

Power Park Exeter Transport Assessment

May 2022

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POWER PARK, EXETER

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01 – TRANSPORT ASSESSMENT

01

1 TRANSPORT ASSESSMENT

1.1 Introduction

1.1.1 Northern Transport Planning has been appointed to provide advice on the transport implications of proposed employment development known as Power Park in Exeter. This report provides a Transport Assessment to support a Local Development Order (LDO) for the proposed development.

1.2 Development Site and Location

1.2.1 The development site is located north of Long Lane and immediately south of Exeter Airport, approximately 9km east of the centre of Exeter. The geographical location of the site is identified on **Plan 01**, **Plan 02** and **Plan 03**.

1.2.2 The site has an irregular shape as identified on the illustrative masterplan layouts provided as **Appendix A**. To the south the site is bounded by Long Lane, to the west by Exeter Airport Car Park No.4, to the north by Exeter Airport and to the east by agricultural land.

1.2.3 The development site is currently used for agriculture.

1.2.4 Access to the site is currently available from Long Lane via an agricultural access located roughly midway along the site frontage.

1.3 Development Proposals

1.3.1 The proposed development comprises an employment site with a range of land uses which will be limited to 26,000sq.m. Gross Floor Area (GFA) across the whole LDO site. The precise split of land uses is not defined as part of the LDO, however for the purposes of this report the following indicative split has been assessed:

- 10,400sq.m. GFA B2 land use (40%); and
- 15,600sq.m. GFA B8 land use (60%).

- 1.3.2 Access to the proposed development site will be available to pedestrians, cyclists, cars and commercial vehicles via a new simple priority junction with Long Lane towards the western end of the site frontage.

1.4 Scope of the Report

- 1.4.1 This report considers the transport planning and traffic related issues relevant to the proposals for development at the Power Park site. The scope and parameters of the report have been agreed with Devon County Council (the Local Highway Authority) and National Highways via a Transport Assessment Scoping Report (Ref: jgv/21027/TASR/v2 dated 17/12/21), a subsequent meeting and email correspondence.

- 1.4.2 Subsequent sections of the report deal with the following matters:

- **Section 2** considers the site's accessibility by sustainable modes of transport.
- **Section 3** deals with traffic issues.
- **Section 4** deals with operational analysis of the local highway network.
- **Section 5** provides a summary and conclusion to the report.

02 – ACCESS BY SUSTAINABLE MODES OF TRANSPORT

02

2 ACCESS BY SUSTAINABLE MODES OF TRANSPORT

2.1 Introduction

2.1.1 This section of the report considers the proposed development site's accessibility by sustainable modes of transport. First, an assessment of the person trip generating potential of the proposed development site is made.

2.2 Person Trips Associated with the Proposed Development

2.2.1 For the purposes of this report the following indicative split of land uses has been considered:

- 10,400sq.m. GFA B2 land use (40%); and
- 15,600sq.m. GFA B8 land use (60%).

2.2.2 The number of weekday person trips associated with this level of development has been estimated using average multi-modal trip rates contained in the TRICS (Version 7.8.4) trip rate database (B2: Industrial Estate category; B8: Warehousing Commercial category).

2.2.3 For the B2 land use the TRICS selection process has been to include all mainland GB sites (excluding Greater London) in Edge of Town locations surveyed since 2013 in the range 1,000sq.m. to 20,000sq.m. GFA. To get a reasonable sample of sites for the B8 land use, the TRICS selection process has been to include all mainland GB sites (excluding Greater London) on the TRICS database.

2.2.4 All TRICS data is provided within **Appendix B** and the trip generation calculations are summarised in the following tables:

	Daily Two-Way Trips
Industrial Estate – Trip Rate per 100sq.m. GFA	13.776
Trips associated with 10,400sq.m. GFA	1,433

Table 2.01: Weekday Person Trips Generated by the B2 Development

	Daily Two-Way Trips
Warehousing – Trip Rate per 100sq.m. GFA	2.408
Trips associated with 15,600sq.m. GFA	276

Table 2.02: Weekday Person Trips Generated by the B8 Development

2.2.5 The TRICS data indicates the total proposed development would generate 1,709 two-way (i.e. arrivals plus departures) person trips per day (by all modes of transport).

2.2.6 By using the journey to work 2011 census data from NOMIS for people who work in the area surrounding the proposed development site (the workplace zone is E02004134 : East Devon 006 – data provided within **Appendix C**) the following weekday trips by mode type for the total development are calculated:

Mode Type	Modal Split	Daily Two-Way Trips
Walking	4.6%	79
Cycling	1.6%	26
Public transport	5.4%	93
Motorcycle, scooter or moped	1.6%	28
Single occupancy car	74.7%	1276
Multi occupancy car	12.1%	207
Total	100.0%	1709

Table 2.03: Weekday Modal Split

2.3 Accessibility on Foot

2.3.1 It is generally accepted that walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2km.

2.3.2 Within the site a network of designated footpaths, footways and areas of shared surface will be available as shown on the illustrative masterplan layouts.

- 2.3.3 A link on foot and by cycle between the proposed development site and the areas west of the site is provided by a combination of footways, footpaths and areas of shared surface within the airport car parks. The footway provision is to be improved as part of the Long Lane Improvement Scheme (**discussed in Section 3**).
- 2.3.4 No provision for pedestrians is provided on Long Lane to the east of the site frontage.
- 2.3.5 A Toucan signal controlled pedestrian/cycle crossing is available west of the Long Lane junction with the B3184 providing a safe link to the designated pedestrian and cycle route which passes through the airport car parks on the south side of the B3184.
- 2.3.6 A 2km walking radius, representing approximately a 25 minute walking distance (walking at 5kph/3mph), is identified on **Plan 04**. Having regard to the alignment of links for walking and barriers to movement, a limited residential built-up area where staff might live lies within a 2km walk from the site – this essentially comprises only the dwellings within Clyst Honiton.
- 2.3.7 Existing accessible facilities are available within a 500m walk from the site as follows:
- Café at the Future Skills Centre;
 - Café at the Hampton Hotel; and
 - Various food outlets at the nearby business park.

2.4 Accessibility by Cycle

- 2.4.1 It is generally accepted that cycling has the potential to substitute for short car trips, particularly those under 5km, and to form part of a longer journey by public transport.
- 2.4.2 Covered and secure cycle parking with public tyre pumps located close to building entrances will be provided as part of the proposed development.

- 2.4.3 Devon benefits from the Co Bikes scheme, an on-demand electric bike rental scheme: <https://www.co-bikes.co.uk/>. To use Co Bikes the rider needs to register via the nextbike app; scan the bike's QR code or enter bike number at any Co Bikes Station – the lock will open automatically; end rental at any Co Bikes Station. Co Bikes Stations are located throughout Exeter, but notably also at the nearby Future Skills Centre.
- 2.4.4 A link for cyclists is available between the proposed development site and the B3184 via a signed route west of the Future Skills Centre as shown on **Plan 05**. Footways along the B3184 and Clyst Honiton Bypass are signed for use as combined footways/cycleways. A route for cyclists is available through Clyst Honiton, which is closed to general through-traffic.
- 2.4.5 An extract from Devon's Cycle Network Map is provided as **Appendix D**. It can be seen that from the airport car parks a link by cycle is available via an 'Advisory Cycle Route' passing through Clyst Honiton, connecting to a 'Traffic-free Cycle Route' and onwards to Exeter's excellent cycle network.
- 2.4.6 A 5km cycling radius, representing approximately a 15 minute cycle distance (cycling at 20kph/12mph), is identified on **Plan 06**. Having regard to the alignment of the links for cyclists and barriers to movement, a modest residential built-up area where staff might live lies within a 5km cycle from the proposed development site, including Clyst Honiton, Cranbrook, Rockbeare and dwellings located west of the site but east of the M5 Motorway.

2.5 Accessibility by Public Transport

- 2.5.1 It is recognised that for public transport to be an attractive alternative mode of transport to the private car it needs to be easily accessible on foot. Ideally, bus users should not have to walk more than 400m to their nearest bus stop and train users should not have to walk more than 800m to their nearest train station. This criterion is sometimes difficult to satisfy comprehensively, particularly outside of the larger conurbations, and therefore it is normally accepted that direct, frequent and easily understood services are more important than a few extra metres of walking distance.

2.5.2 Bus stops are located outside the Exeter Airport terminal building, approximately a 600m walk from the proposed site access. From here the bus service No.56 is available. The timetable and route is summarised in the table below:

Service Number	Route	Frequency (Minutes)		
		Mon-Sat Day	Mon-Sat Eve	Sun Day
No.56	Exeter St. Davids Railway Station – Exeter City Centre – Honiton Road – Science Park – Clyst Honiton – Exeter Airport Terminal	30	60	60
No.56	Exeter Airport Terminal – Aylesbeare Inn – Greendale Business Park – Woodbury Salterton – Woodbury – Lympstone Marine Estate Littlemead Lane – Exmouth Parade	60	-	-

Table 2.04: Bus Services available from Exeter Airport Terminal

2.5.3 As well as serving a good geographical area, the bus service available from Exeter Airport Terminal provides a frequent public transport link into the centre of Exeter where further opportunities for public transport are available.

2.5.4 There are plans to route the bus service No.56 via Long Lane passing the Power Park site. The bus service would then follow a route past the Future Skills Centre and Silverdown Office Park, connecting with the B3184 via Fair Oak Close. Precise details of the planned changes to the bus service, i.e. frequencies and bus stop locations, etc., are not currently available, however we understand the bus is likely to operate a 30 minute frequency along the full length of the route between Exeter St. Davids Railway Station and Exmouth Parade.

2.5.5 The BREEAM Accessibility Index has been calculated to be 1.22 based on a 600m distance to the currently nearest bus stop and a 2 bus services per hour frequency between Exeter Airport and the centre of Exeter.

2.6 Accessibility for Disabled and Mobility Impaired People

2.6.1 The proposed development will be designed to be compliant with the Building Regulations Approved Document Part M to ensure that the site is accessible and usable and that individuals, regardless of their age, gender or disability, level of mobility or visual impairment, are able to gain access to the buildings and within the buildings and use their facilities, both as visitors and as members of staff. This will ensure items such as suitably designed accessible car parking spaces for disabled people, ramps and steps (including handrails and tactile paving provision), adequate external lighting and colour contrasted doors are provided as appropriate.

2.6.2 No specific age-related requirements for walking or cycling facilities have been identified for the proposed development.

2.7 Travel Plan

2.7.1 A Framework Travel Plan, the primary objective which is to reduce single occupancy commuting to the Power Park site, has been submitted to support the LDO for the proposed development.

2.7.2 The Framework Travel Plan has been prepared as a site-wide document, offering a bespoke range of sustainable travel solutions and measures that will enable occupiers of the site to offer ways of reducing unnecessary car travel, and to encourage its employees to be more proactive in their use of more healthy and sustainable modes of transport. This will assist in reducing the impact of congestion during network peak hours and during any operational shift changes that take place at the site.

2.8 Conclusion

2.8.1 It is concluded the proposed development site is accessible by sustainable modes of transport.

03 – TRAFFIC ISSUES

03

3 TRAFFIC ISSUES

3.1 Introduction.

3.1.1 This section of the report considers traffic-related issues.

3.2 Site Access and Servicing

3.2.1 Access to the proposed development site will be available to pedestrians, cyclists, cars and commercial vehicles via a new simple priority junction with Long Lane towards the western end of the site frontage. The access junction will be designed and constructed to the appropriate local and national standards.

3.2.2 Suitable arrangements for HGV manoeuvres within the site will be available as shown on the illustrative masterplan layouts.

3.3 Parking Strategy

3.3.1 East Devon District Council does not have adopted parking standards (and there is no requirement in the National Planning Policy Framework for them to do so). As such, each case must be considered on its own merits having regard to the site location, sustainability and development proposals. Parking at Power Park will be provided as described below:

- Total number of parking spaces for B2 and B8 units provided in the range 1 space per 100sq.m. GFA to 1 space per 200sq.m. GFA.
- Total number of parking spaces for all other development uses provided in the range 1 space per 50sq.m. to 1 space per 200sq.m. GFA.
- Disabled parking spaces, located as close to the entrances to buildings as possible, provided at 5% of the total.
- Car share parking spaces, in more favourable locations, provided at 5% of the total.
- Electric vehicle (EV) charging points provided at 20% of the total, with ducting to be installed to enable the straightforward future provision of charging points to all remaining parking spaces.

- 3.3.2 It should be noted that there will be some 'overlap' between the allocation of disabled/EV spaces and car share/EV spaces.
- 3.3.3 Motorcycle parking spaces will be provided in the range 1 space per 1,000sq.m. GFA to 1 space per 2,000sq.m. GFA.
- 3.3.4 Covered and secure cycle parking spaces located as close to the entrances to buildings as possible will be provided in the range 1 space per 250sq.m. GFA to 1 space per 500sq.m. GFA.
- 3.3.5 The above parking provision has been proposed having regard to the professional experience of Northern Transport Planning Ltd and the site developers, Oxenwood, who manage similar developments nationally. The site is in a sustainable location, with established public transport links and opportunities to encourage the use of alternative modes of transport will be exploited through Travel Plans for each of the proposed units.
- 3.3.6 Measures will put be in place to prevent unauthorised parking on the access roads within the site. It will, however, also be necessary for the overall site management company and/or building unit occupiers to monitor and enforce usage of the car parking spaces to ensure they are used only for the purpose intended (i.e. car share, disabled, etc.), and used only by staff and visitors to the site.

3.4 The Local Highway Network

- 3.4.1 The local highway network considered by the Transport Assessment consists of the following junctions and the highway links between them:
1. Long Lane/Site Access – proposed simple priority junction.
 2. Long Lane/B3184/Airport Car Park – ghost island crossroads.
 3. A30 slip roads/Clyst Honiton Bypass/B3184 – roundabout.
 4. A30 slip roads/B3184/Bishop's Court Lane – roundabout.
- 3.4.2 The extent of the local highway network has been agreed with Devon County Council (the Local Highway Authority) and National Highways (responsible for the A30 Trunk Road).

- 3.4.3 Long Lane is an unclassified local distributor road, generally aligned east-west. The road provides a link between the site and the B3184 to the west, and to various farms and fields to the east. The road provides direct access to Exeter Airport and some of its car parks, to various commercial premises, and connects with Silverdown Link Road which provides access to Exeter College Future Skills Centre, a hotel, a business park and onwards via Fair Oak Close to the B3194. The road has a two-lane single carriageway of width varying between approximately 4.1m and 7.3m. It should be noted that Long Lane will be improved in the vicinity of the proposed development site as part of the Long Lane Improvements – discussed further in **Section 3.8** below. The road is flanked by verges on both sides and does not benefit from street lighting. The road is subject to a 30mph speed limit and is moderately trafficked, carrying around 500 Passenger Car Units (PCUs) per hour during the peak periods.
- 3.4.4 Long Lane connects with the B3184 and the access to an Airport car park at a ghost island crossroads junction. On-site observations during the AM peak period reveal the junction to operate satisfactorily, with no capacity or safety issues being evident.
- 3.4.5 The B3194 is a local distributor road, generally aligned east-west. The road provides a link between Clyst Honiton Bypass/A30 to the west and the A3052 to the southeast. In the vicinity of the site the road provides direct access to an Airport car park, to various commercial premises, and provides access to Fair Oak Close (and onwards to Silverdown Link Road). The road has a two-lane single carriageway approximately 6.5m in width. West of Long Lane the road is flanked by verges on both sides and does not benefit from street lighting; to the east of Long Lane there are typically footways on both sides and street lighting. The road is subject to a 30mph speed limit and is relatively heavily trafficked, carrying around 1,000 PCUs per hour during the peak periods.
- 3.4.6 The B3184 connects with Clyst Honiton Bypass and eastbound A30 slip roads at a roundabout junction. On-site observations during the AM peak period reveal the junction to operate satisfactorily, with no capacity or safety issues being evident.

- 3.4.7 Clyst Honiton Bypass, classified the B3174, is a local distributor road, generally aligned north-south. The road provides a link between the B3184/A30 to the south and London Road to the north. The road provides access to commercial premises via Tiger Moth Road. The road has a two-lane single carriageway approximately 7.3m in width. The road is flanked by footways on both sides and benefits from street lighting. The road is subject to a 40mph speed limit and is relatively heavily trafficked, carrying around 800 PCUs per hour during the peak periods.
- 3.4.8 The B3184 connects with Bishop's Court Lane and westbound A30 slip roads at a roundabout junction. On-site observations during the AM peak period reveal the junction to operate satisfactorily, with no capacity or safety issues being evident.
- 3.4.9 Bishop's Court Lane is an unclassified local distributor road, generally aligned north-south. The road provides a link between the B3184/A30 to the north and Clyst St Mary to the south. The road provides direct access to farms, fields and commercial premises as well as providing a link to various side roads. From the junction with the A30 the road is initially of a good standard, having a width of approximately 5.5m; after approximately 300m the width of the road narrows such that it is suitable for single lane working only. The road is flanked by verges on both sides and does not benefit from street lighting. The road is subject to the national speed limit and is lightly trafficked, carrying less than 100 PCUs per hour during the peak periods.

3.5 Existing Year 2022 Traffic using the Local Highway Network

- 3.5.1 The existing traffic using the local highway network has been determined as follows:
- B3184/Long Lane/Airport car park junction – traffic flow data has been taken from a manual classified traffic survey undertaken by Devon County Council (DCC) at the junction on Thursday 22nd February 2018.
 - Long Lane/Site Access junction – it has been assumed that the level of traffic passing the site is the same as that recorded at the B3184/Long Lane/Airport car park junction. This will provide an over-estimate the level of traffic at this location, so represents a robust assessment.
 - A30 eastbound slip roads/Clyst Honiton Bypass/B3184 junction – traffic flow data has been taken from a manual classified traffic survey undertaken by DCC at the junction on Thursday 8th February 2018.

- A30 westbound slip roads/B3184/Bishop's Court Lane junction – the traffic turning movements to and from Bishop's Court Lane have been taken from DCC's Cranbrook New Community Model Development & Forecasting Report (October 2021). By using the observed data from the A30 eastbound slip roads/Clyst Honiton Bypass/B3184 junction the westbound A30 slip road traffic movements have been calculated.

3.5.2 A consideration of the traffic survey data for the A30 slip roads/Clyst Honiton Bypass/B3184 junction reveals the weekday AM local highway network peak to be 08:00 to 09:00 hours and the PM peak to be 16:30 to 17:30 hours. The observed year 2018 AM and PM peak period traffic turning movements on the local highway network, converted to PCUs, are shown on **Figure 01** and **Figure 02** respectively. All traffic flow Figures are provided within **Appendix E**.

3.5.3 Peak hour traffic flows on the local highway network in the existing year 2022 have been derived by applying the following TEMPRO (version 7.2c) growth factors for East Devon, adjusted in accordance with the National Transport Model (RTF 2018 Scenario 1), to the observed 2018 traffic data:

Scenario	AM Peak Factor	PM Peak Factor
Weekday 2018 to 2022	1.0560	1.0540

Table 3.01: TEMPRO Growth Factors 2018 to 2022

3.5.4 It is considered inappropriate to apply TEMPRO growth to the traffic turning to/from Long Lane and to/from the Airport car park at the junction with B3184. This is because the vast majority of traffic using Long Lane is associated with the Airport and the commercial units which line its route, and without some physical expansion, which would normally require planning permission, there is no reason to consider that this traffic will simply increase over time. Similarly, there is no reason to consider that the Airport car park at the junction with B3184 will experience increased traffic volumes over time without there being a change in operations at the Airport, which again would typically require planning permission.

3.5.5 The above approach has been agreed with Devon County Council (the Local Highway Authority).

- 3.5.6 The existing year 2022 AM and PM peak hour traffic turning movements on the local highway network are shown on **Figure 03** and **Figure 04** respectively. For the avoidance of doubt, TEMPRO traffic growth has been applied to the 'straight through' traffic movements passing through the Long Lane/B3184 junction. Also, because it is not possible to separate out the Long Lane and Airport traffic, TEMPRO growth has been applied to all traffic movements observed at the A30 roundabout junctions.

3.6 Traffic Flows Associated with the Existing Development

- 3.6.1 The development site is currently used for agriculture and generates an insignificant level of traffic.

3.7 Highway Safety

- 3.7.1 Personal Injury Accident (PIA) data recorded on the local highway network for the 5 year period 01/01/16 to 31/12/20 has been obtained from DCC's website. A total of 8 PIAs have been recorded on the local highway network during the time period of analysis as shown on the plot provided as **Appendix F**. The PIAs are summarised as follows:

- Long Lane – a PIA, categorised as slight, was recorded along the proposed development site frontage on 26/09/26 at 23:00 hours. The PIA involved 1 vehicle and resulted in 2 casualties who were both pedestrians.
- B3184 – a PIA, categorised as slight, was recorded at the junction with Fair Oak Close on 01/11/17 at 17:35 hours. The PIA involved 2 vehicles and resulted in 2 casualties.
- B3184 – a PIA, categorised as slight, was recorded at the junction with Long Lane on 09/07/16 at 14:56 hours. The PIA involved 2 vehicles and resulted in 1 casualty.
- B3184 – a PIA, categorised as serious, was recorded approximately 450m east of the junction with Clyst Honiton Bypass on 29/07/20 at 17:43 hours. The PIA involved 2 vehicles and resulted in 1 casualty who was a motorcycle rider.
- B3184 – a PIA, categorised as slight, was recorded at the junction with Clyst Honiton Bypass on 26/01/16 at 06:45 hours. The PIA involved 2 vehicles and resulted in 1 casualty.

- Clyst Honiton Bypass – a PIA, categorised as slight, was recorded at the junction with B3184 on 20/12/18 at 05:27 hours. The PIA involved 2 vehicles and resulted in 1 casualty who was a motorcycle rider.
- Clyst Honiton Bypass – a PIA, categorised as serious, was recorded approximately 200m north of the junction with B3184 on 10/09/19 at 20:30 hours. The PIA involved 2 vehicles and resulted in 3 casualties, of which 1 was a pedestrian.
- A30 Eastbound Exit – a PIA, categorised as slight, was recorded at the junction with B3184 on 05/03/19 at 17:15 hours. The PIA involved 2 vehicles and resulted in 1 casualty.

3.7.2 There are no consistent factors revealed by the PIA data to suggest that the local highway network, including the associated pedestrian and cycling infrastructure, has any particular safety issues which might be adversely affected by the proposed development.

3.8 Committed Highways Schemes and Traffic Management Schemes

3.8.1 The effect of the 'Long Lane Improvements' have been considered as part of the Transport Assessment – the general arrangement drawings are provided within **Appendix G**. The improvements extend from a point at the eastern boundary of Exeter Airport Short Stay Car Park No.1 to a point at the eastern boundary of the proposed development site.

3.8.2 The improvements include widening of the carriageway to a consistent 6.5m and provision of a continuous footway on the north side of the road and represent a significant improvement to the local highway network.

3.8.3 We have been advised that Silverdown Link Road, which provides a link between Long Lane and the B3184 via Fair Oak Close, has been completed (and this has been observed on-site). The Link Road will provide a diversion route to facilitate construction of the Long Lane Improvements. The Long Lane Highway Works are scheduled to commence in February 2022, with an expected 6 month build time.

3.9 Committed Development

- 3.9.1 We have been advised by DCC that there is no committed development which will materially affect traffic conditions in the vicinity of the site and needs to be considered as part of the Transport Assessment.

3.10 Future Assessment Year 2034 Traffic Flows 'Without Development'

- 3.10.1 DCC has requested a future assessment year of 2034, i.e. 12 years after adoption of the LDO. Peak hour traffic flows on the local highway network in the future assessment year 2034 'Without Development' scenario have been derived by applying the following TEMPRO (version 7.2c) growth factors for East Devon, adjusted in accordance with the National Transport Model (RTF 2018 Scenario 1), to the observed 2018 traffic data:

Scenario	AM Peak Factor	PM Peak Factor
Weekday 2018 to 2034	1.1611	1.1596

Table 3.02: TEMPRO Growth Factors 2018 to 2034

- 3.10.2 As with the existing year 2022 scenario, TEMPRO growth has been applied to all traffic movements observed at the A30 roundabout junctions, but only to the 'straight through' traffic movements observed passing through the Long Lane/B3184 junction.
- 3.10.3 The future assessment year 2034 'Without Development' AM and PM peak period traffic turning movements on the local highway network are shown on **Figure 05** and **Figure 06** respectively.

3.11 Traffic Flows Associated with the Proposed Development

- 3.11.1 For the purposes of this report the following indicative split of land uses has been considered:
- 10,400sq.m. GFA B2 land use (40%); and
 - 15,600sq.m. GFA B8 land use (60%).

3.11.2 The number of weekday vehicle trips associated with this level of development has been estimated using average trip rates contained in the TRICS (Version 7.8.4) trip rate database (B2: Industrial Estate category; B8: Warehousing Commercial category).

3.11.3 For the B2 land use the following TRICS assumptions have been made:

- Industrial Estate category;
- Vehicular trip rates;
- Sites in Great Britain excluding Greater London;
- Sites between 3,000 and 20,000sq.m. GFA;
- Default cut-off date;
- Weekday data; and
- Edge of Town location.

3.11.4 For the B8 land use the following TRICS assumptions have been made:

- Warehousing (Commercial) category;
- Vehicular trip rates;
- Sites in Great Britain excluding Greater London;
- Sites greater than 5,000sq.m. GFA;
- Data collected after 01/01/00 – the default date has not been used in order to provide a reasonable sample size (14 sites);
- Weekday data; and
- Edge of Town location.

3.11.5 The TRICS data is provided within **Appendix B** and the vehicular traffic generation calculations are summarised in the following tables:

Land Use	Trip Rate		No. of Trips	
	Arrive	Depart	Arrive	Depart
10,400sq.m. GFA B2	0.551	0.284	57	30
15,600sq.m. GFA B8	0.094	0.065	15	10

Table 3.03: TRICS Assessment of Peak Hour Vehicle Trips Attracted to Proposed Development Weekday 08:00 to 09:00 hours

Land Use	Trip Rate		No. of Trips	
	Arrive	Depart	Arrive	Depart
10,400sq.m. GFA B2	0.355	0.557	37	58
15,600sq.m. GFA B8	0.068	0.119	11	19

Table 3.04: TRICS Assessment of Peak Hour Vehicle Trips Attracted to Proposed Development Weekday 16:00 to 17:00 hours

Time Period	Arrive	Depart	Total
AM Peak	72	40	112
PM Peak	48	76	124

Table 3.05: Weekday Peak Hour Vehicle Trips Attracted to Proposed Development

3.11.6 The HGV traffic generation calculations are summarised in the following tables:

Land Use	Trip Rate		No. of Trips	
	Arrive	Depart	Arrive	Depart
10,400sq.m. GFA B2	0.028	0.030	3	3
15,600sq.m. GFA B8	0.026	0.030	4	5

Table 3.06: TRICS Assessment of Peak Hour HGV Trips Attracted to Proposed Development Weekday 08:00 to 09:00 hours

Land Use	Trip Rate		No. of Trips	
	Arrive	Depart	Arrive	Depart
10,400sq.m. GFA B2	0.014	0.014	1	1
15,600sq.m. GFA B8	0.030	0.024	5	4

Table 3.07: TRICS Assessment of Peak Hour HGV Trips Attracted to Proposed Development Weekday 16:00 to 17:00 hours

Time Period	Arrive	Depart	Total
AM Peak	7	8	15
PM Peak	6	5	11

Table 3.08: Weekday Peak Hour HGV Trips Attracted to Proposed Development

3.11.7 Assuming a 2.0 PCU factor for HGVs (OGV1 = 1.5, OGV2 = 2.3) the PCU traffic generation is calculated in the following table:

Time Period	Arrive	Depart	Total
AM Peak	79	48	127
PM Peak	54	81	135

Table 3.09: Weekday Peak Hour PCU Trips Attracted to Proposed Development

3.12 Traffic Distribution and Assignment

3.12.1 Using 'location of usual residence and place of work by method of travel to work (MSOA level)' from the 2011 National Census for drivers travelling to work by car to the Middle Layer within which the proposed development site is located (E02004134 : East Devon 006) the percentage of trips from every Local Authority in England and Wales has been calculated as shown on the table provided as **Appendix H**. For East Devon the trips from each Middle Layer within the local authority have been separately calculated (shown at the bottom of the table). The assignment of these trips has then been determined using Google Maps for the quickest route on an 'all or nothing' basis. It can be seen that the majority of generated traffic will travel via the A30 West, having an origin/destination predominantly either within Exeter or via the M5.

3.12.2 The Trip Distribution and Assignment (rounded to the nearest non-negative integer) is shown on **Figure 07** and summarised as follows:

- A30 West – 70%
- A30 East – 15%
- Bishop's Court Lane – 0%
- Clyst Honiton Bypass – 5%
- B3184 East – 10%
- Long Lane East – 0%

3.12.3 By applying the above percentages to the calculated PCU generation, the AM and PM peak traffic distribution and assignment shown on **Figure 08** and **Figure 09** respectively is calculated.

3.13 Future Assessment Year 2034 Traffic Flows 'With Development'

3.13.1 The AM and PM future assessment year 2034 traffic flows 'With Development' are calculated by adding the traffic distribution and assignment flows to the corresponding 'Without Development' flows as shown on **Figure 10** and **Figure 11** respectively.

3.14 Operational Analysis

3.14.1 The operation of the local highway network in the 'Without Development' and 'With Development' scenarios is considered in **Section 4** of this Transport Assessment.

04 – OPERATIONAL ANALYSIS

04

4 OPERATIONAL ANALYSIS

4.1 Introduction

4.1.1 This section of the report provides an operational analysis of the junctions within the local highway network. For all junctions (with the exception of the site access junction) the operation has been analysed for the 3 time periods of traffic analysis in the existing year 2022, the future assessment year 2034 'Without Development' and the future assessment 2034 'With Development' scenarios. The operation of the site access junction has been analysed only for the future assessment 2034 'With Development' scenarios.

4.1.2 The operation of each junction has been analysed as appropriate using either the PICADY program (for priority controlled junctions) or the ARCADY program (for roundabouts). The full operational analysis output for each junction is provided within **Appendix I**.

4.2 Operation of the Long Lane/Site Access Simple Priority Junction

4.2.1 The Maximum Queue (Max Q) and Maximum Ratio of Flow to Capacity (Max RFC) during the peak hour operation of the site access junction is summarised as follows:

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Site Access	-	-	-	-	0.14	0.12
Long Lane East	-	-	-	-	0.00	0.00

Table 4.01: Long Lane/Site Access Junction PICADY Analysis Summary Weekday 08:00 – 09:00 Hours

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Site Access	-	-	-	-	0.24	0.19
Long Lane East	-	-	-	-	0.00	0.00

Table 4.02: Long Lane/Site Access Junction PICADY Analysis Summary Weekday 16:30 – 17:30 Hours

4.2.2 The PICADY analysis demonstrates that the site access junction will operate within capacity in the future assessment year 2034 'With Development' scenario.

4.3 Operation of the Long Lane/B3184/Airport Car Park Ghost Island Crossroads Junction

4.3.1 The Maximum Ratio of Flow to Capacity (Max RFC) and Maximum Queue (Max Q.) during the peak hour operation of the Long Lane/B3184/Airport car park junction is summarised as follows:

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Long Lane left/straight	0.07	0.06	0.07	0.09	0.09	0.09
Long Lane right/straight	0.31	0.24	0.33	0.25	0.63	0.39
B3184 (west) right	0.08	0.07	0.08	0.08	0.08	0.08
Car Park	0.04	0.04	0.04	0.04	0.04	0.04
B3184 (east) right	0.13	0.12	0.14	0.12	0.17	0.15

Table 4.03: Long Lane/B3184/Airport Car Park Junction PICADY Analysis Summary Weekday 08:00 – 09:00 Hours

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Long Lane left/straight	0.27	0.21	0.31	0.24	4.56	1.03
Long Lane right/straight	3.25	0.78	3.69	0.80	16.75	1.02
B3184 (west) right	0.05	0.05	0.05	0.05	0.05	0.05
Car Park	0.08	0.08	0.09	0.08	0.09	0.08
B3184 (east) right	0.04	0.04	0.04	0.04	0.05	0.05

**Table 4.04: Long Lane/B3184/Airport Car Park Junction PICADY Analysis Summary
Weekday 16:30 – 17:30 Hours**

- 4.3.2 The PICADY analysis confirms the on-site observations that the Long Lane/B3184/Airport car park junction currently operates within capacity during the AM peak period. The analysis, however, indicates that the junction is approaching capacity during the current 2022 PM peak, with an RFC of 0.78 being modeled for the right-turn/straight ahead approach from Long Lane, and a resultant queue of 3.25 PCUs being calculated (an RFC of greater than 0.85 is typically used as a measure that the approach to a junction is operating at, or over, capacity).
- 4.3.3 In the 2034 'Without Development' AM peak scenario the junction continues to operate within capacity, and the addition of the traffic associated with the proposed development has little effect on the operation of the junction.
- 4.3.4 In the 2034 'Without Development' PM peak scenario, however, the junction is modelled to operate close to capacity, with an RFC of up to 0.80 being calculated for the Long Lane approach. The addition of the traffic associated with the proposed development has the expected effect of making matters worse, with an RFC of up to 1.03 and a queue of up to 21.31 vehicles (4.56 + 16.75) being calculated for the Long Lane approach.
- 4.3.5 It is worth noting that the above analysis uses the 'One Hour' traffic profile which is a PICADY option that synthesises a 'peak within the peak hour' and analyses the worst case scenario. As a highway network approaches capacity it is in fact a common phenomenon for 'peak spreading' to occur as drivers seek to avoid peak queues of traffic by leaving work earlier or later in the day.

4.3.6 To assess the effect of peak spreading at the Long Lane/B3184/Airport car park junction, the analysis has been repeated using the PICADY 'Flat' traffic profile – using this option the traffic is modelled to arrive at the junction at a constant rate throughout the hour. The peak hour operation of the Long Lane/B3184/Airport car park junction using the Flat traffic profile is summarised as follows:

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Long Lane left/straight	0.06	0.05	0.06	0.06	0.08	0.07
Long Lane right/straight	0.26	0.20	0.27	0.21	0.50	0.33
B3184 (west) right	0.07	0.07	0.07	0.07	0.07	0.07
Car Park	0.04	0.03	0.04	0.04	0.04	0.04
B3184 (east) right	0.12	0.10	0.12	0.11	0.15	0.13

Table 4.05: Long Lane/B3184/Airport Car Park Junction PICADY Analysis Summary (Flat Traffic Profile) Weekday 08:00 – 09:00 Hours

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Long Lane left/straight	0.17	0.14	0.18	0.15	0.92	0.49
Long Lane right/straight	2.11	0.68	2.30	0.70	6.98	0.89
B3184 (west) right	0.05	0.04	0.05	0.04	0.05	0.04
Car Park	0.07	0.07	0.08	0.07	0.08	0.07
B3184 (east) right	0.04	0.03	0.04	0.03	0.05	0.04

Table 4.06: Long Lane/B3184/Airport Car Park Junction PICADY Analysis Summary (Flat Traffic Profile) Weekday 16:30 – 17:30 Hours

4.3.7 Using the Flat traffic profile the junction operates within capacity in all AM peak scenarios. In the PM peak the junction operates within capacity in the 'No Development' scenarios, only approaching capacity in the 'With Development' scenario, with an RFC of up to 0.89 and a queue of up to 7.90 vehicles (0.92 + 6.98) being calculated for the Long Lane approach.

4.3.8 The following comments are relevant regarding the modelled operation of the Long Lane/B3184/Airport car park junction:

- The existing junction layout is of a relatively poor standard, being a crossroads which produces multiple traffic conflicts, with limited flares on the side road approaches and with substandard right-turn lanes (approximately 2.3m wide) on the main road;
- The Long Lane approach to the junction is operating close to capacity in the PM peak, even in the existing scenario, and any additional traffic due to changes in operations at the Airport or new development off Long Lane will result either in additional queues, drivers avoiding these queues by 'peak spreading', or a combination of both.
- Options for improvement of the junction are available, subject to the cooperation of all interested parties.
- A short-term and cost-effective measure to mitigate the effect of queues on Long Lane would be to provide a yellow hatched box or 'KEEP CLEAR' road markings at the main entrance to the Airport (and the residential premises opposite) to ensure this junction is kept clear for turning traffic.

4.4 Operation of the A30 slip roads/Clyst Honiton Bypass/B3184 Roundabout Junction

4.4.1 The Maximum Ratio of Flow to Capacity (Max RFC) and Maximum Queue (Max Q.) during the peak hour operation of the A30 slip roads/Clyst Honiton Bypass/B3184 junction is summarised as follows:

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Clyst Honiton Bypass	0.57	0.36	0.71	0.42	0.78	0.44
B3184 (E)	0.23	0.19	0.27	0.21	0.31	0.24
A30 Eastbound Entry Slip	-	-	-	-	-	-
B3184 (S)	0.12	0.11	0.14	0.12	0.15	0.13
A30 Eastbound Exit Slip	0.43	0.30	0.51	0.34	0.58	0.37

**Table 4.07: A30 slip roads/Clyst Honiton Bypass/B3184 Junction ARCADY Analysis
Summary Weekday 08:00 – 09:00 Hours**

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
Clyst Honiton Bypass	0.22	0.18	0.25	0.20	0.26	0.21
B3184 (E)	0.77	0.44	0.94	0.49	1.11	0.53
A30 Eastbound Entry Slip	-	-	-	-	-	-
B3184 (S)	0.05	0.05	0.05	0.05	0.06	0.06
A30 Eastbound Exit Slip	0.23	0.19	0.26	0.21	0.29	0.23

**Table 4.08: A30 slip roads/Clyst Honiton Bypass/B3184 Junction ARCADY Analysis
Summary Weekday 16:30 – 17:30 Hours**

4.4.2 The ARCADY analysis confirms the on-site observations that the A30 slip roads/Clyst Honiton Bypass/B3184 junction currently operates within capacity during the AM and PM peak periods. The analysis also demonstrates that the junction will operate within capacity in the future assessment year 2034 'Without Development' and 'With Development' scenarios. The traffic generated by the proposed development has little effect on the operation of the junction.

4.5 Operation of the A30 slip roads/B3184/Bishop's Court Lane Roundabout Junction

4.5.1 The Maximum Ratio of Flow to Capacity (Max RFC) and Maximum Queue (Max Q.) during the peak hour operation of the A30 slip roads/B3184/Bishop's Court Lane junction is summarised as follows:

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
B3184 (N)	0.36	0.26	0.41	0.29	0.44	0.31
A30 Westbound Exit Slip	0.14	0.13	0.17	0.14	0.18	0.15
Bishop's Court Lane	0.03	0.03	0.03	0.03	0.03	0.03
A30 Westbound Entry Slip	-	-	-	-	-	-

**Table 4.09: A30 slip roads/B3184/Bishop's Court Lane Junction ARCADY Analysis
Summary Weekday 08:00 – 09:00 Hours**

Approach	2022		2034 No Development		2034 With Development	
	Max Q	Max RFC	Max Q	Max RFC	Max Q	Max RFC
B3184 (N)	0.63	0.39	0.74	0.43	0.81	0.45
A30 Westbound Exit Slip	0.05	0.04	0.06	0.05	0.06	0.06
Bishop's Court Lane	0.05	0.05	0.06	0.06	0.07	0.06
A30 Westbound Entry Slip	-	-	-	-	-	-

**Table 4.10: A30 slip roads/B3184/Bishop's Court Lane Junction ARCADY Analysis
Summary Weekday 16:30 – 17:30 Hours**

4.5.2 The ARCADY analysis confirms the on-site observations that the A30 slip roads/B3184/Bishop's Court Lane junction currently operates within capacity during the AM and PM peak periods. The analysis also demonstrates that the junction will operate within capacity in the future assessment year 2034 'Without Development' and 'With Development' scenarios. The traffic generated by the proposed development has little effect on the operation of the junction.

05 – SUMMARY AND CONCLUSIONS

05

5 SUMMARY AND CONCLUSIONS

5.1 Introduction

5.1.1 Northern Transport Planning has been appointed to provide advice on the transport implications of proposed employment development known as Power Park in Exeter. The development site is located north of Long Lane and immediately south of Exeter Airport, approximately 9km east of the centre of Exeter.

5.1.2 The development site is currently used for agriculture.

5.1.3 Access to the site is currently available from Long Lane via an agricultural access located roughly midway along the site frontage.

5.1.4 The proposed development comprises an employment site with a range of land uses which will be limited to 25,297sq.m. GFA across the whole LDO site. The precise split of land uses is not defined as part of the LDO, however for the purposes of this report the following indicative split has been assessed:

- 10,400sq.m. GFA B2 land use (40%); and
- 15,600sq.m. GFA B8 land use (60%).

5.1.5 Access to the proposed development site will be available to pedestrians, cyclists, cars and commercial vehicles via a new simple priority junction with Long Lane towards the western end of the site frontage. The access junction will be designed and constructed to the appropriate local and national standards.

5.2 Parking Strategy

5.2.1 A parking strategy for the proposed development has been formulated, indicating rates for the provision of general car parking spaces and for disabled, car share and electric vehicle parking spaces, as well as rates for motorcycle parking and cycle parking.

5.3 Accessibility

- 5.3.1 It has been demonstrated that the proposed development site is well located for employment development, being accessible on foot, by cycle and by using public transport.

5.4 Travel Plan

- 5.4.1 A Framework Travel Plan for the site has been submitted to support the Local Development Order for the proposed development. The primary objective of the Travel Plan is to reduce single occupancy commuting to the Power Park site.

- 5.4.2 Subsidiary objectives are as follows:

- To provide employees with information on more sustainable travel options, to enable them to make an informed choice about their travel options.
- To promote public transport, walking, cycling and car sharing.
- To reduce the impact of travel and transport arising from operation of the premises, where realistic opportunities to do so are available.

- 5.4.3 The Framework Travel Plan has been prepared as a site-wide document, offering a bespoke range of sustainable travel solutions and measures that will enable occupiers of the site to offer ways of reducing unnecessary car travel, and to encourage its employees to be more proactive in their use of more healthy and sustainable modes of transport. This will assist in reducing the impact of congestion during peak hours and during any operational shift changes that take place at the site.

- 5.4.4 The Framework Travel Plan deals with the following matters:

- The site's accessibility by sustainable modes of transport.
- Management strategy;
- Targets and indicators;
- Sustainable travel measures; and
- Monitoring and review.

5.5 Traffic Issues

- 5.5.1 The local highway network considered by the Transport Assessment consists of the following junctions and the highway links between them:
1. Long Lane/Site Access – proposed simple priority junction.
 2. Long Lane/B3184/Airport Car Park – ghost island crossroads.
 3. A30 slip roads/Clyst Honiton Bypass/B3184 – roundabout.
 4. A30 slip roads/B3184/Bishop's Court Lane – roundabout.
- 5.5.2 The extent of the local highway network has been agreed with Devon County Council (the Local Highway Authority) and National Highways (responsible for the A30 Trunk Road).
- 5.5.3 The traffic using the local highway network has been determined using data observed in 2018 supplied by Devon County Council. A consideration of the traffic survey data reveals the weekday AM local highway network peak to be 08:00 to 09:00 hours and the PM peak to be 16:30 to 17:30 hours.
- 5.5.4 Peak hour traffic flows on the local highway network in the existing year 2022 and future assessment year 2034 have been derived by applying TEMPRO (version 7.2c) growth factors for East Devon, adjusted in accordance with the National Transport Model (RTF 2018 Scenario 1), to the observed 2018 traffic data. It is considered inappropriate to apply TEMPRO growth to the traffic turning to/from Long Lane and to/from the Airport car park at the junction with B3184 – this approach has been agreed with Devon County Council (the Local Highway Authority).
- 5.5.5 Personal Injury Accident (PIA) data recorded on the local highway network for the 5 year period 01/01/16 to 31/12/20 has been obtained from DCC's website. A total of 8 PIAs have been recorded on the local highway network during the time period of analysis. There are no consistent factors revealed by the PIA data to suggest that the local highway network, including the associated pedestrian and cycling infrastructure, has any particular safety issues which might be adversely affected by the proposed development.

- 5.5.6 The effect of the 'Long Lane Improvements' has been considered as part of the Transport Assessment. The improvements extend from a point at the eastern boundary of Exeter Airport Short Stay Car Park No.1 to a point at the eastern boundary of the proposed development site. The improvements include widening of the carriageway to a consistent 6.5m and provision of a continuous footway on the north side of the road and represent a significant improvement to the local highway network.

- 5.5.7 The traffic associated with the proposed development has been estimated using TRICS data. This has then been distributed/assigned on to the local highway network using a model based on 2011 National Census journey to work data.

- 5.5.8 The operation of the junctions within the local highway network have been tested in the 'Without Development' and 'With Development' scenarios using the PICADY or ARCADY junction analysis programs as appropriate.

- 5.5.9 It has been demonstrated that the site access junction will operate within capacity in the future assessment year 2034 'With Development' scenario.

- 5.5.10 The operational analysis confirms the on-site observations that the Long Lane/B3184/Airport car park junction currently operates within capacity during the AM peak period and demonstrates that the junction will operate within capacity in the AM peak 2034 'Without Development' and 'With Development' scenarios. The analysis, however, indicates the Long Lane approach to the junction is operating close to capacity in the PM peak, even in the existing scenario, and any additional traffic due to changes in operations at the Airport or new development off Long Lane will result either in additional queues, drivers avoiding these queues by peak spreading, or a combination of both.

- 5.5.11 It has been noted that options for improvement of the Long Lane/B3184/Airport car park junction are available, subject to the cooperation of all interested parties. A short-term and cost-effective measure to mitigate the effect of potential queues on Long Lane would be to provide a yellow hatched box or 'KEEP CLEAR' road markings at the main entrance to the Airport (and the residential premises opposite) to ensure this junction is kept clear for turning traffic.

5.5.12 It has been demonstrated that the A30 slip roads/Clyst Honiton Bypass/B3184 junction currently operates within capacity during the peak periods and will operate within capacity in the 2034 'Without Development' and 'With Development' scenarios. The traffic generated by the proposed development has little effect on the operation of the junction.

5.5.13 It has been demonstrated that the A30 slip roads/B3184/Bishop's Court Lane junction currently operates within capacity during the peak periods and will operate within capacity in the 2034 'Without Development' and 'With Development' scenarios. The traffic generated by the proposed development has little effect on the operation of the junction.

5.6 National Planning Policy Framework

5.6.1 Paragraph 110 of the NPPF states:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

5.6.2 Paragraph 111 of the NPPF states:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

5.6.3 The following comments are relevant in relation to the above:

- Opportunities for sustainable transport – as has been demonstrated within this Transport Assessment, the site is readily accessible by pedestrians, cyclists and public transport users.
- Safe and suitable access – suitable access to the site will be available for all modes of transport.
- Impact of development – the analysis provided within this Transport Assessment demonstrates that the traffic generated by the proposed development would not have a severe impact on the operation of the local highway network.

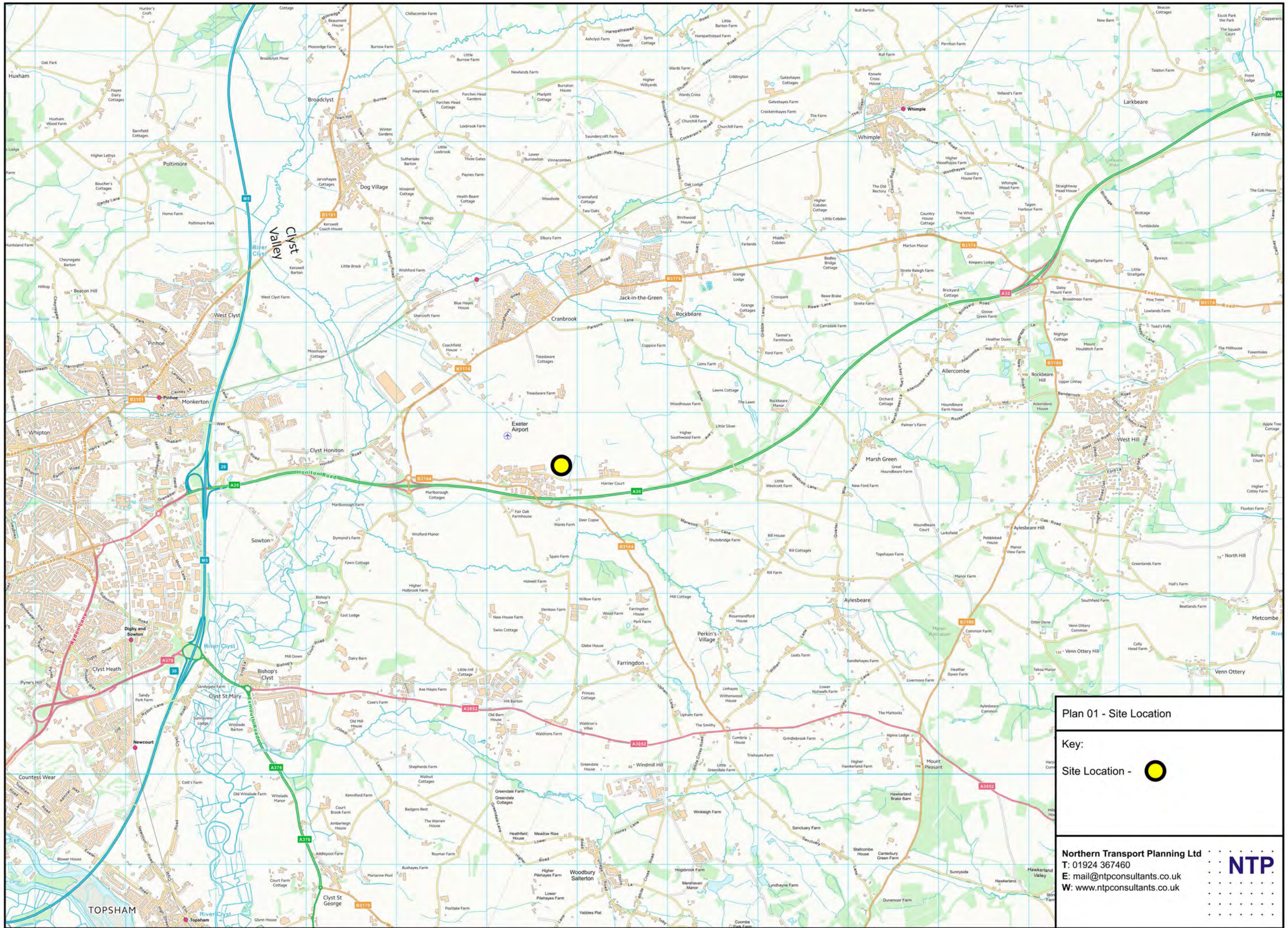
5.7 Overall Conclusion

Having regard to the above it is concluded that the proposed development is satisfactory from a transport policy, traffic and highways viewpoint.

PLANS AND APPENDICES



PLANS



Plan 01 - Site Location

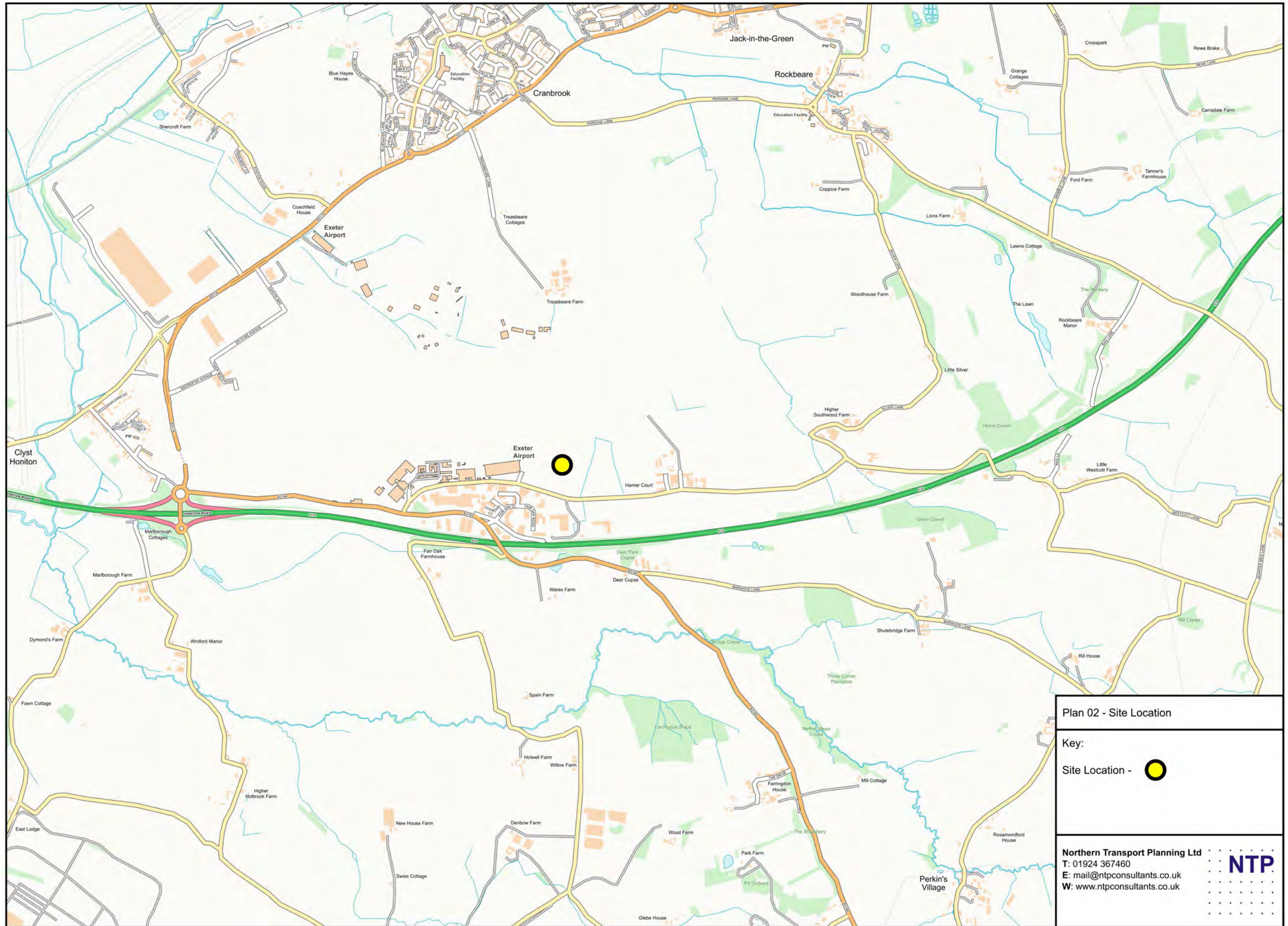
Key:

Site Location -



Northern Transport Planning Ltd
T: 01924 367460
E: mail@ntpconsultants.co.uk
W: www.ntpconsultants.co.uk

NTP



Plan 02 - Site Location

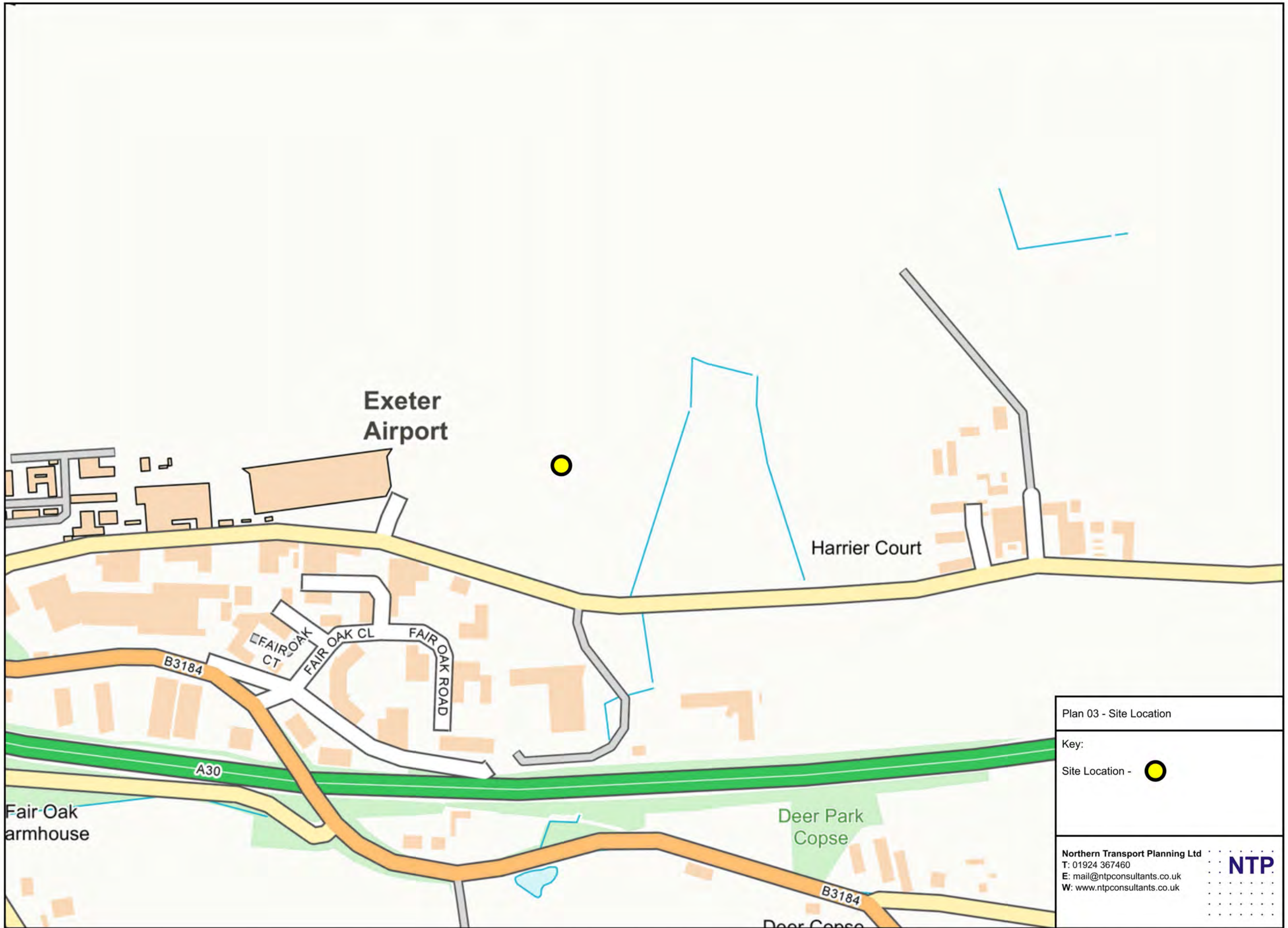
Key:

Site Location -



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W: www.ntpconsultants.co.uk

NTP



Plan 03 - Site Location

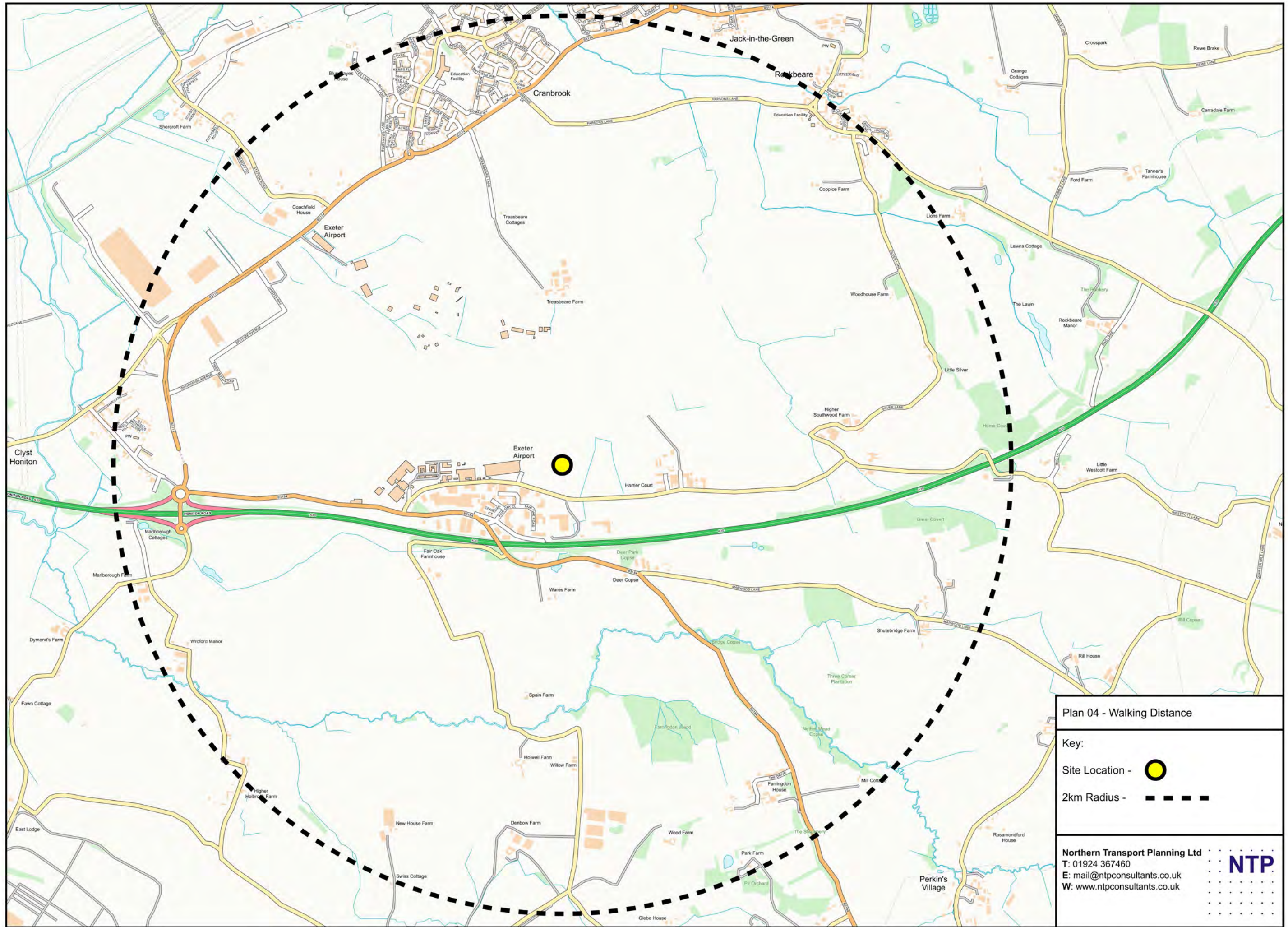
Key:

Site Location -



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Plan 04 - Walking Distance

Key:

Site Location -



2km Radius -



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E: mail@ntpconsultants.co.uk
W: www.ntpconsultants.co.uk



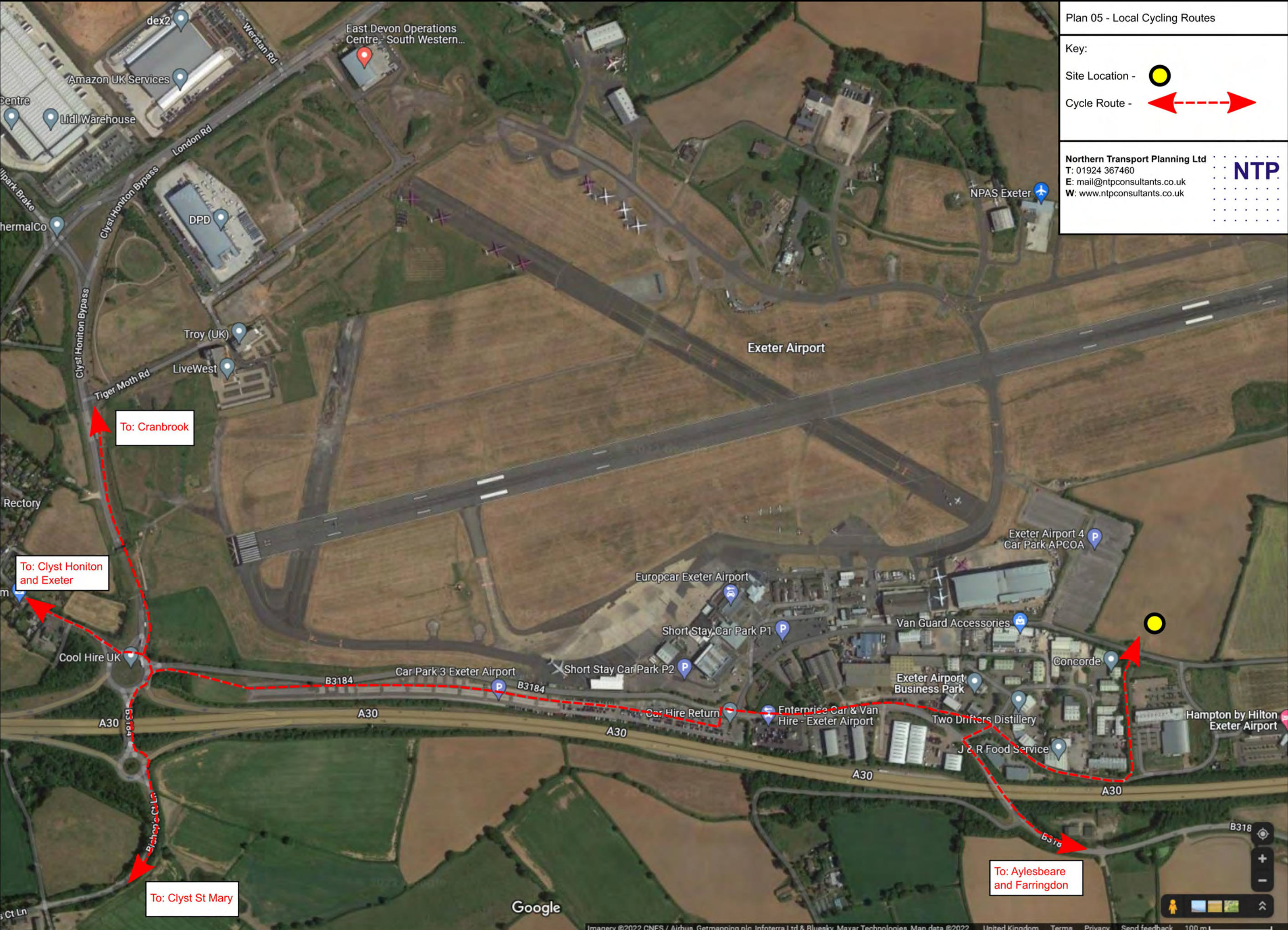
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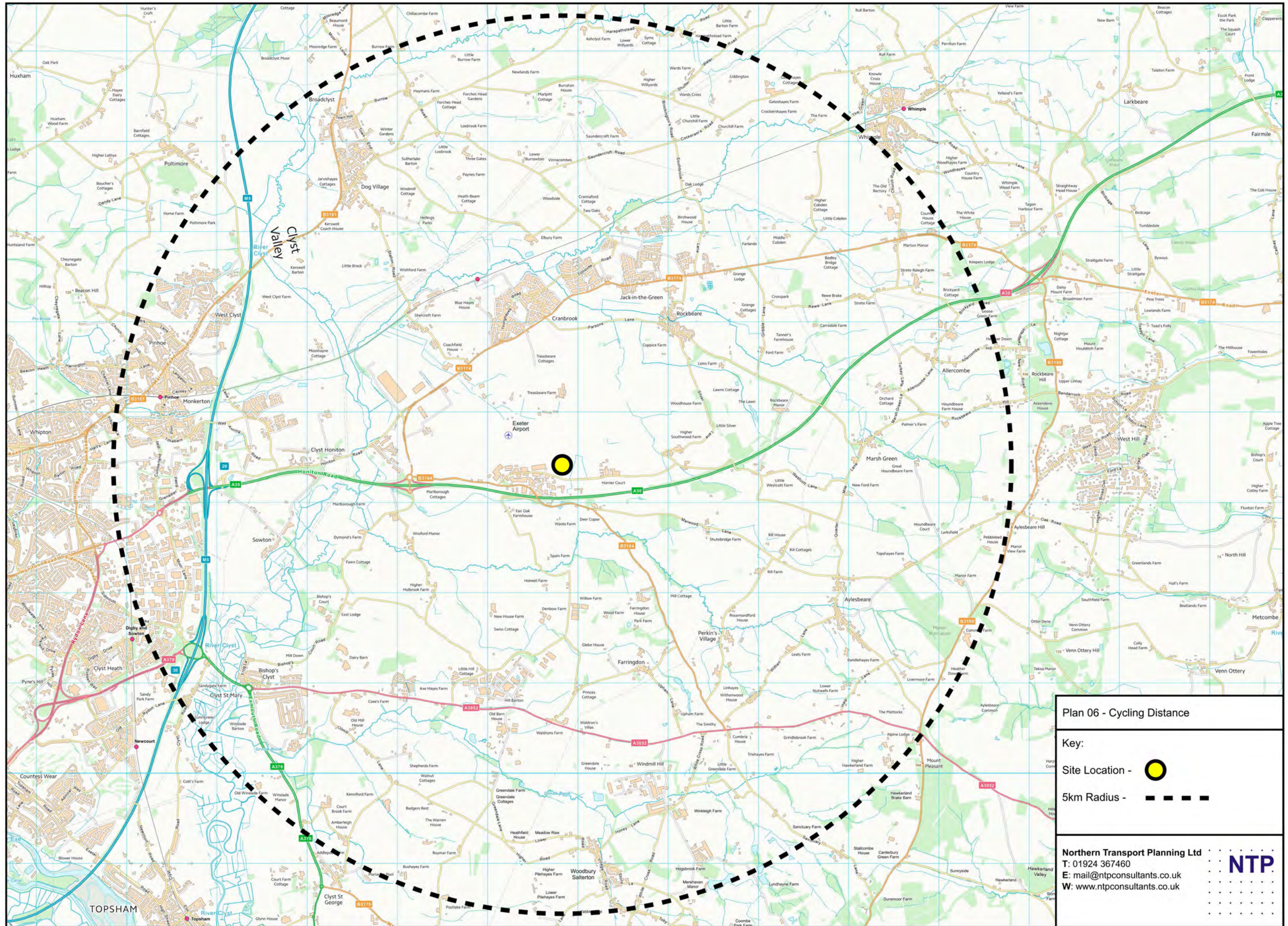
Site Location - 

Cycle Route - 

Northern Transport Planning Ltd
T: 01924 367460
E: mail@ntpconsultants.co.uk
W: www.ntpconsultants.co.uk

NTP





Plan 06 - Cycling Distance

- Key:
- Site Location - 
 - 5km Radius - 

Northern Transport Planning Ltd
T: 01924 367460
E: mail@ntpconsultants.co.uk
W: www.ntpconsultants.co.uk

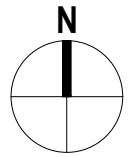


APPENDIX A



PLATEAU A:	
- Total Plateau Area:	24,868 m ² / 267,680 ft ²
- Total Building Area (GIA):	10,160m ² / 109,325 ft ² (40.8%)
- Total Hard and Soft Landscaping:	14,710 m ² / 158,355 ft ² (59.2%)
PLATEAU B:	
- Total Plateau Area:	15,380 m ² / 165,550 ft ²
- Total Building Area (GIA):	6,230 m ² / 67,150 ft ² (40.5%)
- Total Hard and Soft Landscaping:	9,150 m ² / 98,400 ft ² (59.5%)
PLATEAU C:	
- Total Plateau Area:	4,300 m ² / 46,360 ft ²
- Total Building Area (GIA):	1,065 m ² / 11,500 ft ² (24.8%)
- Total Hard and Soft Landscaping:	3,235 m ² / 34,860 ft ² (75.2%)

Approximate Site Boundary based on HM Land Registry Title
Plan ref DNS586252 dated 8 Sept 2017
(exact boundary to be confirmed in due course)



0 7.5m 15m SCALE 1:750

pHp architects

Proposed Logistics Development
Oxenwood Real Estate
Power Park, Exeter

Illustrative Masterplan - Option 1

The Old Rectory Rectory Lane Milton Malzor
NORTHAMPTON NN7 3AQ
t: +44 (0)1604 858916 f: +44 (0)1604 859123
www.peter-haddon.com

Issue Purpose: Preliminary
Drawn by: RG Checked by: JCL
Scale @ A1: 1:750 Date: Nov'21
CAD ref: 4424-006-AP-Exeter Dwg no.: 4424-013 Rev: P02

Copyright reserved. Dimensions to be checked on site. Discrepancies to be reported before proceeding



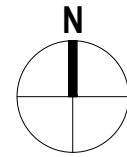
PLATEAU A:		
- Total Plateau Area:	24,859 m ² / 267,680 ft ²	
- Total Building Area (GIA):	10,120 m ² / 108,920 ft ² (40.6%)	
- Total Hard and Soft Landscaping:	14,748 m ² / 158,760 ft ² (59.4%)	

PLATEAU B:		
- Total Plateau Area:	15,380 m ² / 165,550 ft ²	
- Total Building Area (GIA):	6,820 m ² / 63,900 ft ² (38.6%)	
- Total Hard and Soft Landscaping:	8,560 m ² / 101,650 ft ² (61.4%)	

PLATEAU C:		
- Total Plateau Area:	4300m ² / 46,360 ft ²	
- Total Building Area (GIA):	1,477 m ² / 15,900 ft ² (34.3%)	
- Total Hard and Soft Landscaping:	2823 m ² / 30,460 ft ² (65.7%)	

Approximate Site Boundary based on HM Land Registry Title
Plan ref DNS586252 dated 8 Sept 2017
(exact boundary to be confirmed in due course)

0 7.5m 15m SCALE 1:750



P01: Draft Issue
Rev
The Old Rectory Rectory Lane Milton Malzor
NORTHAMPTON NN7 3AQ
t: +44 (0)1604 858916 f: +44 (0)1604 859123
www.peter-haddon.com



pHp architects

Proposed Logistics Development
Oxenwood Real Estate
Power Park, Exeter

Illustrative Masterplan - Option 2

Issue Purpose: Preliminary
Drawn by: GB Checked by: JCL
Scale @ A1: 1:750 Date: Dec'21
CAD ref: 4424-006-AP-Exeter Dwg no.: 4424-014 Rev: P01

Copyright reserved. Dimensions to be checked on site. Discrepancies to be reported before proceeding

APPENDIX B

Calculation Reference: AUDIT-640801-220115-0139

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : D - INDUSTRIAL ESTATE
 MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	EX ESSEX	2 days
03	SOUTH WEST	
	DV DEVON	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	4 days
10	WALES	
	SW SWANSEA	2 days
	VG VALE OF GLAMORGAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 1776 to 17500 (units: sqm)
 Range Selected by User: 1000 to 20000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 10/10/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	5 days
Tuesday	1 days
Wednesday	2 days
Thursday	1 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	12 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town	12
--------------	----

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	6
Development Zone	1
Residential Zone	1
No Sub Category	4

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

Not Known 12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	4 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	10 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 12 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 12 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DV-02-D-07	INDUSTRIAL ESTATE	DEVON
	BITTERN ROAD		
	EXETER		
	SOWTON IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3600 sqm	
	Survey date: MONDAY	03/07/17	Survey Type: MANUAL
2	ES-02-D-06	INDUSTRIAL ESTATE	EAST SUSSEX
	COURTLANDS ROAD		
	EASTBOURNE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	7525 sqm	
	Survey date: MONDAY	21/10/13	Survey Type: MANUAL
3	EX-02-D-03	INDUSTRIAL ESTATE	ESSEX
	WYNCOLLS ROAD		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4876 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
4	EX-02-D-05	INDUSTRIAL ESTATE	ESSEX
	HECKWORTH CLOSE		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	7280 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
5	SW-02-D-01	INDUSTRIAL ESTATE	SWANSEA
	UPPER FOREST WAY		
	SWANSEA		
	SWANSEA ENTERPRISE PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	6822 sqm	
	Survey date: WEDNESDAY	09/10/19	Survey Type: MANUAL
6	SW-02-D-02	INDUSTRIAL ESTATE	SWANSEA
	CLARION COURT		
	SWANSEA		
	SWANSEA ENTERPRISE PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	5280 sqm	
	Survey date: THURSDAY	10/10/19	Survey Type: MANUAL
7	VG-02-D-01	INDUSTRIAL ESTATE	VALE OF GLAMORGAN
	ARTHUR STREET		
	BARRY		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	13091 sqm	
	Survey date: MONDAY	08/05/17	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	WK-02-D-04 ABELES WAY ATHERSTONE	INDUSTRIAL ESTATE	WARWICKSHIRE
	Edge of Town No Sub Category Total Gross floor area: 17500 sqm Survey date: FRIDAY 27/09/19		Survey Type: MANUAL
9	WY-02-D-05 CARR WOOD ROAD CASTLEFORD	INDUSTRIAL ESTATE	WEST YORKSHIRE
	Edge of Town Development Zone Total Gross floor area: 1776 sqm Survey date: MONDAY 22/05/17		Survey Type: MANUAL
10	WY-02-D-06 PIONEER WAY CASTLEFORD	INDUSTRIAL ESTATE (PART)	WEST YORKSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 4328 sqm Survey date: TUESDAY 23/05/17		Survey Type: MANUAL
11	WY-02-D-07 THUNDERHEAD RIDGE RD CASTLEFORD GLASSHOUGHTON	INDUSTRIAL ESTATE	WEST YORKSHIRE
	Edge of Town No Sub Category Total Gross floor area: 3191 sqm Survey date: MONDAY 15/05/17		Survey Type: MANUAL
12	WY-02-D-08 MILL LANE HALIFAX	INDUSTRIAL ESTATE	WEST YORKSHIRE
	Edge of Town No Sub Category Total Gross floor area: 11305 sqm Survey date: WEDNESDAY 17/10/18		Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.45

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	3	9867	0.057	3	9867	0.010	3	9867	0.067
06:00 - 07:00	3	9867	0.233	3	9867	0.044	3	9867	0.277
07:00 - 08:00	12	7215	0.437	12	7215	0.133	12	7215	0.570
08:00 - 09:00	12	7215	0.797	12	7215	0.350	12	7215	1.147
09:00 - 10:00	12	7215	0.671	12	7215	0.411	12	7215	1.082
10:00 - 11:00	12	7215	0.664	12	7215	0.557	12	7215	1.221
11:00 - 12:00	12	7215	0.636	12	7215	0.625	12	7215	1.261
12:00 - 13:00	12	7215	0.596	12	7215	0.673	12	7215	1.269
13:00 - 14:00	12	7215	0.627	12	7215	0.655	12	7215	1.282
14:00 - 15:00	12	7215	0.553	12	7215	0.634	12	7215	1.187
15:00 - 16:00	12	7215	0.520	12	7215	0.602	12	7215	1.122
16:00 - 17:00	12	7215	0.766	12	7215	0.782	12	7215	1.548
17:00 - 18:00	12	7215	0.485	12	7215	0.982	12	7215	1.467
18:00 - 19:00	12	7215	0.159	12	7215	0.461	12	7215	0.620
19:00 - 20:00	3	9867	0.037	3	9867	0.277	3	9867	0.314
20:00 - 21:00	3	9867	0.017	3	9867	0.054	3	9867	0.071
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.255			7.250			14.505

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Calculation Reference: AUDIT-640801-220115-0102

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : F - WAREHOUSING (COMMERCIAL)
 MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST	
	EX ESSEX	1 days
	HF HERTFORDSHIRE	1 days
03	SOUTH WEST	
	DV DEVON	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
09	NORTH	
	TV TEES VALLEY	1 days
11	SCOTLAND	
	GC GLASGOW CITY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 3824 to 80066 (units: sqm)
 Range Selected by User: 3824 to 80066 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/01 to 03/04/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	2 days
Wednesday	1 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	4
Free Standing (PPS6 Out of Town)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	4
Residential Zone	1
Out of Town	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village,

Secondary Filtering selection:

Use Class:

n/a	1 days
B8	6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
10,001 to 15,000	4 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	2 days
1.1 to 1.5	4 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Not Known	3 days
Yes	1 days
No	3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	7 days
-----------------	--------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	DV-02-F-02	LIDL DISTRIBUTION CENTRE	DEVON
	CHILLPARK BRAKE		
	NEAR EXETER		
	CLYST HONITON		
	Free Standing (PPS6 Out of Town)		
	Out of Town		
	Total Gross floor area:	50000 sqm	
	Survey date: WEDNESDAY	03/04/19	Survey Type: MANUAL
2	EX-02-F-01	SPORTS SUPPLEMENTS	ESSEX
	BRUNEL WAY		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	6560 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
3	GC-02-F-01	DISTRIBUTION CEN.	GLASGOW CITY
	BARRACHNIE ROAD		
	GLASGOW		
	GARROWHILL		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	11504 sqm	
	Survey date: MONDAY	10/09/01	Survey Type: MANUAL
4	HF-02-F-02	SUPERSTORE DISTRIBUTION	HERTFORDSHIRE
	BLACK FAN ROAD		
	WELWYN GARDEN CITY		
	PANSHANGER		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	18600 sqm	
	Survey date: FRIDAY	06/09/02	Survey Type: MANUAL
5	LN-02-F-01	BOOK SERVICE	LINCOLNSHIRE
	TRENT ROAD		
	GRANTHAM		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	32300 sqm	
	Survey date: MONDAY	29/11/10	Survey Type: MANUAL
6	TV-02-F-02	ARGOS WAREHOUSE	TEES VALLEY
	ROUNDHOUSE ROAD		
	DARLINGTON		
	FAVERDALE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	80066 sqm	
	Survey date: TUESDAY	07/10/08	Survey Type: MANUAL
7	WO-02-F-02	DISTRIB. CENTRE	WORCESTERSHIRE
	COTSWOLD WAY		
	WORCESTER		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3824 sqm	
	Survey date: TUESDAY	10/09/02	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL PEOPLE
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period
 Total People to Total Vehicles ratio (all time periods and directions): 1.36

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	50000	0.034	1	50000	0.024	1	50000	0.058
06:00 - 07:00	1	50000	0.080	1	50000	0.038	1	50000	0.118
07:00 - 08:00	7	28979	0.148	7	28979	0.059	7	28979	0.207
08:00 - 09:00	7	28979	0.170	7	28979	0.063	7	28979	0.233
09:00 - 10:00	7	28979	0.157	7	28979	0.088	7	28979	0.245
10:00 - 11:00	7	28979	0.075	7	28979	0.064	7	28979	0.139
11:00 - 12:00	7	28979	0.069	7	28979	0.073	7	28979	0.142
12:00 - 13:00	7	28979	0.094	7	28979	0.103	7	28979	0.197
13:00 - 14:00	7	28979	0.226	7	28979	0.166	7	28979	0.392
14:00 - 15:00	7	28979	0.075	7	28979	0.130	7	28979	0.205
15:00 - 16:00	7	28979	0.057	7	28979	0.094	7	28979	0.151
16:00 - 17:00	7	28979	0.076	7	28979	0.134	7	28979	0.210
17:00 - 18:00	7	28979	0.035	7	28979	0.143	7	28979	0.178
18:00 - 19:00	7	28979	0.029	7	28979	0.080	7	28979	0.109
19:00 - 20:00	1	50000	0.018	1	50000	0.024	1	50000	0.042
20:00 - 21:00	1	50000	0.040	1	50000	0.032	1	50000	0.072
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.383			1.315			2.698

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Calculation Reference: AUDIT-640801-220222-0205

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : D - INDUSTRIAL ESTATE
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	EX ESSEX	2 days
03	SOUTH WEST	
	DV DEVON	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NR NORTHAMPTONSHIRE	2 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	3 days
08	NORTH WEST	
	LC LANCASHIRE	2 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	SW SWANSEA	2 days
	VG VALE OF GLAMORGAN	1 days
11	SCOTLAND	
	FI FIFE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 3191 to 17500 (units: sqm)
 Range Selected by User: 3000 to 20000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 21/10/20

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	5 days
Tuesday	2 days
Wednesday	3 days
Thursday	3 days
Friday	6 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	19 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town 19

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

Not Known 19 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	8 days
15,001 to 20,000	4 days
20,001 to 25,000	3 days
25,001 to 50,000	3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
100,001 to 125,000	3 days
125,001 to 250,000	13 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	9 days
1.1 to 1.5	9 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 19 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 19 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	DV-02-D-07	INDUSTRIAL ESTATE	DEVON
	BITTERN ROAD		
	EXETER		
	SOWTON IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	3600 sqm	
	Survey date: MONDAY	03/07/17	Survey Type: MANUAL
2	ES-02-D-06	INDUSTRIAL ESTATE	EAST SUSSEX
	COURTLANDS ROAD		
	EASTBOURNE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	7525 sqm	
	Survey date: MONDAY	21/10/13	Survey Type: MANUAL
3	EX-02-D-03	INDUSTRIAL ESTATE	ESSEX
	WYNCOLLS ROAD		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4876 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
4	EX-02-D-05	INDUSTRIAL ESTATE	ESSEX
	HECKWORTH CLOSE		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	7280 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
5	FI-02-D-01	INDUSTRIAL ESTATE	FIFE
	DICKSON STREET		
	DUNFERMLINE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	7850 sqm	
	Survey date: THURSDAY	21/05/15	Survey Type: MANUAL
6	LC-02-D-07	INDUSTRIAL ESTATE	LANCASHIRE
	CHAIN CAUL WAY		
	PRESTON		
	ASHTON-ON-RIBBLE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4700 sqm	
	Survey date: FRIDAY	17/11/17	Survey Type: MANUAL
7	LC-02-D-08	INDUSTRIAL ESTATE	LANCASHIRE
	NOOK LANE		
	BAMBER BRIDGE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4000 sqm	
	Survey date: TUESDAY	06/11/18	Survey Type: MANUAL
8	LN-02-D-03	INDUSTRIAL ESTATE	LINCOLNSHIRE
	DEACON ROAD		
	LINCOLN		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	11265 sqm	
	Survey date: FRIDAY	28/06/19	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	NR-02-D-01 ROBINSON WAY KETTERING	INDUSTRIAL ESTATE	NORTHAMPTONSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	12900 sqm	
	Survey date: THURSDAY	23/10/14	Survey Type: MANUAL
10	NR-02-D-02 CORNHILL CLOSE NORTHAMPTON LODGE FARM IND. ESTATE	INDUSTRIAL ESTATE	NORTHAMPTONSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	12670 sqm	
	Survey date: WEDNESDAY	21/10/20	Survey Type: MANUAL
11	SW-02-D-01 UPPER FOREST WAY SWANSEA SWANSEA ENTERPRISE PK	INDUSTRIAL ESTATE	SWANSEA
	Edge of Town Industrial Zone Total Gross floor area:	6822 sqm	
	Survey date: WEDNESDAY	09/10/19	Survey Type: MANUAL
12	SW-02-D-02 CLARION COURT SWANSEA SWANSEA ENTERPRISE PK	INDUSTRIAL ESTATE	SWANSEA
	Edge of Town Industrial Zone Total Gross floor area:	5280 sqm	
	Survey date: THURSDAY	10/10/19	Survey Type: MANUAL
13	TW-02-D-07 SWALWELL BANK GATESHEAD WHICKHAM	INDUSTRIAL ESTATE	TYNE & WEAR
	Edge of Town Residential Zone Total Gross floor area:	6800 sqm	
	Survey date: FRIDAY	04/10/13	Survey Type: MANUAL
14	VG-02-D-01 ARTHUR STREET BARRY	INDUSTRIAL ESTATE	VALE OF GLAMORGAN
	Edge of Town No Sub Category Total Gross floor area:	13091 sqm	
	Survey date: MONDAY	08/05/17	Survey Type: MANUAL
15	WK-02-D-04 ABELES WAY ATHERSTONE	INDUSTRIAL ESTATE	WARWICKSHIRE
	Edge of Town No Sub Category Total Gross floor area:	17500 sqm	
	Survey date: FRIDAY	27/09/19	Survey Type: MANUAL
16	WO-02-D-02 WEIR LANE WORCESTER	INDUSTRIAL ESTATE	WORCESTERSHIRE
	Edge of Town Residential Zone Total Gross floor area:	9500 sqm	
	Survey date: MONDAY	14/11/16	Survey Type: MANUAL

Northern Transport Planning LEEDS WEST YORKSHIRE

Licence No: 640801

LIST OF SITES relevant to selection parameters (Cont.)

17	WY-02-D-06 PIONEER WAY CASTLEFORD	INDUSTRIAL ESTATE (PART)	WEST YORKSHIRE
	Edge of Town Industrial Zone		
	Total Gross floor area:	4328 sqm	
	Survey date: TUESDAY	23/05/17	Survey Type: MANUAL
18	WY-02-D-07 THUNDERHEAD RIDGE RD CASTLEFORD GLASSHOUGHTON	INDUSTRIAL ESTATE	WEST YORKSHIRE
	Edge of Town No Sub Category		
	Total Gross floor area:	3191 sqm	
	Survey date: MONDAY	15/05/17	Survey Type: MANUAL
19	WY-02-D-08 MILL LANE HALIFAX	INDUSTRIAL ESTATE	WEST YORKSHIRE
	Edge of Town No Sub Category		
	Total Gross floor area:	11305 sqm	
	Survey date: WEDNESDAY	17/10/18	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	4	10568	0.054	4	10568	0.007	4	10568	0.061
06:00 - 07:00	5	10707	0.123	5	10707	0.032	5	10707	0.155
07:00 - 08:00	19	8131	0.438	19	8131	0.118	19	8131	0.556
08:00 - 09:00	19	8131	0.551	19	8131	0.284	19	8131	0.835
09:00 - 10:00	19	8131	0.485	19	8131	0.346	19	8131	0.831
10:00 - 11:00	19	8131	0.385	19	8131	0.385	19	8131	0.770
11:00 - 12:00	19	8131	0.419	19	8131	0.416	19	8131	0.835
12:00 - 13:00	19	8131	0.379	19	8131	0.440	19	8131	0.819
13:00 - 14:00	19	8131	0.418	19	8131	0.401	19	8131	0.819
14:00 - 15:00	19	8131	0.357	19	8131	0.401	19	8131	0.758
15:00 - 16:00	19	8131	0.334	19	8131	0.402	19	8131	0.736
16:00 - 17:00	19	8131	0.355	19	8131	0.557	19	8131	0.912
17:00 - 18:00	19	8131	0.207	19	8131	0.491	19	8131	0.698
18:00 - 19:00	19	8131	0.087	19	8131	0.197	19	8131	0.284
19:00 - 20:00	5	10707	0.015	5	10707	0.084	5	10707	0.099
20:00 - 21:00	5	10707	0.009	5	10707	0.028	5	10707	0.037
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.616			4.589			9.205

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected:	3191 - 17500 (units: sqm)
Survey date range:	01/01/13 - 21/10/20
Number of weekdays (Monday-Friday):	19
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	4	10568	0.000	4	10568	0.000	4	10568	0.000
06:00 - 07:00	5	10707	0.004	5	10707	0.002	5	10707	0.006
07:00 - 08:00	19	8131	0.019	19	8131	0.014	19	8131	0.033
08:00 - 09:00	19	8131	0.028	19	8131	0.030	19	8131	0.058
09:00 - 10:00	19	8131	0.039	19	8131	0.033	19	8131	0.072
10:00 - 11:00	19	8131	0.031	19	8131	0.033	19	8131	0.064
11:00 - 12:00	19	8131	0.028	19	8131	0.034	19	8131	0.062
12:00 - 13:00	19	8131	0.032	19	8131	0.028	19	8131	0.060
13:00 - 14:00	19	8131	0.036	19	8131	0.023	19	8131	0.059
14:00 - 15:00	19	8131	0.026	19	8131	0.027	19	8131	0.053
15:00 - 16:00	19	8131	0.021	19	8131	0.024	19	8131	0.045
16:00 - 17:00	19	8131	0.014	19	8131	0.014	19	8131	0.028
17:00 - 18:00	19	8131	0.005	19	8131	0.008	19	8131	0.013
18:00 - 19:00	19	8131	0.001	19	8131	0.002	19	8131	0.003
19:00 - 20:00	5	10707	0.000	5	10707	0.000	5	10707	0.000
20:00 - 21:00	5	10707	0.004	5	10707	0.000	5	10707	0.004
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.288			0.272			0.560

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Calculation Reference: AUDIT-640801-220222-0208

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : F - WAREHOUSING (COMMERCIAL)
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	BD BEDFORDSHIRE	1 days
	BU BUCKINGHAMSHIRE	1 days
	EX ESSEX	1 days
	HF HERTFORDSHIRE	2 days
	KC KENT	2 days
03	SOUTH WEST	
	CW CORNWALL	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	WO WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
09	NORTH	
	TV TEES VALLEY	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	NW NEWPORT	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 5150 to 80066 (units: sqm)
 Range Selected by User: 5000 to 80066 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/00 to 03/04/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	2 days
Wednesday	1 days
Thursday	6 days
Friday	4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	14 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town	14
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This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	7
Commercial Zone	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

n/a	1 days
B8	13 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	7 days
10,001 to 15,000	5 days
15,001 to 20,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 75,000	1 days
100,001 to 125,000	4 days
125,001 to 250,000	5 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	7 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Not Known	5 days
Yes	1 days
No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	14 days
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This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	BD-02-F-01 FRENCH'S AVENUE DUNSTABLE	WAREHOUSING	BEDFORDSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 6050 sqm Survey date: THURSDAY 07/03/02		Survey Type: MANUAL
2	BU-02-F-01 BLETCHAM WAY MILTON KEYNES BLETCHLEY	SUPERSTORE DISTRIB.	BUCKINGHAMSHIRE
	Edge of Town Industrial Zone Total Gross floor area: 52125 sqm Survey date: THURSDAY 07/02/02		Survey Type: MANUAL
3	CW-02-F-01 A390 NEAR TRURO THREEMILESTONE	WAREHOUSING	CORNWALL
	Edge of Town No Sub Category Total Gross floor area: 5150 sqm Survey date: TUESDAY 18/09/07		Survey Type: MANUAL
4	EX-02-F-01 BRUNEL WAY COLCHESTER SEVERALLS INDUSTRIAL PK	SPORTS SUPPLEMENTS	ESSEX
	Edge of Town Industrial Zone Total Gross floor area: 6560 sqm Survey date: FRIDAY 18/05/18		Survey Type: MANUAL
5	HF-02-F-01 LONDON ROAD BUNTINGFORD	SUPERSTORE DISTRIBUTION	HERTFORDSHIRE
	Edge of Town No Sub Category Total Gross floor area: 47584 sqm Survey date: WEDNESDAY 06/12/00		Survey Type: MANUAL
6	HF-02-F-03 HATFIELD HATFIELD BUSINESS CEN.	DISTRIBUTION CEN.	HERTFORDSHIRE
	Edge of Town Commercial Zone Total Gross floor area: 80000 sqm Survey date: THURSDAY 10/07/08		Survey Type: MANUAL
7	KC-02-F-01 HOLBOROUGH ROAD SNODLAND	FOOD DISTRIB.	KENT
	Edge of Town No Sub Category Total Gross floor area: 7500 sqm Survey date: THURSDAY 20/06/02		Survey Type: MANUAL
8	KC-02-F-02 MILLS ROAD AYLESFORD QUARRY WOOD	COMMERCIAL WAREHOUSING	KENT
	Edge of Town Industrial Zone Total Gross floor area: 11200 sqm Survey date: FRIDAY 22/09/17		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	LN-02-F-01 TRENT ROAD GRANTHAM	BOOK SERVICE	LINCOLNSHIRE
	Edge of Town No Sub Category Total Gross floor area:	32300 sqm	
	Survey date: MONDAY	29/11/10	Survey Type: MANUAL
10	NW-02-F-01 TREDEGAR TERRACE NEWPORT CROSSKEYS	LOGISTICS CENTRE	NEWPORT
	Edge of Town No Sub Category Total Gross floor area:	16275 sqm	
	Survey date: FRIDAY	12/10/07	Survey Type: MANUAL
11	TV-02-F-02 ROUNDHOUSE ROAD DARLINGTON FAVERDALE	ARGOS WAREHOUSE	TEES VALLEY
	Edge of Town Industrial Zone Total Gross floor area:	80066 sqm	
	Survey date: TUESDAY	07/10/08	Survey Type: MANUAL
12	TW-02-F-01 MANDARIN WAY WASHINGTON PATTISON IND. ESTATE	ASDA DISTRIBUTION CENTRE	TYNE & WEAR
	Edge of Town Industrial Zone Total Gross floor area:	31000 sqm	
	Survey date: FRIDAY	13/11/15	Survey Type: MANUAL
13	WO-02-F-01 WAINWRIGHT ROAD WORCESTER SHIRE BUSINESS PARK	SUPERSTORE DIST.	WORCESTERSHIRE
	Edge of Town Commercial Zone Total Gross floor area:	31416 sqm	
	Survey date: THURSDAY	14/03/02	Survey Type: MANUAL
14	WY-02-F-02 STAITHGATE LANE BRADFORD NEWHALL	DISTRIBUTION COMPANY	WEST YORKSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	10446 sqm	
	Survey date: THURSDAY	14/03/19	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	7500	0.147	1	7500	0.147	1	7500	0.294
01:00 - 02:00	1	7500	0.053	1	7500	0.093	1	7500	0.146
02:00 - 03:00	1	7500	0.080	1	7500	0.093	1	7500	0.173
03:00 - 04:00	1	7500	0.093	1	7500	0.067	1	7500	0.160
04:00 - 05:00	1	7500	0.120	1	7500	0.107	1	7500	0.227
05:00 - 06:00	2	8973	0.267	2	8973	0.150	2	8973	0.417
06:00 - 07:00	2	8973	0.440	2	8973	0.234	2	8973	0.674
07:00 - 08:00	14	29834	0.110	14	29834	0.072	14	29834	0.182
08:00 - 09:00	14	29834	0.094	14	29834	0.065	14	29834	0.159
09:00 - 10:00	14	29834	0.096	14	29834	0.061	14	29834	0.157
10:00 - 11:00	14	29834	0.060	14	29834	0.064	14	29834	0.124
11:00 - 12:00	14	29834	0.073	14	29834	0.065	14	29834	0.138
12:00 - 13:00	14	29834	0.068	14	29834	0.076	14	29834	0.144
13:00 - 14:00	14	29834	0.165	14	29834	0.125	14	29834	0.290
14:00 - 15:00	14	29834	0.092	14	29834	0.151	14	29834	0.243
15:00 - 16:00	14	29834	0.078	14	29834	0.103	14	29834	0.181
16:00 - 17:00	14	29834	0.068	14	29834	0.119	14	29834	0.187
17:00 - 18:00	14	29834	0.064	14	29834	0.102	14	29834	0.166
18:00 - 19:00	14	29834	0.037	14	29834	0.071	14	29834	0.108
19:00 - 20:00	3	7999	0.063	3	7999	0.146	3	7999	0.209
20:00 - 21:00	2	8973	0.100	2	8973	0.078	2	8973	0.178
21:00 - 22:00	1	7500	0.053	1	7500	0.080	1	7500	0.133
22:00 - 23:00	1	7500	0.133	1	7500	0.093	1	7500	0.226
23:00 - 24:00	1	7500	0.080	1	7500	0.080	1	7500	0.160
Total Rates:			2.634			2.442			5.076

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

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Parameter summary

Trip rate parameter range selected:	5150 - 80066 (units: sqm)
Survey date range:	01/01/00 - 03/04/19
Number of weekdays (Monday-Friday):	14
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	7500	0.147	1	7500	0.147	1	7500	0.294
01:00 - 02:00	1	7500	0.053	1	7500	0.093	1	7500	0.146
02:00 - 03:00	1	7500	0.080	1	7500	0.093	1	7500	0.173
03:00 - 04:00	1	7500	0.093	1	7500	0.067	1	7500	0.160
04:00 - 05:00	1	7500	0.120	1	7500	0.107	1	7500	0.227
05:00 - 06:00	2	8973	0.072	2	8973	0.111	2	8973	0.183
06:00 - 07:00	2	8973	0.111	2	8973	0.139	2	8973	0.250
07:00 - 08:00	14	29834	0.023	14	29834	0.025	14	29834	0.048
08:00 - 09:00	14	29834	0.026	14	29834	0.030	14	29834	0.056
09:00 - 10:00	14	29834	0.029	14	29834	0.028	14	29834	0.057
10:00 - 11:00	14	29834	0.029	14	29834	0.029	14	29834	0.058
11:00 - 12:00	14	29834	0.028	14	29834	0.028	14	29834	0.056
12:00 - 13:00	14	29834	0.026	14	29834	0.027	14	29834	0.053
13:00 - 14:00	14	29834	0.028	14	29834	0.025	14	29834	0.053
14:00 - 15:00	14	29834	0.027	14	29834	0.028	14	29834	0.055
15:00 - 16:00	14	29834	0.031	14	29834	0.026	14	29834	0.057
16:00 - 17:00	14	29834	0.030	14	29834	0.024	14	29834	0.054
17:00 - 18:00	14	29834	0.029	14	29834	0.023	14	29834	0.052
18:00 - 19:00	14	29834	0.019	14	29834	0.020	14	29834	0.039
19:00 - 20:00	3	7999	0.029	3	7999	0.046	3	7999	0.075
20:00 - 21:00	2	8973	0.056	2	8973	0.056	2	8973	0.112
21:00 - 22:00	1	7500	0.053	1	7500	0.080	1	7500	0.133
22:00 - 23:00	1	7500	0.133	1	7500	0.093	1	7500	0.226
23:00 - 24:00	1	7500	0.080	1	7500	0.080	1	7500	0.160
Total Rates:			1.352			1.425			2.777

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

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APPENDIX C

WP703EW - Method of travel to work (2001 specification) (Workplace population)

ONS Crown Copyright Reserved [from Nomis on 15 January 2022]

population	All usual residents aged 16 to 74 in employment in the area the week before the census
units	Persons
area type	2011 super output areas - middle layer
area name	E02004134 : East Devon 006

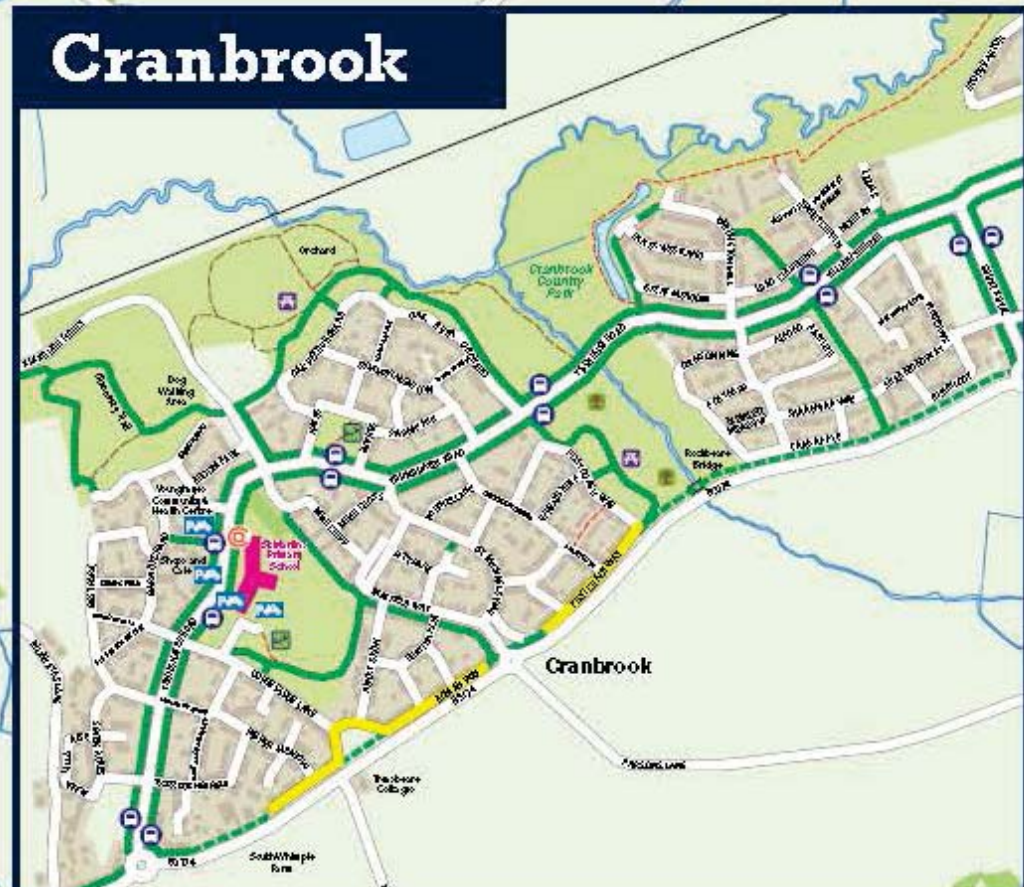
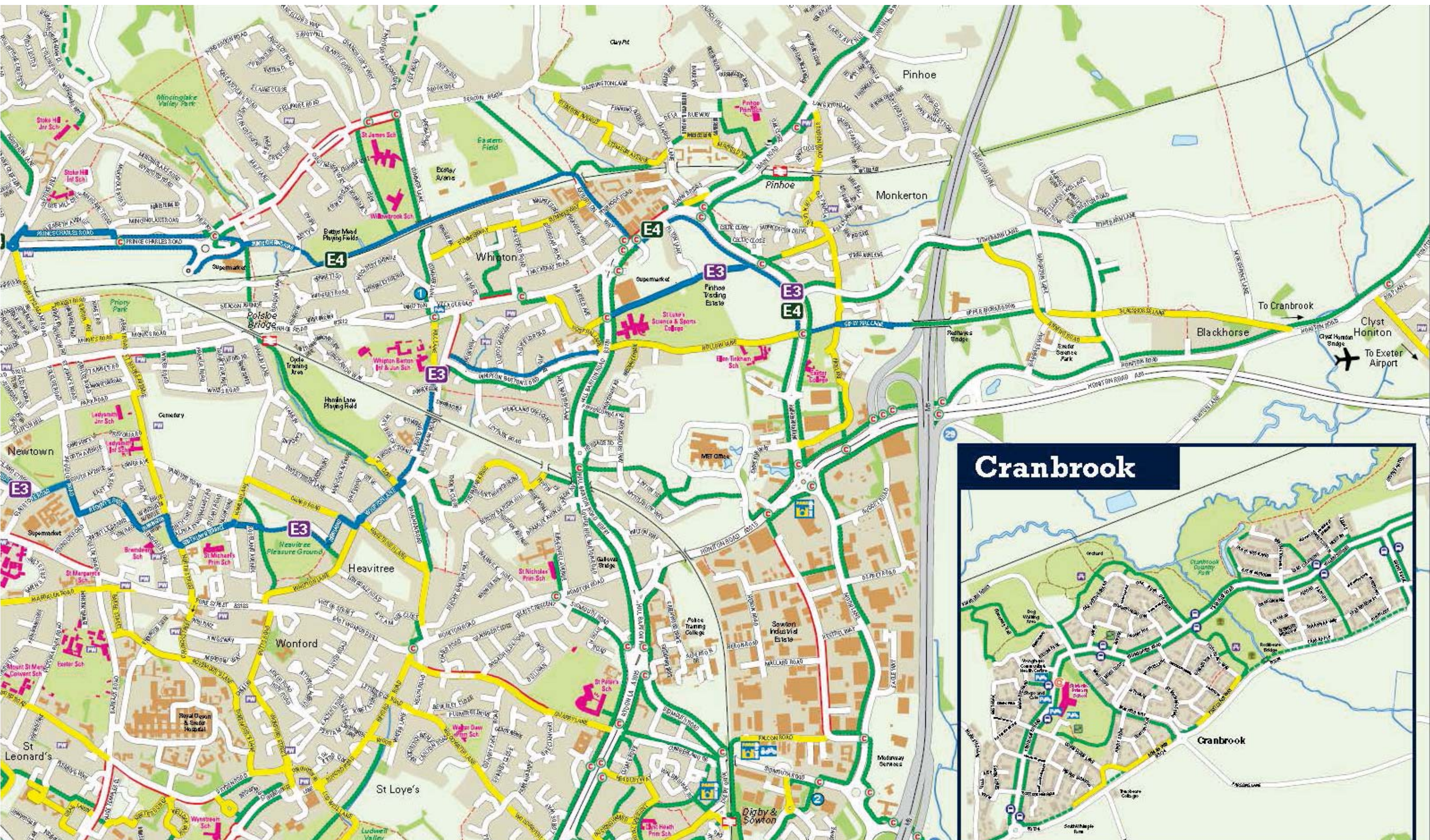
Method of travel to work

2011

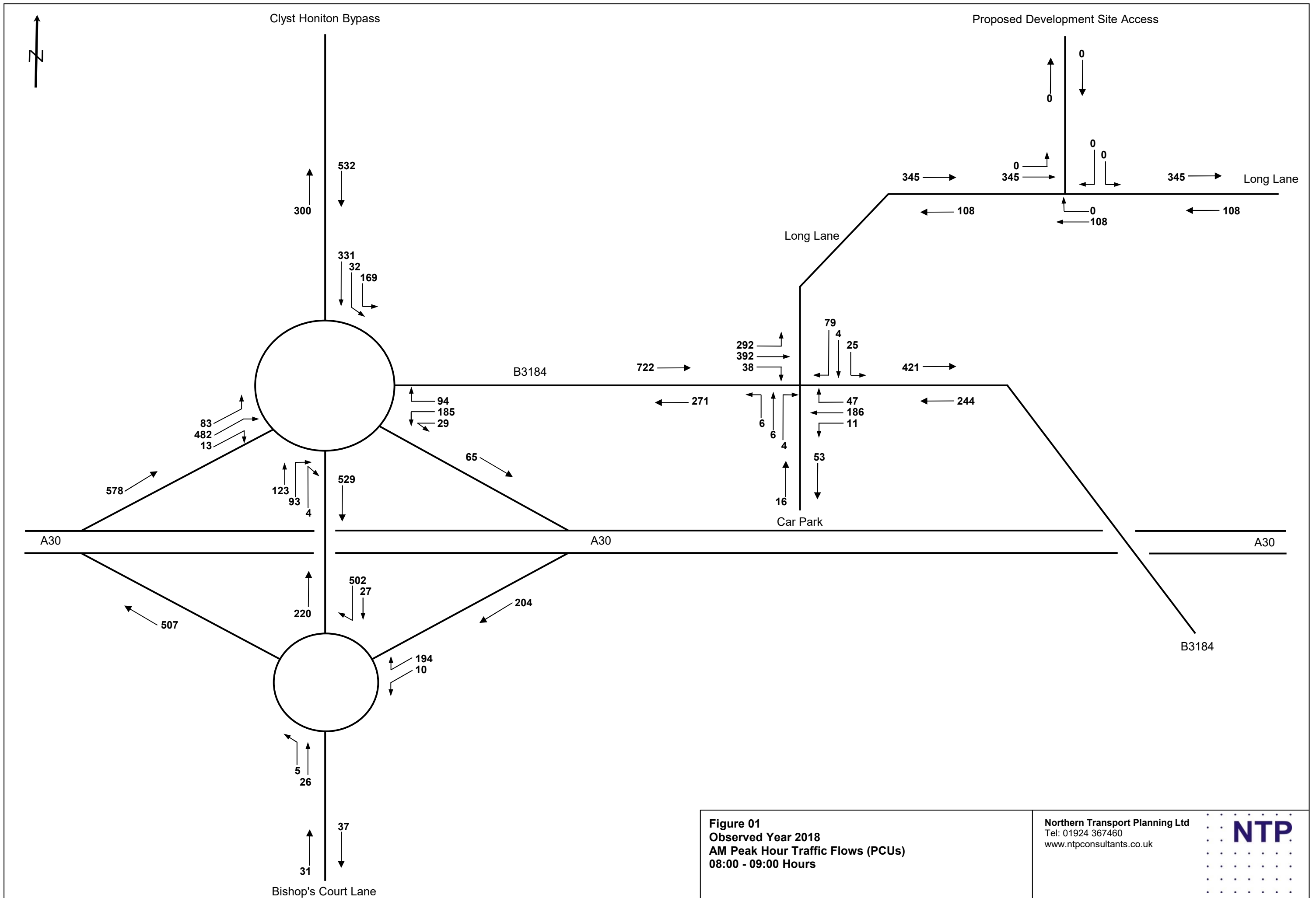
All categories: Method of travel to work (2001 specification)	6,579	6,579
Work mainly at or from home	636	636
Underground, metro, light rail or tram	1	1
Train	66	66
Bus, minibuss or coach	254	254
Taxi	6	6
Motorcycle, scooter or moped	97	97
Driving a car or van	4,775	4,775
Passenger in a car or van	355	355
Bicycle	92	92
On foot	273	273
Other method of travel to work	24	24

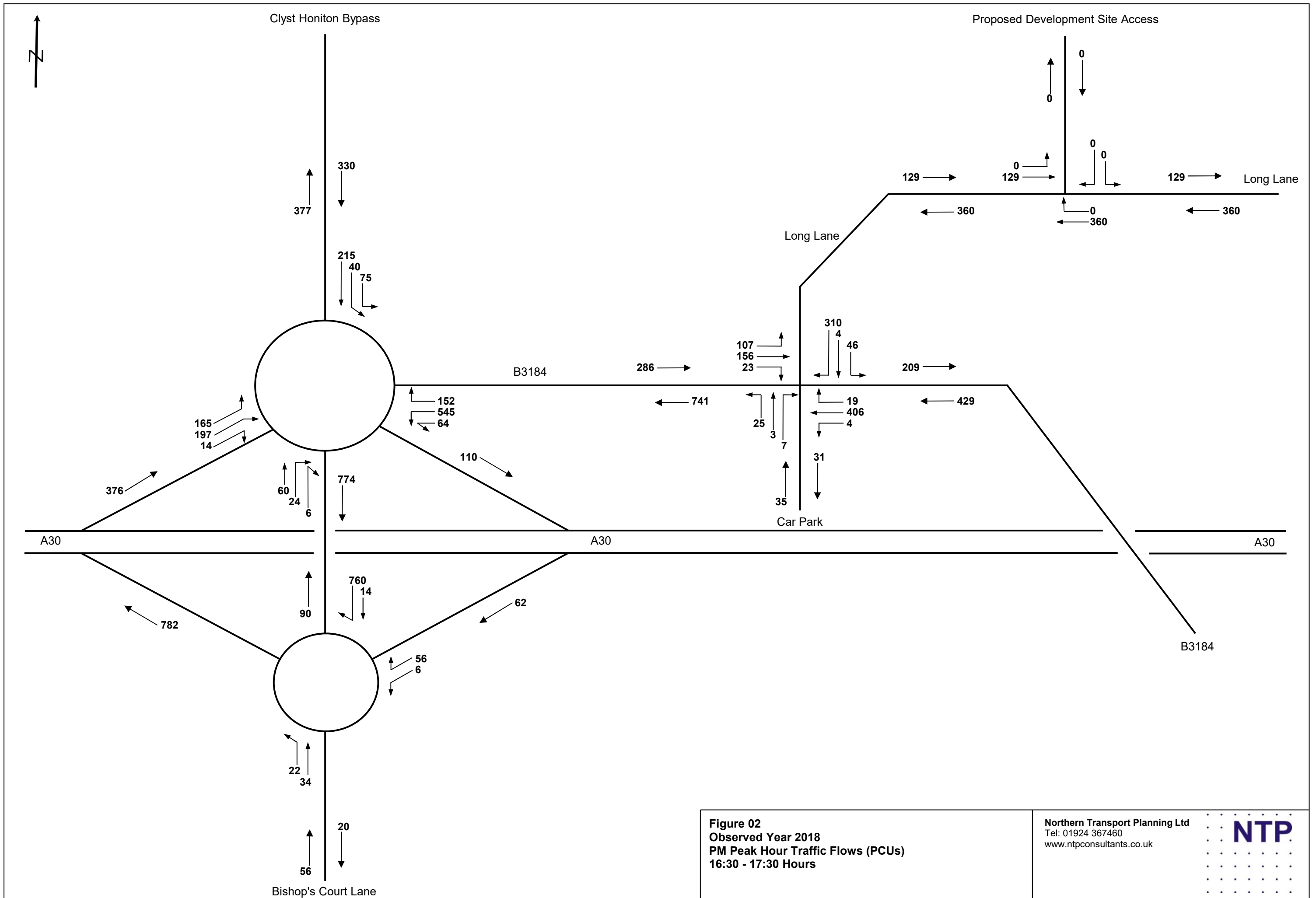
				MODAL SPLIT	TWO-WAY TRIPS
Walking	273	4.61%	1709	4.6%	79
Cycling	92	1.55%	26.6	1.6%	26
Public transport	321	5.42%	92.7	5.4%	93
Motorcycle, scooter or moped	97	1.64%	28.0	1.6%	28
Single occupancy car	4,420	74.67%	1276.2	74.7%	1276
Multi occupancy car	716	12.10%	206.7	12.1%	207
	5,919	100.00%	1709	100.0%	1709

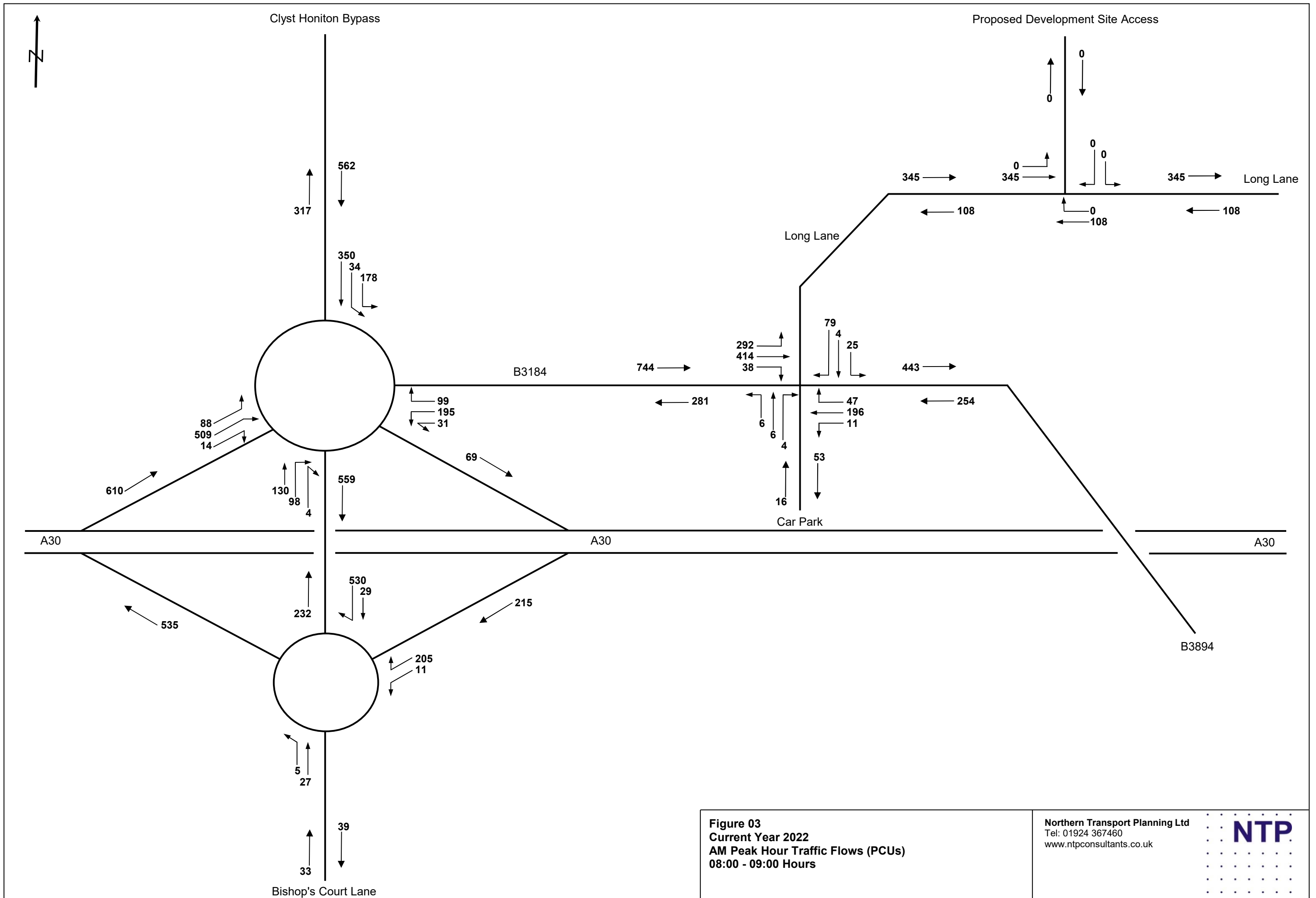
APPENDIX D



APPENDIX E







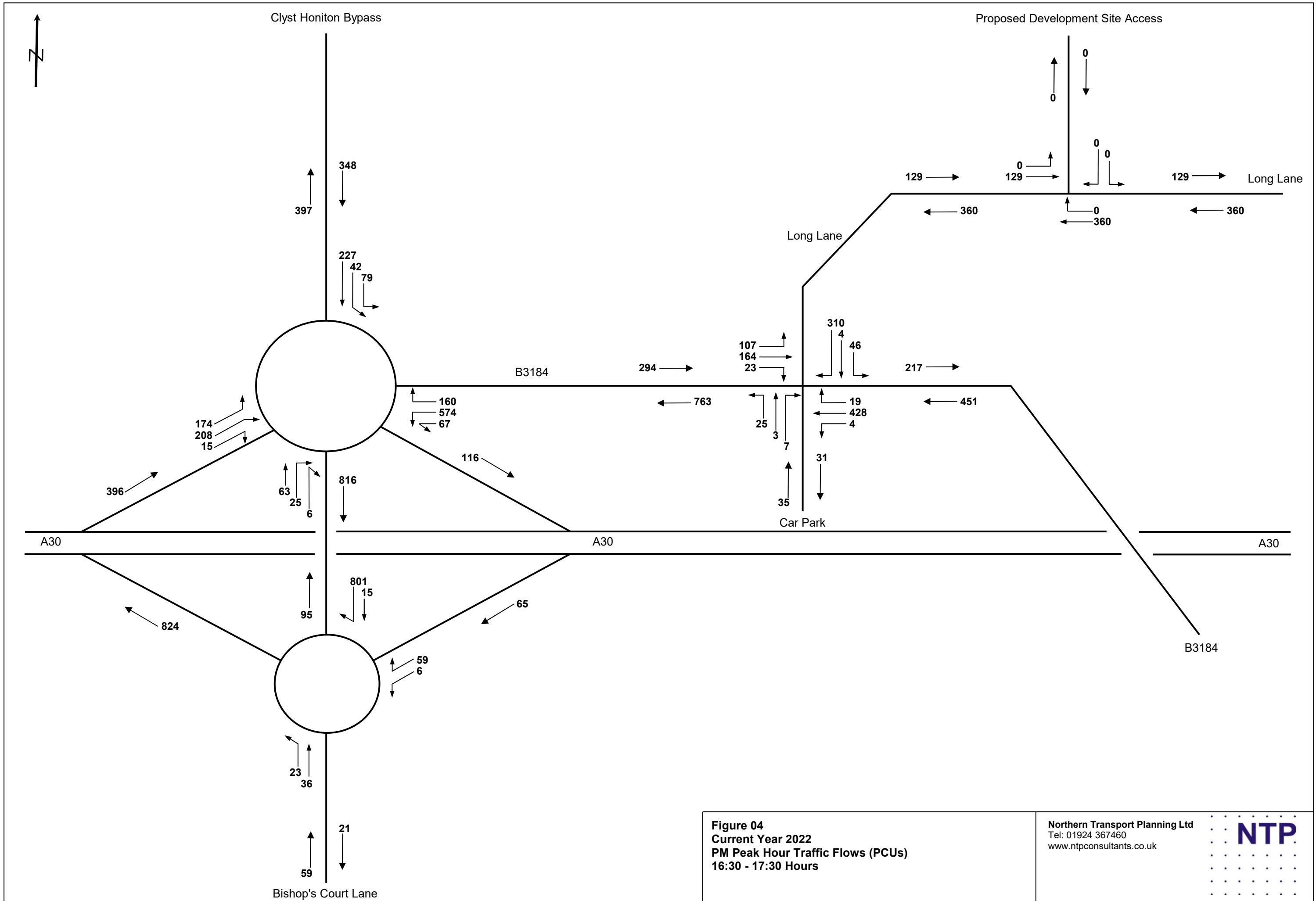


Figure 04
Current Year 2022
PM Peak Hour Traffic Flows (PCUs)
16:30 - 17:30 Hours

Northern Transport Planning Ltd
Tel: 01924 367460
www.ntpconsultants.co.uk



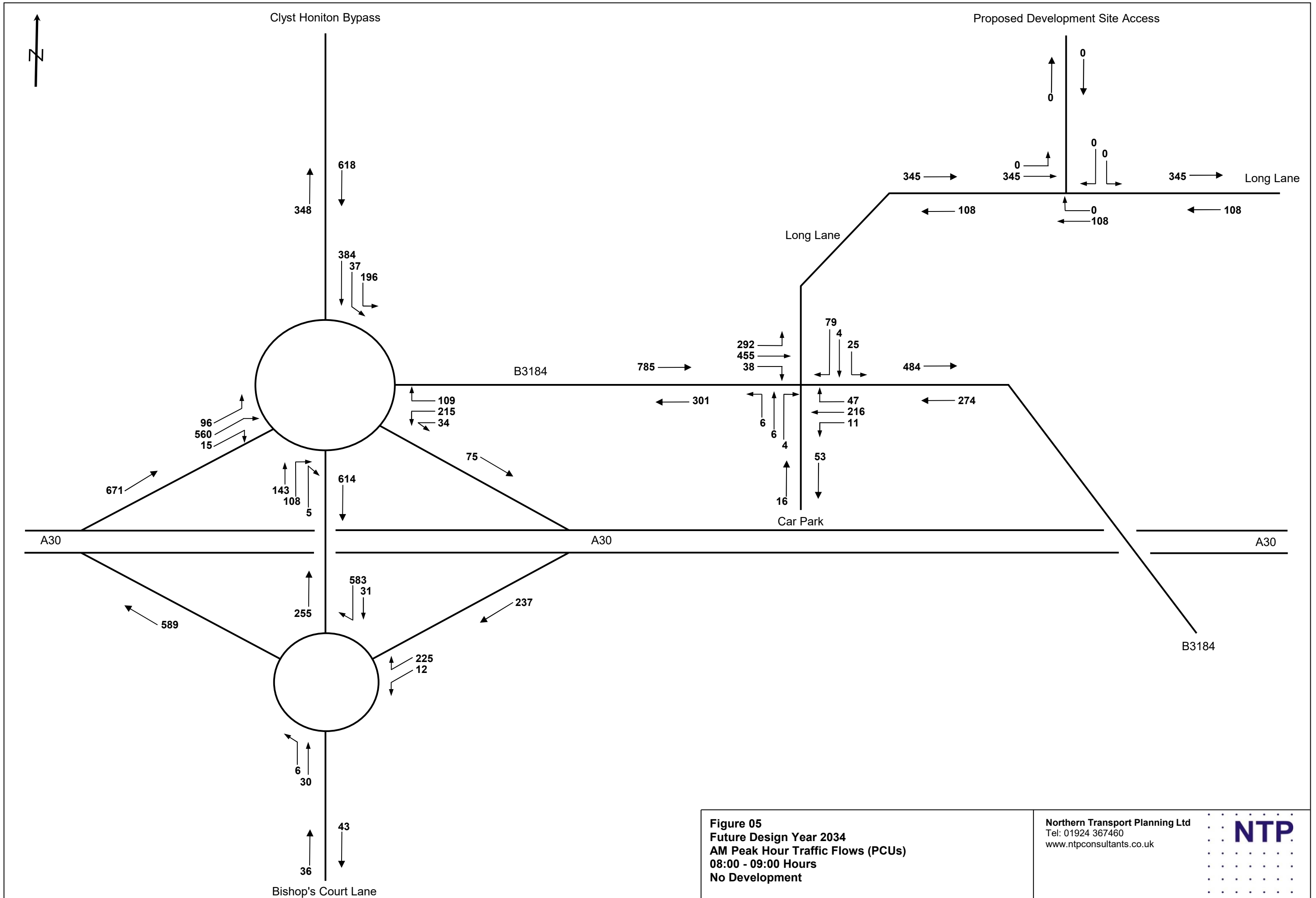
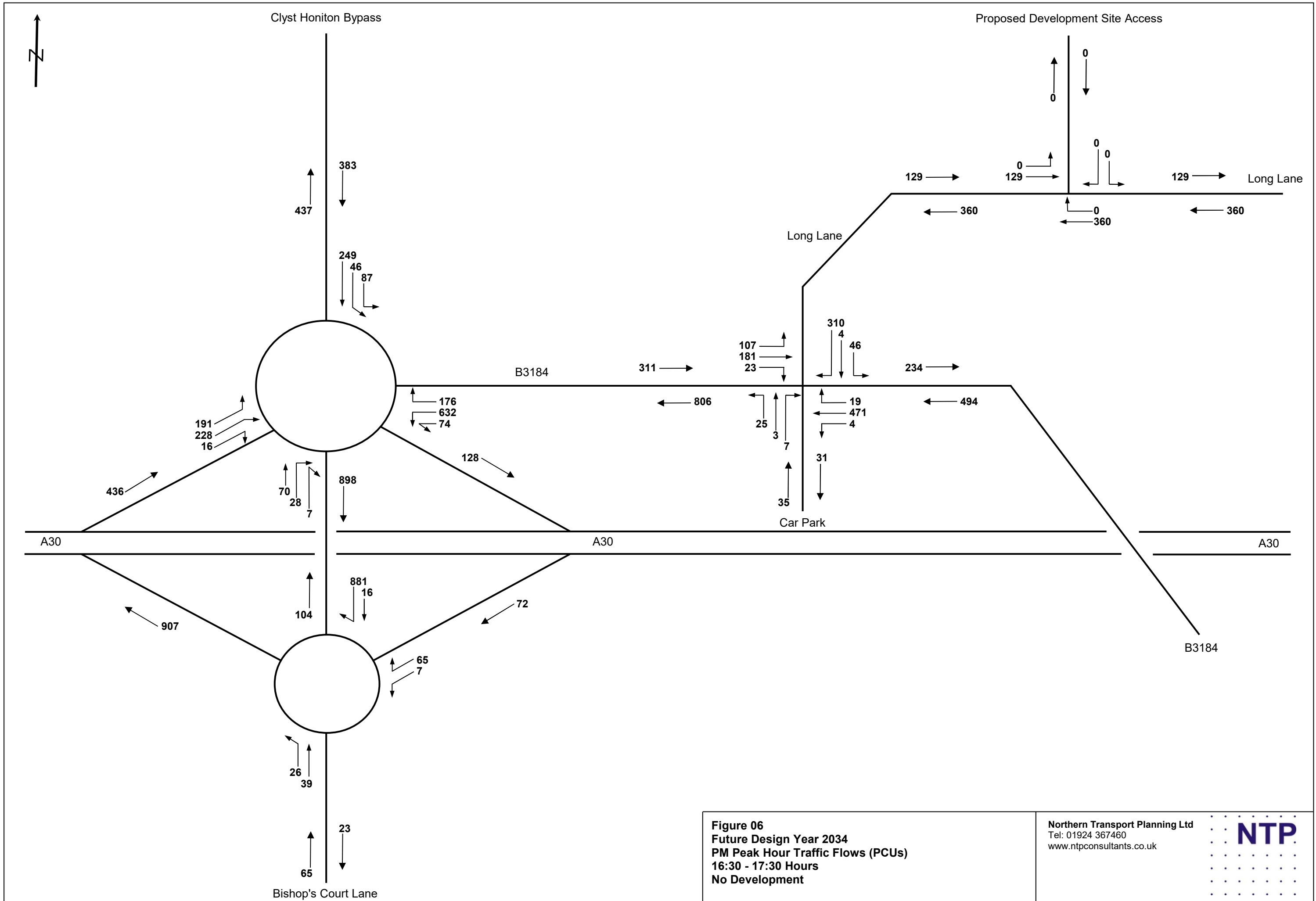


Figure 05
Future Design Year 2034
AM Peak Hour Traffic Flows (PCUs)
08:00 - 09:00 Hours
No Development

Northern Transport Planning Ltd
Tel: 01924 367460
www.ntpconsultants.co.uk





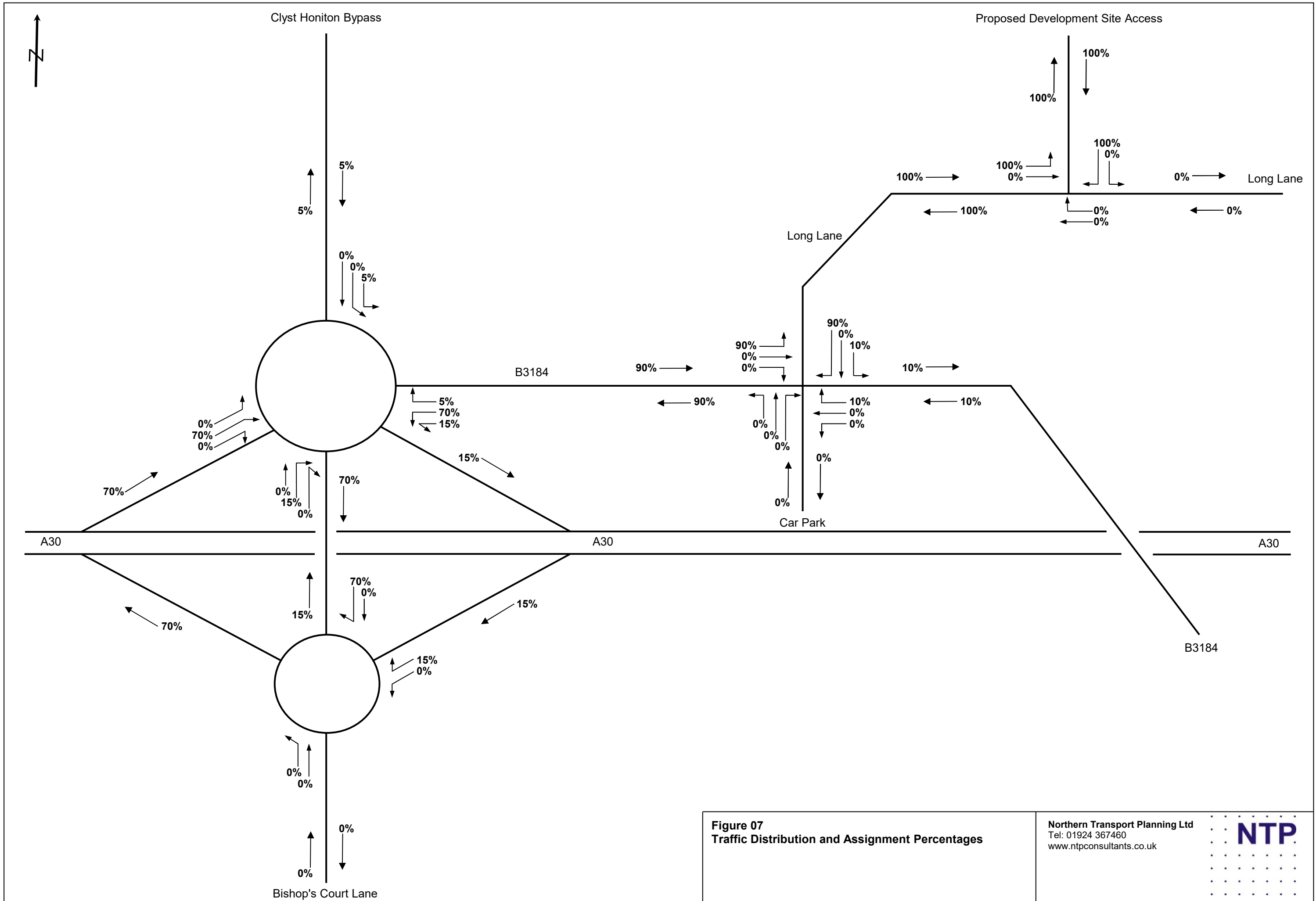


Figure 07
Traffic Distribution and Assignment Percentages

Northern Transport Planning Ltd
Tel: 01924 367460
www.ntpconsultants.co.uk



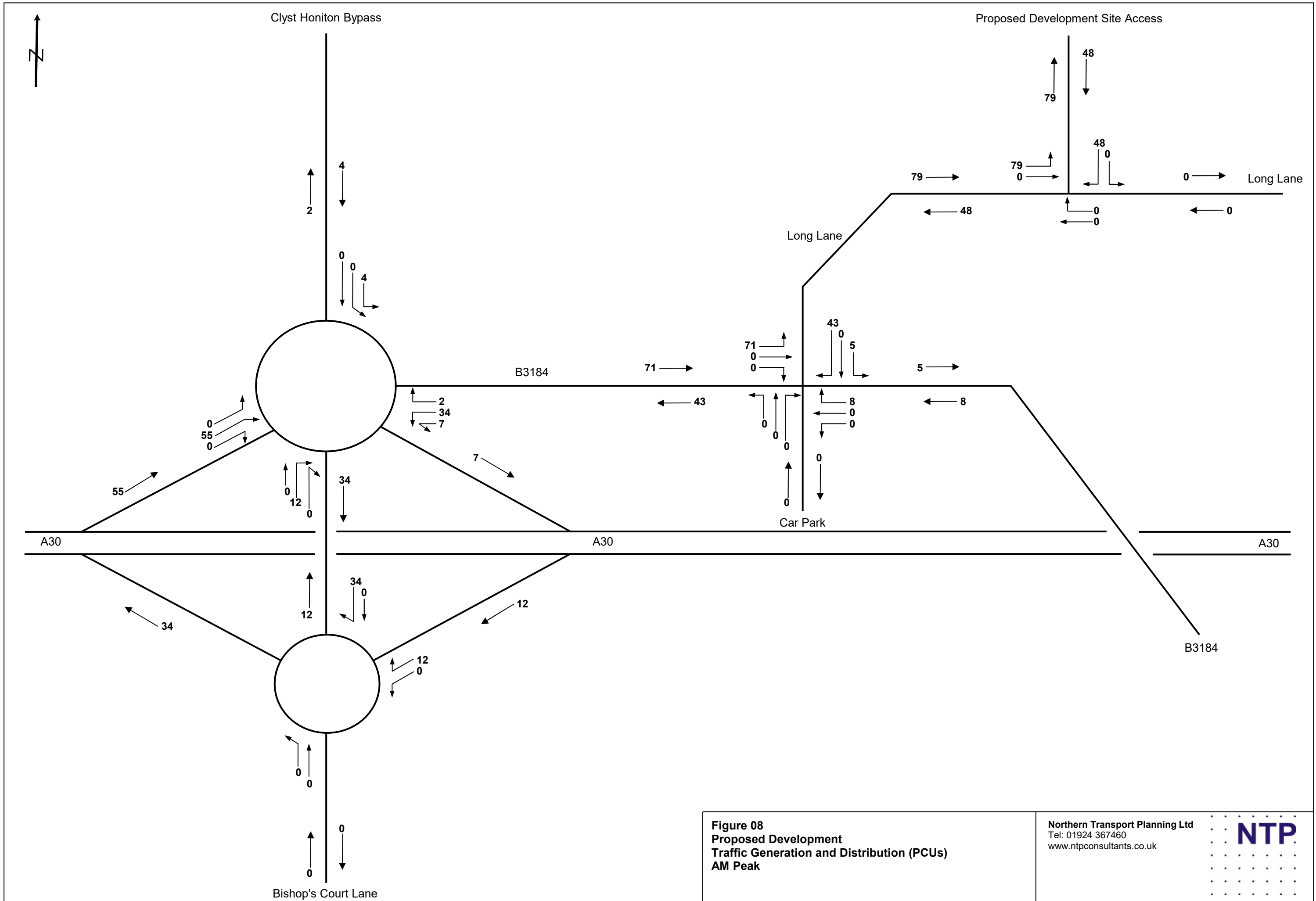


Figure 08
Proposed Development
Traffic Generation and Distribution (PCUs)
AM Peak

Northern Transport Planning Ltd
Tel: 01924 367460
www.ntpconsultants.co.uk



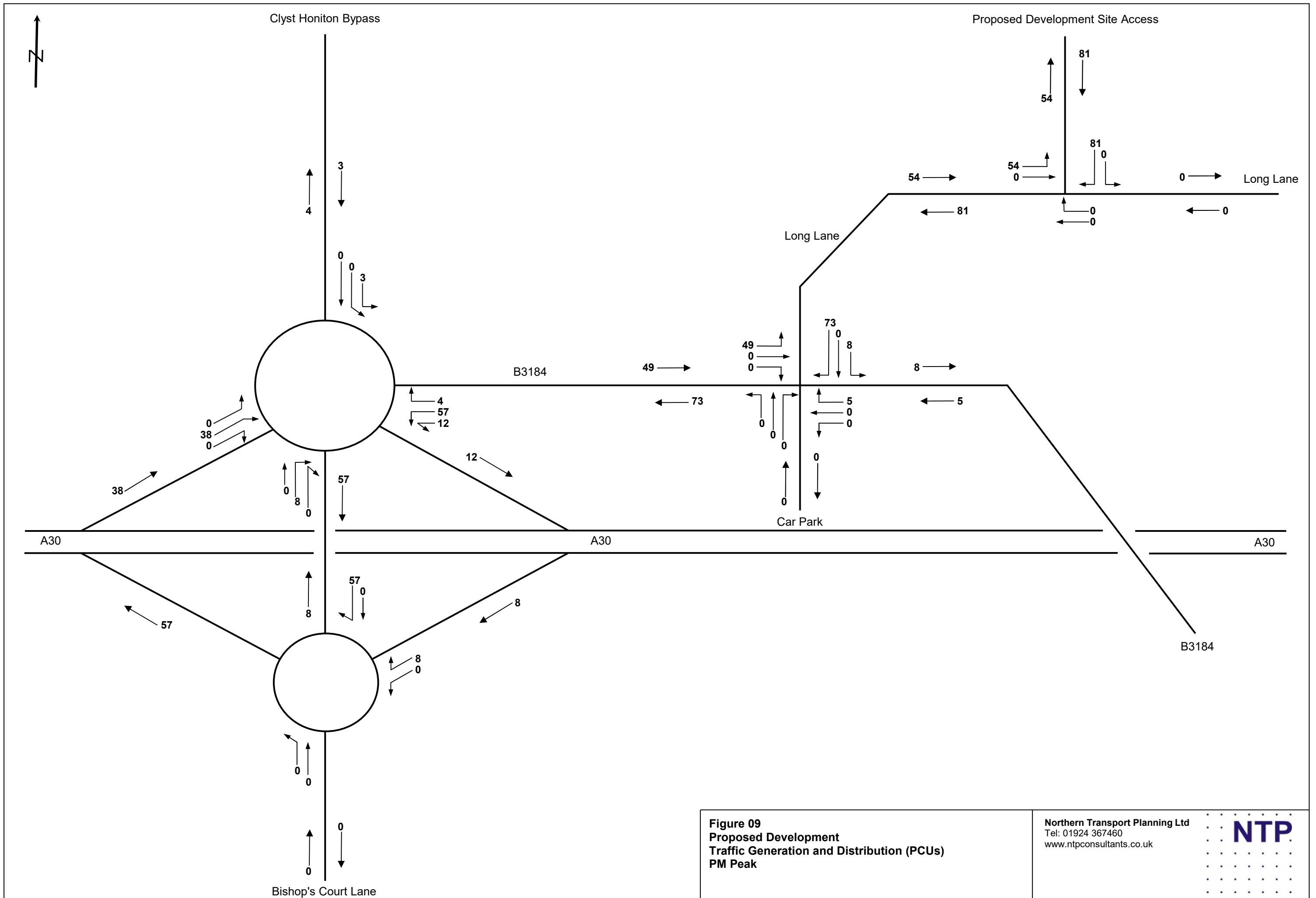
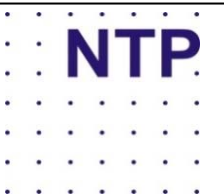


Figure 09
Proposed Development
Traffic Generation and Distribution (PCUs)
PM Peak

Northern Transport Planning Ltd
Tel: 01924 367460
www.ntpconsultants.co.uk



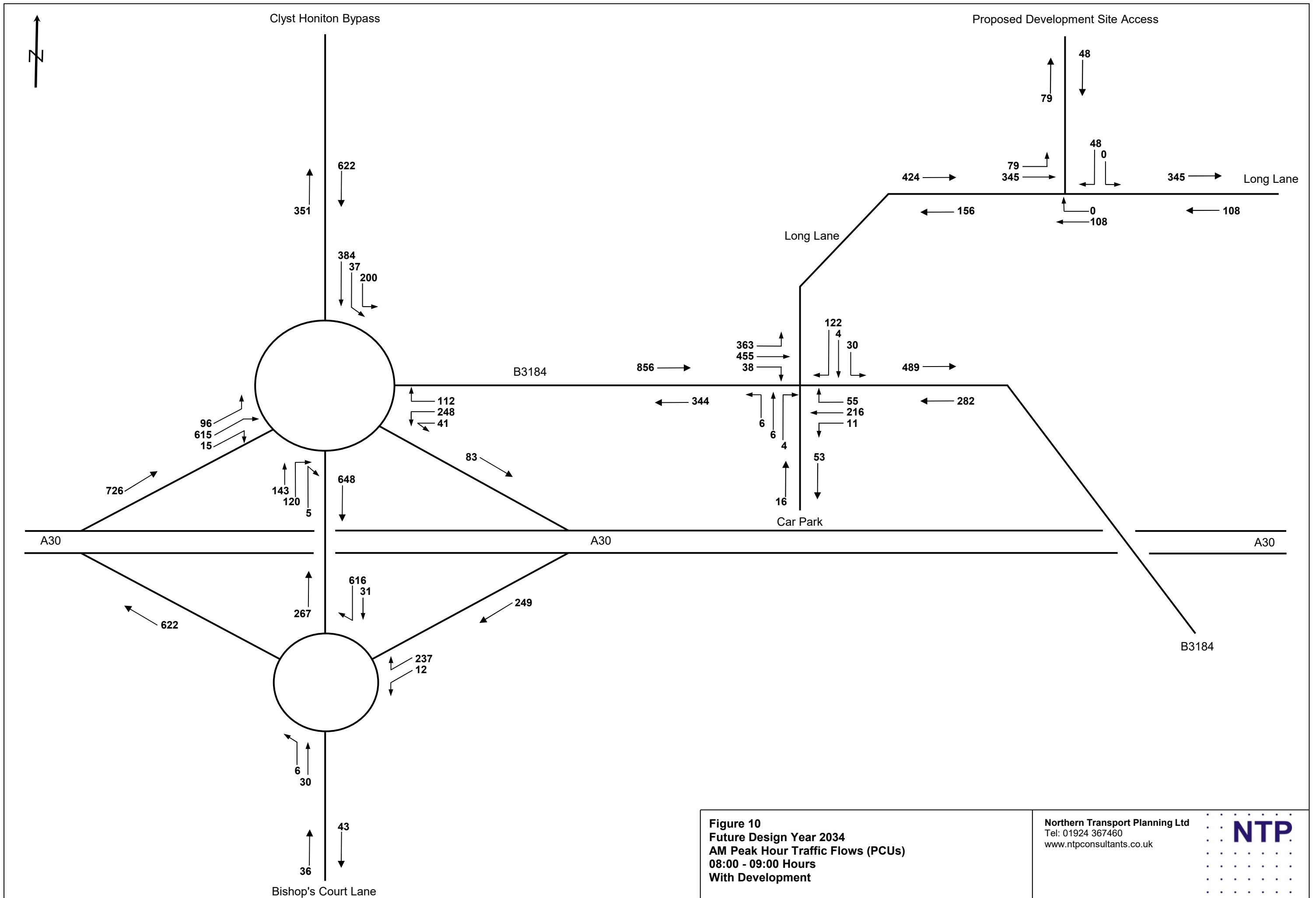


Figure 10
Future Design Year 2034
AM Peak Hour Traffic Flows (PCUs)
08:00 - 09:00 Hours
With Development

Northern Transport Planning Ltd
Tel: 01924 367460
www.ntpconsultants.co.uk



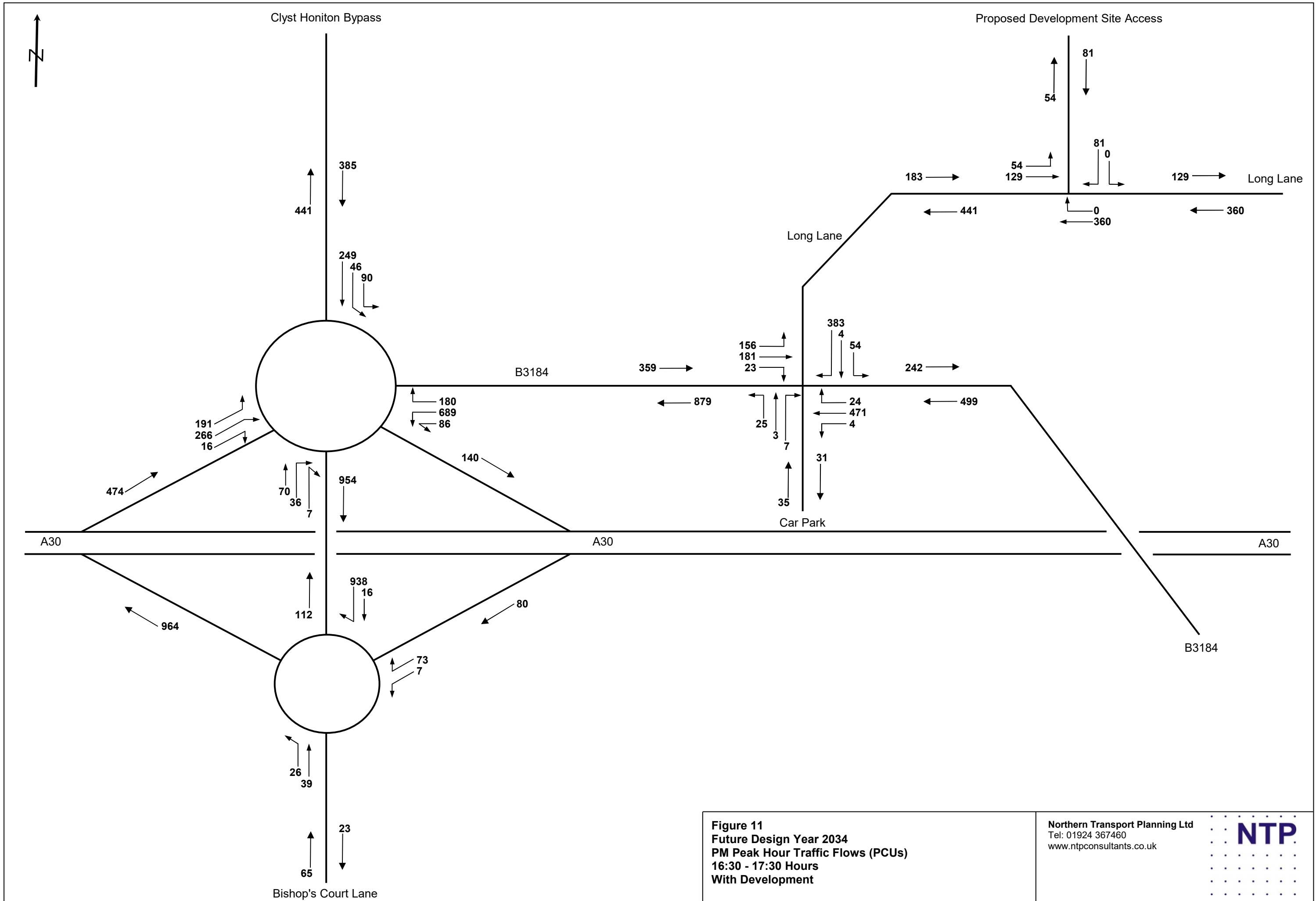
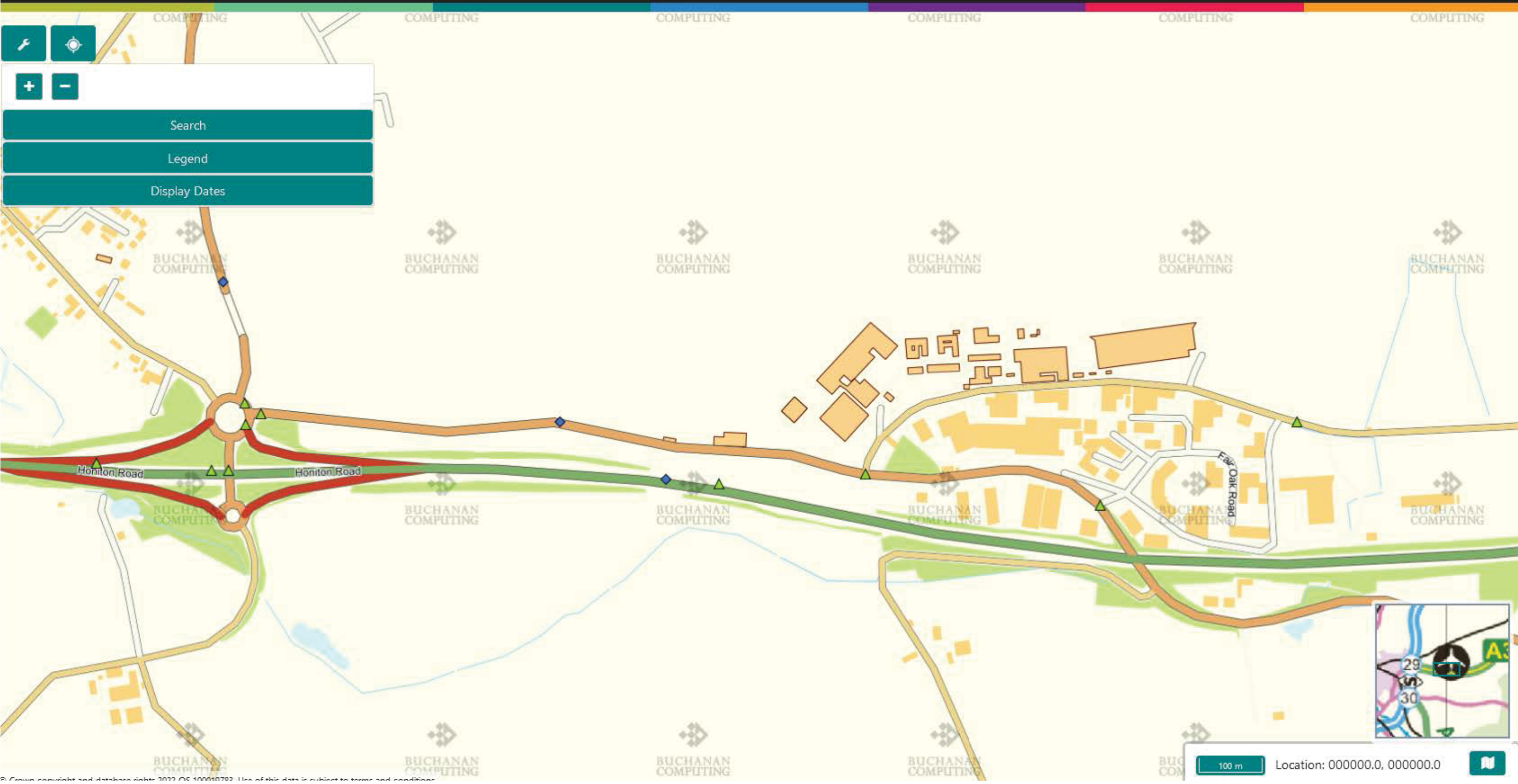


Figure 11
Future Design Year 2034
PM Peak Hour Traffic Flows (PCUs)
16:30 - 17:30 Hours
With Development

Northern Transport Planning Ltd
Tel: 01924 367460
www.ntpconsultants.co.uk



APPENDIX F



APPENDIX G

NOTES

1. FOR LOCATION PLAN SEE DRAWING B23006BZ-01-056.
2. FOR EXISTING UTILITIES, REFER TO DRAWINGS B23006BZ-01-111 TO 115.
3. FOR SETTING OUT DETAILS, REFER TO DRAWINGS B23006BZ-01-024 TO 028.
4. FOR SITE CLEARANCE DETAILS, REFER TO DRAWINGS B23006BZ-02-004 TO 008.
5. FOR DRAINAGE DETAILS, REFER TO DRAWINGS B23006BZ-05-020 TO 024.
6. FOR ROAD PAVEMENT DETAILS, REFER TO DRAWINGS B23006BZ-07-001 TO 005.
7. FOR LONG SECTIONS DETAILS, REFER TO DRAWINGS B23006BZ-01-101 TO 107.
8. FOR DETAILED CROSS SECTIONS, REFER TO DRAWINGS B23006BZ-07-019 TO 021 AND B23006BZ-07-026.
9. FOR CROSS SECTIONS DETAILS REFER TO DRAWINGS B23006BZ-07-022 TO 025.
10. FOR KERB, FOOTWAY AND PAVED AREAS DETAILS, REFER TO DRAWINGS B23006BZ-11-001 TO 004.
11. FOR TRAFFIC SIGNS AND ROAD MARKINGS DETAILS, REFER TO DRAWINGS B23006BZ-12-001 TO 005.
12. FOR STREET LIGHTING DETAILS, REFER TO DRAWINGS B23006BZ-13-001 TO 004.
13. FOR RETAINING WALL DETAILS, REFER TO DRAWINGS B23006BZ-17-003 TO 005.
14. FOR LANDSCAPING DETAILS, REFER TO DRAWINGS B23006BZ-30-001 TO 005.

KEY

- PROPOSED ROAD MARKING
- PROPOSED CARRIAGEWAY
- FIELD ACCESS
- ASPHALT FOOTWAY
- HEDGE CLEARANCE / REPROFILE VERGE AND GRASS SEED
- NATIVE WOODLAND
- PROPOSED KERBLINE
- TACTILE PAVING (BUFF)
- TIMBER POST AND 3 RAIL FENCE
- WIRE MESH AIRPORT PERIMETER FENCE
- CAR PARK AND BOUNDARY FENCE
- PALISADE FENCING
- EXISTING SPEED LIMIT SIGN
- NEW SPEED LIMIT SIGN
- LIGHTING COLUMNS

P04	26/04/2021	ISSUED FOR APPROVAL	CH	ES	BG	AL
P03	21/01/2021	ISSUED FOR INFORMATION	CH	ES	DT	CB
P02	05/01/2021	Detailed Design Issue	CH	ES	DT	CB
P01	08/02/2019	Preliminary Design Issue	BS	MC	MCM	MCM
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd

Client



Project

LONG LANE

Drawing title

GENERAL ARRANGEMENT
SHEET 1 OF 5

Drawing status

FOR APPROVAL

Scale 1:250 @ A1 DO NOT SCALE

JACOBS No. B23006BZ

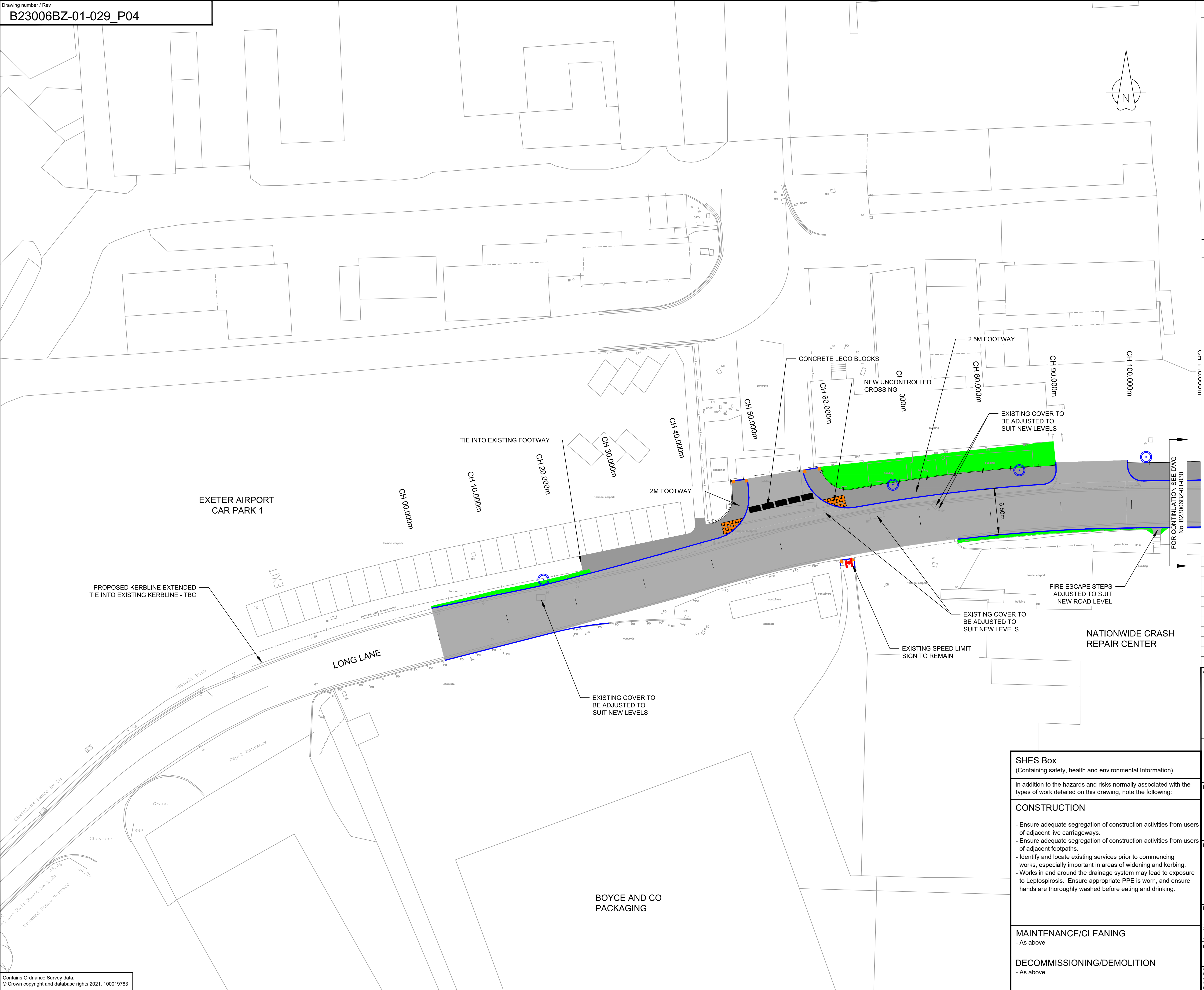
Drawing number

B23006BZ-01-029

Rev

P04

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SHES Box
(Containing safety, health and environmental Information)

In addition to the hazards and risks normally associated with the types of work detailed on this drawing, note the following:

CONSTRUCTION

- Ensure adequate segregation of construction activities from users of adjacent live carriageways.
- Ensure adequate segregation of construction activities from users of adjacent footpaths.
- Identify and locate existing services prior to commencing works, especially important in areas of widening and kerbing.
- Works in and around the drainage system may lead to exposure to Leptospirosis. Ensure appropriate PPE is worn, and ensure hands are thoroughly washed before eating and drinking.

MAINTENANCE/CLEANING
- As above

DECOMMISSIONING/DEMOLITION
- As above

NOTES

1. FOR LOCATION PLAN SEE DRAWING B23006BZ-01-056.
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3. FOR SETTING OUT DETAILS, REFER TO DRAWINGS B23006BZ-01-024 TO 028.
4. FOR SITE CLEARANCE DETAILS, REFER TO DRAWINGS B23006BZ-02-004 TO 008.
5. FOR DRAINAGE DETAILS, REFER TO DRAWINGS B23006BZ-05-020 TO 024.
6. FOR ROAD PAVEMENT DETAILS, REFER TO DRAWINGS B23006BZ-07-001 TO 005.
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8. FOR DETAILED CROSS SECTIONS, REFER TO DRAWINGS B23006BZ-07-019 TO 021 AND B23006BZ-07-026.
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12. FOR STREET LIGHTING DETAILS, REFER TO DRAWINGS B23006BZ-13-001 TO 004.
13. FOR RETAINING WALL DETAILS, REFER TO DRAWINGS B23006BZ-17-003 TO 005.
14. FOR LANDSCAPING DETAILS, REFER TO DRAWINGS B23006BZ-30-001 TO 005.

KEY

- PROPOSED ROAD MARKING
- PROPOSED CARRIAGEWAY
- FIELD ACCESS
- ASPHALT FOOTWAY
- HEDGE CLEARANCE / REPROFILE VERGE AND GRASS SEED
- NATIVE WOODLAND
- PROPOSED KERBLINE
- TACTILE PAVING (BUFF)
- TIMBER POST AND 3 RAIL FENCE
- WIRE MESH AIRPORT PERIMETER FENCE
- CAR PARK AND BOUNDARY FENCE
- PALISADE FENCING
- EXISTING SPEED LIMIT SIGN
- NEW SPEED LIMIT SIGN
- LIGHTING COLUMNS

P04	26/04/2021	ISSUED FOR APPROVAL	CH	ES	BG	AL
P03	21/01/2021	ISSUED FOR INFORMATION	CH	ES	DT	CB
P02	05/01/2021	Detailed Design Issue	CH	ES	DT	CB
P01	08/02/2019	Preliminary Design Issue	BS	MC	MCM	MCM
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Appr'd

Client



JACOBS
Aperture, Pynes Hill, Rydon Lane, Exeter, EX2 5AZ.
Tel: +44 (0) 1392 269 800
Website : www.jacobs.com

Project

LONG LANE

Drawing title

GENERAL ARRANGEMENT
SHEET 2 OF 5

Drawing status

FOR APPROVAL

Scale 1:250 @ A1 DO NOT SCALE

Jacobs No. B23006BZ

Drawing number

B23006BZ-01-030

Rev

P04

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MAINTENANCE/CLEANING

- As above

DECOMMISSIONING/DEMOLITION

- As above

NATIONWIDE CRASH
REPAIR CENTER

NOTES

1. FOR LOCATION PLAN SEE DRAWING B23006BZ-01-056.
2. FOR EXISTING UTILITIES, REFER TO DRAWINGS B23006BZ-01-111 TO 115.
3. FOR SETTING OUT DETAILS, REFER TO DRAWINGS B23006BZ-01-024 TO 028.
4. FOR SITE CLEARANCE DETAILS, REFER TO DRAWINGS B23006BZ-02-004 TO 008.
5. FOR DRAINAGE DETAILS, REFER TO DRAWINGS B23006BZ-05-020 TO 024.
6. FOR ROAD PAVEMENT DETAILS, REFER TO DRAWINGS B23006BZ-07-001 TO 005.
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12. FOR STREET LIGHTING DETAILS, REFER TO DRAWINGS B23006BZ-13-001 TO 004.
13. FOR RETAINING WALL DETAILS, REFER TO DRAWINGS B23006BZ-17-003 TO 005.
14. FOR LANDSCAPING DETAILS, REFER TO DRAWINGS B23006BZ-30-001 TO 005.

KEY

- | | |
|---|--|
|  | PROPOSED ROAD MARKING |
|  | PROPOSED CARRIAGEWAY |
|  | FIELD ACCESS |
|  | ASPHALT FOOTWAY |
|  | HEDGE CLEARANCE / REPROFILE VERGE AND GRASS SEED |
|  | NATIVE WOODLAND |
|  | PROPOSED KERBLINE |
|  | TACTILE PAVING (BUFF) |
|  | TIMBER POST AND 3 RAIL FENCE |
|  | WIRE MESH AIRPORT PERIMETER FENCE |
|  | CAR PARK AND BOUNDARY FENCE |
|  | PALISADE FENCING |
|  | EXISTING SPEED LIMIT SIGN |
|  | NEW SPEED LIMIT SIGN |
|  | LIGHTING COLUMNS |

P04	28/01/2021	ISSUED FOR APPROVAL	CH	ES	BG	AL			
P03	21/01/2021	ISSUED FOR INFORMATION	CH	ES	DT	CB			
P02	14/12/2020	Detailed Design Issue	CH	ES	DT	CB			
P01	08/02/2019	Preliminary Design Issue	BS	MC	MCM	MCM			
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Approved			

Client



JACOBS

Aperture, Pynes Hill, Rydon Lane, Exeter, EX2 5AZ
Tel: +44 (0) 1392 269 800
Website : www.jacobs.com

Project

LONG LANE

S	Drawing title
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GENERAL ARRANGEMENT
SHEET 3 OF 5

Drawing status

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Scale

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Jacobs No.

Drawing number

B23006BZ-01-031

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P04

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- As above

P04	28/01/2021	ISSUED FOR APPROVAL	CH	ES	BG		AL
P03	21/01/2021	ISSUED FOR INFORMATION	CH	ES	DT		CB
P02	05/01/2021	Detailed Design Issue	CH	ES	DT		CB
P01	08/02/2019	Preliminary Design Issue	BS	MC	MCM		MCM
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd		Approved



Project

LONG LANE

Drawing title

GENERAL ARRANGEMENT
SHEET 4 OF 5

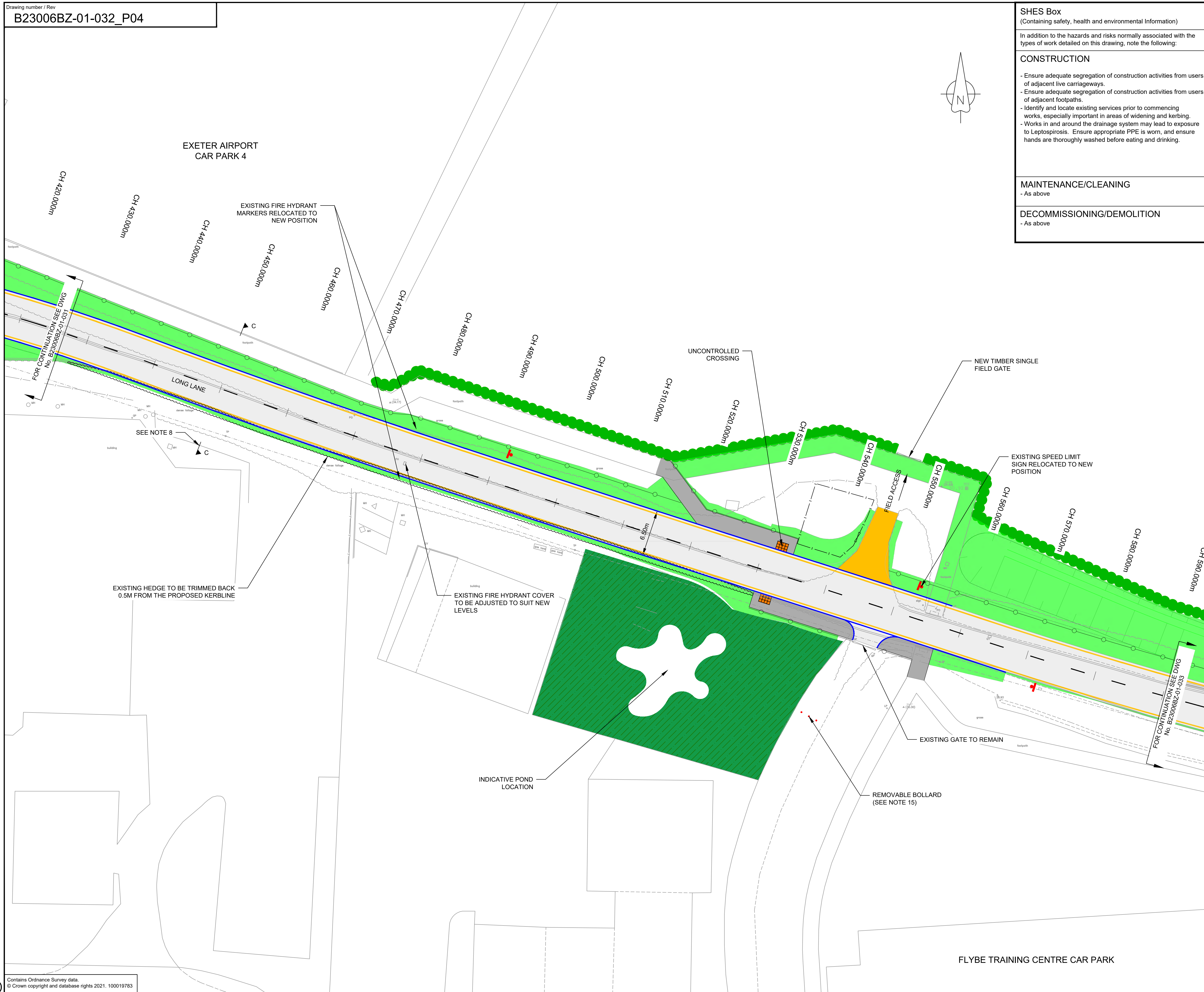
Drawing status

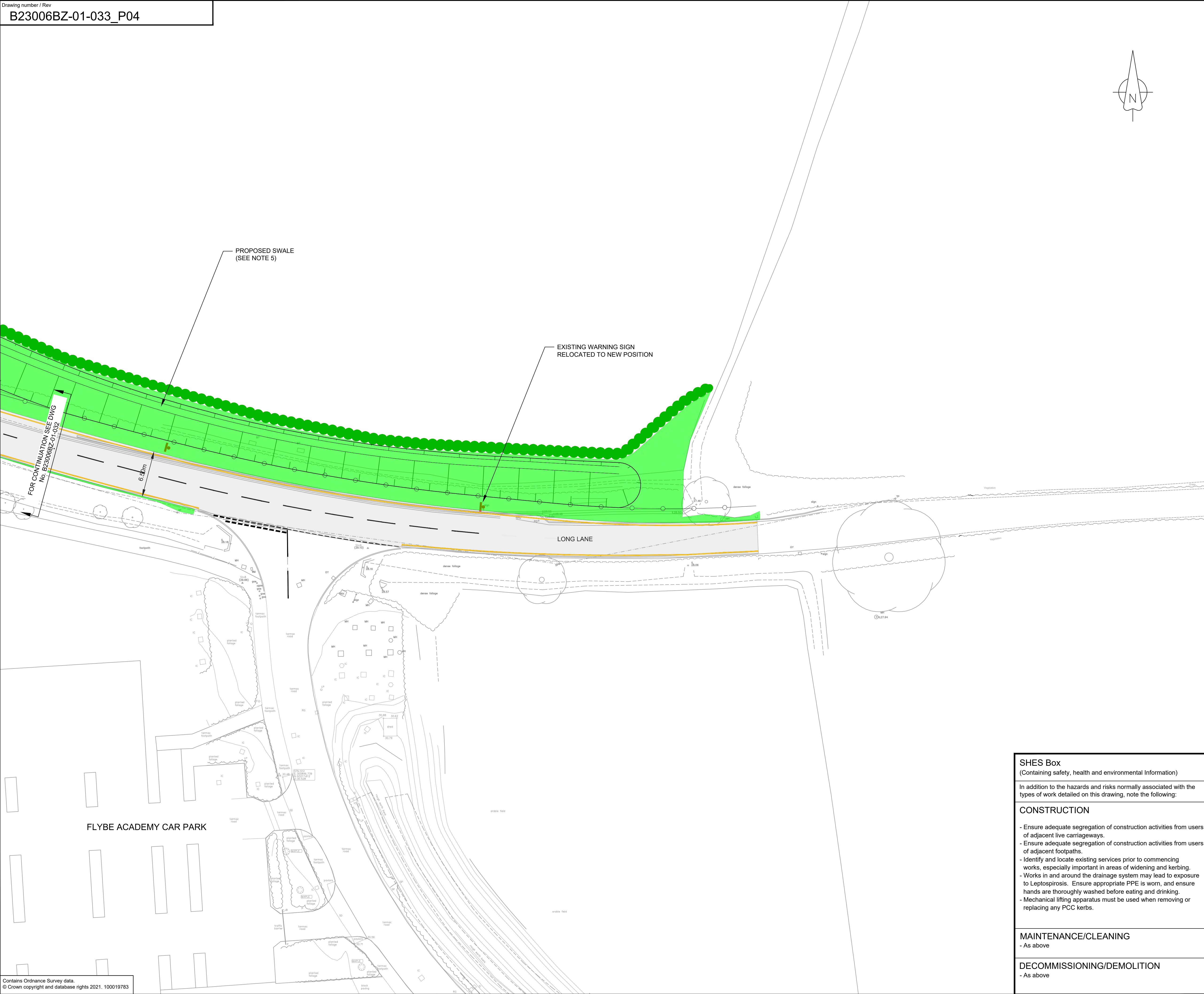
FOR APPROVAL

Scale	1:250 @ A1	DO NOT SCALE
Jacobs No.	B23006BZ	

Drawing number	Rev
B23006BZ-01-032	P04

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NOTES

1. FOR LOCATION PLAN SEE DRAWING B23006BZ-01-056.
2. FOR EXISTING UTILITIES, REFER TO DRAWINGS B23006BZ-01-111 TO 115.
3. FOR SETTING OUT DETAILS, REFER TO DRAWINGS B23006BZ-01-024 TO 028.
4. FOR SITE CLEARANCE DETAILS, REFER TO DRAWINGS B23006BZ-02-004 TO 008.
5. FOR DRAINAGE DETAILS, REFER TO DRAWINGS B23006BZ-05-020 TO 024.
6. FOR ROAD PAVEMENT DETAILS, REFER TO DRAWINGS B23006BZ-07-001 TO 005.
7. FOR LONG SECTIONS DETAILS, REFER TO DRAWINGS B23006BZ-01-101 TO 107.
8. FOR DETAILED CROSS SECTIONS, REFER TO DRAWINGS B23006BZ-07-019 TO 021 AND B23006BZ-07-026.
9. FOR CROSS SECTIONS DETAILS REFER TO DRAWINGS B23006BZ-07-022 TO 025.
10. FOR KERB, FOOTWAY AND PAVED AREAS DETAILS, REFER TO DRAWINGS B23006BZ-11-001 TO 004.
11. FOR TRAFFIC SIGNS AND ROAD MARKINGS DETAILS, REFER TO DRAWINGS B23006BZ-12-001 TO 005.
12. FOR STREET LIGHTING DETAILS, REFER TO DRAWINGS B23006BZ-13-001 TO 004.
13. FOR RETAINING WALL DETAILS, REFER TO DRAWINGS B23006BZ-17-003 TO 005.
14. FOR LANDSCAPING DETAILS, REFER TO DRAWINGS B23006BZ-30-001 TO 005.

KEY

- PROPOSED ROAD MARKING
- PROPOSED CARRIAGEWAY
- FIELD ACCESS
- ASPHALT FOOTWAY
- HEDGE CLEARANCE / REPROFILE VERGE AND GRASS SEED
- NATIVE WOODLAND
- PROPOSED KERBLINE
- TACTILE PAVING (BUFF)
- TIMBER POST AND 3 RAIL FENCE
- WIRE MESH AIRPORT PERIMETER FENCE
- CAR PARK AND BOUNDARY FENCE
- PALISADE FENCING
- EXISTING SPEED LIMIT SIGN
- NEW SPEED LIMIT SIGN
- LIGHTING COLUMNS

P04	28/01/2021	ISSUED FOR APPROVAL	CH	ES	BG	AL
P03	21/01/2021	ISSUED FOR INFORMATION	CH	ES	DT	CB
P02	05/01/2020	Detailed Design Issue	CH	ES	DT	CB
P01	08/02/2019	Preliminary Design Issue	BS	MC	MCM	MCM
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Appr'd

Client



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Website : www.jacobs.com

Project

LONG LANE

Drawing title

GENERAL ARRANGEMENT
SHEET 5 OF 5

Drawing status

FOR APPROVAL

Scale

1:250 @ A1

DO NOT SCALE

Jacobs No.

B23006BZ

Drawing number

B23006BZ-01-033

Rev

P04

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SHES Box

(Containing safety, health and environmental Information)

In addition to the hazards and risks normally associated with the types of work detailed on this drawing, note the following:

CONSTRUCTION

- Ensure adequate segregation of construction activities from users of adjacent live carriageways.
- Ensure adequate segregation of construction activities from users of adjacent footpaths.
- Identify and locate existing services prior to commencing works, especially important in areas of widening and kerbing.
- Works in and around the drainage system may lead to exposure to Leptospirosis. Ensure appropriate PPE is worn, and ensure hands are thoroughly washed before eating and drinking.
- Mechanical lifting apparatus must be used when removing or replacing any PCC kerbs.

MAINTENANCE/CLEANING

- As above

DECOMMISSIONING/DEMOLITION

- As above

APPENDIX H

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

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population All usual residents aged 16 and over in employment the week before the census
units Persons
date 2011
method of travel to work Driving a car or van

usual residence : 2011 census merged local authority district	place of work E02004134 : East Devon 006	Total	A30 West	A30 East	ASSIGNMENT			
					Bishop's Court Lane	Clyst Honiton Bypass	B3184 East	Long Lane East
East Devon	1,316	28.86%	2.54%	11.07%		4.91%	10.33%	
Exeter	1,045	22.92%	22.92%					
Mid Devon	599	13.14%	13.14%					
Teignbridge	518	11.36%	11.36%					
Torbay	152	3.33%	3.33%					
West Devon	80	1.75%	1.75%					
Taunton Deane	72	1.58%	1.58%					
Plymouth	70	1.54%	1.54%					
Cornwall,Isles of Scilly	54	1.18%	1.18%					
South Somerset	53	1.16%		1.16%				
South Hams	51	1.12%	1.12%					
North Devon	41	0.90%	0.90%					
Torridge	38	0.83%	0.83%					
Birmingham	26	0.57%	0.57%					
Sedgemoor	20	0.44%	0.44%					
North Somerset	17	0.37%	0.37%					
Mendip	15	0.33%		0.33%				
West Somerset	13	0.29%	0.29%					
Cheshire East	11	0.24%	0.24%					
Bristol, City of	11	0.24%	0.24%					
Wiltshire	11	0.24%	0.24%					
Stockport	10	0.22%	0.22%					
West Dorset	9	0.20%		0.20%				
Manchester	8	0.18%	0.18%					
Solihull	8	0.18%	0.18%					
Eastleigh	8	0.18%		0.18%				
New Forest	8	0.18%		0.18%				
Trafford	7	0.15%	0.15%					
Liverpool	7	0.15%	0.15%					
South Gloucestershire	7	0.15%	0.15%					
County Durham	6	0.13%	0.13%					
Warwick	6	0.13%	0.13%					
Bromsgrove	6	0.13%	0.13%					
Wolverhampton	6	0.13%	0.13%					
Warrington	5	0.11%	0.11%					
Fareham	5	0.11%		0.11%				
Bournemouth	5	0.11%		0.11%				
Poole	5	0.11%		0.11%				
North Dorset	5	0.11%		0.11%				
Cheshire West and Chester	4	0.09%	0.09%					
Rossendale	4	0.09%	0.09%					
Bolton	4	0.09%	0.09%					
Salford	4	0.09%	0.09%					
Sandwell	4	0.09%	0.09%					
Test Valley	4	0.09%		0.09%				

Cherwell	4	0.09%	0.09%	
Christchurch	4	0.09%		0.09%
Stockton-on-Tees	3	0.07%	0.07%	
Newcastle upon Tyne	3	0.07%	0.07%	
Rochdale	3	0.07%	0.07%	
Wigan	3	0.07%	0.07%	
Bradford	3	0.07%	0.07%	
Kirklees	3	0.07%	0.07%	
Hinckley and Bosworth	3	0.07%	0.07%	
Ashfield	3	0.07%	0.07%	
Herefordshire, County of	3	0.07%	0.07%	
North Warwickshire	3	0.07%	0.07%	
Stratford-on-Avon	3	0.07%	0.07%	
Richmond upon Thames	3	0.07%		0.07%
Southampton	3	0.07%		0.07%
Basingstoke and Deane	3	0.07%		0.07%
Bath and North East Somerset	3	0.07%		0.07%
Lancaster	2	0.04%	0.04%	
South Ribble	2	0.04%	0.04%	
Bury	2	0.04%	0.04%	
Oldham	2	0.04%	0.04%	
Doncaster	2	0.04%	0.04%	
Derby	2	0.04%	0.04%	
High Peak	2	0.04%	0.04%	
Kettering	2	0.04%	0.04%	
Shropshire	2	0.04%	0.04%	
Nuneaton and Bedworth	2	0.04%	0.04%	
Redditch	2	0.04%	0.04%	
Worcester	2	0.04%	0.04%	
Coventry	2	0.04%	0.04%	
Dudley	2	0.04%	0.04%	
Luton	2	0.04%		0.04%
Bedford	2	0.04%	0.04%	
South Cambridgeshire	2	0.04%		0.04%
Portsmouth	2	0.04%		0.04%
Isle of Wight	2	0.04%		0.04%
Wealden	2	0.04%		0.04%
East Hampshire	2	0.04%		0.04%
Gosport	2	0.04%		0.04%
Hart	2	0.04%		0.04%
Elmbridge	2	0.04%		0.04%
Reigate and Banstead	2	0.04%		0.04%
Runnymede	2	0.04%		0.04%
Spelthorne	2	0.04%		0.04%
Surrey Heath	2	0.04%		0.04%
Crawley	2	0.04%		0.04%
Horsham	2	0.04%		0.04%
East Dorset	2	0.04%		0.04%
Weymouth and Portland	2	0.04%		0.04%
Cheltenham	2	0.04%	0.04%	
Bridgend	2	0.04%	0.04%	
The Vale of Glamorgan	2	0.04%	0.04%	
Blaenau Gwent	2	0.04%	0.04%	
Darlington	1	0.02%	0.02%	
Northumberland	1	0.02%	0.02%	
Gateshead	1	0.02%	0.02%	
North Tyneside	1	0.02%	0.02%	
Sunderland	1	0.02%	0.02%	

Halton	1	0.02%	0.02%	
Blackburn with Darwen	1	0.02%	0.02%	
Burnley	1	0.02%	0.02%	
Ribble Valley	1	0.02%	0.02%	
West Lancashire	1	0.02%	0.02%	
Tameside	1	0.02%	0.02%	
Wirral	1	0.02%	0.02%	
East Riding of Yorkshire	1	0.02%	0.02%	
York	1	0.02%	0.02%	
Sheffield	1	0.02%	0.02%	
Leeds	1	0.02%	0.02%	
Wakefield	1	0.02%	0.02%	
Leicester	1	0.02%	0.02%	
Amber Valley	1	0.02%	0.02%	
Derbyshire Dales	1	0.02%	0.02%	
Erewash	1	0.02%	0.02%	
South Derbyshire	1	0.02%	0.02%	
Charnwood	1	0.02%	0.02%	
North West Leicestershire	1	0.02%	0.02%	
Daventry	1	0.02%	0.02%	
Northampton	1	0.02%	0.02%	
South Northamptonshire	1	0.02%	0.02%	
Rushcliffe	1	0.02%	0.02%	
East Staffordshire	1	0.02%	0.02%	
Lichfield	1	0.02%	0.02%	
South Staffordshire	1	0.02%	0.02%	
Stafford	1	0.02%	0.02%	
Staffordshire Moorlands	1	0.02%	0.02%	
Wyre Forest	1	0.02%	0.02%	
Walsall	1	0.02%	0.02%	
Central Bedfordshire	1	0.02%		0.02%
Chelmsford	1	0.02%		0.02%
Uttlesford	1	0.02%		0.02%
North Hertfordshire	1	0.02%		0.02%
Norwich	1	0.02%	0.02%	
South Norfolk	1	0.02%	0.02%	
Mid Suffolk	1	0.02%		0.02%
Waveney	1	0.02%		0.02%
Ealing	1	0.02%		0.02%
Hounslow	1	0.02%		0.02%
Redbridge	1	0.02%		0.02%
Southwark	1	0.02%		0.02%
Reading	1	0.02%	0.02%	
Wokingham	1	0.02%	0.02%	
Aylesbury Vale	1	0.02%	0.02%	
Rother	1	0.02%		0.02%
Winchester	1	0.02%		0.02%
Ashford	1	0.02%		0.02%
Dartford	1	0.02%		0.02%
Tonbridge and Malling	1	0.02%		0.02%
Vale of White Horse	1	0.02%	0.02%	
West Oxfordshire	1	0.02%	0.02%	
Epsom and Ewell	1	0.02%		0.02%
Tandridge	1	0.02%		0.02%
Waverley	1	0.02%		0.02%
Woking	1	0.02%		0.02%
Chichester	1	0.02%		0.02%
Mid Sussex	1	0.02%		0.02%

Worthing	1	0.02%		0.02%				
Swindon	1	0.02%	0.02%					
Gloucester	1	0.02%	0.02%					
Stroud	1	0.02%	0.02%					
Denbighshire	1	0.02%	0.02%					
Flintshire	1	0.02%	0.02%					
Wrexham	1	0.02%	0.02%					
Swansea	1	0.02%	0.02%					
Neath Port Talbot	1	0.02%	0.02%					
Cardiff	1	0.02%	0.02%					
Rhondda Cynon Taf	1	0.02%	0.02%					
Caerphilly	1	0.02%	0.02%					
Torfaen	1	0.02%	0.02%					
Newport	1	0.02%	0.02%					
Total	4,560	100.00%	69.54%	15.22%	0.00%	4.91%	10.33%	0.00%
			A30 West	A30 East	Bishop's Court Lane	Clyst Honiton Bypass	B3184 East	Long Lane East

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

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population All usual residents aged 16 and over in employment the week before the census
units Persons
date 2011
method of travel to work Driving a car or van

usual residence : 2011 super output area - middle layer	place of work		A30 West	A30 East	Bishop's Court Lane	Clyst Honiton Bypass	B3184 East	Long Lane East
	E02004134 : East Devon 006	Total						
E02004129 : East Devon 001	31	2.36%		2.36%				
E02004130 : East Devon 002	85	6.46%		6.46%				
E02004131 : East Devon 003	61	4.64%		4.64%				
E02004132 : East Devon 004	158	12.01%		12.01%				
E02004133 : East Devon 005	15	1.14%		1.14%				
E02004134 : East Devon 006	224	17.02%				17.02%		
E02004135 : East Devon 007	17	1.29%		1.29%				
E02004136 : East Devon 008	110	8.36%		8.36%				
E02004137 : East Devon 009	28	2.13%		2.13%				
E02004138 : East Devon 010	32	2.43%					2.43%	
E02004139 : East Devon 011	32	2.43%					2.43%	
E02004140 : East Devon 012	22	1.67%					1.67%	
E02004141 : East Devon 013	78	5.93%					5.93%	
E02004142 : East Devon 014	60	4.56%	4.56%					
E02004143 : East Devon 015	65	4.94%					4.94%	
E02004144 : East Devon 016	89	6.76%					6.76%	
E02004145 : East Devon 017	39	2.96%					2.96%	
E02004146 : East Devon 018	69	5.24%					5.24%	
E02004147 : East Devon 019	56	4.26%	4.26%					
E02004148 : East Devon 020	45	3.42%					3.42%	
Total	1,316	100.00%	8.81%	38.37%	0.00%	17.02%	35.79%	0.00%

APPENDIX I

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]

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Filename: SITE ACCESS JW LONG LANE 230422.arc8

Path: C:\Users\NTP Laptop\Desktop\ARCADY PICADY ETC\EXETER

Report generation date: 23/04/2022 23:53:50

» PROPOSED LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900

» PROPOSED LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Summary of junction performance

	0800-0900				1630-1730			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	PROPOSED LAYOUT - 2034 WEEKDAY WITH DEV							
Stream B-AC	0.14	9.27	0.12	A	0.24	9.70	0.19	A
Stream C-AB	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D20 - 2034 WEEKDAY WITH DEV, 0800-0900 " model duration: 07:45 - 09:15

"D23 - 2034 WEEKDAY WITH DEV, 1630-1730" model duration: 16:15 - 17:45

Run using Junctions 8.0.2.316 at 23/04/2022 23:53:49

File summary

File Description

Title	SITE ACCESS JW LONG LANE
Location	EXETER
Site Number	
Date	23/04/2022
Version	
Status	PROPOSED LAYOUT
Identifier	
Client	
Jobnumber	21027
Enumerator	
Description	

Analysis Options

Vehicle Length	Do Queue	Calculate Residual	Residual Capacity Criteria	RFC	Average Delay Threshold	Queue Threshold
----------------	----------	--------------------	----------------------------	-----	-------------------------	-----------------

(m)	Variations	Capacity	Type	Threshold	(s)	(PCU)
5.75			N/A	0.85	36.00	20.00

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

PROPOSED LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
PROPOSED LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 0800-0900	2034 WEEKDAY WITH DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
SITE ACCESS JW LONG LANE	T-Junction	Two-way	A,B,C	9.27	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	LONG LANE (W)		Major
B	SITE ACCESS (N)		Minor
C	LONG LANE (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	90.00		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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane	3.25								✓		90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	565.996	0.101	0.255	0.160	0.364
1	B-C	697.629	0.105	0.264	-	-
1	C-B	626.083	0.237	0.237	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	424.00	100.000
B	ONE HOUR	✓	48.00	100.000
C	ONE HOUR	✓	108.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	319.21	319.21		
07:45-08:00	B	36.14	36.14		
07:45-08:00	C	81.31	81.31		
08:00-08:15	A	381.17	381.17		
08:00-08:15	B	43.15	43.15		
08:00-08:15	C	97.09	97.09		
08:15-08:30	A	466.83	466.83		
08:15-08:30	B	52.85	52.85		
08:15-08:30	C	118.91	118.91		
08:30-08:45	A	466.83	466.83		
08:30-08:45	B	52.85	52.85		
08:30-08:45	C	118.91	118.91		
08:45-09:00	A	381.17	381.17		
08:45-09:00	B	43.15	43.15		
08:45-09:00	C	97.09	97.09		
09:00-09:15	A	319.21	319.21		
09:00-09:15	B	36.14	36.14		
09:00-09:15	C	81.31	81.31		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
From		A	B	C
	A	0.000	79.000	345.000
	B	48.000	0.000	0.000
	C	108.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
From		A	B	C
	A	0.00	0.19	0.81
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
From		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
From		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	9.27	0.14	A
C-AB	0.00	0.00	0.00	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.14	35.81	0.00	480.75	0.075	0.08	8.085	A
C-AB	0.00	0.00	0.00	550.33	0.000	0.00	0.000	A
C-A	81.31	81.31	0.00	-	-	-	-	-
A-B	59.48	59.48	0.00	-	-	-	-	-
A-C	259.73	259.73	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	43.15	43.07	0.00	464.21	0.093	0.10	8.545	A
C-AB	0.00	0.00	0.00	535.63	0.000	0.00	0.000	A
C-A	97.09	97.09	0.00	-	-	-	-	-
A-B	71.02	71.02	0.00	-	-	-	-	-

A-C	310.15	310.15	0.00	-	-	-	-	-
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Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	52.85	52.72	0.00	441.33	0.120	0.13	9.260	A
C-AB	0.00	0.00	0.00	515.30	0.000	0.00	0.000	A
C-A	118.91	118.91	0.00	-	-	-	-	-
A-B	86.98	86.98	0.00	-	-	-	-	-
A-C	379.85	379.85	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	52.85	52.85	0.00	441.33	0.120	0.14	9.266	A
C-AB	0.00	0.00	0.00	515.30	0.000	0.00	0.000	A
C-A	118.91	118.91	0.00	-	-	-	-	-
A-B	86.98	86.98	0.00	-	-	-	-	-
A-C	379.85	379.85	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	43.15	43.28	0.00	464.21	0.093	0.10	8.554	A
C-AB	0.00	0.00	0.00	535.63	0.000	0.00	0.000	A
C-A	97.09	97.09	0.00	-	-	-	-	-
A-B	71.02	71.02	0.00	-	-	-	-	-
A-C	310.15	310.15	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.14	36.22	0.00	480.75	0.075	0.08	8.101	A
C-AB	0.00	0.00	0.00	550.33	0.000	0.00	0.000	A
C-A	81.31	81.31	0.00	-	-	-	-	-
A-B	59.48	59.48	0.00	-	-	-	-	-
A-C	259.73	259.73	0.00	-	-	-	-	-

PROPOSED LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
PROPOSED LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 1630-	2034 WEEKDAY	1630-1730		ONE HOUR	16:15	17:45	90	15		

1730	WITH DEV									
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Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
SITE ACCESS JW LONG LANE	T-Junction	Two-way	A,B,C	9.70	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	LONG LANE (W)		Major
B	SITE ACCESS (N)		Minor
C	LONG LANE (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00		2.20	90.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane	3.25								✓		90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	565.996	0.101	0.255	0.160	0.364
1	B-C	697.629	0.105	0.264	-	-
1	C-B	626.083	0.237	0.237	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	183.00	100.000
B	ONE HOUR	✓	81.00	100.000
C	ONE HOUR	✓	360.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:15-16:30	A	137.77	137.77		
16:15-16:30	B	60.98	60.98		
16:15-16:30	C	271.03	271.03		
16:30-16:45	A	164.51	164.51		
16:30-16:45	B	72.82	72.82		
16:30-16:45	C	323.63	323.63		
16:45-17:00	A	201.49	201.49		
16:45-17:00	B	89.18	89.18		
16:45-17:00	C	396.37	396.37		
17:00-17:15	A	201.49	201.49		
17:00-17:15	B	89.18	89.18		
17:00-17:15	C	396.37	396.37		
17:15-17:30	A	164.51	164.51		

17:15-17:30	B	72.82	72.82		
17:15-17:30	C	323.63	323.63		
17:30-17:45	A	137.77	137.77		
17:30-17:45	B	60.98	60.98		
17:30-17:45	C	271.03	271.03		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To			
From		A	B	C
	A	0.000	54.000	129.000
	B	81.000	0.000	0.000
	C	360.000	0.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

	To			
From		A	B	C
	A	0.00	0.30	0.70
	B	1.00	0.00	0.00
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

	To			
From		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
From		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS

B-AC	0.19	9.70	0.24	A
C-AB	0.00	0.00	0.00	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	60.98	60.42	0.00	493.68	0.124	0.14	8.298	A
C-AB	0.00	0.00	0.00	593.39	0.000	0.00	0.000	A
C-A	271.03	271.03	0.00	-	-	-	-	-
A-B	40.65	40.65	0.00	-	-	-	-	-
A-C	97.12	97.12	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	72.82	72.67	0.00	479.64	0.152	0.18	8.843	A
C-AB	0.00	0.00	0.00	587.04	0.000	0.00	0.000	A
C-A	323.63	323.63	0.00	-	-	-	-	-
A-B	48.54	48.54	0.00	-	-	-	-	-
A-C	115.97	115.97	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	89.18	88.94	0.00	460.23	0.194	0.24	9.690	A
C-AB	0.00	0.00	0.00	578.27	0.000	0.00	0.000	A
C-A	396.37	396.37	0.00	-	-	-	-	-
A-B	59.46	59.46	0.00	-	-	-	-	-
A-C	142.03	142.03	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	89.18	89.18	0.00	460.23	0.194	0.24	9.701	A
C-AB	0.00	0.00	0.00	578.27	0.000	0.00	0.000	A
C-A	396.37	396.37	0.00	-	-	-	-	-
A-B	59.46	59.46	0.00	-	-	-	-	-
A-C	142.03	142.03	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	72.82	73.05	0.00	479.64	0.152	0.18	8.858	A
C-AB	0.00	0.00	0.00	587.04	0.000	0.00	0.000	A
C-A	323.63	323.63	0.00	-	-	-	-	-
A-B	48.54	48.54	0.00	-	-	-	-	-
A-C	115.97	115.97	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	60.98	61.14	0.00	493.68	0.124	0.14	8.327	A
C-AB	0.00	0.00	0.00	593.39	0.000	0.00	0.000	A
C-A	271.03	271.03	0.00	-	-	-	-	-
A-B	40.65	40.65	0.00	-	-	-	-	-
A-C	97.12	97.12	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]

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Filename: B3184 JW LONG LANE 230422.arc8

Path: C:\Users\NTP Laptop\Desktop\ARCADY PICADY ETC\EXETER

Report generation date: 24/04/2022 00:10:17

- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Summary of junction performance

	0800-0900				1630-1730			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
EXISTING LAYOUT - 2022 WEEKDAY NO DEV								
Stream B-CD	0.07	8.03	0.06	A	0.27	18.00	0.21	C
Stream B-AD	0.31	12.63	0.24	B	3.25	36.11	0.78	E
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.08	6.93	0.07	A	0.05	7.39	0.05	A
Stream D-ABC	0.04	8.48	0.04	A	0.08	7.96	0.08	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.13	9.42	0.12	A	0.04	6.76	0.04	A
EXISTING LAYOUT - 2034 WEEKDAY NO DEV								
Stream B-CD	0.07	8.29	0.07	A	0.31	20.94	0.24	C
Stream B-AD	0.33	13.37	0.25	B	3.69	41.28	0.80	E
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.08	7.00	0.08	A	0.05	7.56	0.05	A
Stream D-ABC	0.04	8.74	0.04	A	0.09	8.23	0.08	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.14	9.70	0.12	A	0.04	6.82	0.04	A
EXISTING LAYOUT - 2034 WEEKDAY WITH DEV								
Stream B-CD	0.09	9.47	0.09	A	4.56	263.45	1.03	F
Stream B-AD	0.63	17.01	0.39	C	16.75	143.59	1.02	F
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.08	7.05	0.08	A	0.05	7.59	0.05	A
Stream D-ABC	0.04	8.99	0.04	A	0.09	8.44	0.08	A

Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.17	10.47	0.15	B	0.05	7.06	0.05	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D20 - 2022 WEEKDAY NO DEV, 0800-0900 " model duration: 07:45 - 09:15
 "D23 - 2022 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45
 "D24 - 2034 WEEKDAY NO DEV, 0800-0900" model duration: 07:45 - 09:15
 "D25 - 2034 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45
 "D26 - 2034 WEEKDAY WITH DEV, 0800-0900" model duration: 07:45 - 09:15
 "D27 - 2034 WEEKDAY WITH DEV, 1630-1730" model duration: 16:15 - 17:45

Run using Junctions 8.0.2.316 at 24/04/2022 00:10:14

File summary

File Description

Title	B3184 JW LONG LANE
Location	EXETER
Site Number	
Date	23/04/2022
Version	
Status	EXISTING LAYOUT
Identifier	
Client	
Jobnumber	21027
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period	Description	Traffic Profile	Model Start Time	Model Finish Time	Model Time Period Length	Time Segment	Single Time Segment	Locked
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Junction Network

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	9.95	A

Driving Side	Lighting
Left	Normal/unknown

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

Minor Arm Geometry

Pedestrian Crossings

Slope / Intercept / Capacity

[illegible]

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	-	0.269	0.269	0.135
2	B-C	692.267	0.103	0.260	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	561.645	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
2	B-D, offside lane	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	0.169	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	744.00	100.000
B	ONE HOUR	✓	108.00	100.000
C	ONE HOUR	✓	254.00	100.000
D	ONE HOUR	✓	16.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	560.12	560.12		
07:45-08:00	B	81.31	81.31		
07:45-08:00	C	191.22	191.22		
07:45-08:00	D	12.05	12.05		
08:00-	A	668.84	668.84		

08:15					
08:00-08:15	B	97.09	97.09		
08:00-08:15	C	228.34	228.34		
08:00-08:15	D	14.38	14.38		
08:15-08:30	A	819.16	819.16		
08:15-08:30	B	118.91	118.91		
08:15-08:30	C	279.66	279.66		
08:15-08:30	D	17.62	17.62		
08:30-08:45	A	819.16	819.16		
08:30-08:45	B	118.91	118.91		
08:30-08:45	C	279.66	279.66		
08:30-08:45	D	17.62	17.62		
08:45-09:00	A	668.84	668.84		
08:45-09:00	B	97.09	97.09		
08:45-09:00	C	228.34	228.34		
08:45-09:00	D	14.38	14.38		
09:00-09:15	A	560.12	560.12		
09:00-09:15	B	81.31	81.31		
09:00-09:15	C	191.22	191.22		
09:00-09:15	D	12.05	12.05		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
		A	B	C	D
	A	0.000	292.000	414.000	38.000
	B	79.000	0.000	25.000	4.000
	C	196.000	47.000	0.000	11.000
	D	6.000	6.000	4.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
		A	B	C	D
	A	0.00	0.39	0.56	0.05

From	B	0.73	0.00	0.23	0.04
	C	0.77	0.19	0.00	0.04
	D	0.38	0.38	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.06	8.03	0.07	A
B-AD	0.24	12.63	0.31	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.07	6.93	0.08	A
D-ABC	0.04	8.48	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.12	9.42	0.13	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	20.53	20.37	0.00	548.59	0.037	0.04	6.813	A
B-AD	60.78	60.16	0.00	446.62	0.136	0.16	9.300	A
A-B	219.83	219.83	0.00	-	-	-	-	-

A-C	311.68	311.68	0.00	-	-	-	-	-
A-D	28.61	28.40	0.00	583.83	0.049	0.05	6.480	A
D-ABC	12.05	11.95	0.00	498.85	0.024	0.02	7.391	A
C-D	8.28	8.28	0.00	-	-	-	-	-
C-A	147.56	147.56	0.00	-	-	-	-	-
C-B	35.38	35.08	0.00	496.81	0.071	0.08	7.792	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	24.58	24.54	0.00	520.29	0.047	0.05	7.261	A
B-AD	72.51	72.30	0.00	416.01	0.174	0.21	10.467	B
A-B	262.50	262.50	0.00	-	-	-	-	-
A-C	372.18	372.18	0.00	-	-	-	-	-
A-D	34.16	34.11	0.00	574.20	0.059	0.06	6.665	A
D-ABC	14.38	14.36	0.00	475.32	0.030	0.03	7.809	A
C-D	9.89	9.89	0.00	-	-	-	-	-
C-A	176.20	176.20	0.00	-	-	-	-	-
C-B	42.25	42.17	0.00	470.33	0.090	0.10	8.406	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	30.24	30.17	0.00	478.75	0.063	0.07	8.024	A
B-AD	88.67	88.28	0.00	373.81	0.237	0.31	12.590	B
A-B	321.50	321.50	0.00	-	-	-	-	-
A-C	455.82	455.82	0.00	-	-	-	-	-
A-D	41.84	41.77	0.00	561.00	0.075	0.08	6.933	A
D-ABC	17.62	17.58	0.00	442.07	0.040	0.04	8.481	A
C-D	12.11	12.11	0.00	-	-	-	-	-
C-A	215.80	215.80	0.00	-	-	-	-	-
C-B	51.75	51.60	0.00	433.79	0.119	0.13	9.419	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	30.25	30.25	0.00	478.45	0.063	0.07	8.031	A
B-AD	88.66	88.65	0.00	373.74	0.237	0.31	12.627	B
A-B	321.50	321.50	0.00	-	-	-	-	-
A-C	455.82	455.82	0.00	-	-	-	-	-
A-D	41.84	41.84	0.00	560.95	0.075	0.08	6.934	A
D-ABC	17.62	17.62	0.00	441.99	0.040	0.04	8.482	A
C-D	12.11	12.11	0.00	-	-	-	-	-
C-A	215.80	215.80	0.00	-	-	-	-	-
C-B	51.75	51.74	0.00	433.77	0.119	0.13	9.423	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	24.58	24.65	0.00	519.87	0.047	0.05	7.269	A
B-AD	72.51	72.88	0.00	415.89	0.174	0.21	10.506	B
A-B	262.50	262.50	0.00	-	-	-	-	-
A-C	372.18	372.18	0.00	-	-	-	-	-
A-D	34.16	34.23	0.00	574.12	0.060	0.06	6.668	A
D-ABC	14.38	14.42	0.00	475.20	0.030	0.03	7.814	A

C-D	9.89	9.89	0.00	-	-	-	-	-
C-A	176.20	176.20	0.00	-	-	-	-	-
C-B	42.25	42.39	0.00	470.29	0.090	0.10	8.415	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	20.53	20.57	0.00	548.09	0.037	0.04	6.824	A
B-AD	60.78	61.00	0.00	446.40	0.136	0.16	9.345	A
A-B	219.83	219.83	0.00	-	-	-	-	-
A-C	311.68	311.68	0.00	-	-	-	-	-
A-D	28.61	28.66	0.00	583.69	0.049	0.05	6.488	A
D-ABC	12.05	12.07	0.00	498.64	0.024	0.02	7.398	A
C-D	8.28	8.28	0.00	-	-	-	-	-
C-A	147.56	147.56	0.00	-	-	-	-	-
C-B	35.38	35.47	0.00	496.73	0.071	0.08	7.807	A

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 WEEKDAY NO DEV, 1630-1730	2022 WEEKDAY NO DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	29.03	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	5.00	3.65	3.65	3.65	✓	1.00	90	90
D	One lane	3.30										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	610.283	0.108	0.272	0.272	-	-	-	0.171	0.389	-	0.272	0.272	0.136
2	B-C	670.184	0.100	0.252	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	543.729	0.096	0.243	0.243	-	-	-	0.153	0.347	0.153	-	-	-
2	B-D, offside lane	610.283	0.108	0.272	0.272	-	-	-	0.171	0.389	0.171	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	294.00	100.000
B	ONE HOUR	✓	360.00	100.000
C	ONE HOUR	✓	451.00	100.000
D	ONE HOUR	✓	35.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:15-16:30	A	221.34	221.34		
16:15-16:30	B	271.03	271.03		
16:15-16:30	C	339.54	339.54		
16:15-16:30	D	26.35	26.35		
16:30-16:45	A	264.30	264.30		
16:30-16:45	B	323.63	323.63		
16:30-16:45	C	405.44	405.44		
16:30-16:45	D	31.46	31.46		
16:45-17:00	A	323.70	323.70		
16:45-17:00	B	396.37	396.37		
16:45-17:00	C	496.56	496.56		
16:45-17:00	D	38.54	38.54		
17:00-17:15	A	323.70	323.70		
17:00-17:15	B	396.37	396.37		
17:00-17:15	C	496.56	496.56		
17:00-17:15	D	38.54	38.54		
17:15-					

17:30	A	264.30	264.30		
17:15-17:30	B	323.63	323.63		
17:15-17:30	C	405.44	405.44		
17:15-17:30	D	31.46	31.46		
17:30-17:45	A	221.34	221.34		
17:30-17:45	B	271.03	271.03		
17:30-17:45	C	339.54	339.54		
17:30-17:45	D	26.35	26.35		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	107.000	164.000	23.000
	B	310.000	0.000	46.000	4.000
	C	428.000	19.000	0.000	4.000
	D	25.000	3.000	7.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.36	0.56	0.08
	B	0.86	0.00	0.13	0.01
	C	0.95	0.04	0.00	0.01
	D	0.71	0.09	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000

	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.21	18.00	0.27	C
B-AD	0.78	36.11	3.25	E
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.05	7.39	0.05	A
D-ABC	0.08	7.96	0.08	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.04	6.76	0.04	A

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	36.85	36.52	0.00	491.37	0.075	0.08	7.909	A
B-AD	234.18	230.69	0.00	495.05	0.473	0.87	13.452	B
A-B	80.56	80.56	0.00	-	-	-	-	-
A-C	123.47	123.47	0.00	-	-	-	-	-
A-D	17.32	17.19	0.00	550.71	0.031	0.03	6.745	A
D-ABC	26.35	26.15	0.00	546.02	0.048	0.05	6.925	A
C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	322.22	322.22	0.00	-	-	-	-	-
C-B	14.30	14.20	0.00	578.51	0.025	0.03	6.379	A

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	44.22	44.07	0.00	415.76	0.106	0.12	9.681	A
B-AD	279.41	277.35	0.00	471.83	0.592	1.39	18.308	C
A-B	96.19	96.19	0.00	-	-	-	-	-
A-C	147.43	147.43	0.00	-	-	-	-	-
A-D	20.68	20.65	0.00	534.73	0.039	0.04	7.002	A
D-ABC	31.46	31.41	0.00	523.16	0.060	0.06	7.320	A
C-D	3.60	3.60	0.00	-	-	-	-	-
C-A	384.76	384.76	0.00	-	-	-	-	-
C-B	17.08	17.06	0.00	567.91	0.030	0.03	6.534	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-CD	54.57	54.04	0.00	267.87	0.204	0.25	16.795	C
B-AD	341.79	335.16	0.00	438.83	0.779	3.05	32.760	D
A-B	117.81	117.81	0.00	-	-	-	-	-
A-C	180.57	180.57	0.00	-	-	-	-	-
A-D	25.32	25.28	0.00	512.67	0.049	0.05	7.386	A
D-ABC	38.54	38.45	0.00	490.92	0.079	0.08	7.956	A
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	471.24	471.24	0.00	-	-	-	-	-
C-B	20.92	20.89	0.00	553.30	0.038	0.04	6.761	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	54.61	54.53	0.00	254.46	0.215	0.27	17.996	C
B-AD	341.76	340.94	0.00	438.61	0.779	3.25	36.112	E
A-B	117.81	117.81	0.00	-	-	-	-	-
A-C	180.57	180.57	0.00	-	-	-	-	-
A-D	25.32	25.32	0.00	512.66	0.049	0.05	7.386	A
D-ABC	38.54	38.53	0.00	490.52	0.079	0.08	7.964	A
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	471.24	471.24	0.00	-	-	-	-	-
C-B	20.92	20.92	0.00	553.29	0.038	0.04	6.761	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	44.26	44.83	0.00	402.63	0.110	0.13	10.076	B
B-AD	279.37	286.29	0.00	471.67	0.592	1.52	20.075	C
A-B	96.19	96.19	0.00	-	-	-	-	-
A-C	147.43	147.43	0.00	-	-	-	-	-
A-D	20.68	20.72	0.00	534.71	0.039	0.04	7.003	A
D-ABC	31.46	31.55	0.00	522.63	0.060	0.06	7.330	A
C-D	3.60	3.60	0.00	-	-	-	-	-
C-A	384.76	384.76	0.00	-	-	-	-	-
C-B	17.08	17.11	0.00	567.88	0.030	0.03	6.535	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	36.86	37.03	0.00	485.19	0.076	0.08	8.037	A
B-AD	234.16	236.56	0.00	494.90	0.473	0.92	14.063	B
A-B	80.56	80.56	0.00	-	-	-	-	-
A-C	123.47	123.47	0.00	-	-	-	-	-
A-D	17.32	17.35	0.00	550.67	0.031	0.03	6.749	A
D-ABC	26.35	26.40	0.00	545.67	0.048	0.05	6.935	A
C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	322.22	322.22	0.00	-	-	-	-	-
C-B	14.30	14.33	0.00	578.45	0.025	0.03	6.381	A

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY NO DEV, 0800-0900	2034 WEEKDAY NO DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	10.37	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	5.00	3.65	3.65	3.65	✓	1.00	90	90
D	One lane	3.30										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	-	0.269	0.269	0.135
2	B-C	692.267	0.103	0.260	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	561.645	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
2	B-D, offside lane	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	0.169	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	785.00	100.000
B	ONE HOUR	✓	108.00	100.000
C	ONE HOUR	✓	274.00	100.000
D	ONE HOUR	✓	16.00	100.000

Direct/Resultant Flows

Direct Flows Data

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Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	590.99	590.99		
07:45-08:00	B	81.31	81.31		
07:45-08:00	C	206.28	206.28		
07:45-08:00	D	12.05	12.05		
08:00-08:15	A	705.70	705.70		
08:00-08:15	B	97.09	97.09		
08:00-08:15	C	246.32	246.32		
08:00-08:15	D	14.38	14.38		
08:15-08:30	A	864.30	864.30		
08:15-08:30	B	118.91	118.91		
08:15-08:30	C	301.68	301.68		
08:15-08:30	D	17.62	17.62		
08:30-08:45	A	864.30	864.30		
08:30-08:45	B	118.91	118.91		
08:30-08:45	C	301.68	301.68		
08:30-08:45	D	17.62	17.62		
08:45-09:00	A	705.70	705.70		
08:45-09:00	B	97.09	97.09		
08:45-09:00	C	246.32	246.32		
08:45-09:00	D	14.38	14.38		
09:00-09:15	A	590.99	590.99		
09:00-09:15	B	81.31	81.31		
09:00-09:15	C	206.28	206.28		
09:00-09:15	D	12.05	12.05		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To			
	A	B	C	D

From	A	0.000	292.000	455.000	38.000
	B	79.000	0.000	25.000	4.000
	C	216.000	47.000	0.000	11.000
	D	6.000	6.000	4.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.37	0.58	0.05
	B	0.73	0.00	0.23	0.04
	C	0.79	0.17	0.00	0.04
	D	0.38	0.38	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.07	8.29	0.07	A
B-AD	0.25	13.37	0.33	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.08	7.00	0.08	A
D-ABC	0.04	8.74	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.12	9.70	0.14	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	20.53	20.38	0.00	539.83	0.038	0.04	6.928	A
B-AD	60.78	60.14	0.00	435.76	0.139	0.16	9.568	A
A-B	219.83	219.83	0.00	-	-	-	-	-
A-C	342.55	342.55	0.00	-	-	-	-	-
A-D	28.61	28.40	0.00	580.25	0.049	0.05	6.522	A
D-ABC	12.05	11.95	0.00	490.78	0.025	0.02	7.515	A
C-D	8.28	8.28	0.00	-	-	-	-	-
C-A	162.62	162.62	0.00	-	-	-	-	-
C-B	35.38	35.08	0.00	489.47	0.072	0.08	7.918	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	24.59	24.55	0.00	509.52	0.048	0.05	7.422	A
B-AD	72.50	72.27	0.00	403.03	0.180	0.22	10.876	B
A-B	262.50	262.50	0.00	-	-	-	-	-
A-C	409.04	409.04	0.00	-	-	-	-	-
A-D	34.16	34.11	0.00	569.92	0.060	0.06	6.718	A
D-ABC	14.38	14.36	0.00	465.50	0.031	0.03	7.979	A
C-D	9.89	9.89	0.00	-	-	-	-	-
C-A	194.18	194.18	0.00	-	-	-	-	-
C-B	42.25	42.16	0.00	461.57	0.092	0.10	8.581	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	30.27	30.19	0.00	464.74	0.065	0.07	8.284	A
B-AD	88.64	88.22	0.00	357.90	0.248	0.32	13.327	B
A-B	321.50	321.50	0.00	-	-	-	-	-
A-C	500.96	500.96	0.00	-	-	-	-	-
A-D	41.84	41.77	0.00	555.76	0.075	0.08	7.004	A
D-ABC	17.62	17.57	0.00	429.68	0.041	0.04	8.734	A
C-D	12.11	12.11	0.00	-	-	-	-	-
C-A	237.82	237.82	0.00	-	-	-	-	-
C-B	51.75	51.60	0.00	423.06	0.122	0.14	9.687	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	30.27	30.27	0.00	464.39	0.065	0.07	8.292	A
B-AD	88.64	88.63	0.00	357.83	0.248	0.33	13.372	B
A-B	321.50	321.50	0.00	-	-	-	-	-
A-C	500.96	500.96	0.00	-	-	-	-	-
A-D	41.84	41.84	0.00	555.71	0.075	0.08	7.004	A
D-ABC	17.62	17.62	0.00	429.60	0.041	0.04	8.737	A
C-D	12.11	12.11	0.00	-	-	-	-	-
C-A	237.82	237.82	0.00	-	-	-	-	-
C-B	51.75	51.74	0.00	423.04	0.122	0.14	9.695	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	24.59	24.67	0.00	509.06	0.048	0.05	7.435	A
B-AD	72.49	72.91	0.00	402.92	0.180	0.22	10.922	B
A-B	262.50	262.50	0.00	-	-	-	-	-
A-C	409.04	409.04	0.00	-	-	-	-	-
A-D	34.16	34.23	0.00	569.84	0.060	0.06	6.723	A
D-ABC	14.38	14.43	0.00	465.37	0.031	0.03	7.983	A
C-D	9.89	9.89	0.00	-	-	-	-	-
C-A	194.18	194.18	0.00	-	-	-	-	-
C-B	42.25	42.40	0.00	461.53	0.092	0.10	8.593	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	20.54	20.58	0.00	539.30	0.038	0.04	6.942	A
B-AD	60.77	61.01	0.00	435.53	0.140	0.16	9.619	A
A-B	219.83	219.83	0.00	-	-	-	-	-
A-C	342.55	342.55	0.00	-	-	-	-	-
A-D	28.61	28.66	0.00	580.11	0.049	0.05	6.530	A
D-ABC	12.05	12.07	0.00	490.56	0.025	0.03	7.523	A
C-D	8.28	8.28	0.00	-	-	-	-	-
C-A	162.62	162.62	0.00	-	-	-	-	-
C-B	35.38	35.48	0.00	489.39	0.072	0.08	7.934	A

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY NO DEV, 1630-1730	2034 WEEKDAY NO DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	33.07	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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

Minor Arm Geometry

[illegible]

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

[illegible]

2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-
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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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	311.00	100.000
B	ONE HOUR	✓	360.00	100.000
C	ONE HOUR	✓	494.00	100.000
D	ONE HOUR	✓	35.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:15-16:30	A	234.14	234.14		
16:15-16:30	B	271.03	271.03		
16:15-16:30	C	371.91	371.91		
16:15-16:30	D	26.35	26.35		
16:30-16:45	A	279.58	279.58		
16:30-16:45	B	323.63	323.63		
16:30-16:45	C	444.10	444.10		
16:30-16:45	D	31.46	31.46		
16:45-17:00	A	342.42	342.42		
16:45-17:00	B	396.37	396.37		
16:45-17:00	C	543.90	543.90		

16:45-17:00	D	38.54	38.54		
17:00-17:15	A	342.42	342.42		
17:00-17:15	B	396.37	396.37		
17:00-17:15	C	543.90	543.90		
17:00-17:15	D	38.54	38.54		
17:15-17:30	A	279.58	279.58		
17:15-17:30	B	323.63	323.63		
17:15-17:30	C	444.10	444.10		
17:15-17:30	D	31.46	31.46		
17:30-17:45	A	234.14	234.14		
17:30-17:45	B	271.03	271.03		
17:30-17:45	C	371.91	371.91		
17:30-17:45	D	26.35	26.35		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	107.000	181.000	23.000
	B	310.000	0.000	46.000	4.000
	C	471.000	19.000	0.000	4.000
	D	25.000	3.000	7.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.34	0.58	0.07
	B	0.86	0.00	0.13	0.01
	C	0.95	0.04	0.00	0.01
	D	0.71	0.09	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
		A	B	C	D
	A	1.000	1.000	1.000	1.000

From	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.24	20.94	0.31	C
B-AD	0.80	41.28	3.69	E
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.05	7.56	0.05	A
D-ABC	0.08	8.23	0.09	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.04	6.82	0.04	A

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	36.86	36.53	0.00	484.13	0.076	0.08	8.037	A
B-AD	234.17	230.56	0.00	486.00	0.482	0.90	13.909	B
A-B	80.56	80.56	0.00	-	-	-	-	-
A-C	136.27	136.27	0.00	-	-	-	-	-
A-D	17.32	17.18	0.00	543.02	0.032	0.03	6.844	A
D-ABC	26.35	26.14	0.00	536.39	0.049	0.05	7.050	A
C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	354.59	354.59	0.00	-	-	-	-	-
C-B	14.30	14.20	0.00	575.47	0.025	0.03	6.414	A

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	44.25	44.09	0.00	403.55	0.110	0.12	10.011	B
B-AD	279.39	277.14	0.00	460.99	0.606	1.46	19.335	C
A-B	96.19	96.19	0.00	-	-	-	-	-

A-C	162.72	162.72	0.00	-	-	-	-	-
A-D	20.68	20.64	0.00	525.54	0.039	0.04	7.129	A
D-ABC	31.46	31.41	0.00	511.50	0.062	0.06	7.498	A
C-D	3.60	3.60	0.00	-	-	-	-	-
C-A	423.42	423.42	0.00	-	-	-	-	-
C-B	17.08	17.06	0.00	564.28	0.030	0.03	6.578	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	54.63	53.98	0.00	243.06	0.225	0.28	18.977	C
B-AD	341.74	333.96	0.00	425.44	0.803	3.41	36.535	E
A-B	117.81	117.81	0.00	-	-	-	-	-
A-C	199.28	199.28	0.00	-	-	-	-	-
A-D	25.32	25.28	0.00	501.41	0.051	0.05	7.560	A
D-ABC	38.54	38.45	0.00	476.31	0.081	0.09	8.219	A
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	518.58	518.58	0.00	-	-	-	-	-
C-B	20.92	20.89	0.00	548.85	0.038	0.04	6.818	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	54.67	54.55	0.00	226.31	0.242	0.31	20.940	C
B-AD	341.70	340.58	0.00	425.17	0.804	3.69	41.283	E
A-B	117.81	117.81	0.00	-	-	-	-	-
A-C	199.28	199.28	0.00	-	-	-	-	-
A-D	25.32	25.32	0.00	501.40	0.051	0.05	7.560	A
D-ABC	38.54	38.53	0.00	475.82	0.081	0.09	8.232	A
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	518.58	518.58	0.00	-	-	-	-	-
C-B	20.92	20.92	0.00	548.84	0.038	0.04	6.818	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	44.29	45.01	0.00	387.41	0.114	0.13	10.534	B
B-AD	279.34	287.62	0.00	460.80	0.606	1.62	21.669	C
A-B	96.19	96.19	0.00	-	-	-	-	-
A-C	162.72	162.72	0.00	-	-	-	-	-
A-D	20.68	20.72	0.00	525.52	0.039	0.04	7.134	A
D-ABC	31.46	31.55	0.00	510.87	0.062	0.07	7.513	A
C-D	3.60	3.60	0.00	-	-	-	-	-
C-A	423.42	423.42	0.00	-	-	-	-	-
C-B	17.08	17.11	0.00	564.25	0.030	0.03	6.579	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	36.88	37.06	0.00	477.31	0.077	0.08	8.181	A
B-AD	234.15	236.80	0.00	485.84	0.482	0.96	14.604	B
A-B	80.56	80.56	0.00	-	-	-	-	-
A-C	136.27	136.27	0.00	-	-	-	-	-
A-D	17.32	17.35	0.00	542.98	0.032	0.03	6.851	A
D-ABC	26.35	26.41	0.00	536.01	0.049	0.05	7.066	A

C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	354.59	354.59	0.00	-	-	-	-	-
C-B	14.30	14.33	0.00	575.41	0.025	0.03	6.415	A

EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 0800-0900	2034 WEEKDAY WITH DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	12.81	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	5.00	3.65	3.65	3.65	✓	1.00	90	90
D	One lane	3.30										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	605.912	0.107	0.270	0.270	-	-	-	0.170	0.386	-	0.270	0.270	0.135
2	B-C	683.652	0.102	0.257	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	554.656	0.098	0.248	0.248	-	-	-	0.156	0.354	0.156	-	-	-
2	B-D, offside lane	605.912	0.107	0.270	0.270	-	-	-	0.170	0.386	0.170	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR		856.00	100.000

		✓		
B	ONE HOUR	✓	156.00	100.000
C	ONE HOUR	✓	282.00	100.000
D	ONE HOUR	✓	16.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	644.44	644.44		
07:45-08:00	B	117.44	117.44		
07:45-08:00	C	212.30	212.30		
07:45-08:00	D	12.05	12.05		
08:00-08:15	A	769.53	769.53		
08:00-08:15	B	140.24	140.24		
08:00-08:15	C	253.51	253.51		
08:00-08:15	D	14.38	14.38		
08:15-08:30	A	942.47	942.47		
08:15-08:30	B	171.76	171.76		
08:15-08:30	C	310.49	310.49		
08:15-08:30	D	17.62	17.62		
08:30-08:45	A	942.47	942.47		
08:30-08:45	B	171.76	171.76		
08:30-08:45	C	310.49	310.49		
08:30-08:45	D	17.62	17.62		
08:45-09:00	A	769.53	769.53		
08:45-09:00	B	140.24	140.24		
08:45-09:00	C	253.51	253.51		
08:45-09:00	D	14.38	14.38		
09:00-09:15	A	644.44	644.44		
09:00-09:15	B	117.44	117.44		
09:00-					

09:15	C	212.30	212.30		
09:00-09:15	D	12.05	12.05		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	363.000	455.000	38.000
	B	122.000	0.000	30.000	4.000
	C	216.000	55.000	0.000	11.000
	D	6.000	6.000	4.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.42	0.53	0.04
	B	0.78	0.00	0.19	0.03
	C	0.77	0.20	0.00	0.04
	D	0.38	0.38	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.09	9.47	0.09	A
B-AD	0.39	17.01	0.63	C

A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.08	7.05	0.08	A
D-ABC	0.04	8.99	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.15	10.47	0.17	B

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	24.41	24.22	0.00	515.43	0.047	0.05	7.323	A
B-AD	93.03	91.94	0.00	429.61	0.217	0.27	10.628	B
A-B	273.29	273.29	0.00	-	-	-	-	-
A-C	342.55	342.55	0.00	-	-	-	-	-
A-D	28.61	28.40	0.00	578.20	0.049	0.05	6.546	A
D-ABC	12.05	11.94	0.00	483.45	0.025	0.03	7.632	A
C-D	8.28	8.28	0.00	-	-	-	-	-
C-A	162.62	162.62	0.00	-	-	-	-	-
C-B	41.41	41.03	0.00	476.77	0.087	0.09	8.255	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	29.27	29.21	0.00	477.72	0.061	0.06	8.025	A
B-AD	110.97	110.53	0.00	395.04	0.281	0.38	12.632	B
A-B	326.33	326.33	0.00	-	-	-	-	-
A-C	409.04	409.04	0.00	-	-	-	-	-
A-D	34.16	34.11	0.00	567.46	0.060	0.06	6.749	A
D-ABC	14.38	14.36	0.00	456.41	0.032	0.03	8.144	A
C-D	9.89	9.89	0.00	-	-	-	-	-
C-A	194.18	194.18	0.00	-	-	-	-	-
C-B	49.44	49.33	0.00	446.39	0.111	0.12	9.063	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	36.09	35.98	0.00	417.03	0.087	0.09	9.444	A
B-AD	135.67	134.71	0.00	347.25	0.391	0.62	16.860	C
A-B	399.67	399.67	0.00	-	-	-	-	-
A-C	500.96	500.96	0.00	-	-	-	-	-
A-D	41.84	41.77	0.00	552.74	0.076	0.08	7.045	A
D-ABC	17.62	17.57	0.00	417.95	0.042	0.04	8.990	A
C-D	12.11	12.11	0.00	-	-	-	-	-
C-A	237.82	237.82	0.00	-	-	-	-	-
C-B	60.56	60.35	0.00	404.47	0.150	0.17	10.454	B

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

[illegible]

Junction	Stream	(PCU/hr)	for A-B	for A-C	for A-D	for B-A	for B-C	for B-D	for C-A	for C-B	for C-D	for D-A	for D-B	for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	610.690	0.108	0.273	0.273	-	-	-	0.171	0.389	-	0.273	0.273	0.136
2	B-C	668.929	0.099	0.251	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	542.711	0.096	0.242	0.242	-	-	-	0.152	0.346	0.152	-	-	-
2	B-D, offside lane	610.690	0.108	0.273	0.273	-	-	-	0.171	0.389	0.171	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	360.00	100.000
B	ONE HOUR	✓	441.00	100.000
C	ONE HOUR	✓	499.00	100.000
D	ONE HOUR	✓	35.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:15-16:30	A	271.03	271.03		
16:15-16:30	B	332.01	332.01		
16:15-16:30	C	375.67	375.67		
16:15-16:30	D	26.35	26.35		
16:30-16:45	A	323.63	323.63		

16:30-16:45	B	396.45	396.45		
16:30-16:45	C	448.59	448.59		
16:30-16:45	D	31.46	31.46		
16:45-17:00	A	396.37	396.37		
16:45-17:00	B	485.55	485.55		
16:45-17:00	C	549.41	549.41		
16:45-17:00	D	38.54	38.54		
17:00-17:15	A	396.37	396.37		
17:00-17:15	B	485.55	485.55		
17:00-17:15	C	549.41	549.41		
17:00-17:15	D	38.54	38.54		
17:15-17:30	A	323.63	323.63		
17:15-17:30	B	396.45	396.45		
17:15-17:30	C	448.59	448.59		
17:15-17:30	D	31.46	31.46		
17:30-17:45	A	271.03	271.03		
17:30-17:45	B	332.01	332.01		
17:30-17:45	C	375.67	375.67		
17:30-17:45	D	26.35	26.35		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	156.000	181.000	23.000
	B	383.000	0.000	54.000	4.000
	C	471.000	24.000	0.000	4.000
	D	25.000	3.000	7.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.43	0.50	0.06
	B	0.87	0.00	0.12	0.01

	C	0.94	0.05	0.00	0.01
	D	0.71	0.09	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	1.03	263.45	4.56	F
B-AD	1.02	143.59	16.75	F
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.05	7.59	0.05	A
D-ABC	0.08	8.44	0.09	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.05	7.06	0.05	A

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	43.06	42.60	0.00	415.77	0.104	0.11	9.636	A
B-AD	288.95	283.19	0.00	480.05	0.602	1.44	17.813	C
A-B	117.44	117.44	0.00	-	-	-	-	-
A-C	136.27	136.27	0.00	-	-	-	-	-

A-D	17.32	17.18	0.00	541.74	0.032	0.03	6.861	A
D-ABC	26.35	26.14	0.00	532.15	0.050	0.05	7.110	A
C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	354.59	354.59	0.00	-	-	-	-	-
C-B	18.07	17.94	0.00	566.70	0.032	0.03	6.558	A

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	51.72	51.31	0.00	284.27	0.182	0.22	15.425	C
B-AD	344.73	339.23	0.00	453.02	0.761	2.81	30.203	D
A-B	140.24	140.24	0.00	-	-	-	-	-
A-C	162.72	162.72	0.00	-	-	-	-	-
A-D	20.68	20.64	0.00	524.00	0.039	0.04	7.151	A
D-ABC	31.46	31.41	0.00	506.00	0.062	0.07	7.585	A
C-D	3.60	3.60	0.00	-	-	-	-	-
C-A	423.42	423.42	0.00	-	-	-	-	-
C-B	21.58	21.55	0.00	553.80	0.039	0.04	6.763	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	63.86	49.62	0.00	61.97	1.030	3.78	205.691	F
B-AD	421.69	387.94	0.00	414.50	1.017	11.25	86.282	F
A-B	171.76	171.76	0.00	-	-	-	-	-
A-C	199.28	199.28	0.00	-	-	-	-	-
A-D	25.32	25.27	0.00	499.53	0.051	0.05	7.590	A
D-ABC	38.54	38.44	0.00	468.69	0.082	0.09	8.365	A
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	518.58	518.58	0.00	-	-	-	-	-
C-B	26.42	26.38	0.00	536.03	0.049	0.05	7.063	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	63.86	60.73	0.00	69.72	0.916	4.56	263.449	F
B-AD	421.69	399.68	0.00	412.05	1.023	16.75	143.589	F
A-B	171.76	171.76	0.00	-	-	-	-	-
A-C	199.28	199.28	0.00	-	-	-	-	-
A-D	25.32	25.32	0.00	499.51	0.051	0.05	7.590	A
D-ABC	38.54	38.53	0.00	465.17	0.083	0.09	8.437	A
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	518.58	518.58	0.00	-	-	-	-	-
C-B	26.42	26.42	0.00	536.01	0.049	0.05	7.063	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	51.96	68.10	0.00	157.26	0.330	0.53	46.671	E
B-AD	344.49	395.12	0.00	447.50	0.770	4.09	82.900	F
A-B	140.24	140.24	0.00	-	-	-	-	-
A-C	162.72	162.72	0.00	-	-	-	-	-
A-D	20.68	20.72	0.00	523.98	0.039	0.04	7.156	A
D-ABC	31.46	31.55	0.00	501.10	0.063	0.07	7.670	A
C-D	3.60	3.60	0.00	-	-	-	-	-

C-A	423.42	423.42	0.00	-	-	-	-	-
C-B	21.58	21.62	0.00	553.77	0.039	0.04	6.764	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	43.11	44.71	0.00	393.21	0.110	0.12	10.377	B
B-AD	288.90	298.90	0.00	479.56	0.602	1.59	20.906	C
A-B	117.44	117.44	0.00	-	-	-	-	-
A-C	136.27	136.27	0.00	-	-	-	-	-
A-D	17.32	17.35	0.00	541.68	0.032	0.03	6.865	A
D-ABC	26.35	26.41	0.00	531.17	0.050	0.05	7.134	A
C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	354.59	354.59	0.00	-	-	-	-	-
C-B	18.07	18.10	0.00	566.64	0.032	0.03	6.565	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]

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Filename: B3184 JW LONG LANE FLAT PROFILE 230422.arc8

Path: C:\Users\NTP Laptop\Desktop\ARCADY PICADY ETC\EXETER

Report generation date: 24/04/2022 00:14:39

- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Summary of junction performance

	0800-0900				1630-1730			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
EXISTING LAYOUT - 2022 WEEKDAY NO DEV								
Stream B-CD	0.06	7.62	0.05	A	0.17	12.25	0.14	B
Stream B-AD	0.26	11.45	0.20	B	2.11	24.82	0.68	C
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.07	6.80	0.07	A	0.05	7.19	0.04	A
Stream D-ABC	0.04	8.13	0.03	A	0.07	7.63	0.07	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.12	8.89	0.10	A	0.04	6.65	0.03	A
EXISTING LAYOUT - 2034 WEEKDAY NO DEV								
Stream B-CD	0.06	7.82	0.06	A	0.18	13.09	0.15	B
Stream B-AD	0.27	12.01	0.21	B	2.30	27.06	0.70	D
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.07	6.86	0.07	A	0.05	7.34	0.04	A
Stream D-ABC	0.04	8.34	0.04	A	0.08	7.85	0.07	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.12	9.11	0.11	A	0.04	6.70	0.03	A
EXISTING LAYOUT - 2034 WEEKDAY WITH DEV								
Stream B-CD	0.08	8.66	0.07	A	0.92	59.69	0.49	F
Stream B-AD	0.50	14.53	0.33	B	6.98	68.63	0.89	F
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.07	6.89	0.07	A	0.05	7.36	0.04	A
Stream D-ABC	0.04	8.54	0.04	A	0.08	7.98	0.07	A

Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.15	9.72	0.13	A	0.05	6.91	0.04	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D20 - 2022 WEEKDAY NO DEV, 0800-0900 " model duration: 07:45 - 09:15
 "D23 - 2022 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45
 "D24 - 2034 WEEKDAY NO DEV, 0800-0900" model duration: 07:45 - 09:15
 "D25 - 2034 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45
 "D26 - 2034 WEEKDAY WITH DEV, 0800-0900" model duration: 07:45 - 09:15
 "D27 - 2034 WEEKDAY WITH DEV, 1630-1730" model duration: 16:15 - 17:45

Run using Junctions 8.0.2.316 at 24/04/2022 00:14:35

File summary

File Description

Title	B3184 JW LONG LANE
Location	EXETER
Site Number	
Date	23/04/2022
Version	
Status	EXISTING LAYOUT
Identifier	
Client	
Jobnumber	21027
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period	Description	Traffic Profile	Model Start Time	Model Finish Time	Model Time Period Length	Time Segment	Single Time Segment	Locked
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Junction Network

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	9.27	A

Driving Side	Lighting
Left	Normal/unknown

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

Minor Arm Geometry

Pedestrian Crossings

Slope / Intercept / Capacity

[illegible]

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	-	0.269	0.269	0.135
2	B-C	692.267	0.103	0.260	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	561.645	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
2	B-D, offside lane	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	0.169	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	744.00	100.000
B	FLAT	✓	108.00	100.000
C	FLAT	✓	254.00	100.000
D	FLAT	✓	16.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	744.00	744.00		
07:45-08:00	B	108.00	108.00		
07:45-08:00	C	254.00	254.00		
07:45-08:00	D	16.00	16.00		
08:00-	A	744.00	744.00		

08:15					
08:00-08:15	B	108.00	108.00		
08:00-08:15	C	254.00	254.00		
08:00-08:15	D	16.00	16.00		
08:15-08:30	A	744.00	744.00		
08:15-08:30	B	108.00	108.00		
08:15-08:30	C	254.00	254.00		
08:15-08:30	D	16.00	16.00		
08:30-08:45	A	744.00	744.00		
08:30-08:45	B	108.00	108.00		
08:30-08:45	C	254.00	254.00		
08:30-08:45	D	16.00	16.00		
08:45-09:00	A	744.00	744.00		
08:45-09:00	B	108.00	108.00		
08:45-09:00	C	254.00	254.00		
08:45-09:00	D	16.00	16.00		
09:00-09:15	A	744.00	744.00		
09:00-09:15	B	108.00	108.00		
09:00-09:15	C	254.00	254.00		
09:00-09:15	D	16.00	16.00		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	292.000	414.000	38.000
	B	79.000	0.000	25.000	4.000
	C	196.000	47.000	0.000	11.000
	D	6.000	6.000	4.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
		A	B	C	D
	A	0.00	0.39	0.56	0.05

From	B	0.73	0.00	0.23	0.04
	C	0.77	0.19	0.00	0.04
	D	0.38	0.38	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.05	7.62	0.06	A
B-AD	0.20	11.45	0.26	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.07	6.80	0.07	A
D-ABC	0.03	8.13	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.10	8.89	0.12	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.40	27.17	0.00	500.49	0.055	0.06	7.602	A
B-AD	80.60	79.59	0.00	395.13	0.204	0.25	11.373	B
A-B	292.00	292.00	0.00	-	-	-	-	-

A-C	414.00	414.00	0.00	-	-	-	-	-
A-D	38.00	37.72	0.00	567.72	0.067	0.07	6.789	A
D-ABC	16.00	15.86	0.00	459.03	0.035	0.04	8.120	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	196.00	196.00	0.00	-	-	-	-	-
C-B	47.00	46.54	0.00	452.14	0.104	0.11	8.866	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.40	27.40	0.00	499.81	0.055	0.06	7.619	A
B-AD	80.60	80.59	0.00	394.86	0.204	0.25	11.454	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	414.00	414.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	567.56	0.067	0.07	6.797	A
D-ABC	16.00	16.00	0.00	458.78	0.035	0.04	8.130	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	196.00	196.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	452.04	0.104	0.12	8.887	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.41	27.40	0.00	499.80	0.055	0.06	7.619	A
B-AD	80.59	80.59	0.00	394.86	0.204	0.26	11.454	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	414.00	414.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	567.56	0.067	0.07	6.797	A
D-ABC	16.00	16.00	0.00	458.78	0.035	0.04	8.130	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	196.00	196.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	452.04	0.104	0.12	8.887	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.41	27.40	0.00	499.80	0.055	0.06	7.619	A
B-AD	80.59	80.59	0.00	394.86	0.204	0.26	11.454	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	414.00	414.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	567.56	0.067	0.07	6.797	A
D-ABC	16.00	16.00	0.00	458.77	0.035	0.04	8.130	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	196.00	196.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	452.04	0.104	0.12	8.887	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.41	27.40	0.00	499.80	0.055	0.06	7.619	A
B-AD	80.59	80.59	0.00	394.86	0.204	0.26	11.454	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	414.00	414.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	567.56	0.067	0.07	6.797	A
D-ABC	16.00	16.00	0.00	458.77	0.035	0.04	8.130	A

C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	196.00	196.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	452.04	0.104	0.12	8.887	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.41	27.40	0.00	499.80	0.055	0.06	7.619	A
B-AD	80.59	80.59	0.00	394.86	0.204	0.26	11.454	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	414.00	414.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	567.56	0.067	0.07	6.797	A
D-ABC	16.00	16.00	0.00	458.77	0.035	0.04	8.130	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	196.00	196.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	452.04	0.104	0.12	8.887	A

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 WEEKDAY NO DEV, 1630-1730	2022 WEEKDAY NO DEV	1630-1730		FLAT	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	20.30	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	5.00	3.65	3.65	3.65	✓	1.00	90	90
D	One lane	3.30										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	610.283	0.108	0.272	0.272	-	-	-	0.171	0.389	-	0.272	0.272	0.136
2	B-C	670.184	0.100	0.252	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	543.729	0.096	0.243	0.243	-	-	-	0.153	0.347	0.153	-	-	-
2	B-D, offside lane	610.283	0.108	0.272	0.272	-	-	-	0.171	0.389	0.171	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	294.00	100.000
B	FLAT	✓	360.00	100.000
C	FLAT	✓	451.00	100.000
D	FLAT	✓	35.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:15-16:30	A	294.00	294.00		
16:15-16:30	B	360.00	360.00		
16:15-16:30	C	451.00	451.00		
16:15-16:30	D	35.00	35.00		
16:30-16:45	A	294.00	294.00		
16:30-16:45	B	360.00	360.00		
16:30-16:45	C	451.00	451.00		
16:30-16:45	D	35.00	35.00		
16:45-17:00	A	294.00	294.00		
16:45-17:00	B	360.00	360.00		
16:45-17:00	C	451.00	451.00		
16:45-17:00	D	35.00	35.00		
17:00-17:15	A	294.00	294.00		
17:00-17:15	B	360.00	360.00		
17:00-17:15	C	451.00	451.00		
17:00-17:15	D	35.00	35.00		
17:15-					

17:30	A	294.00	294.00		
17:15-17:30	B	360.00	360.00		
17:15-17:30	C	451.00	451.00		
17:15-17:30	D	35.00	35.00		
17:30-17:45	A	294.00	294.00		
17:30-17:45	B	360.00	360.00		
17:30-17:45	C	451.00	451.00		
17:30-17:45	D	35.00	35.00		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	107.000	164.000	23.000
	B	310.000	0.000	46.000	4.000
	C	428.000	19.000	0.000	4.000
	D	25.000	3.000	7.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.36	0.56	0.08
	B	0.86	0.00	0.13	0.01
	C	0.95	0.04	0.00	0.01
	D	0.71	0.09	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000

	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.14	12.25	0.17	B
B-AD	0.68	24.82	2.11	C
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.04	7.19	0.05	A
D-ABC	0.07	7.63	0.07	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.03	6.65	0.04	A

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.35	48.72	0.00	357.13	0.138	0.16	11.650	B
B-AD	310.65	302.73	0.00	455.74	0.682	1.98	22.511	C
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	164.00	164.00	0.00	-	-	-	-	-
A-D	23.00	22.82	0.00	523.74	0.044	0.05	7.185	A
D-ABC	35.00	34.71	0.00	507.47	0.069	0.07	7.609	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	428.00	428.00	0.00	-	-	-	-	-
C-B	19.00	18.86	0.00	560.66	0.034	0.03	6.642	A

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.39	49.36	0.00	343.99	0.144	0.17	12.216	B
B-AD	310.61	310.30	0.00	455.44	0.682	2.06	24.665	C
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	164.00	164.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	523.69	0.044	0.05	7.189	A
D-ABC	35.00	35.00	0.00	506.98	0.069	0.07	7.626	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	428.00	428.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	560.59	0.034	0.03	6.646	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-CD	49.39	49.38	0.00	343.47	0.144	0.17	12.240	B
B-AD	310.61	310.50	0.00	455.43	0.682	2.09	24.756	C
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	164.00	164.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	523.69	0.044	0.05	7.189	A
D-ABC	35.00	35.00	0.00	506.96	0.069	0.07	7.626	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	428.00	428.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	560.59	0.034	0.03	6.646	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.39	49.39	0.00	343.28	0.144	0.17	12.248	B
B-AD	310.61	310.55	0.00	455.43	0.682	2.10	24.790	C
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	164.00	164.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	523.69	0.044	0.05	7.189	A
D-ABC	35.00	35.00	0.00	506.95	0.069	0.07	7.626	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	428.00	428.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	560.59	0.034	0.04	6.646	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.39	49.39	0.00	343.18	0.144	0.17	12.252	B
B-AD	310.61	310.58	0.00	455.43	0.682	2.11	24.807	C
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	164.00	164.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	523.69	0.044	0.05	7.189	A
D-ABC	35.00	35.00	0.00	506.95	0.069	0.07	7.626	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	428.00	428.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	560.59	0.034	0.04	6.646	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.39	49.39	0.00	343.12	0.144	0.17	12.255	B
B-AD	310.61	310.59	0.00	455.43	0.682	2.11	24.817	C
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	164.00	164.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	523.69	0.044	0.05	7.189	A
D-ABC	35.00	35.00	0.00	506.95	0.069	0.07	7.626	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	428.00	428.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	560.59	0.034	0.04	6.646	A

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY NO DEV, 0800-0900	2034 WEEKDAY NO DEV	0800-0900		FLAT	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	9.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	5.00	3.65	3.65	3.65	✓	1.00	90	90
D	One lane	3.30										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	-	0.269	0.269	0.135
2	B-C	692.267	0.103	0.260	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	561.645	0.099	0.251	0.251	-	-	-	0.158	0.358	0.158	-	-	-
2	B-D, offside lane	603.117	0.107	0.269	0.269	-	-	-	0.169	0.385	0.169	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	785.00	100.000
B	FLAT	✓	108.00	100.000
C	FLAT	✓	274.00	100.000
D	FLAT	✓	16.00	100.000

Direct/Resultant Flows

Direct Flows Data

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Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	785.00	785.00		
07:45-08:00	B	108.00	108.00		
07:45-08:00	C	274.00	274.00		
07:45-08:00	D	16.00	16.00		
08:00-08:15	A	785.00	785.00		
08:00-08:15	B	108.00	108.00		
08:00-08:15	C	274.00	274.00		
08:00-08:15	D	16.00	16.00		
08:15-08:30	A	785.00	785.00		
08:15-08:30	B	108.00	108.00		
08:15-08:30	C	274.00	274.00		
08:15-08:30	D	16.00	16.00		
08:30-08:45	A	785.00	785.00		
08:30-08:45	B	108.00	108.00		
08:30-08:45	C	274.00	274.00		
08:30-08:45	D	16.00	16.00		
08:45-09:00	A	785.00	785.00		
08:45-09:00	B	108.00	108.00		
08:45-09:00	C	274.00	274.00		
08:45-09:00	D	16.00	16.00		
09:00-09:15	A	785.00	785.00		
09:00-09:15	B	108.00	108.00		
09:00-09:15	C	274.00	274.00		
09:00-09:15	D	16.00	16.00		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
		A	B	C	D

From	A	0.000	292.000	455.000	38.000
	B	79.000	0.000	25.000	4.000
	C	216.000	47.000	0.000	11.000
	D	6.000	6.000	4.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To			
From		A	B	C	D
	A	0.00	0.37	0.58	0.05
	B	0.73	0.00	0.23	0.04
	C	0.79	0.17	0.00	0.04
	D	0.38	0.38	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To			
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.06	7.82	0.06	A
B-AD	0.21	12.01	0.27	B
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.07	6.86	0.07	A
D-ABC	0.04	8.34	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.11	9.11	0.12	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.41	27.18	0.00	488.23	0.056	0.06	7.804	A
B-AD	80.59	79.53	0.00	380.69	0.212	0.26	11.912	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	37.71	0.00	562.96	0.068	0.07	6.851	A
D-ABC	16.00	15.85	0.00	447.95	0.036	0.04	8.329	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	47.00	46.53	0.00	442.39	0.106	0.12	9.080	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.42	27.42	0.00	487.49	0.056	0.06	7.824	A
B-AD	80.58	80.57	0.00	380.42	0.212	0.27	12.005	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	562.81	0.068	0.07	6.858	A
D-ABC	16.00	16.00	0.00	447.69	0.036	0.04	8.339	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	442.29	0.106	0.12	9.106	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.42	27.42	0.00	487.48	0.056	0.06	7.824	A
B-AD	80.58	80.58	0.00	380.42	0.212	0.27	12.005	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	562.80	0.068	0.07	6.858	A
D-ABC	16.00	16.00	0.00	447.69	0.036	0.04	8.339	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	442.29	0.106	0.12	9.106	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.42	27.42	0.00	487.48	0.056	0.06	7.824	A
B-AD	80.58	80.58	0.00	380.42	0.212	0.27	12.005	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	562.80	0.068	0.07	6.858	A
D-ABC	16.00	16.00	0.00	447.69	0.036	0.04	8.339	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	442.29	0.106	0.12	9.106	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.42	27.42	0.00	487.48	0.056	0.06	7.824	A
B-AD	80.58	80.58	0.00	380.42	0.212	0.27	12.005	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	562.80	0.068	0.07	6.858	A
D-ABC	16.00	16.00	0.00	447.69	0.036	0.04	8.339	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	442.29	0.106	0.12	9.106	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	27.42	27.42	0.00	487.48	0.056	0.06	7.824	A
B-AD	80.58	80.58	0.00	380.42	0.212	0.27	12.005	B
A-B	292.00	292.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	562.80	0.068	0.07	6.858	A
D-ABC	16.00	16.00	0.00	447.69	0.036	0.04	8.339	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	47.00	47.00	0.00	442.29	0.106	0.12	9.106	A

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY NO DEV, 1630-1730	2034 WEEKDAY NO DEV	1630-1730		FLAT	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	22.02	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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

Minor Arm Geometry

[illegible]

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

[illegible]

2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-
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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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	311.00	100.000
B	FLAT	✓	360.00	100.000
C	FLAT	✓	494.00	100.000
D	FLAT	✓	35.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:15-16:30	A	311.00	311.00		
16:15-16:30	B	360.00	360.00		
16:15-16:30	C	494.00	494.00		
16:15-16:30	D	35.00	35.00		
16:30-16:45	A	311.00	311.00		
16:30-16:45	B	360.00	360.00		
16:30-16:45	C	494.00	494.00		
16:30-16:45	D	35.00	35.00		
16:45-17:00	A	311.00	311.00		
16:45-17:00	B	360.00	360.00		
16:45-17:00	C	494.00	494.00		

16:45-17:00	D	35.00	35.00		
17:00-17:15	A	311.00	311.00		
17:00-17:15	B	360.00	360.00		
17:00-17:15	C	494.00	494.00		
17:00-17:15	D	35.00	35.00		
17:15-17:30	A	311.00	311.00		
17:15-17:30	B	360.00	360.00		
17:15-17:30	C	494.00	494.00		
17:15-17:30	D	35.00	35.00		
17:30-17:45	A	311.00	311.00		
17:30-17:45	B	360.00	360.00		
17:30-17:45	C	494.00	494.00		
17:30-17:45	D	35.00	35.00		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

		To			
From		A	B	C	D
	A	0.000	107.000	181.000	23.000
	B	310.000	0.000	46.000	4.000
	C	471.000	19.000	0.000	4.000
	D	25.000	3.000	7.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To			
From		A	B	C	D
	A	0.00	0.34	0.58	0.07
	B	0.86	0.00	0.13	0.01
	C	0.95	0.04	0.00	0.01
	D	0.71	0.09	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

		To			
		A	B	C	D
	A	1.000	1.000	1.000	1.000

From	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.15	13.09	0.18	B
B-AD	0.70	27.06	2.30	D
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.04	7.34	0.05	A
D-ABC	0.07	7.85	0.08	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.03	6.70	0.04	A

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.39	48.72	0.00	340.47	0.145	0.17	12.311	B
B-AD	310.61	302.08	0.00	443.65	0.700	2.13	24.181	C
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	22.81	0.00	513.51	0.045	0.05	7.335	A
D-ABC	35.00	34.70	0.00	494.38	0.071	0.08	7.827	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	19.00	18.86	0.00	556.61	0.034	0.04	6.692	A

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.43	49.39	0.00	325.53	0.152	0.18	13.035	B
B-AD	310.57	310.19	0.00	443.33	0.701	2.23	26.841	D
A-B	107.00	107.00	0.00	-	-	-	-	-

A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	513.47	0.045	0.05	7.339	A
D-ABC	35.00	35.00	0.00	493.84	0.071	0.08	7.845	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	556.55	0.034	0.04	6.696	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.43	49.42	0.00	324.85	0.152	0.18	13.070	B
B-AD	310.57	310.43	0.00	443.32	0.701	2.26	26.970	D
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	513.46	0.045	0.05	7.339	A
D-ABC	35.00	35.00	0.00	493.82	0.071	0.08	7.845	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	556.55	0.034	0.04	6.696	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.43	49.43	0.00	324.60	0.152	0.18	13.081	B
B-AD	310.57	310.50	0.00	443.32	0.701	2.28	27.017	D
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	513.46	0.045	0.05	7.339	A
D-ABC	35.00	35.00	0.00	493.81	0.071	0.08	7.846	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	556.55	0.034	0.04	6.696	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.43	49.43	0.00	324.48	0.152	0.18	13.087	B
B-AD	310.57	310.53	0.00	443.32	0.701	2.29	27.041	D
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	513.46	0.045	0.05	7.339	A
D-ABC	35.00	35.00	0.00	493.81	0.071	0.08	7.846	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	556.55	0.034	0.04	6.696	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	49.43	49.43	0.00	324.40	0.152	0.18	13.091	B
B-AD	310.57	310.54	0.00	443.32	0.701	2.30	27.057	D
A-B	107.00	107.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	513.46	0.045	0.05	7.339	A
D-ABC	35.00	35.00	0.00	493.80	0.071	0.08	7.846	A

C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	19.00	19.00	0.00	556.55	0.034	0.04	6.696	A

EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 0800-0900	2034 WEEKDAY WITH DEV	0800-0900		FLAT	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
B3184 JW LONG LANE	Crossroads	Two-way	A,B,C,D	11.35	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B3184 (W)		Major
B	LONG LANE (N)		Minor
C	B3184 (E)		Major
D	CAR PARK (S)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.70		0.00	✓	2.30	90.00		
C	6.70		0.00	✓	2.30	90.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	5.00	3.65	3.65	3.65	✓	1.00	90	90
D	One lane	3.30										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	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	Slope for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	605.912	0.107	0.270	0.270	-	-	-	0.170	0.386	-	0.270	0.270	0.135
2	B-C	683.652	0.102	0.257	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	554.656	0.098	0.248	0.248	-	-	-	0.156	0.354	0.156	-	-	-
2	B-D, offside lane	605.912	0.107	0.270	0.270	-	-	-	0.170	0.386	0.170	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT		856.00	100.000

		✓		
B	FLAT	✓	156.00	100.000
C	FLAT	✓	282.00	100.000
D	FLAT	✓	16.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	856.00	856.00		
07:45-08:00	B	156.00	156.00		
07:45-08:00	C	282.00	282.00		
07:45-08:00	D	16.00	16.00		
08:00-08:15	A	856.00	856.00		
08:00-08:15	B	156.00	156.00		
08:00-08:15	C	282.00	282.00		
08:00-08:15	D	16.00	16.00		
08:15-08:30	A	856.00	856.00		
08:15-08:30	B	156.00	156.00		
08:15-08:30	C	282.00	282.00		
08:15-08:30	D	16.00	16.00		
08:30-08:45	A	856.00	856.00		
08:30-08:45	B	156.00	156.00		
08:30-08:45	C	282.00	282.00		
08:30-08:45	D	16.00	16.00		
08:45-09:00	A	856.00	856.00		
08:45-09:00	B	156.00	156.00		
08:45-09:00	C	282.00	282.00		
08:45-09:00	D	16.00	16.00		
09:00-09:15	A	856.00	856.00		
09:00-09:15	B	156.00	156.00		
09:00-					

09:15	C	282.00	282.00		
09:00 - 09:15	D	16.00	16.00		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
		A	B	C	D
From	A	0.000	363.000	455.000	38.000
	B	122.000	0.000	30.000	4.000
	C	216.000	55.000	0.000	11.000
	D	6.000	6.000	4.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.42	0.53	0.04
	B	0.78	0.00	0.19	0.03
	C	0.77	0.20	0.00	0.04
	D	0.38	0.38	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To				
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.07	8.66	0.08	A
B-AD	0.33	14.53	0.50	B

A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.07	6.89	0.07	A
D-ABC	0.04	8.54	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.13	9.72	0.15	A

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	32.66	32.35	0.00	450.19	0.073	0.08	8.609	A
B-AD	123.34	121.40	0.00	371.44	0.332	0.49	14.291	B
A-B	363.00	363.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	37.71	0.00	560.25	0.068	0.07	6.887	A
D-ABC	16.00	15.85	0.00	437.62	0.037	0.04	8.533	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	55.00	54.41	0.00	425.51	0.129	0.15	9.701	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	32.67	32.66	0.00	448.53	0.073	0.08	8.656	A
B-AD	123.33	123.31	0.00	371.11	0.332	0.49	14.525	B
A-B	363.00	363.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	560.05	0.068	0.07	6.895	A
D-ABC	16.00	16.00	0.00	437.29	0.037	0.04	8.544	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	425.41	0.129	0.15	9.718	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	32.67	32.67	0.00	448.51	0.073	0.08	8.656	A
B-AD	123.33	123.32	0.00	371.11	0.332	0.49	14.528	B
A-B	363.00	363.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	560.05	0.068	0.07	6.895	A
D-ABC	16.00	16.00	0.00	437.29	0.037	0.04	8.544	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	425.41	0.129	0.15	9.718	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	32.67	32.67	0.00	448.50	0.073	0.08	8.656	A
B-AD	123.33	123.33	0.00	371.11	0.332	0.49	14.528	B
A-B	363.00	363.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	560.05	0.068	0.07	6.895	A
D-ABC	16.00	16.00	0.00	437.29	0.037	0.04	8.544	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	425.41	0.129	0.15	9.718	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	32.67	32.67	0.00	448.50	0.073	0.08	8.657	A
B-AD	123.33	123.33	0.00	371.11	0.332	0.50	14.528	B
A-B	363.00	363.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	560.05	0.068	0.07	6.895	A
D-ABC	16.00	16.00	0.00	437.29	0.037	0.04	8.544	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	425.41	0.129	0.15	9.718	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	32.67	32.67	0.00	448.49	0.073	0.08	8.657	A
B-AD	123.33	123.33	0.00	371.11	0.332	0.50	14.528	B
A-B	363.00	363.00	0.00	-	-	-	-	-
A-C	455.00	455.00	0.00	-	-	-	-	-
A-D	38.00	38.00	0.00	560.05	0.068	0.07	6.895	A
D-ABC	16.00	16.00	0.00	437.29	0.037	0.04	8.544	A
C-D	11.00	11.00	0.00	-	-	-	-	-
C-A	216.00	216.00	0.00	-	-	-	-	-
C-B	55.00	55.00	0.00	425.41	0.129	0.15	9.718	A

EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

[illegible]

[illegible]

Junction	Stream	(PCU/hr)	for A-B	for A-C	for A-D	for B-A	for B-C	for B-D	for C-A	for C-B	for C-D	for D-A	for D-B	for D-C
2	A-D	632.897	-	-	-	-	-	-	0.238	0.340	0.238	-	-	-
2	B-A	610.690	0.108	0.273	0.273	-	-	-	0.171	0.389	-	0.273	0.273	0.136
2	B-C	668.929	0.099	0.251	-	-	-	-	-	-	-	-	-	-
2	B-D, nearside lane	542.711	0.096	0.242	0.242	-	-	-	0.152	0.346	0.152	-	-	-
2	B-D, offside lane	610.690	0.108	0.273	0.273	-	-	-	0.171	0.389	0.171	-	-	-
2	C-B	632.897	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
2	D-A	701.036	-	-	-	-	-	-	0.263	-	0.104	-	-	-
2	D-B, nearside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-B, offside lane	568.760	0.160	0.160	0.363	-	-	-	0.254	0.254	0.100	-	-	-
2	D-C	568.760	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.100	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	FLAT	✓	360.00	100.000
B	FLAT	✓	441.00	100.000
C	FLAT	✓	499.00	100.000
D	FLAT	✓	35.00	100.000

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:15-16:30	A	360.00	360.00		
16:15-16:30	B	441.00	441.00		
16:15-16:30	C	499.00	499.00		
16:15-16:30	D	35.00	35.00		
16:30-16:45	A	360.00	360.00		

16:30-16:45	B	441.00	441.00		
16:30-16:45	C	499.00	499.00		
16:30-16:45	D	35.00	35.00		
16:45-17:00	A	360.00	360.00		
16:45-17:00	B	441.00	441.00		
16:45-17:00	C	499.00	499.00		
16:45-17:00	D	35.00	35.00		
17:00-17:15	A	360.00	360.00		
17:00-17:15	B	441.00	441.00		
17:00-17:15	C	499.00	499.00		
17:00-17:15	D	35.00	35.00		
17:15-17:30	A	360.00	360.00		
17:15-17:30	B	441.00	441.00		
17:15-17:30	C	499.00	499.00		
17:15-17:30	D	35.00	35.00		
17:30-17:45	A	360.00	360.00		
17:30-17:45	B	441.00	441.00		
17:30-17:45	C	499.00	499.00		
17:30-17:45	D	35.00	35.00		

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.000	156.000	181.000	23.000
	B	383.000	0.000	54.000	4.000
	C	471.000	24.000	0.000	4.000
	D	25.000	3.000	7.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.43	0.50	0.06
	B	0.87	0.00	0.12	0.01

	C	0.94	0.05	0.00	0.01
	D	0.71	0.09	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 2 (for whole period)

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

		To			
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.49	59.69	0.92	F
B-AD	0.89	68.63	6.98	F
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.04	7.36	0.05	A
D-ABC	0.07	7.98	0.08	A
C-D	-	-	-	-
C-A	-	-	-	-
C-B	0.04	6.91	0.05	A

Main Results for each time segment

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	57.74	55.99	0.00	183.60	0.315	0.44	27.859	D
B-AD	383.26	362.87	0.00	434.08	0.883	5.10	42.800	E
A-B	156.00	156.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-

A-D	23.00	22.81	0.00	511.81	0.045	0.05	7.360	A
D-ABC	35.00	34.69	0.00	488.12	0.072	0.08	7.935	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	24.00	23.82	0.00	544.96	0.044	0.05	6.906	A

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	57.84	56.81	0.00	134.88	0.429	0.70	45.478	E
B-AD	383.16	379.65	0.00	433.11	0.885	5.97	60.548	F
A-B	156.00	156.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	511.75	0.045	0.05	7.364	A
D-ABC	35.00	35.00	0.00	486.81	0.072	0.08	7.967	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	24.00	24.00	0.00	544.90	0.044	0.05	6.910	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	57.85	57.48	0.00	126.36	0.458	0.79	51.804	F
B-AD	383.15	381.40	0.00	432.76	0.885	6.41	64.478	F
A-B	156.00	156.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	511.75	0.045	0.05	7.364	A
D-ABC	35.00	35.00	0.00	486.52	0.072	0.08	7.972	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	24.00	24.00	0.00	544.90	0.044	0.05	6.910	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	57.86	57.63	0.00	122.07	0.474	0.85	55.436	F
B-AD	383.14	382.08	0.00	432.63	0.886	6.68	66.502	F
A-B	156.00	156.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	511.75	0.045	0.05	7.364	A
D-ABC	35.00	35.00	0.00	486.39	0.072	0.08	7.975	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	24.00	24.00	0.00	544.90	0.044	0.05	6.910	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	57.86	57.70	0.00	119.45	0.484	0.89	57.896	F
B-AD	383.14	382.42	0.00	432.54	0.886	6.86	67.761	F
A-B	156.00	156.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	511.75	0.045	0.05	7.364	A
D-ABC	35.00	35.00	0.00	486.31	0.072	0.08	7.976	A
C-D	4.00	4.00	0.00	-	-	-	-	-

C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	24.00	24.00	0.00	544.90	0.044	0.05	6.910	A

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	57.87	57.74	0.00	117.68	0.492	0.92	59.686	F
B-AD	383.13	382.61	0.00	432.48	0.886	6.98	68.625	F
A-B	156.00	156.00	0.00	-	-	-	-	-
A-C	181.00	181.00	0.00	-	-	-	-	-
A-D	23.00	23.00	0.00	511.75	0.045	0.05	7.364	A
D-ABC	35.00	35.00	0.00	486.25	0.072	0.08	7.977	A
C-D	4.00	4.00	0.00	-	-	-	-	-
C-A	471.00	471.00	0.00	-	-	-	-	-
C-B	24.00	24.00	0.00	544.90	0.044	0.05	6.910	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]

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Filename: A30 NORTHERN ROUNDABOUT 230422.arc8

Path: C:\Users\NTP Laptop\Desktop\ARCADY PICADY ETC\EXETER

Report generation date: 24/04/2022 00:44:07

- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Summary of junction performance

	0800-0900				1630-1730			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
EXISTING LAYOUT - 2022 WEEKDAY NO DEV								
Arm A	0.57	3.32	0.36	A	0.22	2.09	0.18	A
Arm B	0.23	2.31	0.19	A	0.77	3.14	0.44	A
Arm D	0.12	1.75	0.11	A	0.05	1.68	0.05	A
Arm E	0.43	2.30	0.30	A	0.23	1.90	0.19	A
EXISTING LAYOUT - 2034 WEEKDAY NO DEV								
Arm A	0.71	3.78	0.42	A	0.25	2.17	0.20	A
Arm B	0.27	2.43	0.21	A	0.94	3.50	0.49	A
Arm D	0.14	1.78	0.12	A	0.05	1.70	0.05	A
Arm E	0.51	2.47	0.34	A	0.26	1.98	0.21	A
EXISTING LAYOUT - 2034 WEEKDAY WITH DEV								
Arm A	0.78	4.11	0.44	A	0.26	2.24	0.21	A
Arm B	0.31	2.51	0.24	A	1.11	3.80	0.53	A
Arm D	0.15	1.80	0.13	A	0.06	1.71	0.06	A
Arm E	0.58	2.61	0.37	A	0.29	2.04	0.23	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2022 WEEKDAY NO DEV, 0800-0900" model duration: 07:45 - 09:15

"D2 - 2022 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45

"D3 - 2034 WEEKDAY NO DEV, 0800-0900" model duration: 07:45 - 09:15

"D4 - 2034 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45

"D5 - 2034 WEEKDAY WITH DEV, 0800-0900" model duration: 07:45 - 09:15

"D6 - 2034 WEEKDAY WITH DEV, 1630-1730" model duration: 16:15 - 17:45

Run using Junctions 8.0.2.316 at 24/04/2022 00:44:04

File summary

File Description

Title	A30 NORTHERN ROUNDABOUT
Location	EXETER
Site Number	
Date	23/04/2022
Version	
Status	EXISTING
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 WEEKDAY NO DEV, 0800-0900	2022 WEEKDAY NO DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 NORTHERN ROUNDABOUT	Roundabout	A,B,C,D,E	✓		2.56	A

Junction Network Options

Driving Side	Lighting

Left	Normal/unknown
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Arms

Arms

Arm	Name	Description
A	CLYST HONITON BYPASS (N)	
B	B3184 (E)	
C	A30 EASTBOUND ENTRY SLIP	
D	B3184 (S)	
E	A30 EASTBOUND EXIT SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.10	6.00	10.00	15.00	70.00	40.00	
B	3.20	7.30	20.00	15.00	70.00	70.00	
C	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
D	4.50	6.80	15.00	15.00	70.00	70.00	
E	3.65	7.30	20.00	30.00	70.00	40.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.995	2385.781
B		(calculated)	(calculated)	0.920	2319.855
C		(calculated)	(calculated)	Exit-only	Exit-only
D		(calculated)	(calculated)	0.951	2414.208
E		(calculated)	(calculated)	1.096	2639.038

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	562.00	100.000
B	ONE HOUR	✓	325.00	100.000
C	Exit-only	✓	Exit-only	Exit-only
D	ONE HOUR	✓	232.00	100.000
E	ONE HOUR	✓	611.00	100.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.36	3.32	0.57	A
B	0.19	2.31	0.23	A
C	Exit-only	Exit-only	Exit-only	Exit-only
D	0.11	1.75	0.12	A
E	0.30	2.30	0.43	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	423.10	421.98	469.57	0.00	1918.60	0.221	0.28	2.404	A
B	244.68	244.13	301.85	0.00	2042.23	0.120	0.14	2.002	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	174.66	174.34	74.37	0.00	2343.46	0.075	0.08	1.659	A
E	459.99	459.03	248.71	0.00	2366.35	0.194	0.24	1.887	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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A	505.23	504.83	561.59	0.00	1827.05	0.277	0.38	2.722	A
B	292.17	292.02	361.11	0.00	1987.73	0.147	0.17	2.122	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	208.56	208.49	88.96	0.00	2329.58	0.090	0.10	1.696	A
E	549.28	549.00	297.45	0.00	2312.91	0.237	0.31	2.040	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	618.77	618.02	687.69	0.00	1701.59	0.364	0.57	3.321	A
B	357.83	357.60	442.09	0.00	1913.25	0.187	0.23	2.314	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	255.44	255.33	108.93	0.00	2310.57	0.111	0.12	1.750	A
E	672.72	672.25	364.26	0.00	2239.65	0.300	0.43	2.297	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	618.77	618.77	688.13	0.00	1701.15	0.364	0.57	3.325	A
B	357.83	357.83	442.61	0.00	1912.77	0.187	0.23	2.314	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	255.44	255.44	109.00	0.00	2310.51	0.111	0.12	1.750	A
E	672.72	672.72	364.44	0.00	2239.46	0.300	0.43	2.297	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	505.23	505.97	562.30	0.00	1826.34	0.277	0.38	2.727	A
B	292.17	292.40	361.91	0.00	1986.99	0.147	0.17	2.126	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	208.56	208.67	89.07	0.00	2329.47	0.090	0.10	1.699	A
E	549.28	549.74	297.73	0.00	2312.60	0.238	0.31	2.042	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	423.10	423.50	470.81	0.00	1917.37	0.221	0.28	2.410	A
B	244.68	244.82	302.93	0.00	2041.24	0.120	0.14	2.003	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	174.66	174.73	74.58	0.00	2343.26	0.075	0.08	1.659	A
E	459.99	460.27	249.31	0.00	2365.69	0.194	0.24	1.888	A

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 WEEKDAY NO DEV, 1630-1730	2022 WEEKDAY NO DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 NORTHERN ROUNDABOUT	Roundabout	A,B,C,D,E	✓		2.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	CLYST HONITON BYPASS (N)	
B	B3184 (E)	
C	A30 EASTBOUND ENTRY SLIP	
D	B3184 (S)	
E	A30 EASTBOUND EXIT SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.10	6.00	10.00	15.00	70.00	40.00	
B	3.20	7.30	20.00	15.00	70.00	70.00	
C	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
D	4.50	6.80	15.00	15.00	70.00	70.00	
E	3.65	7.30	20.00	30.00	70.00	40.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.995	2385.781
B		(calculated)	(calculated)	0.920	2319.855
C		(calculated)	(calculated)	Exit-only	Exit-only
D		(calculated)	(calculated)	0.951	2414.208
E		(calculated)	(calculated)	1.096	2639.038

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	348.00	100.000
B	ONE HOUR	✓	801.00	100.000
C	Exit-only	✓	Exit-only	Exit-only
D	ONE HOUR	✓	94.00	100.000
E	ONE HOUR	✓	397.00	100.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.18	2.09	0.22	A
B	0.44	3.14	0.77	A
C	Exit-only	Exit-only	Exit-only	Exit-only

D	0.05	1.68	0.05	A
E	0.19	1.90	0.23	A

Main Results for each time segment

Main results: (16:15-16:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	261.99	261.45	190.87	0.00	2195.88	0.119	0.14	1.860	A
B	603.03	601.45	217.88	0.00	2119.46	0.285	0.40	2.369	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	70.77	70.64	120.14	0.00	2299.91	0.031	0.03	1.614	A
E	298.88	298.32	190.78	0.00	2429.86	0.123	0.14	1.688	A

Main results: (16:30-16:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	312.84	312.71	228.25	0.00	2158.69	0.145	0.17	1.950	A
B	720.08	719.56	260.59	0.00	2080.18	0.346	0.53	2.646	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	84.50	84.48	143.73	0.00	2277.47	0.037	0.04	1.640	A
E	356.89	356.75	228.21	0.00	2388.83	0.149	0.18	1.770	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	383.16	382.95	279.52	0.00	2107.68	0.182	0.22	2.087	A
B	881.92	880.96	319.12	0.00	2026.35	0.435	0.77	3.140	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	103.50	103.46	175.97	0.00	2246.79	0.046	0.05	1.678	A
E	437.11	436.89	279.43	0.00	2332.67	0.187	0.23	1.898	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	383.16	383.15	279.66	0.00	2107.55	0.182	0.22	2.087	A
B	881.92	881.91	319.29	0.00	2026.19	0.435	0.77	3.145	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	103.50	103.50	176.16	0.00	2246.61	0.046	0.05	1.678	A
E	437.11	437.10	279.66	0.00	2332.42	0.187	0.23	1.898	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	312.84	313.05	228.48	0.00	2158.47	0.145	0.17	1.952	A
B	720.08	721.03	260.88	0.00	2079.92	0.346	0.53	2.650	A

C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	84.50	84.54	144.03	0.00	2277.19	0.037	0.04	1.641	A
E	356.89	357.11	228.57	0.00	2388.43	0.149	0.18	1.771	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	261.99	262.13	191.31	0.00	2195.44	0.119	0.14	1.864	A
B	603.03	603.57	218.44	0.00	2118.95	0.285	0.40	2.377	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	70.77	70.80	120.56	0.00	2299.51	0.031	0.03	1.617	A
E	298.88	299.02	191.36	0.00	2429.23	0.123	0.14	1.691	A

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY NO DEV, 0800-0900	2034 WEEKDAY NO DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 NORTHERN ROUNDABOUT	Roundabout	A,B,C,D,E	✓		2.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description

A	CLYST HONITON BYPASS (N)	
B	B3184 (E)	
C	A30 EASTBOUND ENTRY SLIP	
D	B3184 (S)	
E	A30 EASTBOUND EXIT SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.10	6.00	10.00	15.00	70.00	40.00	
B	3.20	7.30	20.00	15.00	70.00	70.00	
C	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
D	4.50	6.80	15.00	15.00	70.00	70.00	
E	3.65	7.30	20.00	30.00	70.00	40.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.995	2385.781
B		(calculated)	(calculated)	0.920	2319.855
C		(calculated)	(calculated)	Exit-only	Exit-only
D		(calculated)	(calculated)	0.951	2414.208
E		(calculated)	(calculated)	1.096	2639.038

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	617.00	100.000
B	ONE HOUR	✓	358.00	100.000
C	Exit-only	✓	Exit-only	Exit-only
D	ONE HOUR	✓	256.00	100.000
E	ONE HOUR	✓	671.00	100.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.42	3.78	0.71	A
B	0.21	2.43	0.27	A
C	Exit-only	Exit-only	Exit-only	Exit-only
D	0.12	1.78	0.14	A
E	0.34	2.47	0.51	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	464.51	463.19	516.86	0.00	1871.55	0.248	0.33	2.554	A
B	269.52	268.91	331.08	0.00	2015.35	0.134	0.15	2.061	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	192.73	192.37	81.87	0.00	2336.32	0.082	0.09	1.678	A
E	505.16	504.06	274.24	0.00	2338.35	0.216	0.27	1.961	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	554.67	554.17	618.17	0.00	1770.75	0.313	0.45	2.957	A
B	321.83	321.66	396.10	0.00	1955.55	0.165	0.20	2.203	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	230.14	230.06	97.94	0.00	2321.03	0.099	0.11	1.720	A
E	603.22	602.88	328.00	0.00	2279.42	0.265	0.36	2.147	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	679.33	678.32	756.95	0.00	1632.68	0.416	0.71	3.769	A
B	394.17	393.89	484.84	0.00	1873.93	0.210	0.27	2.432	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	281.86	281.74	119.93	0.00	2300.11	0.123	0.14	1.782	A
E	738.78	738.20	401.67	0.00	2198.64	0.336	0.50	2.463	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	679.33	679.32	757.50	0.00	1632.14	0.416	0.71	3.777	A
B	394.17	394.16	485.54	0.00	1873.28	0.210	0.27	2.433	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	281.86	281.86	120.01	0.00	2300.03	0.123	0.14	1.782	A
E	738.78	738.78	401.87	0.00	2198.42	0.336	0.51	2.465	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	554.67	555.68	619.04	0.00	1769.89	0.313	0.46	2.966	A
B	321.83	322.11	397.15	0.00	1954.58	0.165	0.20	2.205	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	230.14	230.26	98.07	0.00	2320.91	0.099	0.11	1.721	A
E	603.22	603.79	328.33	0.00	2279.05	0.265	0.36	2.149	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	464.51	465.02	518.29	0.00	1870.13	0.248	0.33	2.562	A
B	269.52	269.69	332.36	0.00	2014.17	0.134	0.15	2.065	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	192.73	192.81	82.11	0.00	2336.09	0.083	0.09	1.681	A
E	505.16	505.50	274.92	0.00	2337.61	0.216	0.28	1.965	A

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
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2034 WEEKDAY NO DEV, 1630-1730	2034 WEEKDAY NO DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		
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Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 NORTHERN ROUNDABOUT	Roundabout	A,B,C,D,E	✓		2.75	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	CLYST HONITON BYPASS (N)	
B	B3184 (E)	
C	A30 EASTBOUND ENTRY SLIP	
D	B3184 (S)	
E	A30 EASTBOUND EXIT SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.10	6.00	10.00	15.00	70.00	40.00	
B	3.20	7.30	20.00	15.00	70.00	70.00	
C	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
D	4.50	6.80	15.00	15.00	70.00	70.00	
E	3.65	7.30	20.00	30.00	70.00	40.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

E	None
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Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.995	2385.781
B		(calculated)	(calculated)	0.920	2319.855
C		(calculated)	(calculated)	Exit-only	Exit-only
D		(calculated)	(calculated)	0.951	2414.208
E		(calculated)	(calculated)	1.096	2639.038

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	382.00	100.000
B	ONE HOUR	✓	882.00	100.000
C	Exit-only	✓	Exit-only	Exit-only
D	ONE HOUR	✓	105.00	100.000
E	ONE HOUR	✓	435.00	100.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.20	2.17	0.25	A
B	0.49	3.50	0.94	A
C	Exit-only	Exit-only	Exit-only	Exit-only
D	0.05	1.70	0.05	A
E	0.21	1.98	0.26	A

Main Results for each time segment

Main results: (16:15-16:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	287.59	286.98	209.65	0.00	2177.20	0.132	0.15	1.904	A
B	664.02	662.17	238.91	0.00	2100.12	0.316	0.46	2.500	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	79.05	78.91	132.13	0.00	2288.50	0.035	0.04	1.628	A
E	327.49	326.86	211.04	0.00	2407.65	0.136	0.16	1.729	A

Main results: (16:30-16:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	343.41	343.25	250.71	0.00	2136.34	0.161	0.19	2.007	A
B	792.90	792.25	285.75	0.00	2057.04	0.385	0.62	2.844	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	94.39	94.36	158.09	0.00	2263.81	0.042	0.04	1.658	A
E	391.06	390.89	252.45	0.00	2362.24	0.166	0.20	1.825	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	420.59	420.34	307.03	0.00	2080.32	0.202	0.25	2.168	A
B	971.10	969.84	349.92	0.00	1998.02	0.486	0.94	3.496	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	115.61	115.56	193.53	0.00	2230.09	0.052	0.05	1.701	A
E	478.94	478.69	309.09	0.00	2300.14	0.208	0.26	1.976	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	420.59	420.59	307.18	0.00	2080.16	0.202	0.25	2.168	A
B	971.10	971.09	350.12	0.00	1997.83	0.486	0.94	3.505	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	115.61	115.61	193.78	0.00	2229.86	0.052	0.05	1.701	A
E	478.94	478.94	309.38	0.00	2299.82	0.208	0.26	1.976	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	343.41	343.65	250.97	0.00	2136.09	0.161	0.19	2.008	A
B	792.90	794.15	286.08	0.00	2056.74	0.386	0.63	2.855	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	94.39	94.44	158.47	0.00	2263.45	0.042	0.04	1.658	A
E	391.06	391.31	252.91	0.00	2361.75	0.166	0.20	1.829	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	287.59	287.75	210.15	0.00	2176.70	0.132	0.15	1.907	A

B	664.02	664.68	239.54	0.00	2099.54	0.316	0.46	2.509	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	79.05	79.08	132.63	0.00	2288.02	0.035	0.04	1.631	A
E	327.49	327.66	211.72	0.00	2406.91	0.136	0.16	1.733	A

EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 0800-0900	2034 WEEKDAY WITH DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 NORTHERN ROUNDABOUT	Roundabout	A,B,C,D,E	✓		2.94	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	CLYST HONITON BYPASS (N)	
B	B3184 (E)	
C	A30 EASTBOUND ENTRY SLIP	
D	B3184 (S)	
E	A30 EASTBOUND EXIT SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
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A	4.10	6.00	10.00	15.00	70.00	40.00	
B	3.20	7.30	20.00	15.00	70.00	70.00	
C	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
D	4.50	6.80	15.00	15.00	70.00	70.00	
E	3.65	7.30	20.00	30.00	70.00	40.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.995	2385.781
B		(calculated)	(calculated)	0.920	2319.855
C		(calculated)	(calculated)	Exit-only	Exit-only
D		(calculated)	(calculated)	0.951	2414.208
E		(calculated)	(calculated)	1.096	2639.038

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	621.00	100.000

B	ONE HOUR	✓	401.00	100.000
C	Exit-only	✓	Exit-only	Exit-only
D	ONE HOUR	✓	268.00	100.000
E	ONE HOUR	✓	726.00	100.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.44	4.11	0.78	A
B	0.24	2.51	0.31	A
C	Exit-only	Exit-only	Exit-only	Exit-only
D	0.13	1.80	0.15	A
E	0.37	2.61	0.58	A

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	467.52	466.15	567.16	0.00	1821.50	0.257	0.34	2.654	A
B	301.89	301.19	331.04	0.00	2015.38	0.150	0.18	2.099	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	201.76	201.39	84.12	0.00	2334.18	0.086	0.09	1.687	A
E	546.57	545.35	285.51	0.00	2326.00	0.235	0.31	2.021	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	558.27	557.71	678.35	0.00	1710.88	0.326	0.48	3.120	A
B	360.49	360.29	396.07	0.00	1955.58	0.184	0.23	2.256	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	240.93	240.84	100.63	0.00	2318.47	0.104	0.12	1.731	A
E	652.66	652.27	341.47	0.00	2264.64	0.288	0.40	2.232	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	683.73	682.56	830.61	0.00	1559.40	0.438	0.77	4.101	A
B	441.51	441.18	484.74	0.00	1874.02	0.236	0.31	2.512	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	295.07	294.95	123.22	0.00	2296.98	0.128	0.15	1.797	A
E	799.34	798.65	418.17	0.00	2180.55	0.367	0.58	2.603	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	683.73	683.72	831.27	0.00	1558.75	0.439	0.78	4.113	A
B	441.51	441.51	485.54	0.00	1873.28	0.236	0.31	2.513	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	295.07	295.07	123.31	0.00	2296.89	0.128	0.15	1.797	A
E	799.34	799.34	418.39	0.00	2180.31	0.367	0.58	2.606	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	558.27	559.43	679.38	0.00	1709.86	0.327	0.49	3.131	A
B	360.49	360.81	397.26	0.00	1954.48	0.184	0.23	2.260	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	240.93	241.05	100.78	0.00	2318.33	0.104	0.12	1.734	A
E	652.66	653.34	341.83	0.00	2264.25	0.288	0.41	2.235	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	467.52	468.08	568.78	0.00	1819.89	0.257	0.35	2.665	A
B	301.89	302.09	332.40	0.00	2014.14	0.150	0.18	2.102	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	201.76	201.85	84.38	0.00	2333.94	0.086	0.09	1.687	A
E	546.57	546.96	286.23	0.00	2325.21	0.235	0.31	2.026	A

EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 1630-1730	2034 WEEKDAY WITH DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 NORTHERN ROUNDABOUT	Roundabout	A,B,C,D,E	✓		2.93	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	CLYST HONITON BYPASS (N)	
B	B3184 (E)	
C	A30 EASTBOUND ENTRY SLIP	
D	B3184 (S)	
E	A30 EASTBOUND EXIT SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.10	6.00	10.00	15.00	70.00	40.00	
B	3.20	7.30	20.00	15.00	70.00	70.00	
C	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓
D	4.50	6.80	15.00	15.00	70.00	70.00	
E	3.65	7.30	20.00	30.00	70.00	40.00	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00
E	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.995	2385.781

B		(calculated)	(calculated)	0.920	2319.855
C		(calculated)	(calculated)	Exit-only	Exit-only
D		(calculated)	(calculated)	0.951	2414.208
E		(calculated)	(calculated)	1.096	2639.038

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	385.00	100.000
B	ONE HOUR	✓	955.00	100.000
C	Exit-only	✓	Exit-only	Exit-only
D	ONE HOUR	✓	113.00	100.000
E	ONE HOUR	✓	473.00	100.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.21	2.24	0.26	A
B	0.53	3.80	1.11	A
C	Exit-only	Exit-only	Exit-only	Exit-only
D	0.06	1.71	0.06	A
E	0.23	2.04	0.29	A

Main Results for each time segment

Main results: (16:15-16:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	289.85	289.22	244.20	0.00	2142.82	0.135	0.16	1.942	A
B	718.97	716.90	238.90	0.00	2100.13	0.342	0.52	2.599	A
						Exit-		Exit-	Exit-

C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	only	Exit-only	only	only
D	85.07	84.92	135.12	0.00	2285.66	0.037	0.04	1.635	A
E	356.10	355.40	220.04	0.00	2397.78	0.149	0.17	1.762	A

Main results: (16:30-16:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	346.11	345.94	292.05	0.00	2095.22	0.165	0.20	2.057	A
B	858.53	857.75	285.74	0.00	2057.05	0.417	0.71	3.000	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	101.58	101.55	161.67	0.00	2260.40	0.045	0.05	1.666	A
E	425.22	425.03	263.22	0.00	2350.44	0.181	0.22	1.868	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	423.89	423.63	357.64	0.00	2029.96	0.209	0.26	2.241	A
B	1051.47	1049.92	349.91	0.00	1998.03	0.526	1.10	3.790	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	124.42	124.37	197.89	0.00	2225.94	0.056	0.06	1.712	A
E	520.78	520.49	322.26	0.00	2285.71	0.228	0.29	2.039	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	423.89	423.89	357.83	0.00	2029.77	0.209	0.26	2.241	A
B	1051.47	1051.45	350.12	0.00	1997.83	0.526	1.11	3.803	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	124.42	124.42	198.18	0.00	2225.67	0.056	0.06	1.712	A
E	520.78	520.78	322.60	0.00	2285.34	0.228	0.29	2.039	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	346.11	346.37	292.36	0.00	2094.91	0.165	0.20	2.058	A
B	858.53	860.07	286.09	0.00	2056.73	0.417	0.72	3.013	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	101.58	101.63	162.11	0.00	2259.99	0.045	0.05	1.669	A
E	425.22	425.51	263.74	0.00	2349.87	0.181	0.22	1.873	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	289.85	290.01	244.80	0.00	2142.23	0.135	0.16	1.943	A
B	718.97	719.76	239.54	0.00	2099.54	0.342	0.52	2.612	A
C	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
D	85.07	85.11	135.66	0.00	2285.14	0.037	0.04	1.638	A
E	356.10	356.29	220.77	0.00	2396.98	0.149	0.17	1.766	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]

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Filename: A30 SOUTHERN ROUNDABOUT 230422.arc8

Path: C:\Users\NTP Laptop\Desktop\ARCADY PICADY ETC\EXETER

Report generation date: 24/04/2022 00:48:09

- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900
- » EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Summary of junction performance

	0800-0900				1630-1730			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
EXISTING LAYOUT - 2022 WEEKDAY NO DEV								
Arm A	0.36	2.11	0.26	A	0.63	2.52	0.39	A
Arm B	0.14	2.20	0.13	A	0.05	2.35	0.04	A
Arm C	0.03	2.66	0.03	A	0.05	3.00	0.05	A
EXISTING LAYOUT - 2034 WEEKDAY NO DEV								
Arm A	0.41	2.18	0.29	A	0.74	2.69	0.43	A
Arm B	0.17	2.31	0.14	A	0.06	2.51	0.05	A
Arm C	0.03	2.82	0.03	A	0.06	3.24	0.06	A
EXISTING LAYOUT - 2034 WEEKDAY WITH DEV								
Arm A	0.44	2.23	0.31	A	0.82	2.83	0.45	A
Arm B	0.18	2.39	0.15	A	0.06	2.63	0.06	A
Arm C	0.03	2.92	0.03	A	0.07	3.43	0.06	A

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.

"D1 - 2022 WEEKDAY NO DEV, 0800-0900 " model duration: 07:45 - 09:15

"D2 - 2022 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45

"D3 - 2034 WEEKDAY NO DEV, 0800-0900" model duration: 07:45 - 09:15

"D4 - 2034 WEEKDAY NO DEV, 1630-1730" model duration: 16:15 - 17:45

"D5 - 2034 WEEKDAY WITH DEV, 0800-0900" model duration: 07:45 - 09:15

"D6 - 2034 WEEKDAY WITH DEV, 1630-1730" model duration: 16:15 - 17:45

Run using Junctions 8.0.2.316 at 24/04/2022 00:48:07

File summary

File Description

Title	A30 SOUTHERN ROUNDABOUT
Location	EXETER

Site Number	
Date	23/04/2022
Version	
Status	EXISTING
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 WEEKDAY NO DEV, 0800-0900	2022 WEEKDAY NO DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 SOUTHERN ROUNDABOUT	Roundabout	A,B,C,D	✓		2.15	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B3184 (N)	
B	A30 WESTBOUND EXIT SLIP	
C	BISHOP'S COURT LANE (S)	
D	A30 WESTBOUND ENTRY SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.40	6.60	10.00	15.00	70.00	70.00	
B	3.65	7.30	30.00	15.00	70.00	70.00	
C	2.75	6.50	10.00	10.00	70.00	40.00	
D	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.921	2323.771
B		(calculated)	(calculated)	0.972	2474.410
C		(calculated)	(calculated)	0.883	2102.838
D		(calculated)	(calculated)	Exit-only	Exit-only

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	559.00	100.000
B	ONE HOUR	✓	216.00	100.000
C	ONE HOUR	✓	32.00	100.000
D	Exit-only	✓	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.26	2.11	0.36	A
B	0.13	2.20	0.14	A
C	0.03	2.66	0.03	A
D	Exit-only	Exit-only	Exit-only	Exit-only

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	420.84	419.96	0.00	0.00	2323.77	0.181	0.22	1.890	A
B	162.62	162.28	419.96	0.00	2066.40	0.079	0.09	1.889	A
C	24.09	24.03	552.19	0.00	1615.01	0.015	0.02	2.262	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	502.53	502.31	0.00	0.00	2323.77	0.216	0.28	1.976	A
B	194.18	194.09	502.31	0.00	1986.39	0.098	0.11	2.008	A
C	28.77	28.75	660.46	0.00	1519.36	0.019	0.02	2.414	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	615.47	615.13	0.00	0.00	2323.77	0.265	0.36	2.107	A
B	237.82	237.67	615.13	0.00	1876.78	0.127	0.14	2.196	A
C	35.23	35.21	808.79	0.00	1388.31	0.025	0.03	2.660	A

D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
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Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	615.47	615.47	0.00	0.00	2323.77	0.265	0.36	2.107	A
B	237.82	237.82	615.47	0.00	1876.46	0.127	0.14	2.196	A
C	35.23	35.23	809.25	0.00	1387.91	0.025	0.03	2.660	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	502.53	502.86	0.00	0.00	2323.77	0.216	0.28	1.977	A
B	194.18	194.32	502.86	0.00	1985.86	0.098	0.11	2.009	A
C	28.77	28.79	661.20	0.00	1518.70	0.019	0.02	2.415	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	420.84	421.06	0.00	0.00	2323.77	0.181	0.22	1.891	A
B	162.62	162.71	421.06	0.00	2065.33	0.079	0.09	1.891	A
C	24.09	24.11	553.64	0.00	1613.72	0.015	0.02	2.264	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

EXISTING LAYOUT - 2022 WEEKDAY NO DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2022 WEEKDAY NO DEV, 1630-1730	2022 WEEKDAY NO DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 SOUTHERN ROUNDABOUT	Roundabout	A,B,C,D	✓		2.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B3184 (N)	
B	A30 WESTBOUND EXIT SLIP	
C	BISHOP'S COURT LANE (S)	
D	A30 WESTBOUND ENTRY SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.40	6.60	10.00	15.00	70.00	70.00	
B	3.65	7.30	30.00	15.00	70.00	70.00	
C	2.75	6.50	10.00	10.00	70.00	40.00	
D	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.921	2323.771
B		(calculated)	(calculated)	0.972	2474.410
C		(calculated)	(calculated)	0.883	2102.838
D		(calculated)	(calculated)	Exit-only	Exit-only

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	816.00	100.000
B	ONE HOUR	✓	65.00	100.000
C	ONE HOUR	✓	59.00	100.000
D	Exit-only	✓	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.39	2.52	0.63	A
B	0.04	2.35	0.05	A
C	0.05	3.00	0.05	A
D	Exit-only	Exit-only	Exit-only	Exit-only

Main Results for each time segment

Main results: (16:15-16:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	614.33	612.89	0.00	0.00	2323.77	0.264	0.36	2.102	A
B	48.94	48.83	612.89	0.00	1878.96	0.026	0.03	1.966	A
C	44.42	44.30	645.95	0.00	1532.17	0.029	0.03	2.419	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Main results: (16:30-16:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	733.57	733.16	0.00	0.00	2323.77	0.316	0.46	2.263	A
B	58.43	58.40	733.16	0.00	1762.11	0.033	0.03	2.112	A
C	53.04	53.00	772.70	0.00	1420.20	0.037	0.04	2.632	A

D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
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Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	898.43	897.76	0.00	0.00	2323.77	0.387	0.63	2.523	A
B	71.57	71.52	897.76	0.00	1602.20	0.045	0.05	2.351	A
C	64.96	64.90	946.17	0.00	1266.94	0.051	0.05	2.994	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	898.43	898.43	0.00	0.00	2323.77	0.387	0.63	2.525	A
B	71.57	71.57	898.43	0.00	1601.55	0.045	0.05	2.352	A
C	64.96	64.96	946.87	0.00	1266.32	0.051	0.05	2.995	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	733.57	734.23	0.00	0.00	2323.77	0.316	0.46	2.267	A
B	58.43	58.48	734.23	0.00	1761.08	0.033	0.03	2.115	A
C	53.04	53.10	773.82	0.00	1419.21	0.037	0.04	2.636	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	614.33	614.74	0.00	0.00	2323.77	0.264	0.36	2.106	A
B	48.94	48.97	614.74	0.00	1877.17	0.026	0.03	1.970	A
C	44.42	44.45	647.88	0.00	1530.47	0.029	0.03	2.424	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
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2034 WEEKDAY NO DEV, 0800-0900	2034 WEEKDAY NO DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		
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Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 SOUTHERN ROUNDABOUT	Roundabout	A,B,C,D	✓		2.24	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B3184 (N)	
B	A30 WESTBOUND EXIT SLIP	
C	BISHOP'S COURT LANE (S)	
D	A30 WESTBOUND ENTRY SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.40	6.60	10.00	15.00	70.00	70.00	
B	3.65	7.30	30.00	15.00	70.00	70.00	
C	2.75	6.50	10.00	10.00	70.00	40.00	
D	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.921	2323.771
B		(calculated)	(calculated)	0.972	2474.410
C		(calculated)	(calculated)	0.883	2102.838
D		(calculated)	(calculated)	Exit-only	Exit-only

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	614.00	100.000
B	ONE HOUR	✓	237.00	100.000
C	ONE HOUR	✓	36.00	100.000
D	Exit-only	✓	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.29	2.18	0.41	A
B	0.14	2.31	0.17	A
C	0.03	2.82	0.03	A
D	Exit-only	Exit-only	Exit-only	Exit-only

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	462.25	461.26	0.00	0.00	2323.77	0.199	0.25	1.932	A
B	178.43	178.04	461.26	0.00	2026.28	0.088	0.10	1.947	A
C	27.10	27.03	607.00	0.00	1566.58	0.017	0.02	2.338	A

D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
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Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	551.97	551.72	0.00	0.00	2323.77	0.238	0.31	2.031	A
B	213.06	212.95	551.72	0.00	1938.39	0.110	0.12	2.086	A
C	32.36	32.34	726.03	0.00	1461.42	0.022	0.02	2.518	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	676.03	675.63	0.00	0.00	2323.77	0.291	0.41	2.184	A
B	260.94	260.77	675.63	0.00	1818.01	0.144	0.17	2.311	A
C	39.64	39.60	889.08	0.00	1317.38	0.030	0.03	2.816	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	676.03	676.02	0.00	0.00	2323.77	0.291	0.41	2.184	A
B	260.94	260.94	676.02	0.00	1817.63	0.144	0.17	2.312	A
C	39.64	39.64	889.62	0.00	1316.90	0.030	0.03	2.817	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	551.97	552.36	0.00	0.00	2323.77	0.238	0.31	2.034	A
B	213.06	213.23	552.36	0.00	1937.77	0.110	0.12	2.087	A
C	32.36	32.40	726.91	0.00	1460.65	0.022	0.02	2.520	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	462.25	462.51	0.00	0.00	2323.77	0.199	0.25	1.934	A
B	178.43	178.53	462.51	0.00	2025.07	0.088	0.10	1.949	A
C	27.10	27.12	608.65	0.00	1565.13	0.017	0.02	2.340	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

EXISTING LAYOUT - 2034 WEEKDAY NO DEV, 1630-1730

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY NO DEV, 1630-1730	2034 WEEKDAY NO DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 SOUTHERN ROUNDABOUT	Roundabout	A,B,C,D	✓		2.71	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B3184 (N)	
B	A30 WESTBOUND EXIT SLIP	
C	BISHOP'S COURT LANE (S)	
D	A30 WESTBOUND ENTRY SLIP	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.40	6.60	10.00	15.00	70.00	70.00	
B	3.65	7.30	30.00	15.00	70.00	70.00	
C	2.75	6.50	10.00	10.00	70.00	40.00	
D	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.921	2323.771
B		(calculated)	(calculated)	0.972	2474.410
C		(calculated)	(calculated)	0.883	2102.838
D		(calculated)	(calculated)	Exit-only	Exit-only

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	897.00	100.000
B	ONE HOUR	✓	72.00	100.000
C	ONE HOUR	✓	65.00	100.000
D	Exit-only	✓	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.43	2.69	0.74	A
B	0.05	2.51	0.06	A
C	0.06	3.24	0.06	A
D	Exit-only	Exit-only	Exit-only	Exit-only

Main Results for each time segment

Main results: (16:15-16:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	675.31	673.68	0.00	0.00	2323.77	0.291	0.41	2.180	A
B	54.21	54.08	673.68	0.00	1819.91	0.030	0.03	2.038	A
C	48.94	48.80	710.48	0.00	1475.16	0.033	0.03	2.523	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Main results: (16:30-16:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	806.38	805.90	0.00	0.00	2323.77	0.347	0.53	2.372	A
B	64.73	64.69	805.90	0.00	1691.45	0.038	0.04	2.212	A
C	58.43	58.39	849.93	0.00	1351.97	0.043	0.05	2.782	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	987.62	986.79	0.00	0.00	2323.77	0.425	0.74	2.691	A
B	79.27	79.21	986.79	0.00	1515.70	0.052	0.06	2.505	A
C	71.57	71.49	1040.70	0.00	1183.43	0.060	0.06	3.237	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	987.62	987.61	0.00	0.00	2323.77	0.425	0.74	2.693	A
B	79.27	79.27	987.61	0.00	1514.91	0.052	0.06	2.507	A
C	71.57	71.57	1041.56	0.00	1182.67	0.061	0.06	3.239	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	806.38	807.20	0.00	0.00	2323.77	0.347	0.53	2.376	A
B	64.73	64.79	807.20	0.00	1690.18	0.038	0.04	2.214	A
C	58.43	58.51	851.29	0.00	1350.77	0.043	0.05	2.785	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	675.31	675.80	0.00	0.00	2323.77	0.291	0.41	2.186	A
B	54.21	54.24	675.80	0.00	1817.84	0.030	0.03	2.042	A
C	48.94	48.98	712.71	0.00	1473.19	0.033	0.03	2.527	A
						Exit-		Exit-	Exit-

D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	only	Exit-only	only	only
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EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 0800-0900

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 0800-0900	2034 WEEKDAY WITH DEV	0800-0900		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 SOUTHERN ROUNDABOUT	Roundabout	A,B,C,D	✓		2.30	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B3184 (N)	
B	A30 WESTBOUND EXIT SLIP	
C	BISHOP'S COURT LANE (S)	
D	A30 WESTBOUND ENTRY SLIP	

Roundabout Geometry

[illegible]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.921	2323.771
B		(calculated)	(calculated)	0.972	2474.410
C		(calculated)	(calculated)	0.883	2102.838
D		(calculated)	(calculated)	Exit-only	Exit-only

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	647.00	100.000
B	ONE HOUR	✓	249.00	100.000
C	ONE HOUR	✓	36.00	100.000
D	Exit-only	✓	Exit-only	Exit-only

Results

Results Summary for whole modelled period

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Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A	0.31	2.23	0.44	A
B	0.15	2.39	0.18	A
C	0.03	2.92	0.03	A
D	Exit-only	Exit-only	Exit-only	Exit-only

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	487.10	486.04	0.00	0.00	2323.77	0.210	0.26	1.958	A
B	187.46	187.05	486.04	0.00	2002.21	0.094	0.10	1.983	A
C	27.10	27.03	640.78	0.00	1536.74	0.018	0.02	2.384	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	581.64	581.37	0.00	0.00	2323.77	0.250	0.33	2.066	A
B	223.85	223.73	581.37	0.00	1909.59	0.117	0.13	2.135	A
C	32.36	32.34	766.46	0.00	1425.71	0.023	0.02	2.583	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	712.36	711.93	0.00	0.00	2323.77	0.307	0.44	2.233	A
B	274.15	273.96	711.93	0.00	1782.74	0.154	0.18	2.385	A
C	39.64	39.60	938.57	0.00	1273.65	0.031	0.03	2.916	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	712.36	712.36	0.00	0.00	2323.77	0.307	0.44	2.233	A
B	274.15	274.15	712.36	0.00	1782.33	0.154	0.18	2.386	A
C	39.64	39.64	939.17	0.00	1273.13	0.031	0.03	2.917	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	581.64	582.07	0.00	0.00	2323.77	0.250	0.33	2.068	A
B	223.85	224.04	582.07	0.00	1908.91	0.117	0.13	2.136	A
C	32.36	32.40	767.42	0.00	1424.86	0.023	0.02	2.584	A

D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
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Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	487.10	487.37	0.00	0.00	2323.77	0.210	0.27	1.961	A
B	187.46	187.58	487.37	0.00	2000.91	0.094	0.10	1.985	A
C	27.10	27.12	642.56	0.00	1535.17	0.018	0.02	2.388	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

EXISTING LAYOUT - 2034 WEEKDAY WITH DEV, 1630-1730

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
EXISTING LAYOUT			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2034 WEEKDAY WITH DEV, 1630-1730	2034 WEEKDAY WITH DEV	1630-1730		ONE HOUR	16:15	17:45	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
A30 SOUTHERN ROUNDABOUT	Roundabout	A,B,C,D	✓		2.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B3184 (N)	
B	A30 WESTBOUND EXIT SLIP	
C	BISHOP'S COURT LANE (S)	

D	A30 WESTBOUND ENTRY SLIP	
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Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.40	6.60	10.00	15.00	70.00	70.00	
B	3.65	7.30	30.00	15.00	70.00	70.00	
C	2.75	6.50	10.00	10.00	70.00	40.00	
D	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only	✓

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A	0.00	0.00
B	0.00	0.00
C	0.00	0.00
D	0.00	0.00

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

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		(calculated)	(calculated)	0.921	2323.771
B		(calculated)	(calculated)	0.972	2474.410
C		(calculated)	(calculated)	0.883	2102.838
D		(calculated)	(calculated)	Exit-only	Exit-only

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	PCU Factors	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	954.00	100.000

C	71.57	71.57	1113.12	0.00	1119.45	0.064	0.07	3.434	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	857.63	858.57	0.00	0.00	2323.77	0.369	0.59	2.460	A
B	71.92	71.99	858.57	0.00	1640.28	0.044	0.05	2.297	A
C	58.43	58.52	909.86	0.00	1299.02	0.045	0.05	2.901	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A	718.22	718.78	0.00	0.00	2323.77	0.309	0.45	2.245	A
B	60.23	60.27	718.78	0.00	1776.09	0.034	0.04	2.097	A
C	48.94	48.98	761.72	0.00	1429.90	0.034	0.04	2.606	A
D	Exit-only	Exit-only	Exit-only	0.00	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

