



# Document control sheet

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# 1. Executive summary

- 1.1.1 This transport assessment (TA) has been produced by Hydrock on behalf of Persimmon Homes in support of an outline planning application for a new development for up to 190 dwellings (50% affordable) at Rectory Farm (North), located in the west of the village of Yatton. North Somerset.
- 1.1.1 A travel plan (TP) has been prepared in support of the redevelopment of the site. The TP identifies measures and initiatives to encourage travel to and from the site by sustainable modes of travel, and is submitted as a separate document.
- 1.1.2 Following a review of the personal injury accident data records within the vicinity of the site, it is not considered that there is an inherent highway safety deficiency which would be exacerbated by the proposed development. It is noted that a highways safety scheme is due to be implemented by NSC on the B3133 High Street, which will improve the pedestrian environment along the high street.
- 1.1.3 The site is well connected to surrounding facilities and services via the existing network of footways and cycle routes. The facilities and services in Yatton are mainly located on High Street, which are within a 10-minute walk. The site can therefore be considered a 20-minute neighbourhood as set out by Sustrans. The site is also well positioned to connect to existing dedicated cycle routes including National Cycle Network (NCN) Route 26 which is also known as the Strawberry Line.
- 1.1.4 The nearest station to the site is Yatton Rail Station, an 8-minute walk or 2-minute cycle to the north. The station provides a direct line to Bristol Temple Meads in c.20 minutes with two trains in each direction per hour. This provides a genuine choice of sustainable travel to access opportunities within the major city, including employment and leisure travel. Yatton Rail Station also provides local connectivity through North Somerset, with direct trains to Weston-super-Mare's three stops and Nailsea & Backwell.
- 1.1.2 Yatton is set to be served by demand responsive public transport. The services will use a smaller vehicles and route according to the demand, without a set timetable. The X5 bus service is also proposed to begin re-routing through Yatton in the summer of 2023, after the Yatton High Street improvements are complete.
- 1.1.5 Due to the site being located in close proximity to a range of sustainable transport options, residents would benefit from a genuine choice of sustainable travel options that are already available.
- 1.1.6 There are two vehicular access locations for the site. The first access point will be the continuation of Shiners Elms, located north-east of the site. Footways and carriageways will be appropriately provided to tie in to the existing highway network. Means of access via Shiners Elms forms part of this outline consent.
- 1.1.7 The second access point will be through the approved Rectory Farm development onto Chescombe Road. This development for 100 homes was allowed at appeal (reference: APP/D0121/W/21/3286677). The North Somerset Council reference is 21/P/0236/OUT.
- 1.1.8 The layout of this permitted site is subject to a reserved matters application and so the precise route of the access for this application will also be a reserved matter. Persimmon Homes have rights of access over the Rectory Farm sites including stepping rights should



- the access not be built out by the Rectory Farm developer. It can therefore be relied upon to provide the second access to the site.
- 1.1.3 The surveyed network peak hours have been tested alongside the development peak hours resulting from a TRICS analysis of the site's trip generation. This has tested the 190 residential dwellings, and consider office use for the land reserved for use class E.
- 1.1.9 The trip generation results in 97 two-way trips in the AM peak and 96 in the PM peak, spread across the two access points. The distribution of trips has been established using 2011 Census data for journeys to work (WU03EW). Given the choice of routes on the local network, the trips rapidly disperse, diluting the impact in any one area.
- 1.1.10 The application has assessed the cumulative impact of the development in planning terms. This has been achieved through the use of TEMPRO growth rates to reflect background/planned growth, and the inclusion of committed development where appropriate.
- 1.1.11 Detailed operational assessments have been carried out to determine the potential impact of the proposed development on the performance of the following junctions:
  - » Grassmere Road/B3133 High Street priority junction; and
  - » Chescombe Road/High Street priority junction.
- 1.1.12 The analysis demonstrated that the modelled and observed queues are within typical daily variations in queue lengths. There is minimal queueing at these junctions in both peak periods.
- 1.1.13 A sensitivity assessment of the development traffic's impact on the surrounding highway network was carried out considering the use of Shiners Elms as the only vehicular access.
- 1.1.14 This sensitivity assessment has been undertaken to support the phased delivery of the site. It is noted that the development proposes two accesses which form the basis for the access strategy. This sensitivity assessment demonstrates that the total development can be served by a single access if required as part of the construction phasing.
- 1.1.15 Consequently, the development will not have a 'severe' impact upon the local highway network and there are no material highway or transportation matter that could preclude the local authority from approving this planning application.



## 2. INTRODUCTION

# 2.1 Background

- 2.1.1 This transport assessment (TA) has been produced by Hydrock on behalf of Persimmon Homes in support of an outline planning application for a new residential development at Rectory Farm (North), located in the west of the village of Yatton, North Somerset.
- 2.1.2 The site known as Rectory Farm (North) currently comprises of farm land and farm buildings. The proposal is for the development of up to 190 homes (including 50% affordable homes), 0.13ha of land reserved for Class E uses, allotments, car parking, earthworks to facilitate sustainable drainage systems, open space and all other ancillary infrastructure and enabling works with means of access from Shiners Elms for consideration.
- 2.1.3 All other matters including the means of access from Chescombe Road, internal access, scale and layout are reserved for subsequent approval.
- 2.1.4 This TA demonstrates that the above development is acceptable in terms of transportation, highway safety and access matters, and that it is compliant with relevant national and local planning policies.
- 2.1.5 The TA has been prepared in accordance with industry standards and best practice. It sets out the transport issues relating to the development site (existing conditions) and provides details of the development proposals; including those associated with accessibility and connectivity, an assessment of the traffic predicted to be generated by the development and the corresponding traffic impact on the surrounding local highway network.
- 2.1.6 A travel plan (TP) has been prepared in support of the development of the site. The TP identifies measures and initiatives to encourage travel to and from the site by sustainable modes of travel, and is submitted as a separate document. The TP is submitted as a separate document, reference 23257-HYD-XX-XX-RP-TP-6001.

# 2.2 Pre-Application Highways Discussions

- 2.2.1 A transport assessment scoping report (doc ref: 23257-HYD-XX-XX-RP-TP-3001) was submitted to North Somerset Council (NSC) on 8<sup>th</sup> November 2022 for review/comment; email correspondence is attached as Appendix A. It is noted that the scoping was for c.280 dwellings, and since submitting the pre-application scoping report, the proposed scheme has reduced to up to 190 dwellings.
- 2.2.2 Comments from NSC highways & transport (dated 31 October 2022) were provided by NSC on 19 January 2023, confirming the requirement for a Transport Assessment, but not commenting on the scoping document submitted.
- 2.2.3 The comments stated that contributions will be required towards public transport to fund infrastructure improvements and bus services. This request appears to be made in the absence of an assessment of the impact, and so it is unclear how the conclusion that mitigation is necessary was reached. This has been considered further within this TA.



# 2.3 Scope of Transport Assessment

2.3.1 This TA has been compiled to reflect guidance set out in the National Planning Policy Framework (NPPF) and accompanying National Planning Policy Guidance (NPPG). It also considers advice set out in various local and national guidance documents including; Transport Evidence in Plan Making (DfT), Manual for Streets (DfT), Providing for Journeys on Foot (CIHT), Local Transport Note 1/20: Cycle Infrastructure Design (DfT) and the North Somerset Council (NSC) and Somerset County Council (SCC) planning policy documents and supplementary guidance.



## 3. SITE DESCRIPTION AND EXISTING CONDITIONS

- 3.1 Site Location and Existing Use
- 3.1.1 The proposed development site is located on the west of Yatton, and to the north of Chescombe Road and Rectory Farm. Yatton is a village and civil parish within the unitary authority of North Somerset. The village is located 17.7km south-west of Bristol.
- 3.1.2 The site is bound to the north and west by agricultural land, existing residential properties to the east, and what is currently Rectory Farm to the south, which has been granted planning permission at appeal for a residential scheme of up to 100 dwellings in June 2022
- 3.1.3 The National Cycle Network (NCN) Route 26, also known as the 'Strawberry Line', broadly runs adjacent to the west of the site.
- 3.1.4 The indicative site location is shown in red in Figure 3.1.



Figure 3.1: Indicative Site Location



# 3.2 Strategic Highway Network

3.2.1 The strategic road network (SRN) within the vicinity of the site is summarised in Table 3.1.

Table 3.1: Summary of Strategic Road Network

Junction Ref:	Description:	Travelling Distance (km):	Alignment / Destination:
M5 J20	Clevedon Interchange (Grade separated Roundabout) accessed via the B3133 route into Clevedon	8.2	North-South/West Bromwich-Exeter
M5 J21	St Georges Interchange (Grade separated Roundabout) accessed via the A370 to the southwest of the site	9.2	North-South/West Bromwich-Exeter

# 3.3 Local Highway Network

3.3.1 The local highway network within the vicinity of the site is summarised in Table 3.2.

Table 3.2: Local Highway Network Summary

Location:	Road Type:	Carriageway width (m):	Alignment:	Speed Limit (mph):
Mendip Close	Unclassified	5.1m	North/south	30
Shiners Elms	Unclassified	5.5m	East/West	30
Chescombe Road	Unclassified	4m-5.1m	Northwest/South east	30
Mendip Road (West)	Unclassified	5.5m	East/West	30
Mendip Road (East)	Unclassified	6.7m	Southeast/North west	30
B3133 High Street	B road	7.2m	Northeast/South west	30

- 3.3.2 Chescombe Road and Shiners Elms will provide access to the site.
- 3.3.3 Table 3.3 further describes the characteristics of local highway network.



Table 3.3: Local Highway Network Characteristics

Route Name	Pedestrian footways	Street lighting	Crossing facilities	Description/comments:
Mendip Road	Yes	Yes	Yes	Local distributer road that crosses Chescombe Road 120m east of the site, joining to the B3133 at either end of the village. The pedestrian route along Mendip Road is of a high standard, with street lighting, dropped kerbs and tactile paving at crossing points.
Shiners Elms	Yes	Yes	No	Cul-de-sac serving 15 dwellings. The carriageway measures 5.5m wide with 1.8m wide footways on either side. It has a turning head at its mid-point to allow large vehicles to exit the street in a forward gear.
Chescombe Road	Yes	Yes	Yes	Chescombe Road is a residential road that continues north and forms a junction with the B3133 High Street at its northern extent, providing access to the village high street with a wide range of services and facilities, including shops, education and public transport.
B3133 High Street	Yes	Yes	Yes	Provides the main road to and from Yatton, with Clevedon and the M5 in the north and the A370 in the south. At the end of Chescombe Road, it forms the village High Street, with a wide range of services and facilities, including shops, education and public transport.
NCN Route 26	NA	No	NA	The Strawberry Line is a traffic free walking and cycling route between Yatton and Cheddar, forming part of the National Cycle Network (NCN). It provides a high-quality active travel link between the site and Yatton Train Station, as well as a nine-mile-long leisure route.

# 3.4 Highway Safety

- 3.4.1 Personal Injury Accident (PIA) data has been obtained from recorded road safety data published annually by the Department for Transport (DfT). The statistics provide PIA data reported in each local authority recorded using the STATS19 accident reporting form.
- 3.4.2 The most recent five-year dataset has been reviewed, covering between January 1st 2017 and 31st December 2021. The study area includes the length of Chescombe Road and its priority junction with the B3133 High Street, and the Grassmere Road and Heathgate routes between Shiners Elm and the High Street, as shown in Figure 3.2.



Figure 3.2: PIA Search Area and Recorded Collisions

- 3.4.3 The PIA data is reviewed to establish if the highway may be a causal factor in PIA events.
- 3.4.4 It is unlikely that a single incident will lead to a conclusion that highway design resulted in the incident. Therefore, the review focuses on patterns and clusters of accidents.
- 3.4.5 In spite of this, hazardous weather conditions can also affect the level of highway risk. However, mitigating weather conditions is not usually achieved through alterations to the highway.
- 3.4.6 Within the study a total of four PIAs were recorded, all slight in nature; there were no serious or fatal accidents recorded within the study.
- 3.4.7 The slight accident located on Grassmere Road/High Street junction was a head on collision involving a motorcycle and a car. The motorcycle was proceeding normally along the carriageway and the car pulled out into oncoming traffic.
- 3.4.8 Two out of the four slight accidents recorded involved heavy goods vehicles and pedal cycles. One goods vehicle hit the front of the pedal cycle on their nearside whilst both proceeding normally. The second accident was a shunting collision with the goods vehicle hitting the offside of the pedal cycle, both were proceeding normally. One of these incidents took place at the Heathgate/High Street junction, and the other occurred near the Chescombe Road/High Street junction.



- 3.4.9 The slight accident located the B3133 High Street just east of Chescombe Road involved a vehicle and a pedestrian. The pedestrian was walking along the carriageway with their back to the traffic and the vehicle failed to see them.
- 3.4.10 Following this review of personal injury accident data records within the vicinity of the site, it is not considered that there is an inherent highway safety deficiency which would be exacerbated by the proposed development.
- 3.4.11 It is noted that a highways safety scheme is being implemented by NSC on the B3133 High Street, which will improve the pedestrian environment along the high street.
- 3.4.12 The accident output is provided in Appendix B.

## 3.5 Traffic survey data

- 3.5.1 Hydrock instructed independent traffic surveys (Manual Classified Count and Queue data) in the following locations:
  - » Grassmere Road/B3133 High Street priority T-junction
  - » B3133 High Street/Chescombe Road priority T-junction
  - » Mendip Road/Shiners Elms priority T-junction
  - » B3133 High Street/Heathgate priority T-junction
- 3.5.2 The surveys have been carried out within school term time on the neutral weekday Thursday 1st December 2022. The surveys recorded between the hours of 07:00 and 19:00 to ensure that the development and local AM and PM network peak periods are captured.
- 3.5.3 The full survey data outputs are attached as Appendix C.

#### B3133 High Street/Grassmere Road priority T-junction

3.5.4 The traffic survey results at B3133 High Street/Grassmere Road priority T-junction have been analysed to ascertain the network peak hours. The results are summarised in Table 3.4.

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Table 3.4: B3133 High Street	/Grassmere Roac	l priority I -junctio	on survey results

Peak Period	Time	Grassmere Road/High Street priority T-junction			
		B3133 High Street (N)	B3133 High Street (S)	Grassmere Road	Total
АМ	07:00	317	327	50	694
	08:00	470	353	77	900
	09:00	409	403	67	879
PM	16:00	560	409	52	1021
	17:00	499	402	57	958
	18:00	418	369	22	809



### B3133 High Street/Chescombe Road priority T-junction

3.5.5 The traffic survey results at B3133 High Street/Chescombe Road priority T-junction have been analysed to ascertain the network peak hours. The results are summarised in Table 3.5.

Table 3.5: B3133 High Street/Chescombe Road priority T-junction survey results

Peak Period	Time	High Street/C	hescombe Road	escombe Road priority T-junction		
		B3133 High Street (E)	B3133 High Street (W)	Chescombe Road	Total	
АМ	07:00	320	332	27	679	
	08:00	377	416	40	833	
	09:00	402	437	58	897	
РМ	16:00	427	523	70	1020	
	17:00	408	463	60	931	
	18:00	332	461	97	890	

#### Mendip Road/Shiners Elms priority T-junction

3.5.6 The traffic survey results at Mendip Road/Shiners Elms priority T-junction have been analysed to ascertain the network peak hours. The results are summarised in Table 3.6.

Table 3.6: Mendip Road/Shiners Elms priority T-junction survey results

Peak Period	Time	Mendip Road/ Shiners Elms priority T-junction			
		Mendip Road (E)	Mendip Road (W)	Shiners Elms	Total
АМ	07:00	48	20	4	70
	08:00	71	41	3	115
	09:00	70	36	4	110
РМ	16:00	64	36	3	103
	17:00	66	26	2	94
	18:00	35	25	4	64

## B3133 High Street/Heathgate priority T-junction

3.5.7 The traffic survey results at B3133 High Street/Heathgate priority T-junction have been analysed to ascertain the network peak hours. The results are summarised in Table 3.7.



Table 3.7: B3133 High Street/Heathgate priority T-junction survey results

Peak Period	Time	B3133 High Street/Heathgate priority T-junction				
		B3133 High Street (N)	B3133 High Street (S)	Heathgate	Total	
АМ	07:00	313	329	18	570	
	08:00	451	357	22	830	
	09:00	386	396	22	804	
PM	16:00	544	427	17	988	
	17:00	462	400	25	887	
	18:00	413	390	38	841	



## 4. SUSTAINABLE CONNECTIVITY OF THE SITE

#### 4.1 Introduction

- 4.1.1 This chapter sets out the connectivity of the site to the surrounding area by sustainable modes of travel.
- 4.1.2 The principal of locating dwellings near to key services and facilities is not new, and the benefits of residents being able to walk or cycle for their daily needs is well understood. There are a number of concepts that capture this ideal and provide a framework for its delivery. One such example is Sustrans 20-minute neighbourhood, which has gained significant traction in the UK, as illustrated by publications such as the RTPI's Briefing Paper 20 Minute Neighbourhoods (2021).
- 4.1.3 Key to the concept is ensuring that most of people's daily needs can be met within a short walk or cycle. This results in multiple benefits including improved mental and physical wellbeing, reduced traffic congestion, improved noise and air quality and a stronger community.
- 4.1.4 For Sustrans, this means a 20-minute return walk, 10 minutes there and 10 minutes back, which is consistent with the 800m 'Walkable Neighbourhood' described in Manual for Streets.
- 4.1.5 Although now superseded by CD143, TA91/05 *Provision for Non-Motorised Users* states at paragraph 2.3 that 'Walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles' (3.2km). Paragraph 2.2 of TA91/05 stated that 2 miles is 'a distance that could easily be walked by the majority of people' and (at paragraph 2.3) that 'Walking and rambling can also be undertaken as a leisure activity, often over longer distances'. In relation to shorter trips in particular, the CIHT publication Planning for Walking (section 2.1) states that across Britain about '80% of journeys shorter than 1 mile are made wholly on foot'.
- 4.1.6 Consequently, whilst a 10-minute walking distance to key everyday facilities should be the target for new neighbourhoods, the 20-minute neighbourhood concept can be based around that length of walk each-way to wider locations including employment and less-frequently visited facilities (e.g. healthcare provision).

## 4.2 Pedestrian connectivity

- 4.2.1 Figure 4.1 shows actual walking distances from the site. The resulting isochrones are broken down into the distances able to be travel in 10-, 20- and 30-minute.
- 4.2.2 This shows that the amenities on the High Street are within a 10-minute walk, in line with the 20-minute neighbourhood principle.

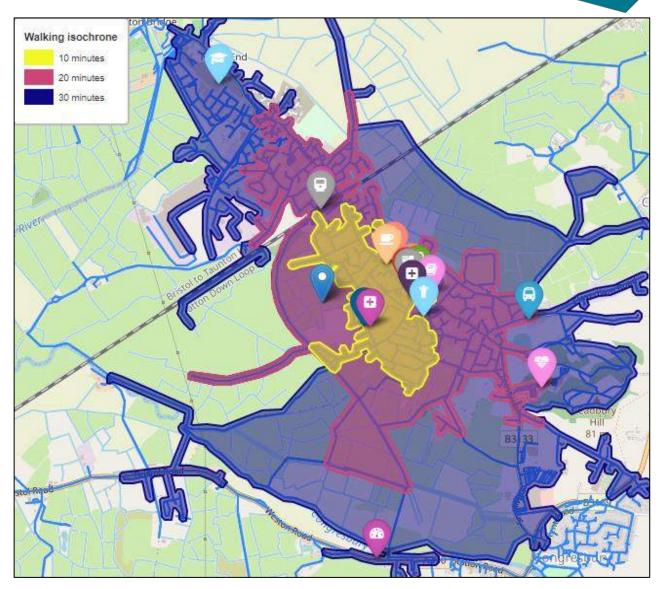


Figure 4.1: Pedestrian Isochrone

4.2.3 The site is located within a residential area where there is an existing network of footways and footpath connections giving access to local facilities and services. The key pedestrian routes from the development site are set out below:

## High Street

- 4.2.4 High Street benefits from a range of facilities and services including educational facilities, retail and other local amenities within suitable walking distance. From the site, High Street is accessible via Mendip Road and Elborough Avenue, or Elm Close and Chescombe Road. These routes benefit from street lighting and footways on both sides of the carriageway, with dropped kerb facilities at crossing points along the route. Dropped kerbs are present along Chescombe Road at local junctions. Moreover, there are existing formalised crossing points, such as zebra crossing facilities and tactile paving, along the High Street which provides ready access for town centre relates uses on either side of the road.
- 4.2.5 NSC are progressing a well-developed scheme to improve parts of the High Street for all users and create a more accessible and safer street. Local improvement and enhancement works include a widening of parts of the pavement on the High Street, bus



stop improvements, reducing traffic speeds and enhancing the school pedestrian and cycle zone on Mendip Road. Works were due to start in February 2023, but are undergoing additional consultation at the time of writing.

#### Railway station

- 4.2.6 Yatton Rail Station is some 600m north of the development site and is accessible by either the existing pedestrian footways on Mendip Road (West) or by an off-road route, which forms part of the NCN 26.
- 4.2.7 The route along Mendip Road (West) is provided with dropped kerb crossing facilities at local junctions and is provided with street lighting. The NCN 26 is unlit but provides a traffic free route and direct access to the Rail Station.

#### 4.1 Pedestrian route audit

4.1.1 A site visit was undertaken to assess the pedestrian routes taken to travel to different destinations within Yatton. A map displaying the four key routes assessed is shown in Figure 4.2.

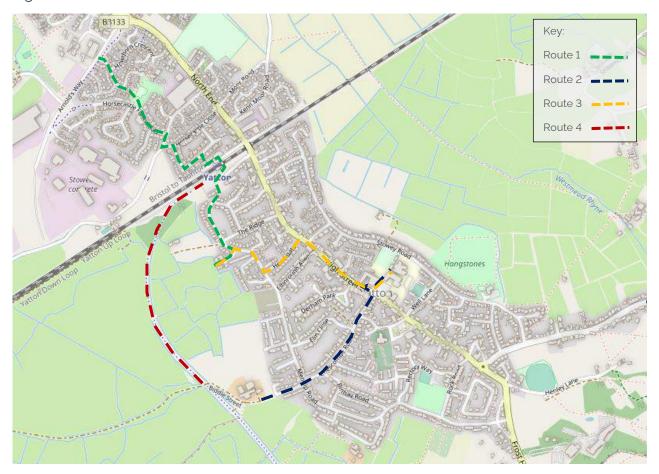


Figure 4.2: Key walking routes in Yatton

## Route 1

4.1.2 Route 1 provides a connection to the proposed Sainsbury's development site from the access point on Shiner's Elms, via the railway station. The route follows Shiner's Elms, and routes north onto Mendip Road at the junction which connects to the train station. The



- railway bridge allows for access over the tracks, and continues through the residential streets towards the cut-through in Horsecastle Playground.
- 4.1.3 The cut-through provides a connection to Meadowland Lane; the route continues north along Meadowland Lane which forms a junction with Arnold's way. The route is c1.3km which falls in line with the guidance set out within paragraph 2.2 of TA91/05., Guidance for walking and cycling. This is deemed an appropriate distance which would take approximately 16 minutes on foot or a 4-minute cycle.
- 4.1.4 The streets are of a good standard with street lighting, dropped kerbs, tactile paving, and footways typically measuring 1.8m in width.



Figure 4.3: Pedestrian route from Yatton Rail Station north





Figure 4.4: Entrance and Footpath in Horsecastle Playground

## Route 2

- 4.1.5 Route 2 connects to Yatton Primary School from the southern access on Chescombe Road. The route follows Chescombe Road heading north until its junction with High Street. The route crossing the High Street using the zebra crossing.
- 4.1.6 The roads are of a good standard with street lighting, dropped kerbs, tactile paving and footways typically measuring 1.8m as well as a zebra crossing opposite the Co-op.
- 4.1.7 Although already of a good standard, improvement works to Chescombe Road are due to be completed as part of the development proposals at Rectory Farm, to the south of the site (21/P/2791/OUT).



Figure 4.5: Zebra Crossing on the High Street

#### Route 3

- 4.1.8 Route 3 provides an alternative route to the school as well as the High Street from the northern access. It follows Shiners Elms, Mendip Road to the south, along Heathgate and finally onto the High Street.
- 4.1.9 The roads are of a good standard with street lighting, dropped kerbs, tactile paving and footways typically measuring 1.8m in width. The route is c.1km and falls under the Walkable Distance outlined by TA91/05.

#### Route 4

4.1.10 Route 4 follows the Strawberry Line and offers a walking/cycling route to Yatton Rail Station. As illustrated in Figure 4.5 the Strawberry Line is a gravel path dedicated to pedestrians and cyclists. It forms part of the National Cycle Network (NCN) Route 26.





Figure 4.6: Entrance to the Strawberry Line outside Yatton Rail Station



## 4.2 Public Rights of Way

4.2.1 No Public Rights of Way (PRoW) cross the site. The closest PRoW is (LA21/28/10), which connects Chescombe Road and the Strawberry line. The PRoWs within the vicinity of the site are shown in Figure 4.7.

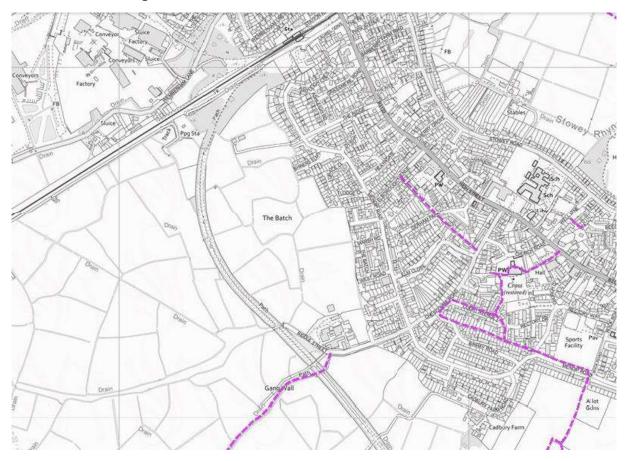


Figure 4.7: PRoW routes within the vicinity of the site

### 4.3 Cycle Connectivity

- 4.3.1 TA91/05 states (in paragraph 2.11) that 'Cycling is used for accessing a variety of different destinations, including educational facilities, shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances.' At paragraph 2.9, TA91/05 states that 5 miles (8km) is a distance 'that could easily be cycled by the majority of people'.
- 4.3.2 This is consistent with the statement in LTN01/20 (paragraph 2.2.2) that 'Two out of every three personal trips are less than five miles in length an achievable distance to cycle for most people, with many shorter journeys also suitable for walking.'
- 4.3.3 The development site is located in close to the National Cycle Network (NCN) route 26 which is located directly along the western boundary of the site. NCN 26 is also known as the Strawberry Line and is a traffic free walking and cycle route between Yatton and Cheddar. It provides a high-quality active travel link between the site and Yatton Train Station.
- 4.3.4 The Strawberry Line also provides a 14.5km leisure route, connecting locally to Clevedon and Cheddar to the north and south of the site respectively. There is also planning for



further phased extension of the route. To the east of the site the existing road network is suitable for on-road cycling with access to the Avon Cycleway some 6km north of Yatton.

4.3.5 The existing cycle routes within close proximity to the site are shown in Figure 4.8.

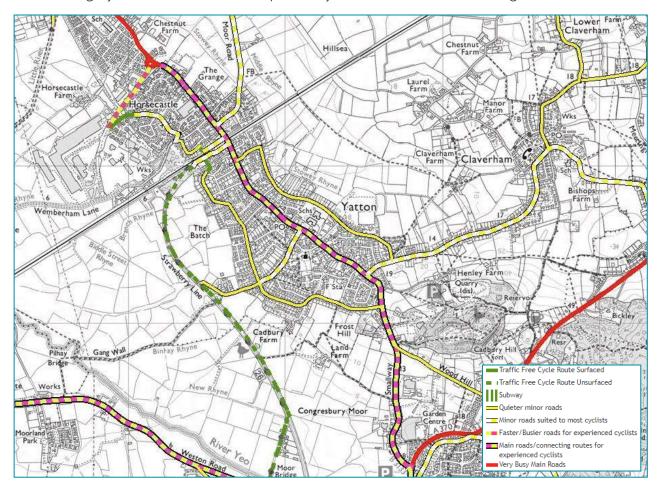


Figure 4.8: Local Cycle Routes

#### Local Cycle Usage

4.3.6 Strava is a tool to track physical exercise, and is used by many cyclists to track their cycle activity, whether for leisure or commuting. Strava produce heatmaps showing records of their users recorded activities. The heatmap shown in Figure 4.9 has been filtered to include cyclists only, and shows that the local highway network is currently well used by cyclists.



Figure 4.9: Strava Heatmap – Cycling



# 4.4 Existing Local Services and Facilities

4.4.1 As can be seen in Figure 4.10 the site lies within walking/cycling distance of a range of local services, facilities and employment opportunities.

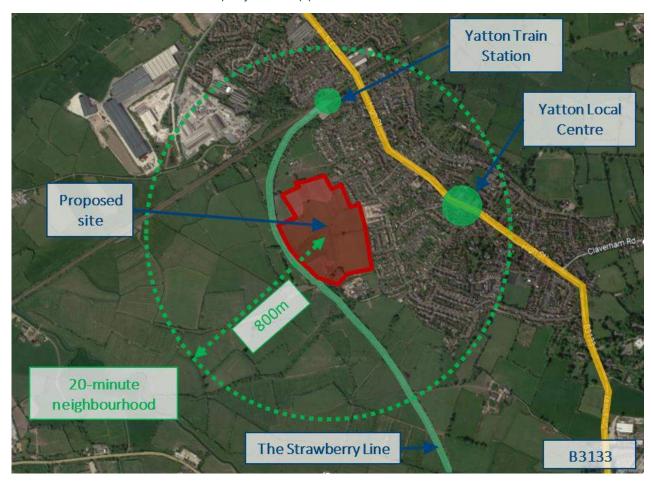


Figure 4.10: 20-minute neighbourhood context plan



4.4.2 Local facilities and amenities are summarised in Table 4.1 and the location of local facilities is shown on Figure 4.11.

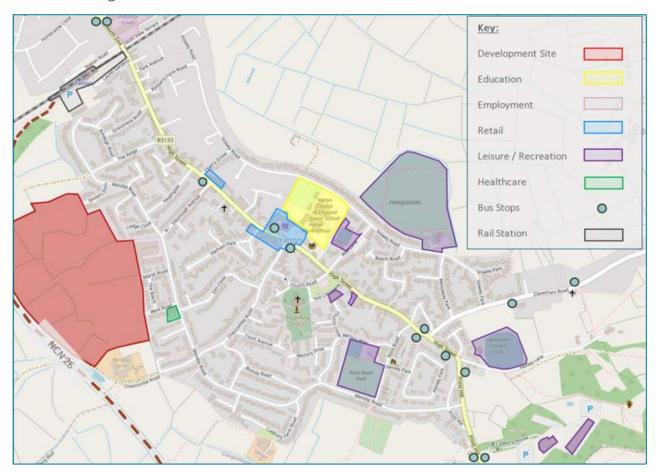


Figure 4.11: Site Location and Local Facilities

Table 4.1: Local Facilities and Services

Category:	Facility:	Name:	Distance (m)	Walking Time (Mins)	Cycle time (Mins)
Transport	Cycle	NCN 26	250m	3	1
	Rail Station	Yatton Station	750m	8	2
Education	Nursery	Yatton VC Infants School	850m	11	3
	Primary School	Yatton C of E School	1000m	13	3
	Secondary School	Churchill Academy and	7000m	-	22
	Sixth Form	Churchill Academy and Sixth Form	7000m	-	22
Healthcare	GP Practice	Mendip Vale Medical Practice	300m	4	1
	Pharmacy	Lloyds Pharmacy	350m	4	1
High Street / Retail / Amenities	Bakery	Pullin's Bakery	550m	7	2
	Veterinary Practice(s)	Watkins & Tasker	700m	9	2
	Food Store	Cooperative	750m	9	2
	Hairdresser	Broad Street Hair Yatton	750m	9	2
	Restaurant	Yatton Tandoori	800m	10	3
	Post Office	Post Office	850m	11	3
	Public House	Butchers Arms Public	950m	12	3
	Public House	Market Inn Public House	950m	12	3
	Public House	The Railway	1100m	14	3
	Village Hall	Yatton Village Hall	950m	12	3
Leisure	Recreation Ground	Rectory Way	1100m	14	4
	Recreation Ground	Hangstones Pavilion	1300m	16	4
	Cricket Club	Claverham C.C.	1500m	19	5
	Gym	CommandoFit	1500m	19	5
	Rugby/Football Club	Yatton R.F.C	1500m	19	5



- 4.4.3 The travel time set out in Table 4.1 is based on walking speed of 80m/minute, taken from 'Providing for Journeys on Foot', IHT and cycling speed of 320m/minute (19.2kph), taken from Cycling England Design Guide.
- 4.4.4 Table 4.1 indicates that there is one supermarket that is accessible by foot. In addition, a new Sainsbury's store c.840sqm has been approved at Arnolds Way, in north Yatton.
- 4.4.5 The site is 1.3km away from the village's main shopping precinct which falls under the suitable walking distance. The additional food store would serve the demand of residents in Yatton as well as widen the choice of supermarkets that can be accessed sustainably from the site.
- 4.4.6 Table 4.1 demonstrates that there are a wide range of services and facilities within an acceptable walking and cycling distance to/from the site which ensure that future residents have the choice to travel by sustainable modes for their everyday needs, and will not be reliant on the car. The calculations are based upon a point in the centre of the site which is robust, as the illustrative masterplan shows that dwellings are likely to be centred to the east of the site meaning walking and cycling times will be less.

# 4.5 Public Transport Connectivity

#### Bus Services

- 4.5.1 Due to local authority budget cuts bus services were removed temporarily from Yatton at the beginning of September 2022. In response, demand responsive transport is set to be introduced in North Somerset. The services will use a smaller vehicle and route according to the demand, without a set timetable.
- 4.5.2 Initially this service will run from 7am until 7pm Monday to Saturday. Passengers will be able to book their journeys by phone or through mobile app. Pricing will be in line with fares for the previous local buses.
- 4.5.3 The new service is due to start running from the 3 March 2023.
- 4.5.4 The X5 bus service is also proposed to begin re-routing through Yatton in the summer of 2023, after the Yatton High Street improvements are complete.
- 4.5.5 There is also a local community bus service available, provided by the Yeo Valley Lions Club, known as the 'Big Yellow Minibus'. The service operates in a number of local villages including Yatton. The service is used by a variety of youth organisations, lunch groups and sports clubs as well as the elderly for scheduled trips to local food stores and shops.
- 4.5.6 Trip schedule includes: Tuesday, Thursday and Friday mornings.

#### Rail Services

- 4.5.7 The nearest station to the site is Yatton Rail Station, located approximately 550m north of the development (as the crow flies). Access to the rail facility by foot or cycle can be achieved via Mendip Road (650m walking/cycling distance) or the NCN 26 (700m walking/cycling distance), equating to approximately an 8-minute walk or 2-minute cycle.
- 4.5.8 Yatton Rail Station offers a direct line to Bristol Temple Meads as part of the Great Western Railway service. The full route runs between Cardiff Central and Taunton, with some services terminating short at Weston-super-Mare and Bristol Parkway.



- 4.5.9 The service provides two trains in each direction per hour and takes c.20 minutes to reach Bristol Temple Meads. This provides an attractive option to reach the City of Bristol and the wide range of services, facilities and employment it offers. Yatton Rail Station also provides local connectivity through North Somerset, with direct trains to Weston-super-Mare's three stops and Nailsea & Backwell.
- 4.5.10 This provides a genuine choice of sustainable travel to access opportunities within the major city, including employment and leisure travel.
- 4.5.11 Yatton Rail Station offers 20 sheltered storage spaces for bicycles including CCTV coverage and a cycle Pods bike pump.
- 4.5.12 The public transport isochrone for the site can be seen in Figure 4.12 which shows that central Bristol, Weston-super-Mare and Nailsea are all available within a 30-minute journey time, with most of west Bristol available within an hour.

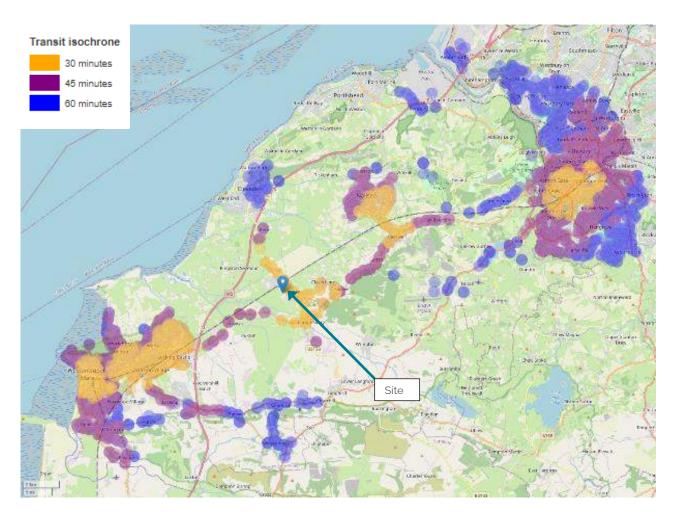


Figure 4.12: Public Transport Isochrone



# 4.6 Connectivity Summary

- 4.6.1 The site is well connected to surrounding facilities and services via the existing network of footways and cycle routes which in turn encourages alternative sustainable modes of transport
- 4.6.2 The site is located within walking distance of a wide range of day-to-day services and facilities within Yatton, including convenience stores, takeaways, pubs and cafés, a library and a village hall. It will form part of a 20-minute neighbourhood, ensuring that future residents have a genuine choice of sustainable transport and are not reliant on the private car.
- 4.6.3 It is within cycling distance of a larger range of services, facilities and employment opportunities in Clevedon.
- 4.6.4 The site is also within a reasonable walking distance of Yatton Rail Station with a frequent service between Cardiff and Taunton, notably calling at Bristol Temple Meads with a c.15-minute journey time and a 30-minute frequency. This provides a genuine choice of sustainable travel to access opportunities within the major city, including employment, retail and leisure uses. Yatton Rail Station also provides local connectivity through North Somerset, with direct trains to Weston-super-Mare's three stops and Nailsea & Backwell.
- 4.6.5 Consequently, due to the site being located in close proximity to good existing sustainable transport infrastructure and demand responsive bus services, residents would benefit from the diverse range of sustainable travel options that are already available. Their use by new residents will also support their ongoing viability. The site is in a sustainable location in transport terms.



## 5. DEVELOPMENT PROPOSALS

### 5.1 Overview

- 5.1.1 The proposal is for the outline planning application for the development of up to 190 homes (including 50% affordable homes), 0.13 ha of land reserved for Class E uses, allotments, car parking, earthworks to facilitate sustainable drainage systems, open space and all other ancillary infrastructure and enabling workings with means of access from Shiners Elms for consideration
- 5.1.2 All other matters (means of access from Chescombe Road, internal access, scale, layout, appearance and landscaping) reserved for subsequent approval.
- 5.1.3 An extract of the illustrative masterplan is shown in Figure 5.1 for context.



Figure 5.1: Illustrative masterplan

# 5.2 Proposed Access Arrangements

#### Vehicular Access

- 5.2.1 There are two vehicular access locations for the site, shown in Figure 5.2. The first access point will be the continuation of Shiners Elms, located north-east of the site. Footways and carriageways will be appropriately provided to tie in to the existing highway network. Means of access via Shiners Elms forms part of this outline planning application.
- 5.2.2 The proposed site access general arrangement is provided at Appendix E.



- 5.2.3 The second access point will be through the approved Rectory Farm development onto Chescombe Road. This development for 100 homes was allowed at appeal (reference: APP/D0121/W/21/3286677). The North Somerset Council reference is 21/P/0236/OUT.
- 5.2.4 The layout of this permitted site is subject to a reserved matters application and so the precise route of the road for the development and its access point on to the approved Rectory Farm site will be confirmed through the subsequent reserved matters stage.
- 5.2.5 Persimmon Homes have rights of access from the Rectory Farm development proposal including step in rights should the access not be built out by the Rectory Farm developer which ensures that the second access at the southern end of the site can be provided.

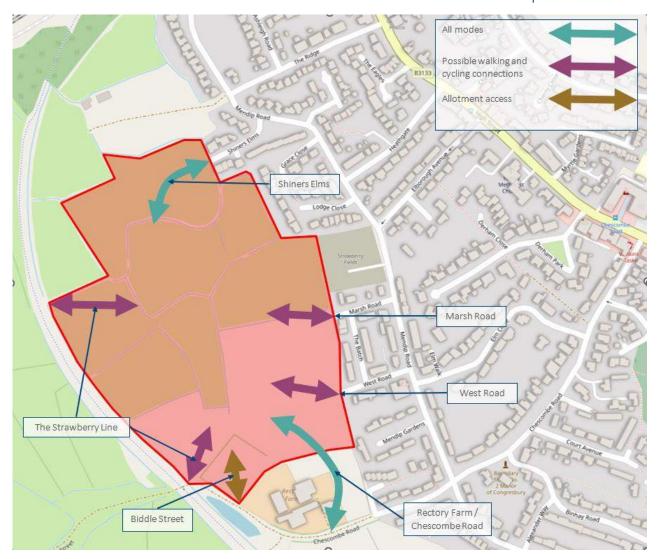


Figure 5.2: Access points for the site

#### Pedestrian and Cycle Access

- 5.2.6 Pedestrian and cycle access will be provided at both vehicular access points.
- 5.2.7 In addition, the development will facilitate access up to the boundary of the site at Marsh Road and West Road to aid integration and active travel permeability. We note that these locations are NSC owned, but unadopted highway.



- 5.2.8 Pedestrian and cycle access will be located where there are existing access points to the Strawberry Line.
- 5.3 Internal Layout
- 5.3.1 As part of the outline application, the internal layout is not a detailed matter and is reserved for future consideration. The masterplan shown in Figure 5.1 is indicative only.
- 5.4 Parking Requirements
- 5.4.1 The North Somerset Parking Standards SPD, 2021, provides the parking requirements for the site.
- 5.4.2 Car parking is proposed in accordance with the NSC parking standards, for detailed consideration as part of the reserved matters application. Cycle parking provision would be accommodated either in a lockable garden shed, secure garden space or space within a garage detailed as part of the reserved matters application.



#### 6. TRAFFIC GENERATION

#### 6.1 Introduction

6.1.1 The surveyed network peak hours shown in Section 3.5 have been considered alongside the development peak hours as shown in the TRICS analysis. It is considered that the most robust hours of analysis are the typical local highway network peak hours of 08:00 – 09:00 and 17:00 – 18:00 for the AM and PM respectively, which have therefore been used to assess the impact of the proposed development.

#### 6.2 Existing use trip generation

6.2.1 The site currently generates trips associated with its agricultural use. However, for robustness, no offsetting has been applied.

#### 6.3 Residential use trip generation

- 6.3.1 A robust approach of assessing 190 dwellings has been applied for traffic generation calculations.
- 6.3.2 The TRICS database is an industry standard tool for predicting the likely number of trips from a proposed development by comparing the site with existing developments of a similar size and characteristic within the UK.
- 6.3.3 TRICS 7.9.3 has been be used to establish the trip rates associated with the development.
- 6.3.4 50% of the development will be affordable housing and so the following TRICS categories have been selected to derive trip rates for the proposed development
  - » O3A Houses privately owned
  - » O3B Affordable/Local Authority.
- 6.3.5 The database has been filtered in order to achieve the most representative sites; the following parameters have been applied to the search criteria:
  - » The removal of sites in London and Ireland
  - » The selection of Edge of Town location type
  - » Population < 1 mile = 5,001 to 15,000 (2011 Census population of Yatton = 7,552)
  - » Population < 5 miles = 50,001 to 125,000 (2011 Census population of MSOAs North Somerset 005,007-016, 0024 and 026 = 99,343)
- 6.3.6 These search criteria match those used in support of the development proposals at the Rectory Farm site, which were included within the Statement of Common Ground with NSC at appeal.
- 6.3.7 The trip rates for open market dwellings are summarised in Table 6.1 and the TRICS outputs are attached as Appendix F



Table 6.1: Proposed Trip Rates-Houses Privately Owned

Time	Trip Rate				
	Arrivals	Departures	Total Two-way Trips		
08:00-09:00	0.132	0.389	0.521		
17:00-18:00	0.343	O.147	0.490		

6.3.8 The trip rates for affordable/local authority dwellings are summarised in Table 6.2 and the TRICS outputs are attached as Appendix F.

Table 6.2: Proposed Trip Rates-Affordable/Local Authority Dwellings

Time	Trip Rate			
	Arrivals	Departures	Total Two-way Trips	
08:00-09:00	0.148	0.227	0.357	
17:00-18:00	0.224	0.145	0.369	

6.3.9 The forecast trip generation for 95 (50%) open market dwellings is shown below in Table 6.3.

Table 6.3: Proposed Indicative Trip Generation-Houses Privately Owned

Time	Trip generation – Houses Privately Owned  Arrivals  Departures  Total Two-way Trips				
08:00-09:00	13	37	49		
17:00-18:00	33	14	47		

6.3.10 The forecast trip generation for 95 (50%) affordable dwellings is shown below in Table 6.4.

Table 6.4: Proposed Indicative Trip Generation-Affordable Local Authority Dwellings

Time	Trip generation – Affordable and Local Authority Dwellings				
	Arrivals	Total Two-way Trips			
08:00-09:00	14	22	34		
17:00-18:00	21	14	35		

6.3.11 Table 6.5 shows the combined total trip generation for both Houses Privately Owned and Affordable/Local Authority Dwellings.



Table 6.5: Total Trip Generation

Time	Trip generation - Total			
	Arrivals	Total Two-way Trips		
08:00-09:00	27	59	83	
17:00-18:00	54	28	82	

- 6.3.12 Table 6.5 demonstrates that the proposed development will generate approximately 83 two-way vehicle movements in the AM peak and 82 two-way vehicle movements in the PM peak. This would equate to an additional 2 vehicle per minute in the AM and PM peak hours.
- 6.3.13 The number of vehicles trips generated by the site needs to be considered in the context of the vehicle movements, which will be spread across the local highway network from the two access points. This is considered further in the next section.
- 6.4 Use class E trip generation
- 6.4.1 The precise use and floor area 0.13ha of land reserved for Class E uses is not known at this stage. Trip generation has been undertaken for office use as a robust assessment of the forecast trip generation; the assessment has been based on 500sqm of office use.
- 6.4.2 Trip rates have been derived from TRICS.
- 6.4.3 The following TRICS category has been selected to derive trip rates for the proposed development:
  - » 02/A Employment/Office
- 6.4.4 The database has been filtered in order to achieve the most representative sites; the following parameters have been applied to the search criteria:
  - » The removal of sites in London and Ireland
  - » The selection of Edge of Town location type
  - » Population < 1 mile = 1,001-5,000 and 5,001 to 15,000 (2011 Census population of Yatton = 7,552)
  - » Population < 5 miles = 50,001 to 125,000 and 125,001 to 250,000 (2011 Census population of MSOAs North Somerset 005,007-016, 0024 and 026 = 99,343)
- 6.4.5 The trip rates for office/employment space are summarised in Table 6.6 and the TRICS outputs are attached as Appendix F.

Table 6.6: Proposed trip rates-employment/office 02/A

Time	Trip Rate				
	Arrivals	Departures	Total two-way trips		
08:00-09:00	2.359	0.268	2.627		
17:00-18:00	0.134	2.708	2.842		



6.4.6 The forecast trip generation for 500sqm of office/employment space is shown below in Table 6.7.

Table 6.7: Proposed indicative trip generation-employment/office 02/A

Time	Trip generation-Office/employment space (500sqm)				
	Arrivals	Total two-way trips			
08:00-09:00	12	1	13		
17:00-18:00	1	14	14		

- 6.4.7 Table 6.7 demonstrates that the proposed development will generate approximately 13 two-way vehicle movements in the AM peak and 14 two-way vehicle movements in the PM peak. This equates to approximately 1 car every 4-5 minutes in the AM and PM peak periods.
- 6.4.8 The assessment of office use is considered a robust assessment for the proposed use class E development; the trip generation displayed in Table 6.7 demonstrates that office use would not have a material impact on the operation of the local highway network and its impact would not be severe. Others permitted uses under use class E are considered to have a reduced impact in traffic and transport terms.
- 6.5 Total trip generation-employment and residential use
- 6.5.1 Table 6.8 includes the total trip generation for both residential and employment use.

Table 6.8: Total trip generation-employment/office 02/A and residential use

Time	Trip generation - Total				
	Arrivals	Total Two-way Trips			
08:00-09:00	38	60	97		
17:00-18:00	55	41	96		
Daily	402	405	807		

#### 6.6 Trip Distribution and Assignment

- 6.6.1 The distribution of trips has been established using 2011 Census data for journeys to work (WU03EW), which contains the employment destinations for those living within Yatton, North Somerset 012-MSOA. The census distribution has been applied to the arrivals and departures for both the AM and the PM network peak hours to reflect commuter patterns to/from the proposed development. A trip assignment model has been prepared using this information to distribute the development trips on the local highway network, which is included at Appendix H.
- 6.6.2 Following the distribution exercise, an online journey planner was then used to establish the most attractive routes based upon distance and delay. The proposed development vehicle trips were assigned to the surrounding highway network accordingly. Trips via Moor Lane were re-routed using the most convenient alternative route due to NSC



- proposals (subject to statutory consultation) to prohibit the use of this route either through a 'No access TRO' or point closure.
- 6.6.3 Given the choice of routes on the local network, the trips rapidly disperse, diluting the impact in any one area.
- 6.6.4 Of the 2,706 work trips by car/van associated with the MSOA, 53% are to/from North Somerset, 26.31%-to/from Bristol, 10.64%-to/from South Gloucestershire, and the remaining to/from the rest of the UK. North Somerset trips are spread through the authority, within the urban areas of Portishead, Clevedon and Weston-Super-Mare and also through the more rural areas.
- 6.6.5 Trips were broadly associated with eight routing options split equally between the North and South.
- 6.6.6 Southern Access (Chescombe Road via Rectory Farm):
  - » Travelling North: Mendip Road-Heathgate-High Street OR Chescombe Road-High Street
  - » Travelling South: Mendip Road-High Street OR Chescombe Road-High Street
- 6.6.7 Northern Access (Shiners Elms)
  - » Travelling North: Mendip Road-The Ridge-Ashleigh Road-Grassmere Road OR Mendip Road-Heathgate
  - » Travelling South: Mendip Road-The Ridge-Ashleigh Road-Grassmere Road OR Mendip Road-Heathgate
- 6.6.8 44% trips were taken from the Southern Access (Chescombe Road Via Rectory Farm) and 52% of trips left from the Northern Access (Shiners Elms). 12% travelled North from the Southern Access and 32% travelled South. 48% travelled North via the Northern Access and 8% travelled South. The trips weighted towards the Northern access which reflects the reduced distance and journey time.
- 6.6.9 These results have been presented in traffic flow diagrams at Appendix D.
- 6.6.10 As can be seen from the traffic flow diagrams, traffic rapidly disperses. The Shiners Elms access has a two-way peak hour link flow of 66 vehicles, which is approximately one car a minute.
- 6.6.11 Once this reaches Grassmere it is a two-way peak hour link flow of 37 vehicles, a trip approximately every 100 seconds. The surveys show that Grassmere has a base flow of 106 in the AM Peak and 91 in the PM peak. During the busier AM peak this results in a total of 146 two-way trips, or a vehicle every 25 seconds. One vehicle every 25 seconds does not reflect busy traffic conditions, and vehicles will be able to safely pass each other as needed.
- 6.6.12 Table 3.1 shows the distribution set out in the format previously required by NSC.



Table 6.9: Distribution to/from Site to/from Key Origins/Destinations

Origin/Destination	From Yatton Site (%)	Total (%)	Route
Bath and NE Somerset	1.26%	32.85%	From Mendip Road South head east via A370 past Bristol Airport, through Chew Magna and then link to Bath via A368, A39 and A36.
City of Bristol	26.31%		Variety of routes heading north or south from site.
Long Ashton	2.77%		From Mendip Road South/High St South, follow A370 direct to Long Ashton.
Backwell and Failand	2.51%		From Mendip Road South/High St South, follow A370 direct to Backwell and connect via B3129 to Failand.
South Gloucestershire	10.64%	25.19%	Head North to join the M5 which provides a direct link or South joining the A370 through central Bristol.
Portishead	3.62%		Head north via either Mendip Road North or High Street North, linking to the M5 which provides a direct route to Portishead (J19).
Pill	1.66%		Head north via either Mendip Road North or High Street North, linking to the M5 which provides a direct route to Pill (J19).
Clevedon	9.27%		Head north via either Mendip Road North or High Street North, linking to Clevedon via the B3133 Kenn Road.
Nailsea	3.4%	3.4%	Head either north or south. South via either Mendip Road or High Street to link to A370 and Station Rd before reaching Nailsea. North via Mendip Rd/High St linking to B3133 Kenn Road and through Tickenham via B3130
Yatton	12.08%	12.08%	Various routes form site depending upon specific destination within Yatton.
WSM	7.8%	9.5%	South via Mendip Rd or High St, connecting to B3133 and then on to A370 heading south-west to reach WSM.
Sedgemoor	1.7%		South via Mendip Rd or High St, connecting to B3133 and then on to A370 heading south-west to join M5 at J21.
Langford	2.88%	3.18%	South via Mendip Rd or High St connecting to the B3133 through Congresbury to Langford.
Banwell	0.3%		South via Mendip Rd or High St routing via either the B3133 or A370.Riverside.



Congesbury	3.88%	3.88%	South via Mendip Rd or High St routing via B3133.
Mendip	0.37%	0.37%	South via either Mendip Road or High Street routing via the B3133, South past Burrington and onto the B3135 turning off onto the A37



#### 7. TRAFFIC IMPACT ASSESSMENT

#### 7.1 Overview

- 7.1.1 This section sets out an assessment of the development traffic impact on the surrounding highway network.
- 7.1.2 The development traffic set out in Section 5 of this report has been factored in order to predict the future flows associated with this development.
- 7.1.3 Traffic survey data has been obtained (December 2022) and used in conjunction with trip generation data in order to form a robust approach to capacity testing.

#### 7.2 Junction capacity modelling

- 7.2.1 Detailed operational assessments have been carried out to determine the potential impact of the proposed development on the performance of the following junctions:
  - » Grassmere Road/B3133 High Street priority junction; and
  - » Chescombe Road/High Street priority junction.
- 7.2.2 The junctions assessed within this section have been selected as having the highest base flows on the key vehicle routes to and from the site.
- 7.2.3 The assessment of the two junctions has been undertaken using the PICADY module within the TRL 'Junctions' software.
- 7.2.4 Junction capacity modelling has been undertaken using total traffic flows and HGV percentages. The key outputs from Junctions 9 which inform the operational assessment are as follows:
  - » 'Ratio of Flow to Capacity' (RFC)
  - » Maximum queue length in vehicles
  - » Delay in second per vehicle.
- 7.2.5 The main indication of the performance of a junction is given by the RFC for each lane. The peak capacity is realised when the demand flow at the entry is great enough to cause a continuous queue of vehicles to wait on approach to the stop line. This is reached when the RFC attains a value of 1.00.
- 7.2.6 Queue lengths provide an indication of how the overall junction performance may affect adjacent junctions on the highway network. The queue lengths are presented as the maximum over an hourly period. Changes in queue lengths provide an indicator as to a development's impact on the operation of a junction.
- 7.2.7 When considering the change in the operation of junctions across the network all of these factors will be considered to form a view as to whether the impact of the development generated traffic would be severe.

#### 7.3 Cumulative assessment

7.3.1 The application has assessed the cumulative impact of the development in planning terms. This has been achieved through the use of TEMPRO growth rates to reflect background/planned growth, and the explicit inclusion of committed development where appropriate.



#### Committed Development

- 7.3.2 Two developments were incorporated into the committed development for the traffic flow diagrams.
- 7.3.3 Land Off Moor Road Yatton (Ref: 19/P/3197/FUL) is a residential development of 60 dwellings with supporting infrastructure and a new vehicular access. (Application was refused in July 2021 with an appeal allowed). The site is located north of the proposed development Rectory Farm (north) and is bound by Kenn Moor Road in the south-east and the B3133 North End Road in the south-west.
- 7.3.4 Rectory Farm (Ref: (21/P/0236/OUT) is a residential development of 100 dwellings with support infrastructure and a new vehicular access. Rectory Farm is located just south of Rectory Farm (North) and is bound by the Strawberry Line in the west and residential development on Chescombe Road in the east.

#### TEMPRO growth rates

- 7.3.5 The 2022 surveyed traffic flows have been growthed to 2025 (year of first occupation) and 2028 (future year) using the following TEMPRO growth rates for North Somerset 012 which covers the area of Yatton:
  - » North Somerset 012 2022-2025: 1.0577
  - » North Somerset 012 2022-2028: 1,0884

#### 7.4 Operational Assessment Scenarios

- 7.4.1 The following scenarios have been modelled:
  - » 2025 Base AM + PM
  - » 2025 Base + Committed Developments AM + PM
  - » 2025 Base + Committed Developments + Proposed Development AM + PM
  - » 2028 Base AM + PM
  - » 2028 Base + Committed Developments AM + PM
  - » 2028 Base + Committed Developments + Proposed Development AM + PM

#### 7.5 Junction Capacity Assessments

7.5.1 The modelling outputs are attached as Appendix G.

Grassmere Road/B3133 High Street priority junction (PICADY)

7.5.2 The results of the capacity testing of the Grassmere Road/B3133 High Street priority junction are set out below at Table 7.1.

Table 7.1: Grassmere Road/B3133 High Street priority junction Summary

Year	Period	Scenario(s):	Max RFC (all arms)	Max End Queue (all arms)
	AM Peak (08:00-09:00)	Base	0.19	0.2
	PM Peak (17:00-18:00)	Base	0.14	0.2
	AM Peak (08:00-09:00)	Base + Committed	0.19	0.2
2025	PM Peak (17:00-18:00)	Base + Committed	0.14	0.2
	AM Peak (08:00-09:00)	Base + Committed + Development	0.24	0.3
	PM Peak (17:00-18:00)	Base + Committed + Development	0.17	0.4
	AM Peak (08:00-09:00)	Base	0.20	0.2
	PM Peak (17:00-18:00)	Base	0.14	0.2
	AM Peak (08:00-09:00)	Base + Committed	0.20	0.2
2028	PM Peak (17:00-18:00)	Base + Committed	0.15	0.2
	AM Peak (08:00-09:00)	Base + Committed + Development	0.25	0.3
	PM Peak (17:00-18:00)	Base + Committed + Development	0.18	0.4

- 7.5.3 Table 7.1 demonstrates that in the 2025 base + committed + development scenario the maximum RFC would be 0.24 during the AM peak with a queue of 0.3 vehicles on all arms. During the PM peak, the maximum RFC would be 0.17 on all arms with a queue of 0.4 vehicles. The Grassmere Road/B3133 High Street priority junction therefore has sufficient capacity to accommodate the traffic generated by the proposal.
- 7.5.4 Table 7.1 demonstrates that in the 2028 base + committed + development scenario the maximum RFC would be 0.25 during the AM peak with a queue of 0.3 vehicles on all arms. During the PM peak, the maximum RFC would be 0.18 on all arms with a queue of 0.4 vehicles. The Grassmere Road/B3133 High Street priority junction therefore has sufficient capacity to accommodate the traffic generated by the proposal.
- 7.5.5 Queue data recorded for the existing Grassmere Road/B3133 High Street priority junction has been analysed for the peak hours to provide a layer of validation for the queues shown in the existing model.
- 7.5.6 The analysis demonstrated that the modelled and observed queues are within typical daily variations in queue lengths. There is minimal queueing at this junction in both peak periods. It is considered that the models reflect the observed operation of the Grassmere Road/B3133 High Street priority junction.



#### Chescombe Road/B3133 High Street priority junction (PICADY)

7.5.7 The results of the capacity testing of the Chescombe Road/B3133 High Street priority junction are set out below at Table 7.2:

Table 7.2: Chescombe	Road/R2122 High	Street priority	iunction Summary
Tuble 7.2. Chesconibe	Roddy D3133 i ligh	Succe priority	junicuon Sunninui y

Year	Period	Scenario(s):	Max RFC (all arms)	Max End Queue (all arms)
	AM Peak (08:00-09:00)	Base	0.10	0.2
	PM Peak (17:00-18:00)	Base	0.18	0.4
	AM Peak (08:00-09:00)	Base + Committed	0.13	0.2
2025	PM Peak (17:00-18:00)	Base + Committed	0.20	0.5
	AM Peak (08:00-09:00)	Base + Committed + Development	0.17	0.3
	PM Peak (17:00-18:00)	Base + Committed + Development	0.22	0.5
	AM Peak (08:00-09:00)	Base	0.10	0.2
	PM Peak (17:00-18:00)	Base	0.19	0.5
	AM Peak (08:00-09:00)	Base + Committed	0.14	0.2
2028	PM Peak (17:00-18:00)	Base + Committed	0.21	0.5
	AM Peak (08:00-09:00)	Base + Committed + Development	0.17	0.3
	PM Peak (17:00-18:00)	Base + Committed + Development	0.23	0.6

- 7.5.8 Table 7.2 demonstrates that in the 2025 base + committed + development scenario the maximum RFC would be 0.17 during the AM peak with a queue of 0.3 vehicles on all arms. During the PM peak, the maximum RFC would be 0.22 on all arms with a queue of 0.5 vehicles. The Chescombe Road/B3133 High Street priority junction therefore has sufficient capacity to accommodate the traffic generated by the proposal.
- 7.5.9 Table 7.2 demonstrates that in the 2028 base + committed + development scenario the maximum RFC would be 0.17 during the AM peak with a queue of 0.3 vehicles on all arms. During the PM peak, the maximum RFC would be 0.23 on all arms with a queue of 0.6 vehicles. The Chescombe Road/B3133 High Street priority junction therefore has sufficient capacity to accommodate the traffic generated by the proposal.
- 7.5.10 Queue data recorded for the existing Chescombe Road/B3133 High Street priority junction has been analysed for the peak hours to provide a layer of validation for the queues shown in the existing model.
- 7.5.11 The analysis demonstrated that the modelled and observed queues are within typical daily variations in queue lengths. There is minimal queueing at this junction in both peak



periods. It is considered that the models reflect the observed operation of the Chescombe Road/B3133 High Street priority junction.

- 7.6 Sensitivity traffic impact assessment
- 7.6.1 A sensitivity assessment of the development traffic's impact on the surrounding highway network was carried out considering the use of Shiners Elms as the only vehicular access.
- 7.6.2 This sensitivity assessment has been undertaken to support the phased delivery of the site. As set out within Section 5.2, the development proposes two accesses which form the basis for the access strategy.
- 7.6.3 Detailed operational assessments have been carried out to determine the potential impact of the proposed development on the performance of the following junction:
  - » Grassmere Road/B3133 High Street priority junction
- 7.6.4 As vehicles will no longer be routing along Chescombe Road as part of this sensitivity assessment, it is not considered necessary to include the Chescombe Road/High Street priority junction in the modelling assessment.
- 7.6.5 The assessment of this junction has been undertaken using the PICADY module within the TRL 'Junctions' software.
- 7.6.6 The results of the capacity testing of the Grassmere Road/B3133 High Street priority junction are set out below at Table 7.3.

Table 7.3: Grassmere Road/B3133 High Street priority junction sensitive summary

Year	Period	Scenario(s):	Max RFC (all arms)	Max End Queue (all arms)
	AM Peak (08:00-09:00)	Base	0.19	0.2
	PM Peak (17:00-18:00)	Base	O.14	0.2
	AM Peak (08:00-09:00)	Base + Committed	0.19	0.2
	PM Peak (17:00-18:00)	Base + Committed	0.14	0.2
2025	AM Peak (08:00-09:00)	Base + Committed + Development (Sensitivity)	0.29	0.4
	PM Peak (17:00-18:00)	Base + Committed + Development (Sensitivity)	0.19	0.4
	AM Peak (08:00-09:00)	Base	0.20	0.2
	PM Peak (17:00-18:00)	Base	O.14	0.2
	AM Peak (08:00-09:00)	Base + Committed	0.20	0.2
	PM Peak (17:00-18:00)	Base + Committed	0.15	0.2
2028	AM Peak (08:00-09:00)	Base + Committed + Development (Sensitivity)	0.30	0.4
	PM Peak (17:00-18:00)	Base + Committed + Development (Sensitivity)	0.20	0.5

- 7.6.7 Table 7.3 demonstrates that in the 2025 base + committed + development (sensitivity) scenario the maximum RFC would be 0.29 during the AM peak with a queue of 0.4 vehicles on all arms. During the PM peak, the maximum RFC would be 0.19 on all arms with a queue of 0.4 vehicles. The Grassmere Road/B3133 High Street priority junction therefore has sufficient capacity to accommodate the traffic generated by the proposal.
- 7.6.8 Table 7.3 demonstrates that in the 2028 base + committed + development scenario the maximum RFC would be 0.30 during the AM peak with a queue of 0.4 vehicles on all arms. During the PM peak, the maximum RFC would be 0.20 on all arms with a queue of 0.5 vehicles. The Grassmere Road/B3133 High Street priority junction therefore has sufficient capacity to accommodate the traffic generated by the proposal.
- 7.6.9 Queue data recorded for the existing Grassmere Road/B3133 High Street priority junction has been analysed for the peak hours to provide a layer of validation for the queues shown in the existing model.
- 7.6.10 This sensitivity assessment demonstrates that the total development can be served by a single access if required as part of the construction phasing.



#### 7.7 Development Traffic Impact Summary

- 7.7.1 This section has taken a robust approach by undertaking junction capacity modelling of two junctions.
- 7.7.2 The modelling revealed that both the Grassmere Road/B3133 High Street priority junction and the Chescombe Road/B3133 High Street priority junction reach a maximum RFC of 0.25, indicating that the junctions would operate within capacity. Furthermore, the largest increase in RFC resulting from the development was 0.4 RFC, which is not considered to indicate a material change in the operation of the junction.
- 7.7.3 This demonstrates that the proposed development would not have a material impact on the operation of the local highway network and its impact would not be severe.
- 7.7.4 The sensitivity traffic impact assessment demonstrates that the modelled and observed queues are within typical daily variations in queue lengths. There is minimal queueing at this junction in both peak periods. It is considered that the models reflect the observed operation of the Grassmere Road/B3133 High Street priority junction.
- 7.7.5 This therefore demonstrates that the proposed development would not have a material adverse impact on the operation of the local highway network with the sole use of the northern access, and therefore its impact would not be severe.



#### 8. TRANSPORT POLICY CONTEXT

#### 8.1 Preface

8.1.1 Developments should accord with national and local transport policies and government advice. This section identifies the transport and highway policies and guidance that are relevant in this case, and which the development is considered to comply with, namely:

#### National Policy:

- » National Planning Policy Framework
- » National Planning Practice Guidance

#### Local Policy:

- » North Somerset Council Core Strategy (2012)
- » North Somerset Sites and Policies Plan
- » Yatton Neighbourhood Plan (2019)
- » North Somerset Parking SPD (2021)
- » North Somerset Highways Development Design Guide (2021)

#### Additional Guidance:

- » Manual for Streets (2007)
- » Manual for Streets 2 (2010)
- » Local Transport Note 1/20



#### 9. SUMMARY AND CONCLUSION

#### 9.1 Summary

- 9.1.1 Hydrock has prepared this transport assessment (TA) on behalf of Persimmon Homes in support of an outline planning application for up to 190 dwelling residential development at Rectory Farm (North), Yatton, North Somerset. Access via Shiners Elms forms part of the application, with all other matters relating to transport being reserved matters.
- 9.1.2 The TA provides the necessary information for the local planning authority to consider the merits of the development in terms of accessibility, sustainability, highway safety, and the impact of the new development on the local network.

#### 9.2 Conclusions

- 9.2.1 The site is well connected to surrounding facilities and services via the existing network of footways and cycle routes. The facilities and services in Yatton are mainly located on High Street, which are within walking distance. The site can therefore be considered a 20-minute neighbourhood as set out by Sustrans. The site is also well positioned to connect to existing dedicated cycle routes including National Cycle Network (NCN) Route 26 which is also known as the Strawberry Line.
- 9.2.2 Due to the site being located in close proximity to a range of sustainable transport options, residents would benefit from a genuine choice of sustainable travel options that are already available. Including central Bristol which is a c.20-minute train journey via Yatton Rail Station.
- 9.2.3 It is concluded that the accident records do not demonstrate any particular pattern or clustering. There are therefore no apparent highway safety issues on the existing network which need to be addressed as part of this planning application.
- 9.2.4 The proposed trip rates and trip generation has been derived from the TRICS database and will generate approximately 83 two-way trips in the AM peak and 82 two-way trips in the PM peak, split across two access points. This would equate to an additional 2 vehicle per minute in the AM and PM peak hours. It is therefore considered that the proposed development will not have a material impact on the local highway network.
- 9.2.5 The vehicle flows from the proposed development on key routes from the site has been quantified. The magnitude of change resulting from the proposals is not significant.
- 9.2.6 The junction capacity modelling revealed that no junction arms reach or exceed the value of 0.85 RFC with the highest figure recorded at 0.25. The max end queue figures are also recorded as considerably low ranging from 0.2 to 0.6. As a result of this, the development will not have a 'severe' impact upon the local highway network and accords with the national planning policy guidance. The sensitivity assessment demonstrates that the total development can be served by a single access as required for its phased construction.
- 9.2.7 Consequently, the development will not have a 'severe' impact upon the local highway network and there are no material highway or transportation matter that could preclude the local authority from approving this planning application



# Appendix A Pre-Application Highways discussion



### INTERNAL MEMORANDUM

# FROM: HIGHWAYS & TRANSPORT, PLACE DIRECTORATE

Application No: 22.P.2451.PR2

**Development Control Case Officer: Lee Bowering** 

**Location: Land West of Yatton** 

Proposal: Outline planning application for up to 280 new homes and land for a Doctor's surgery

Date: 31.10.22

#### **Pre-Application Advice from Highways & Transport Development Management**

Highways and Transport comments contained herein are made in good faith but without prejudice to any subsequent application. The final assessment of issues will be made upon the receipt of a planning application.

#### **Summary**

Pre app enquiry for up to 280 new homes and land for a doctor's surgery. The site is located West of Yatton.

#### **Land Use**

In addition to the residential development, land for a doctor's surgery potential site for new secondary school should to be considered.

#### **Access**

Details of vehicle pedestrian and cycle access required including links to the Strawberry Line cycle route.

#### **Traffic Generation**

Any subsequent planning application should be provided with a **Transport Assessment**. This should include but not limited to:

- trip rate and peak hour trips from the development
- traffic modelling of that predicted of the development

#### Sustainable Travel, Road Safety and Home to School and Public Transport

Safe walking routes to schools, and contribution towards home to school travel required. There will also be contributions required towards public transport to fund infrastructure improvements and to fund bus services.

#### Street Lighting

Street Lighting plans required.

#### **Waste Servicing**

The site should include sufficient space for refuse vehicles to operate safely. Any future application should therefore include vehicle tracking plans.

#### **Parking**

The North Somerset Parking Standards SPD details the number of parking spaces required for residential properties. The applicant will be expected to provide the required number of parking spaces for the development.

#### **Active Travel**

In line with the latest government guidance, including the 'Gear Change A Bold Vision for Walking and Cycling' strategy, the Highway Authority require developers to prioritise active modes of travel over private vehicle trips. On this basis, and in order to encourage pedestrian trips, measures should be put in place to prioritise pedestrian routes wherever possible and appropriate. This should include blended crossings (Copenhagen style) to provide continuous footways across junctions

#### **Construction Management Plan**

Given the nature and size or the site a Construction Management Plan will be required.

The plans provided in the pre-application submission are limited in detail. Further Highways considerations may need to be taken in to account as plans for the proposed development are progressed



# Appendix B PIA Data



Crash Date: Tuesday, December 18, 2018 Time of Crash: 4:15:00 PM Crash Reference: 2018521808497

Highest Injury Severity: Slight Road Number: B3133 Number of Casualties: 1

Highway Authority: North Somerset Number of Vehicles: 1

**Local Authority:** North Somerset **OS Grid Reference:** 343156 165562

**Weather Description:** Raining with high winds

**Road Surface Description:** Wet or Damp

Speed Limit: 30

**Light Conditions:** Darkness: street lights present and lit

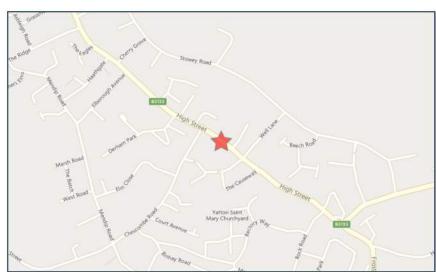
Carriageway Hazards: None

**Junction Detail:** Not at or within 20 metres of junction

**Junction Pedestrian Crossing:** No physical crossing facility within 50 metres

**Road Type:** Single carriageway

**Junction Control:** Not Applicable









#### **Vehicles involved**

Vehicle Ref	Vehicle Type		Driver Gender	 Vehicle Maneouvre	First Point of Impact	_	_	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Unknown	None	None

#### **Casualties**

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Pedestrian	Male	26 - 35	On footway or verge	Walking along in carriageway - back to traffic





Crash Date: Wednesday, February 20, 2019 Time of Crash: 12:25:00 PM Crash Reference: 2019521903390

Highest Injury Severity: Slight Road Number: B3133 Number of Casualties: 1

Highway Authority: North Somerset Number of Vehicles: 2

**Local Authority:** North Somerset **OS Grid Reference:** 342840 165802

**Weather Description:** Fine without high winds

**Road Surface Description:** Dry

Speed Limit: 30

**Light Conditions:** Daylight: regardless of presence of streetlights

Carriageway Hazards: None

**Junction Detail:** T or staggered junction

**Junction Pedestrian Crossing:** No physical crossing facility within 50 metres

**Road Type:** Single carriageway

**Junction Control:** Give way or uncontrolled







#### **Vehicles involved**

Vehicle Ref	Vehicle Type		Driver Gender		Vehicle Maneouvre	First Point of Impact		Hit Object - On Carriageway	Hit Object - Off Carriageway
1	1 Goods vehicle 7.5 tonnes 4 Male 26 - 35 mgw and over		Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None		
2	2 Pedal cycle -1 Male 36 - 45			Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None	

#### **Casualties**

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other





**Crash Date:** Friday, July 05, 2019 **Time of Crash:** 4:15:00 PM **Crash Reference: 2019521904204** 

Highest Injury Severity: Slight Road Number: B3133 Number of Casualties: 1

Highway Authority: North Somerset Number of Vehicles: 2

**Local Authority:** North Somerset **OS Grid Reference:** 343088 165602

**Weather Description:** Fine without high winds

**Road Surface Description:** Dry

Speed Limit: 30

**Light Conditions:** Daylight: regardless of presence of streetlights

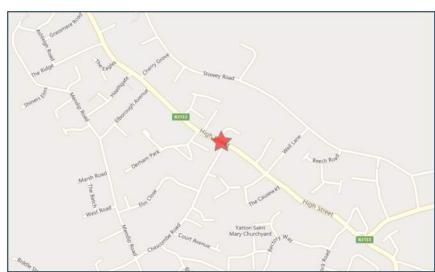
Carriageway Hazards: None

**Junction Detail:** Not at or within 20 metres of junction

**Junction Pedestrian Crossing:** Zebra crossing

**Road Type:** Single carriageway

**Junction Control:** Not Applicable









#### **Vehicles involved**

Vehicle Ref	Vehicle Type		Driver Gender		Vehicle Maneouvre	First Point of Impact		Hit Object - On Carriageway	Hit Object - Off Carriageway
1	1 Goods vehicle 7.5 tonnes 2 Male 56 - 65 mgw and over		Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Journey as part of work	None	None		
2	2 Pedal cycle -1 Male 6 - 10		1 -	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None	

#### **Casualties**

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	6 - 10	Unknown or other	Unknown or other





Crash Date: Wednesday, April 24, 2019 Time of Crash: 5:15:00 AM Crash Reference: 2019521905514

**Highest Injury Severity:** Slight **Road Number:** B3133 **Number of Casualties:** 1

Highway Authority: North Somerset Number of Vehicles: 2

**Local Authority:** North Somerset **OS Grid Reference:** 342694 165995

**Weather Description:** Fine without high winds

**Road Surface Description:** Dry

Speed Limit: 30

**Light Conditions:** Darkness: street lighting unknown

Carriageway Hazards: None

**Junction Detail:** T or staggered junction

**Junction Pedestrian Crossing:** No physical crossing facility within 50 metres

**Road Type:** Single carriageway

**Junction Control:** Give way or uncontrolled









#### **Vehicles involved**

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender		Vehicle Maneouvre	First Point of Impact		Hit Object - On Carriageway	Hit Object - Off Carriageway
	1 Motorcycle over 125cc and up to 500cc		Male		Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
	2 Car (excluding private -1 Unkn n		Unknow	Unknown	Vehicle is moving off	Front	Unknown	None	None

#### **Casualties**

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other





#### Provisional Data does not include vehicle and casualty records

Crash Date: Friday, January 01, 2021 Time of Crash: 3:32:00 PM Crash Reference: 2021522101464

Highest Injury Severity: Slight Road Number: B3133 Number of Casualties: 1

Highway Authority: Number of Vehicles: 1

Local Authority: OS Grid Reference: 342873 165767

**Weather Description:** Fine without high winds

**Road Surface Description:** Wet or Damp

**Speed Limit:** 30

**Light Conditions:** Daylight: regardless of presence of streetlights

Carriageway Hazards: None

**Junction Detail:** T or staggered junction

**Junction Pedestrian Crossing:** No physical crossing facility within 50 metres

**Road Type:** Single carriageway

**Junction Control:** Give way or uncontrolled









**Provisional Data does not include vehicle and casualty records** 





# Appendix C Traffic Survey Data



Junction: 1

Approach: B3133 High Street North

			A l	D2421	a III-la Causa	+ (c)						Dielete Co	B			
TIME	CVCLE	NA/CYCLE			3 High Stree		BUG	TOTAL	CVCLE	NA/CVCLE			asmere Roa		BUG	TOTAL
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	39	15	0	0	0	54	1	0	0	0	0	0	0	1
07:15 - 07:30	0	0	52	14	0	1	0	67	0	0	2	0	0	0	0	2
07:30 - 07:45	0	0	88	14	1	0	1	104	1	0	3	0	0	0	0	4
07:45 - 08:00	0	2	63	14	2	1	1	83	0	0	2	0	0	0	0	2
Hourly Total	0	2	242	57	3	2	2	308	2	0	7	0	0	0	0	9
08:00 - 08:15	0	0	99	15	0	0	4	118	0	0	6	0	0	0	0	6
08:15 - 08:30	0	0	70	8	2	2	0	82	0	0	9	3	0	0	0	12
08:30 - 08:45	0	3	86	15	2	0	0	106	0	0	6	0	0	0	0	6
08:45 - 09:00	0	0	115	21	2	0	0	138	0	0	2	0	0	0	0	2
Hourly Total	0	3	370	59	6	2	4	444	0	0	23	3	0	0	0	26
09:00 - 09:15	1	1	76	9	2	1	0	90	0	0	5	0	0	0	0	5
09:15 - 09:30	0	0	86	11	2	1	0	100	0	0	6	1	0	0	0	7
09:30 - 09:45	0	0	63	12	6	1	0	82	0	0	7	2	0	0	0	9
09:45 - 10:00	1	0	89	16	3	1	0	110	0	0	4	2	0	0	0	6
Hourly Total	2	1	314	48	13	4	0	382	0	0	22	5	0	0	0	27
10:00 - 10:15	0	2	70	21	2	3	0	98	0	0	5	1	0	1	1	8
10:15 - 10:30	0	0	87	14	2	1	0	104	0	0	5	1	0	0	0	6
10:30 - 10:45	1	2	92	12	1	3	0	111	1	0	4	2	0	0	0	7
10:45 - 11:00	1	0	88	16	7	1	0	113	0	0	4	0	0	0	0	4
Hourly Total	2	4	337	63	12	8	0	426	1	0	18	4	0	1	1	25
11:00 - 11:15	2	0	102	13	0	1	0	118	0	0	3	0	0	0	0	3
11:15 - 11:30	1	1	84	8	2	1	0	97	0	0	8	0	0	0	0	8
11:30 - 11:45	1	1	88	14	1	2	0	107	0	0	9	2	0	0	0	11
	0	0	97	14	0	1	0	112	0	0	6	0	0	0	0	6
11:45 - 12:00	4	2	371	49	3	5	0	434	0	0	26	2	0	0	0	28
Hourly Total							0	130	0	0			0	0	0	
12:00 - 12:15	0	2	106	18	1	3					8	3			-	11
12:15 - 12:30	0	0	100	18	0	0	0	118	0	0	5	2	0	0	0	7
12:30 - 12:45	0	1	102	11	1	3	0	118	0	0	1	0	0	0	0	1
12:45 - 13:00	1	0	91	14	0	2	0	108	0	0	10	1	0	0	0	11
Hourly Total	1	3	399	61	2	8	0	474	0	0	24	6	0	0	0	30
13:00 - 13:15	1	1	102	12	0	1	0	117	0	0	8	0	0	0	0	8
13:15 - 13:30	1	0	93	15	0	2	0	111	0	0	3	0	0	0	0	3
13:30 - 13:45	0	1	97	16	1	1	0	116	1	0	6	1	0	0	0	8
13:45 - 14:00	1	0	85	8	0	1	0	95	1	0	3	2	0	0	0	6
Hourly Total	3	2	377	51	1	5	0	439	2	0	20	3	0	0	0	25
14:00 - 14:15	2	1	140	17	0	3	0	163	0	0	6	0	0	0	0	6
14:15 - 14:30	2	2	111	6	1	1	0	123	0	0	6	1	0	0	0	7
14:30 - 14:45	2	1	116	9	0	1	0	129	0	1	7	2	0	0	0	10
14:45 - 15:00	1	1	90	18	0	1	0	111	0	0	11	3	0	0	0	14
Hourly Total	7	5	457	50	1	6	0	526	0	1	30	6	0	0	0	37
15:00 - 15:15	1	0	123	15	0	1	0	140	0	0	11	3	0	0	0	14
15:15 - 15:30	2	0	99	12	0	0	0	113	0	0	9	0	0	0	0	9
15:30 - 15:45	1	0	70	15	0	1	1	88	0	0	6	2	0	0	0	8
15:45 - 16:00	0	1	104	16	2	1	3	127	1	0	8	0	0	0	0	9
Hourly Total	4	1	396	58	2	3	4	468	1	0	34	5	0	0	0	40
16:00 - 16:15	1	1	124	17	0	0	1	144	0	0	8	1	0	0	0	9
16:15 - 16:30	0	0	102	18	0	0	0	120	0	0	5	0	0	0	0	5
16:30 - 16:45	1	2	115	9	1	0	0	128	0	0	5	0	0	0	0	5
16:45 - 17:00	1	1	131	5	1	0	0	139	0	0	10	0	0	0	0	10
Hourly Total	3	4	472	49	2	0	1	531	0	0	28	1	0	0	0	29
17:00 - 17:15	0	1	100	8	0	0	0	109	0	0	9	3	0	0	0	12
17:15 - 17:30	0	1	100	11	0	0	0	114	0	0	5	0	0	0	0	5
							0	131	1	0		1	0	0	0	10
17:30 - 17:45 17:45 - 18:00	2	0	121	8 9	0	0			0		8	0	0	0	0	4
	3	2	103		1	0	0	114 468		0	4 26	4	0	0	0	31
Hourly Total			426	36			0		1	0						
18:00 - 18:15	0	0	89	7	1	0	0	97	0	0	6	1	0	0	0	7
18:15 - 18:30	0	2	107	7	0	0	1	117	0	0	5	0	0	0	0	5
18:30 - 18:45	0	1	98	3	0	0	0	102	0	0	0	1	0	0	0	1
18:45 - 19:00	0	0	84	3	0	0	0	87	0	0	2	0	0	0	0	2
Hourly Total	0	3	378	20	1	0	1	403	0	0	13	2	0	0	0	15
TOTAL	29	32	4539	601	47	43	12	5303	7	1	271	41	0	1	1	322
TOTAL	29	32	4003	001	41	40	12	0000	- 1		2/1	41	U			322



Junction: 1

Approach: B3133 High Street South

				Left to Gras	mere Road						Ahe	ad to B313	3 High Stree	et (N)		
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	0	0	0	0	0	0	2	1	54	13	0	2	0	72
07:15 - 07:30	0	0	0	0	0	0	0	0	1	1	56	4	0	3	1	66
07:30 - 07:45	0	0	0	0	0	0	0	0	0	1	69	12	0	1	0	83
07:45 - 08:00	0	0	0	0	0	0	0	0	1	1	80	17	2	0	5	106
Hourly Total	0	0	0	0	0	0	0	0	4	4	259	46	2	6	6	327
08:00 - 08:15	0	0	0	0	0	0	0	0	0	0	85	13	0	1	0	99
08:15 - 08:30	0	0	0	0	0	0	0	0	0	1	78	12	1	1	0	93
08:30 - 08:45	0	0	2	0	0	0	0	2	0	1	70	9	2	0	0	82
08:45 - 09:00	0	0	1	0	0	0	0	1	0	0	64	10	1	1	0	76
Hourly Total	0	0	3	0	0	0	0	3	0	2	297	44	4	3	0	350
09:00 - 09:15	0	0	0	1	0	0	0	1	1	0	101	15	1	0	0	118
09:15 - 09:30	0	0	0	0	0	0	0	0	0	0	79	10	0	3	0	92
09:30 - 09:45	0	0	0	0	0	0	0	0	0	1	66	9	1	1	0	78
09:45 - 10:00 Hourly Total	0 <b>0</b>	0 <b>0</b>	1	0 1	0	0 <b>0</b>	0 <b>0</b>	2	0	0	102 348	8 <b>42</b>	3 <b>5</b>	0 4	0	113 401
10:00 - 10:15	0	0	0	0	0	0	0	0	0	1	80	14	2	1	0	98
10:15 - 10:30	0	0	0	0	0	0	0	0	1	1	83	6	4	1	0	96
10:30 - 10:45	0	0	0	1	0	0	0	1	0	0	65	11	4	3	0	83
10:45 - 11:00	0	0	1	0	0	0	0	1	0	0	90	17	2	2	0	111
Hourly Total	0	0	1	1	0	0	0	2	1	2	318	48	12	7	0	388
11:00 - 11:15	0	0	1	0	0	0	0	1	1	0	64	8	1	0	0	74
11:15 - 11:30	0	0	1	0	0	0	0	1	0	0	71	17	0	0	0	88
11:30 - 11:45	0	0	0	0	0	0	0	0	1	0	58	8	2	0	0	69
11:45 - 12:00	0	0	1	0	0	0	0	1	0	0	78	13	0	0	0	91
Hourly Total	0	0	3	0	0	0	0	3	2	0	271	46	3	0	0	322
12:00 - 12:15	0	0	0	0	0	0	0	0	1	1	74	17	1	2	0	96
12:15 - 12:30	0	0	0	0	0	0	0	0	0	1	81	8	0	0	0	90
12:30 - 12:45	0	0	0	0	0	0	0	0	1	2	75	12	0	1	0	91
12:45 - 13:00	0	0	0	0	0	0	0	0	9	1	66	10	1	2	0	89
Hourly Total	0	0	0	0	0	0	0	0	11	5	296	47	2	5	0	366
13:00 - 13:15	0	0	1	1	0	0	0	2	0	0	85	6	0	2	0	93
13:15 - 13:30	0	0	1	0	0	0	0	1	1	1	95	12	1	0	0	110
13:30 - 13:45	0	0	1	0	0	0	0	1	1	0	86 80	10	3 0	3	0	101
13:45 - 14:00 Hourly Total	0 <b>0</b>	0 <b>0</b>	4	1	0	0 <b>0</b>	0	5	0 <b>2</b>	1	346	18 <b>46</b>	4	6	0	101 405
14:00 - 14:15	0	0	0	0	1	0	0	1	1	1	78	10	0	2	0	92
14:15 - 14:30	0	0	1	0	0	0	0	1	0	0	62	7	1	1	0	71
14:30 - 14:45	0	0	1	0	0	0	0	1	1	1	85	6	0	0	0	93
14:45 - 15:00	0	0	0	0	0	0	0	0	1	0	78	16	0	3	0	98
Hourly Total	0	0	2	0	1	0	0	3	3	2	303	39	1	6	0	354
15:00 - 15:15	0	0	0	0	0	0	0	0	0	1	76	15	3	1	0	96
15:15 - 15:30	0	0	0	0	0	0	0	0	1	1	69	11	0	0	0	82
15:30 - 15:45	0	1	0	1	0	0	0	2	0	0	106	8	2	0	2	118
15:45 - 16:00	0	0	1	0	0	0	0	1	1	0	94	8	2	0	3	108
Hourly Total	0	1	1	1	0	0	0	3	2	2	345	42	7	1	5	404
16:00 - 16:15	0	0	1	0	0	0	0	1	1	1	92	10	0	0	0	104
16:15 - 16:30	0	0	1	0	0	0	0	1	2	0	94	11	1	0	0	108
16:30 - 16:45	0	0	1	1	0	0	0	2	1	1	96	4	0	1	0	103
16:45 - 17:00	0	0	0	1	0	0	0	1	0	0	80	8	0	0	1	89
Hourly Total	0	0	3	2	0	0	0	5	4	2	362	33	1	1	1	404
17:00 - 17:15	0	0	0	0	0	0	0	2	0	2	108 99	7 9	0	0	0	117 110
17:15 - 17:30	0	0	0	0	0	0	0	0	0	2			0	0	0	
17:30 - 17:45 17:45 - 18:00	0	0	1	0	0	0	0	1	2	1	83 76	4	0	0	0	89 83
Hourly Total	0	0	3	0	0	0	0	3	2	6	366	24	0	1	0	399
18:00 - 18:15	0	0	1	0	0	0	0	1	1	1	87	5	1	0	0	95
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0	85	3	0	0	0	88
18:30 - 18:45	0	0	3	0	0	0	0	3	0	0	107	4	0	0	0	111
18:45 - 19:00	0	0	0	0	0	0	0	0	1	1	64	5	0	0	0	71
Hourly Total	0	0	4	0	0	0	0	4	2	2	343	17	1	0	0	365
TOTAL	0	1	25	6	1	0	0	33	34	29	3854	474	42	40	12	4485



Junction: 1

Approach: Grasmere Road

			1 -4	D2422	III-b Chin-sh	(B1)					Di-	L	III'-b China	+ /c\		
		/		t to B3133						/			High Stree			
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
07:15 - 07:30	1	0	11	1	1	0	0	14	0	0	0	0	0	0	0	0
07:30 - 07:45	0	0	8	0	0	0	1	9	0	0	0	0	0	0	0	0
07:45 - 08:00	0	0	16	5	0	0	0	21	0	0	0	0	0	0	0	0
Hourly Total	1	0	41	6	1	0	1	50	0	0	0	0	0	0	0	0
08:00 - 08:15	0	0	19	0	0	0	0	19	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	19	5	0	0	0	24	0	0	1	0	0	0	0	1
08:30 - 08:45	0	0	16	1	0	0	0	17	0	0	0	1	0	0	0	1
08:45 - 09:00	1	0	10	2	0	0	0	13	0	0	2	0	0	0	0	2
Hourly Total	1	0	64	8	0	0	0	73	0	0	3	1	0	0	0	4
09:00 - 09:15	0	0	13	3	0	0	0	16	0	0	0	0	0	0	0	0
09:15 - 09:30	0	0	18	2	0	0	0	20	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	15	2	0	0	0	17	0	0	0	0	0	0	0	0
09:45 - 10:00	0	0	14	0	0	0	0	14	0	0	0	0	0	0	0	0
Hourly Total	0	0	60	7	0	0	0	67	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	17	2	0	0	0	19	0	0	1	1	0	0	0	2
10:15 - 10:30	0	0	16	2	0	0	0	18	0	0	1	1	0	0	0	2
10:30 - 10:45	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	9	0	0	0	0	9	0	0	1	0	0	0	0	1
Hourly Total	0	0	57	5	0	0	0	62	0	0	3	2	0	0	0	5
11:00 - 11:15	0	0	6	3	0	0	0	9	0	0	0	0	0	0	0	0
11:15 - 11:30	1	0	8	0	0	0	0	9	0	0	1	0	0	0	0	1
11:30 - 11:45	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	16	0	0	0	0	16	0	0	1	0	0	0	0	1
Hourly Total	1	0	36	4	0	0	0	41	0	0	2	0	0	0	0	2
12:00 - 12:15	0	0	10	3	0	0	0	13	0	0	0	1	0	0	0	1
12:15 - 12:30	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
12:30 - 12:45	0	1	21	2	0	0	0	24	0	0	0	0	0	0	0	0
-	0	0	13	2	0	0	0	15	0	0	1	0	0	0	0	1
12:45 - 13:00	0	1	55	7	0	0	0	63	0	0	1	1	0	0	0	2
Hourly Total																
13:00 - 13:15	0	0	13	2	0	0	0	15	0	0	0	1	0	0	0	1
13:15 - 13:30	1	0	8	2	0	0	0	11	0	0	1	1	0	0	0	2
13:30 - 13:45	0	0	4	2	0	0	0	6	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	8	0	0	0	0	8	0	0	0	1	0	0	0	1
Hourly Total	1	0	33	6	0	0	0	40	0	0	1	3	0	0	0	4
14:00 - 14:15	0	0	16	4	0	0	0	20	0	0	1	0	0	0	0	1
14:15 - 14:30	0	0	10	0	0	0	0	10	0	0	1	1	0	0	0	2
14:30 - 14:45	0	0	19	0	0	0	0	19	0	0	2	0	0	0	0	2
14:45 - 15:00	1	0	12	0	0	0	0	13	0	0	1	0	0	0	0	1
Hourly Total	1	0	57	4	0	0	0	62	0	0	5	1	0	0	0	6
15:00 - 15:15	0	0	12	3	0	0	0	15	0	0	1	0	0	0	0	1
15:15 - 15:30	0	0	10	1	0	0	0	11	0	0	1	0	0	0	0	1
15:30 - 15:45	0	0	16	1	0	0	0	17	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	10	2	0	0	0	12	0	0	0	0	0	0	0	0
Hourly Total	0	0	48	7	0	0	0	55	0	0	2	0	0	0	0	2
16:00 - 16:15	0	0	8	0	0	0	0	8	0	0	1	1	0	0	0	2
16:15 - 16:30	0	0	12	3	0	0	0	15	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	10	2	0	0	0	12	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0
Hourly Total	0	0	45	5	0	0	0	50	0	0	1	1	0	0	0	2
17:00 - 17:15	0	0	19	2	0	0	0	21	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	9	1	0	0	0	10	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	13	2	0	0	0	15	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	7	4	0	0	0	11	0	0	0	0	0	0	0	0
Hourly Total	0	0	48	9	0	0	0	57	0	0	0	0	0	0	0	0
18:00 - 18:15	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	4	0	0	0	0	4	0	0	1	0	0	0	0	1
18:30 - 18:45	0	1	2	0	0	0	0	3	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	5	1	0	0	0	6	0	0	1	0	0	0	0	1
Hourly Total	0	1	17	2	0	0	0	20	0	0	2	0	0	0	0	2
				_										•		_
TOTAL	5	2	561	70	1	0	1	640	0	0	20	9	0	0	0	29
. JIAL		_				_		U-70		_		-		_		



Junction: 2 Approach: B3133 High Street East

Color     Color     Color     Color																			II Turn							
\$\frac{\text{\$000}}{\text{\$000}} \text{\$000} \text{\$0000} \text{\$000} \text{\$000} \text{\$000} \text{\$000} \text{\$000} \text{\$000} \text{\$000} \text{\$000} \text{\$000} \text{\$0000} \text{\$00000} \text{\$00000} \text{\$00000} \text{\$00000} \text{\$00000000} \t																										
0751-0752   0   0   0   0   0   0   0   0   0																										
CF-10-07-05-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-			_																-	_						
OFFICE   Color   Col																										
New Friend   Q			_				_												_							
0000-0000-0000-0000-0000-0000-0000-00							-												0							
OST																										
683-6965   0																					_					
Control   Cont																					_					
New Protect			_	_				_					_	2	_	_			_	_	_			_		
0000-00055   0   0   0   0   0   0   0   0														1					0							
0915-1936   0																										
0985-1905   0																					_					
Person 1909   0																										
Note   Property   Pr																										
1001-1101-1101-1101-1101-1101-1101-110																			0							
1915  1930  0																										
1005-1106   0																										
100.511.00   0							_														_					
New York   0				_			_									_					_					
1100-1115																										
11:51:13:0																										
1136-1145																-										
1145-1260   0   0   2   0   0   0   2   0   0																										
No.									_					_												
1200-1215   0																										
1215-1230   0																										
1230-1245   0																										
1245-1350   0																										
Houry Total   10																_					_					
1300-1315   0																					_					
13:36:13:30																										
13:30-13:45   0   0   2   0   0   0   0   2   1   0   0   2   1   0   0   2   1   0   0   0   0   0   0   0   0   0																_									_	
13.45-14.50																										
Houry Total   2																										
14:00-14:15   0   0   0   1   1   0   0   0   0   2   0   0   0   94   10   1   2   0   1077   0   0   0   0   0   0   0   0   0																										
14:15:14:30							_																			
14:43:145:00 0 0 0 2 1 1 0 0 0 1 4 0 1 82 6 0 0 0 0 89 0 0 0 0 0 0 0 0 0 0 0 0 0 0														_											_	
14.45-15.00																					_					
Houry Total   0			_	_		_	_									_			_		_	_		_		
15:00-15:15   0   0   0   2   1   0   0   0   0   3   0   1   91   14   3   1   0   110   0   0   0   0   0   0																										
15:15:15:30																										
15:30 : 15:45 0 0 0 6 2 0 0 0 0 8 1 2 87 5 2 0 3 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																										
15:45:16:00 0 0 7 0 0 0 0 7 1 0 0 84 12 2 0 1 1 100 0 0 0 0 0 0 0 0 0 0 0 0																										
Houry Total   0									_					_						_						
16:00-16:15   0   0   0   3   0   0   0   0   0   3   0   1   104   11   10   0   0   0   116   0   0   0   0   0   0   0   0   0				_																						
16:15-16:30																										
16:30 : 16:45 0 0 0 2 1 1 0 0 0 0 3 0 0 100 7 0 1 0 108 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																										
16:45-17:00 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0																										
HouryTotal   0   0   8   1   0   0   0   9   0   3   375   36   1   1   2   418   0   0   0   0   0   0   0   0   0			_	_		_	_		2		_					_			_		_	_	_	_		
1170-1715 0 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																										
1715-1730         0         0         2         0         0         0         2         0         2         83         9         0         0         94         0 <td< td=""><td></td><td></td><td></td><td>_</td><td></td><td></td><td>_</td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td></td><td>-</td><td></td><td>_</td><td></td><td></td></td<>				_			_		_										0		-		_			
17:30-17:45 0 0 0 3 0 0 0 0 0 0 0 1 85 4 0 0 0 0 90 0 0 0 0 0 0 0 0 0 0 0 0 0				_		_	_				_			_	_				_	_		_				
17.45-18.00 0 0 0 2 0 0 0 0 0 0 2 1 1 1 75 7 0 0 0 0 85 0 0 0 0 0 0 0 0 0 0 0 0 0 0																										
Hourly Total   0   0   12   0   0   0   12   1   6   360   29   0   0   0   396   0   0   0   0   0   0   0   0   0																										
18:00-18:15         0         0         1         1         1         0         0         3         0         2         87         10         <																										
18:15-18:30 0 0 0 5 0 1 0 0 0 6 0 0 80 3 0 0 0 83 0 0 0 0 0 0 0 0 0 0 0							_												0		-					
18:30-18:45 0 0 1 1 0 0 0 0 1 0 1 75 4 0 0 0 80 0 0 0 0 0 0 0 0 0 0 1 1 1 52 3 0 0 0 0 57 0 0 0 0 0 0 0 0 0 0 0 0 0 0																										
1845-1900 0 0 0 2 1 0 0 0 3 1 1 52 3 0 0 0 57 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																			0							
Hourly Total 0 0 9 2 2 0 0 13 1 4 294 20 0 0 319 0 0 0 0 0 0 0 0									3												_					
TOTAL 2 1 112 20 4 0 3 142 24 35 3906 490 45 36 12 4548 0 0 1 0 0 0 0 1																										
	TOTAL	2	1	112	20	4	0	3	142	24	35	3906	490	45	36	12	4548	0	0	1	0	0	0	0	1	



Junction: 2

Approach: Chescombe Road

			1.6		Unit Change	(144)					Di-	L	III'-b China	+ (F)		
		/			ligh Street					/			High Stree			
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	3	0	0	0	0	3	0	0	3	0	0	0	0	3
07:15 - 07:30	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
07:30 - 07:45	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
07:45 - 08:00	0	0	11	0	0	0	0	11	0	0	4	1	0	0	0	5
Hourly Total	0	0	16	0	0	0	0	16	0	0	9	2	0	0	0	11
08:00 - 08:15	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	2	1	0	0	0	3	0	0	3	0	0	0	0	3
08:30 - 08:45	0	0	6	0	0	0	0	6	0	0	0	2	0	0	0	2
08:45 - 09:00	0	0	14	0	0	0	0	14	1	0	2	0	0	0	0	3
Hourly Total	0	0	30	2	0	0	0	32	1	0	5	2	0	0	0	8
09:00 - 09:15	0	0	11	0	0	0	0	11	0	0	4	1	0	0	0	5
09:15 - 09:30	0	0	4	2	0	0	0	6	0	0	7	1	0	0	0	8
09:30 - 09:45	0	0	9	2	0	0	0	11	0	0	1	2	0	0	0	3
09:45 - 10:00	0	0	7	2	0	0	0	9	0	0	5	0	0	0	0	5
Hourly Total	0	0	31	6	0	0	0	37	0	0	17	4	0	0	0	21
10:00 - 10:15	0	0	5	0	0	0	0	5	0	0	5	3	0	0	0	8
10:15 - 10:30	0	0	6	0	1	0	0	7	0	0	2	0	0	0	0	2
10:30 - 10:45	0	1	8	2	1	0	0	12	0	0	5	4	1	0	0	10
10:45 - 11:00	0	0	5	1	0	0	0	6	0	0	6	2	0	0	0	8
Hourly Total	0	1	24	3	2	0	0	30	0	0	18	9	1	0	0	28
11:00 - 11:15	0	0	10	1	0	0	0	11	0	0	3	0	0	0	0	3
11:15 - 11:30	0	0	8	1	0	0	0	9	0	0	2	1	0	0	0	3
11:30 - 11:45	0	0	13	1	0	0	0	14	0	0	5	2	0	0	0	7
	0	0	11	1	0	0	0	12	0	0	2	0	1	0	0	3
11:45 - 12:00	0	0	42	4	0	0	0	46	0	0	12	3	1	0	0	16
Hourly Total 12:00 - 12:15	0									0			0	0		7
-		0	6	0	0	0	0	6	0		4	3			0	
12:15 - 12:30	0	0	8	2	0	0	0	10	0	0	6	0	0	0	0	6
12:30 - 12:45	1	0	5	0	0	0	0	6	0	0	3	1	0	0	0	4
12:45 - 13:00	0	0	9	0	1	0	0	10	0	0	3	2	0	0	0	5
Hourly Total	1	0	28	2	1	0	0	32	0	0	16	6	0	0	0	22
13:00 - 13:15	0	0	10	1	0	0	0	11	0	0	1	0	0	0	0	1
13:15 - 13:30	0	1	11	1	0	0	0	13	0	0	10	3	1	0	0	14
13:30 - 13:45	0	0	10	2	0	0	0	12	0	0	3	1	0	0	0	4
13:45 - 14:00	0	0	8	1	1	0	0	10	0	0	4	1	0	0	0	5
Hourly Total	0	1	39	5	1	0	0	46	0	0	18	5	1	0	0	24
14:00 - 14:15	1	1	8	1	0	0	0	11	0	0	5	1	0	0	0	6
14:15 - 14:30	0	0	3	1	0	0	0	4	0	0	1	1	0	0	0	2
14:30 - 14:45	0	0	5	0	0	0	0	5	0	0	3	0	0	0	0	3
14:45 - 15:00	0	0	10	1	0	0	0	11	0	0	3	2	0	0	0	5
Hourly Total	1	1	26	3	0	0	0	31	0	0	12	4	0	0	0	16
15:00 - 15:15	0	0	9	1	0	0	0	10	0	0	4	0	0	0	0	4
15:15 - 15:30	1	0	9	0	0	0	0	10	0	0	4	0	0	0	0	4
15:30 - 15:45	0	0	7	0	0	0	0	7	0	0	5	0	0	0	0	5
15:45 - 16:00	0	0	8	1	0	0	1	10	0	0	7	2	0	0	0	9
Hourly Total	1	0	33	2	0	0	1	37	0	0	20	2	0	0	0	22
16:00 - 16:15	0	0	9	1	0	0	0	10	0	0	5	0	0	0	0	5
16:15 - 16:30	0	0	8	2	0	0	0	10	0	0	6	2	0	0	0	8
16:30 - 16:45	0	0	12	0	0	0	0	12	0	0	6	0	0	0	0	6
16:45 - 17:00	0	0	14	0	0	0	0	14	0	0	5	0	0	0	0	5
Hourly Total	0	0	43	3	0	0	0	46	0	0	22	2	0	0	0	24
17:00 - 17:15	0	0	10	0	0	0	0	10	0	0	4	0	0	0	0	4
17:15 - 17:30	0	0	6	0	0	0	0	6	0	0	6	1	0	0	0	7
17:30 - 17:45	0	0	5	0	0	0	0	5	0	0	8	0	0	0	0	8
17:30 - 17:45	0		13	0	0	0				0	7	0	0	0	0	7
	0	0	13 34	0	0	0	0	13	0	0				0	0	26
Hourly Total		0					0	34	0		25	1	0			
18:00 - 18:15	0	0	13	1	1	0	0	15	0	0	9	0	0	0	0	9
18:15 - 18:30	0	0	17	0	0	0	0	17	0	0	7	0	0	0	0	7
18:30 - 18:45	0	0	21	1	0	0	0	22	0	0	5	0	0	0	0	5
18:45 - 19:00	0	0	15	2	0	0	0	17	0	0	5	0	0	0	0	5
Hourly Total	0	0	66	4	1	0	0	71	0	0	26	0	0	0	0	26
TOTAL	3	3	412	34	5	0	1	458	1	0	200	40	3	0	0	244



Junction: 2 Approach: B3133 High Street West

				ad to B313									scombe Ro					/==			urn			
TIME	CYCLE	M/CYCLE		LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	1	48	12	0	0	0	61	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
07:15 - 07:30	1	0	60	10	0	1	0	72	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0
07:30 - 07:45	0	0	83	13	1	0	0	97	0	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0
07:45 - 08:00	0	2	75	12	2	1	1	93	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	1	3	266	47	3	2	1	323	0	0	6	2	0	0	1	9	0		0	0	0	0	0	0
08:00 - 08:15	0	0	94	7	1	0	2	104	0	0	11	2	0	0	0	13	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	71	12	1	2	1	87	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0
08:30 - 08:45	0	4	70	9	2	0	0	85	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0
08:45 - 09:00	0	0	83	22	3	1	1	110	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
Hourly Total	0	4	318	50	7	3	4	386	0	0	27	3	0	0	0	30	0		0	0	0	0	0	0
09:00 - 09:15	0	1	97	8	3	2	1	112	0	0	9	3	0	0	0	12	0	0	0	0	0	0	0	0
09:15 - 09:30	0	0	86	13	2	0	0	101	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	66	8	5	1	0	80	0	0	4	2	0	0	0	6	0	0	0	0	0	0	0	0
09:45 - 10:00	1	0	94	10	3	1	0	109	0	0	2	2	0	0	0	4	0	0	1	0	0	0	0	1
Hourly Total	1	1	343	39	13	4	1	402	0	0	26	8	0	0	0	34	0		1	0	0	0	0	1
10:00 - 10:15	1	2	75	18	1	3	0	100	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	94	10	1	1	0	106	0	0	8	1	1	0	0	10	0	0	0	0	0	0	0	0
10:30 - 10:45	1	2	92	11	1	2	0	109	0	0	11	3	0	0	0	14	0	0	0	1	0	0	0	1
10:45 - 11:00	2	1	95	12	8	2	0	120	0	0	5	2	0	0	0	7	0	0	0	0	0	0	0	0
Hourly Total	4	5	356	51	11	8	0	435	0	0	25	7	1	0	0	33	0	0	0	1	0	0	0	1
11:00 - 11:15	1	0	110	13	0	1	0	125	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
11:15 - 11:30	0	1	84	11	2	1	0	99	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	86	13	1	2	0	102	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
11:45 - 12:00	1	0	112	3	0	2	0	118	0	0	- 6	1	0	0	0	7	0	0	0	0	0	0	0	0
Hourly Total	2	1	392	40	3	6	0	444	0	0	23	2	0	0	0	25	0	0	0	0	0	0	0	0
12:00 - 12:15	0	1	105	12	1	3	0	122	0	0	6	2	0	0	0	8	0	0	0	0	0	0	0	0
12:15 - 12:30	0	2	91	12	1	0	0	106	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	120	8	0	3	0	131	0	0	9	3	1	0	0	13	0	0	0	0	0	0	0	0
12:45 - 13:00	1	0	82	15	0	2	0	100	0	0	13	0	0	0	0	13	0	0	0	0	0	0	0	0
Hourly Total	1	3	398	47	2	8	0	459	0	0	38	6	1	0	0	45	0	0	0	0	0	0	0	0
13:00 - 13:15	0	1	87	13	1	0	0	102	0	0	12	1	0	0	0	13	0	0	1	0	0	0	0	1
13:15 - 13:30	0	0	104	10	0	3	0	117	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	0
13:30 - 13:45	1	1	97	17	0	1	0	117	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	86	4	0	1	0	91	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0
Hourly Total	1	2	374	44	1	5	0	427	0	0	37	3	0	0	0	40	0	0	1	0	0	0	0	1
14:00 - 14:15	3	1	134	18	0	3	0	159	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0
14:15 - 14:30	0	2	114	10	1	1	0	128	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
14:30 - 14:45	1	1	113	8	0	1	0	124	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0
14:45 - 15:00	1	1	76	17	0	1	0	96	0	0	13	0	0	0	0	13	0	0	0	0	0	0	0	0
Hourly Total	5	5	437	53	1	6	0	507	0	0	32	1	0	0	0	33	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	111	12	0	1	0	124	0	0	5	0	0	0	0	5	0	0	1	0	0	0	0	1
15:15 - 15:30	1	0	78	11	0	0	0	90	0	0	18	0	0	0	0	18	0	0	0	0	0	0	0	0
15:30 - 15:45	0	1	87	13	0	1	1	103	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0
15:45 - 16:00	0	1	110	15	0	1	2	129	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0
Hourly Total	1	2	386	51	0	3	3	446	0	0	37	1	0	0	0	38	0	0	1	0	0	0	0	1
16:00 - 16:15	0	1	130	11	1	0	1	144	0	0	5	2	0	0	0	7	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	104	13	1	0	1	119	0	0	6	0	0	0	0	6	0	0	1	0	0	0	0	1
16:30 - 16:45	1	2	98	6	0	0	0	107	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	111	8	0	1	0	120	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	0
Hourly Total	1	3	443	38	2	1	2	490	0	0	29	3	0	0	0	32	0		1	0	0	0	0	1
17:00 - 17:15	0	0	82	5	0	0	0	87	0	0	16	1	0	0	0	17	0	0	0	0	0	0	0	0
17:15 - 17:30	0	2	102	7	0	0	0	111	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	104	7	0	0	0	111	0	0	12	1	0	0	0	13	0	0	1	0	0	0	0	1
17:45 - 18:00	1	0	89	8	0	0	0	98	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
Hourly Total	1	2	377	27	0	0	0	407	0	0	53	2	0	0	0	55	0		1	0	0	0	0	1
18:00 - 18:15	1	0	88	6	0	0	0	95	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
18:15 - 18:30	1	1	101	4	0	0	0	107	0	0	17	0	0	0	0	17	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	103	3	0	0	1	107	0	0	17	1	0	0	0	18	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	96	5	0	0	0	101	0	0	9	0	0	0	0	9	0	0	1	0	0	0	0	1
Hourly Total	2	1	388	18	0	0	1	410	0	0	49	1	0	0	0	50	0		1	0	0	0	0	1
TOTAL	20	32	4478	505	43	46	12	5136	0	0	382	39	2	0	1	424	0	0	6	1	0	0	0	7



Junction: 3 Approach: Mendip Road East

																								_
					iners Elms								ndip Road (								Turn			
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	9	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	0	0	0	7	0	1	0	0	8	0	0	0	0	0	0	0	0
07:30 - 07:45	0	0	0	0	0	0	0	0	2	0	10	0	0	0	1	13	0	0	0	0	0	0	0	0
07:45 - 08:00	0	0	0	0	0	0	0	0	1	0	14	3	0	0	0	18	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	4	0	39	3	1	0	1	48	0	0	0	0	0	0	0	0
08:00 - 08:15	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0	19	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	0	0	0	0	0	0	0	0	22	4	0	0	0	26	0	0	0	0	0	0	0	0
08:30 - 08:45	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	0	0	0	0	0	0	0	0
08:45 - 09:00	0	0	0	0	0	0	0	0	1	0	9	2	0	0	0	12	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	1	0	63	7	0	0	0	71	0	0	0	0	0	0	0	0
09:00 - 09:15	0	0	0	0	0	0	0	0	1	0	16	2	0	0	0	19	0	0	0	0	0	0	0	0
09:15 - 09:30	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	20	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	0	0	0	0	0	0	0	0	14	3	0	0	0	17	0	0	0	0	0	0	0	0
09:45 - 10:00	0	0	0	0	0	0	0	0	0	0	12	2	0	0	0	14	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	1	0	61	8	0	0	0	70	0	0	0	0	0	0	0	0
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	17	2	0	0	0	19	0	0	0	0	0	0	0	0
10:30 - 10:45	0	0	2	1	0	0	0	3	0	0	19	1	0	0	0	20	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	1	0	0	0	0	1	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
Hourly Total	0	0	3	1	0	0	0	4	0	0	58	3	0	0	0	61	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	3	0	0	0	0	3	1	0	8	3	0	0	0	12	0	0	1	0	0	0	0	1
	0	0	0	0	0	0	0	0	2	0	11	1	0	0	0	14	0	0	0	0	0		0	0
11:15 - 11:30 11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	11	0	0	0	0	0	0	0	0
			_					0										_						0
11:45 - 12:00	0	0	0	0	0	0	0		0	0	18	0	1	0	0	19	0	0	0	0	0	0	0	
Hourly Total	0	0	3	0	0	0	0	3	3	0	46	6	1	0	0	56	0	0	11	0	0	0	0	1
12:00 - 12:15	0	0	1	1	0	0	0	2	0	0	12	2	0	0	0	14	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	1	0	0	0	0	1	0	1	21	2	0	0	0	24	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	1	0	0	0	1	1	0	20	1	2	0	0	24	0	0	0	0	0	0	0	0
Hourly Total	0	0	2	2	0	0	0	4	1	1	64	5	2	0	0	73	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	2	0	0	0	0	2	0	0	12	4	0	0	0	16	0	0	0	0	0	0	0	0
13:15 - 13:30	0	0	2	0	0	0	0	2	1	0	6	2	0	0	0	9	0	0	0	0	0	0	0	0
13:30 - 13:45	0	0	1	0	0	0	0	1	0	0	5	2	0	0	0	7	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	1	0	0	0	1	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
Hourly Total	0	0	5	1	0	0	0	6	1	0	30	8	0	0	0	39	0	0	0	0	0	0	0	0
14:00 - 14:15	0	0	0	0	0	0	0	0	1	0	19	3	0	0	0	23	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	1	0	0	0	0	1	0	0	12	0	0	0	0	12	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	0	0	0	0	0	0	2	0	14	0	0	0	0	16	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	3	0	63	3	0	0	0	69	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	0	0	0	0	0	0	0	0	14	2	0	0	0	16	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	1	1	0	0	0	2	0	0	20	1	0	0	0	21	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	14	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	1	0	0	0	2	0	0	55	8	0	0	0	63	0	0	0	0	0	0	0	0
16:00 - 16:15	0	0	2	0	0	0	0	2	0	0	9	1	0	0	0	10	0	0	0	1	0	0	0	1
16:15 - 16:30	0	0	1	0	0	0	0	1	0	0	12	4	0	0	0	16	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	1	0	0	0	0	1	1	0	13	4	0	0	0	18	0	0	0	0	0	0	0	0
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0
Hourly Total	0	0	4	0	0	0	0	4	1	0	49	9	0	0	0	59	0	0	0	1	0	0	0	1
17:00 - 17:15	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0	0	0	1	1	12	2	0	0	0	16	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	16	2	0	0	0	18	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	0	1	0	12	3	0	0	0	16	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	2	1	55	8	0	0	0	66	0	0	0	0	0	0	0	0
			_			_		2				2	-					-	-					-
18:00 - 18:15	0	0	1	1	0	0	0	2	0	0	12		0	0	0	14	0	0	0	0	0	0	0	0
18:15 - 18:30 18:30 - 18:45	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	6	0	0	0	0	0	0	0	0
	_	0	2		0	0	0		0		6		0	0		_		0	0	0		0		
18:45 - 19:00	0	0	0	0	0	0	0	6	0	0	5	2	0	0	0	5	0	0	0	0	0	0	0	0
Hourly Total	0	0	5	1	0	0	0	ь	0	1	26	2	0	0	U	29	0	0	U	0	0	0	0	0
TOTAL	0	0	24	6	0	0	0	30	17	3	609	70	4	0	- 1	704	0	0	- 1	- 1	0	0	0	2



Junction: 3

Approach: Shiners Elms

														_,		
		/		eft to Men		-				/			ndip Road (			
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30 - 07:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:45 - 08:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	0	0	11	0	0	0	0	1	0	0	3	0	0	0	0	3
08:00 - 08:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
08:15 - 08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 - 08:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:45 - 09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3
09:00 - 09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 - 09:30	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
09:45 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
10:00 - 10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
10:30 - 10:45	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	2
10:45 - 11:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	0	0	1	0	0	0	0	1	0	0	3	1	0	0	0	4
11:00 - 11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
13:15 - 13:30	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
13:30 - 13:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	0	0	2	1	0	0	0	3	0	0	2	0	0	0	0	2
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
14:45 - 15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
15:00 - 15:15					0							0	0			1
15:15 - 15:30	0	0	0	0		0	0	0	0	0	1			0	0	
15:30 - 15:45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0		-		0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
16:00 - 16:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
16:15 - 16:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
17:00 - 17:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
18:00 - 18:15	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
18:30 - 18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3
TOTAL	0	0	9	1	0	0	0	10	0	0	20	4	0	0	0	24



Junction: 3 Approach: Mendip Road West

			Α.	head to Me	ndin Poad	/E\						Dight to SI	niners Elms							U-T	urn			
TIME	CYCLE	M/CYCLE		LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30 - 07:45	1	0	3	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 - 08:00	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	2	0	16	1	0	0	0	19	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:00 - 08:15	0	1	8	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	11	2	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 - 08:45	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	6		1	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 - 09:00	0	1	36	3	1	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total 09:00 - 09:15	0	0	8	2	0	0	0		0	0	0	0			0	0	0	0		0	0	0	0	0
	0			1				10					0	0					0					0
09:15 - 09:30	0	0	6		0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 - 09:45		0	7	1	0	0	0		0	0	0	0			0	0	0	0		_	0		0	
09:45 - 10:00	0	0	_	1		0	0	8			0	0	0	0	0	0	0	0	0	0	0	0		0
Hourly Total	0	0	7	5	0		0	36 7	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10:00 - 10:15	0	0		0	0	0	0			0	0	0	0	_	0		0	0	0	0	0		0	0
10:15 - 10:30	0	0	7	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:30 - 10:45	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 - 11:00	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	23	3	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 - 11:15	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
11:15 - 11:30	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 - 11:45	0	0	8	3	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	9	0	1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	32	5	1	0	0	38	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
12:00 - 12:15	1	0	6	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	3	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 - 12:45	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 - 13:00	0	0	8	0	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	0	19	3	1	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00 - 13:15	0	0	8	3	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15 - 13:30	0	1	7	0	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30 - 13:45	1	0	6	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45 - 14:00	0	0	6	3	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	1	27	7	1	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00 - 14:15	1	0	7	0	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15 - 14:30	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30 - 14:45	0	0	8	2	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	0	11	2	0	0	0	13	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	1	0	31	5	1	0	0	38	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
15:00 - 15:15	0	0	11	2	0	0	0	13	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	7	0	0	0	0	7	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	1	0	6	0	0	0	0	7	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	1	0	30	3	0	0	0	34	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
16:00 - 16:15	1	0	8	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30 - 16:45	1	0	7	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45 - 17:00	1	0	11	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	3	0	32	1	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 - 17:15	0	0	8	2	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30 - 17:45	1	0	5	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45 - 18:00	1	0	4	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	2	0	21	2	0	0	0	25	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
18:00 - 18:15	0	0	5	0	0	0	0	5	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	10	0	0	0	0	10	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	23	0	0	0	0	23	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
TOTAL	11	2	321	38	5	0	0	377	0	0	7	0	0	0	0	7	0	0	2	0	0	0	0	2



Junction: 4 Approach: B3133 High Street North

			Ahe	ad to B313	3 High Stre	et (S)						Right to	Heathgate							U-T	urn			
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	44	11	0	0	0	55	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	53	14	0	1	0	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 - 07:45	0	0	89	15	0	0	1	105	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45 - 08:00	0	2	62	12	1	1	1	79	0	0	2	1	1	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	0	2	248	52	1	2	2	307	0	0	4	1	1	0	0	6	0	0	0	0	0	0	0	0
08:00 - 08:15	0	0	98	15	1	0	3	117	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	63	11	1	2	0	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 - 08:45	0	3	83	15	3	0	0	104	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
08:45 - 09:00	0	0	118	19	4	0	1	142	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total 09:00 - 09:15	1	3	362 74	<b>60</b> 9	<b>9</b>	2	0	440 89	0	0	10 1	0	0	0	0	11	0	0	0		0	0	0	0
09:00 - 09:15	0	0	82	14	2	1	0	99	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
09:30 - 09:45	0	0	58	13	6	1	0	78	0	0	2	2	0	0	0	4	0	0	1	0	0	0	0	1
09:45 - 10:00	1	0	87	14	3	1	0	106	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	2	1	301	50	14	4	0	372	0	0	10	3	0	0	0	13	0	0	1	0	0	0	0	1
10:00 - 10:15	0	2	69	20	2	3	0	96	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0
10:15 - 10:30	0	0	90	14	3	1	0	108	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
10:30 - 10:45	1	1	87	16	1	3	0	109	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10:45 - 11:00	1	0	82	16	7	1	0	107	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	2	3	328	66	13	8	0	420	0	1	7	2	0	0	0	10	0	0	0	0	0	0	0	0
11:00 - 11:15	2	0	99	17	0	1	0	119	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
11:15 - 11:30	2	1	83	10	2	1	0	99	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
11:30 - 11:45	1	0	77	17	1	2	0	98	0	1	4	0	0	0	0	5	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	98	11	0	1	0	110	0	0	2	2	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	5	1	357	55	3	5	0	426	0	1	14	2	0	0	0	17	0	0	0	0	0	0	0	0
12:00 - 12:15	0	1	97	14	1	2	0	115	0	0	2	2	0	0	0	4	0	0	0	0	0	0	0	0
12:15 - 12:30	0	0	97	17	0	0	0	114	0	0	3	3	0	0	0	6	0	0	0	0	0	0	0	0
12:30 - 12:45	0	1	98	17	1	4	0	121	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
12:45 - 13:00	1	2	80	17	0	2	0	100	0	0	6	0 5	0	0	0	6	0	0	0	0	0	0	0	0
13:00 - 13:15	1	1	372 94	65 14	0	0	0	450 110	0	0	<b>14</b>	1	0	0	0	19	0	0	0	0	0	0	0	0
13:15 - 13:30	1	0	98	15	0	3	0	117	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
13:30 - 13:45	0	1	94	15	0	1	0	111	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
13:45 - 14:00	1	0	81	8	0	1	0	91	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
Hourly Total	3	2	367	52	0	5	0	429	0	0	8	1	1	0	0	10	0	0	0	0	0	0	0	0
14:00 - 14:15	2	1	134	19	0	3	0	159	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
14:15 - 14:30	2	2	107	8	1	1	0	121	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
14:30 - 14:45	2	1	119	8	0	1	0	131	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
14:45 - 15:00	1	1	92	16	0	1	0	111	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	7	5	452	51	1	6	0	522	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0
15:00 - 15:15	1	0	117	9	0	1	0	128	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
15:15 - 15:30	2	0	105	9	0	0	0	116	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
15:30 - 15:45	0	0	69	12	0	1	1	83	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
15:45 - 16:00	0	1	100	17	2	1	3	124	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
Hourly Total	3	1	391	47	2	3	4	451	0	0	18	0	0	0	0	18	0	0	0	0	0	0	0	0
16:00 - 16:15 16:15 - 16:30	0	2	130 95	14 17	0	0	0	145 114	0	0	5 9	1	0	0	0	5 10	0	0	0	0	0	0	0	0
16:15 - 16:30 16:30 - 16:45	1	1	107	1/	0	0	1	114	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0
16:45 - 17:00	1	1	134	4	1	0	0	141	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0
Hourly Total	2	5	466	46	1	0	1	521	0	0	21	1	1	0	0	23	0	0	0	0	0	0	0	0
17:00 - 17:15	0	1	94	5	0	0	0	100	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
17:15 - 17:30	0	0	99	9	0	0	0	108	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0
17:30 - 17:45	1	0	105	7	0	0	0	113	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0
17:45 - 18:00	1	0	107	10	0	0	0	118	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0
Hourly Total	2	1	405	31	0	0	0	439	0	0	20	3	0	0	0	23	0	0	0	0	0	0	0	0
18:00 - 18:15	1	1	88	5	0	0	0	95	0	0	5	1	1	0	0	7	0	0	0	0	0	0	0	0
18:15 - 18:30	0	1	101	8	0	0	1	111	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	107	3	0	0	0	110	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	84	1	0	0	0	85	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	1	2	380	17	0	0	1	401	0	0	10	1	1	0	0	12	0	0	0	0	0	0	0	0
TOTAL	28	28	4429	592	46	43	12	5178	0	2	146	20	4	0	0	172	0	0	1	0	0	0	0	1



Junction: 4

Approach: B3133 High Street South

I				. 6					ı			1. 2010	2111 1 61	. (21)		
		/			eathgate					/			3 High Stree			
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	0	0	0	0	0	0	2	2	50	13	0	2	0	69
07:15 - 07:30	0	0	1	0	0	0	0	1	0	1	60	4	0	3	0	68
07:30 - 07:45	0	0	0	0	0	0	0	0	0	1	67	10	0	1	0	79
07:45 - 08:00	0	0	0	1	0	0	0	1	2	1	85	16	2	0	5	111
Hourly Total	0	0	1	1	0	0	0	2	4	5	262	43	2	6	5	327
08:00 - 08:15	0	0	0	2	0	0	0	2	0	0	85	12	0	1	0	98
08:15 - 08:30	0	0	1	0	0	0	0	1	0	1	72	12	1	1	0	87
08:30 - 08:45	0	0	1	1	0	0	0	2	0	1	76	9	2	0	0	88
08:45 - 09:00	0	0	2	0	0	0	0	2	1	0	62	12	1	1	0	77
Hourly Total	0	0	4	3	0	0	0	7	1	2	295	45	4	3	0	350
09:00 - 09:15	0	0	3	0	0	0	0	3	0	0	110	16	1	0	0	127
09:15 - 09:30	0	0	1	0	0	0	0	1	0	0	62	13	0	3	0	78
09:30 - 09:45	0	0	1	0	0	0	0	1	0	1	61	10	1	1	0	74
09:45 - 10:00	0	0	1	1	0	0	0	2	0	0	101	6	3	0	0	110
Hourly Total	0	0	6	1	0	0	0	7	0	1	334	45	5	4	0	389
10:00 - 10:15	0	0	3	0	0	0	0	3	0	1	77	14	2	1	0	95
10:15 - 10:30	0	0	1	0	0	0	0	1	1	0	78	7	4	2	0	92
10:30 - 10:45	0	0	4	0	0	0	0	4	0	0	63	11	4	2	0	80
10:45 - 11:00	0	0	3	1	0	0	0	4	0	0	87	18	2	2	0	109
Hourly Total	0	0	11	1	0	0	0	12	1	1	305	50	12	7	0	376
11:00 - 11:15	0	0	1	0	0	0	0	1	1	0	65	9	1	0	0	76
11:15 - 11:30	0	0	1	0	0	0	0	1	1	0	75	16	0	0	0	92
11:30 - 11:45	0	0	4	0	0	0	0	4	1	0	54	8	2	0	0	65
11:45 - 12:00	0	0	1	0	1	0	0	2	0	0	81	14	0	0	0	95
Hourly Total	0	0	7	0	1	0	0	8	3	0	275	47	3	0	0	328
12:00 - 12:15	0	0	1	0	0	0	0	1	0	1	71	18	1	2	0	93
12:15 - 12:30	0	0	3	0	0	0	0	3	0	1	79	7	0	0	0	87
12:30 - 12:45	0	0	1	1	0	0	0	2	1	2	76	11	0	1	0	91
12:45 - 13:00	0	0	2	1	0	0	0	3	9	1	67	9	1	2	0	89
Hourly Total	0	0	7	2	0	0	0	9	10	5	293	45	2	5	0	360
13:00 - 13:15	0	0	4	2	0	0	0	6	0	0	83	7	0	2	0	92
13:15 - 13:30	1	0	3	0	0	0	0	4	1	0	95	11	1	0	0	108
13:30 - 13:45	0	0	1	1	0	0	0	2	1	0	85	10	3	1	0	100
13:45 - 14:00	0	0	1	0	0	0	0	1	0	0	89	16	0	3	0	108
Hourly Total	1	0	9	3	0	0	0	13	2	0	352	44	4	6	0	408
14:00 - 14:15	0	0	1	0	0	0	0	1	1	1	77	9	1	2	0	91
14:15 - 14:30	0	0	0	1	0	0	0	1	0	0	65	8	1	1	0	75
14:30 - 14:45	0	0	2	0	0	0	0	2	1	1	80	5	0	0	0	87
14:45 - 15:00	0	0	5	0	0	0	0	5	1	0	85	14	0	3	0	103
			8										2			
Hourly Total	0	0	1	0	0	<b>0</b>	0	9	0	<b>2</b>	<b>307</b> 74	36	3	<b>6</b>	0	356 94
15:00 - 15:15				0	0							15	_			
15:15 - 15:30	0	0	2			0	0	2	1	2	68	9	2	0	0	80
15:30 - 15:45	0	0	6	0	0	0	0	7	0	0	108	8		0	4	120
15:45 - 16:00	0	0	0		0	0	0		1		92	9	2	0		108
Hourly Total	0	0	9	1	0	0	0	10	2	3	342	41	7	1	6	402
16:00 - 16:15	0	0	8	1	0	0	0	9	0	1	91	11	0	0	0	103
16:15 - 16:30	0	0	3	1	0	0	0	4	1	1	100	10	1	0	0	113
16:30 - 16:45	0	0	3	0	1	0	0	4	0	0	97	5	0	1	0	103
16:45 - 17:00	0	0	2	0	0	0	0	2	0	1	79	9	0	0	0	89
Hourly Total	0	0	16	2	1	0	0	19	1	3	367	35	1	1	0	408
17:00 - 17:15	0	0	1	1	0	0	0	2	0	1	107	3	0	0	0	111
17:15 - 17:30	0	0	4	0	0	0	0	4	0	2	100	9	0	0	0	111
17:30 - 17:45	0	0	1	0	0	0	0	1	0	1	86	2	0	0	0	89
17:45 - 18:00	0	0	2	0	0	0	0	2	3	0	72	5	0	0	0	80
Hourly Total	0	0	8	1	0	0	0	9	3	4	365	19	0	0	0	391
18:00 - 18:15	0	0	7	1	0	0	0	8	1	0	86	5	1	0	0	93
18:15 - 18:30	0	0	7	0	0	0	0	7	0	0	84	2	0	0	0	86
18:30 - 18:45	0	0	12	0	0	0	0	12	0	1	107	4	0	0	0	112
18:45 - 19:00	0	0	2	0	0	0	0	2	1	0	64	5	0	0	0	70
Hourly Total	0	0	28	1	0	0	0	29	2	1	341	16	1	0	0	361
TOTAL	1	0	114	17	2	0	0	134	32	27	3838	466	43	39	11	4456

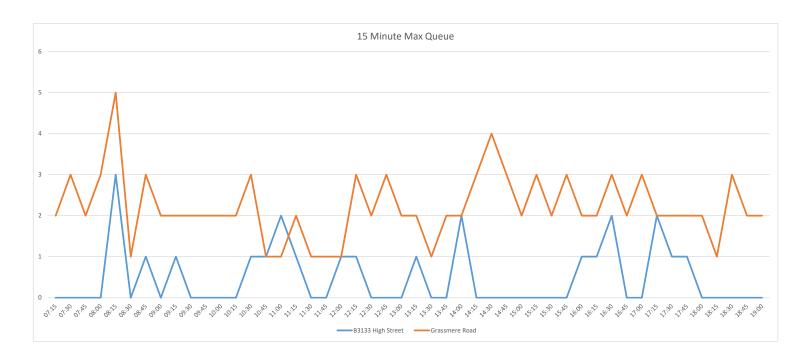


Junction: 4
Approach: Heathgate

Г			1 - 4	D2422	III-b Canada	/B1\					Di-	D2422	III'-b Carre	+ (c)		
TIME	CVCLE	MICVOLE			High Street	· <i>'</i>	DUC	TOTAL	CVCLE	MICVOLE			High Stree		DLIC	TOTAL
71ME 07:00 - 07:15	CYCLE 0	M/CYCLE 0	CAR 3	LGV 0	OGV1	OGV2 0	BUS 0	TOTAL 3	CYCLE 0	M/CYCLE 0	CAR 0	LGV 0	OGV1	OGV2	BUS 0	0
07:15 - 07:30	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
07:30 - 07:45	0	0	2	0	0	0	0	2	0	0	1	1	0	0	0	2
07:45 - 08:00	0	0	1	1	0	0	0	2	0	0	6	0	0	0	0	6
Hourly Total	0	0	7	1	0	0	0	8	0	0	9	1	0	0	0	10
08:00 - 08:15	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	10
	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
08:15 - 08:30	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
08:30 - 08:45													-			
08:45 - 09:00	0	0	3	0	0	0	0	1	0	0	8	2 2	1	0	0 <b>0</b>	11 19
Hourly Total	0	0		0	0	0	0	3	1	0	15		1	0		
09:00 - 09:15	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
09:15 - 09:30	0	0	3	0	0	0	0	3	0	0	3	1	0	0	0	4
09:30 - 09:45	0	0	2	1	0	0	0	3	0	0	2	1	0	0	0	3
09:45 - 10:00	0	0	3	0	0	0	0	3	0	0	2	1	0	0	0	3
Hourly Total	0	0	8	1	0	0	0	9	0	0	9	4	0	0	0	13
10:00 - 10:15	0	0	3	0	0	0	0	3	0	0	2	1	0	0	0	3
10:15 - 10:30	0	1	2	0	0	0	0	3	0	0	3	1	0	0	0	4
10:30 - 10:45	0	0	3	0	0	0	0	3	0	0	5	2	0	0	0	7
10:45 - 11:00	0	0	2	2	0	0	0	4	0	0	2	0	0	0	0	2
Hourly Total	0	1	10	2	0	0	0	13	0	0	12	4	0	0	0	16
11:00 - 11:15	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0
11:15 - 11:30	0	0	2	2	0	0	0	4	0	0	1	0	0	0	0	1
11:30 - 11:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
11:45 - 12:00	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
Hourly Total	0	0	6	3	0	0	0	9	0	0	5	0	0	0	0	5
12:00 - 12:15	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
12:15 - 12:30	0	0	3	1	0	0	0	4	0	0	1	0	0	0	1	2
12:30 - 12:45	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	6
12:45 - 13:00	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
Hourly Total	0	0	7	1	0	0	0	8	0	0	9	2	0	0	1	12
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	4	1	1	0	0	6
13:15 - 13:30	0	0	2	0	0	0	0	2	1	0	3	0	0	0	0	4
13:30 - 13:45	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
13:45 - 14:00	0	0	1	0	0	0	0	1	0	0	1	2	0	0	0	3
Hourly Total	0	0	4	0	0	0	0	4	1	0	9	3	1	0	0	14
14:00 - 14:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
14:15 - 14:30	0	0	1	0	0	0	0	1	0	0	2	1	0	0	0	3
14:30 - 14:45	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
14:45 - 15:00	0	0	2	1	0	0	0	3	0	0	1	1	0	0	0	2
Hourly Total	0	0	3	1	0	0	0	4	0	0	8	2	0	0	0	10
15:00 - 15:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
15:15 - 15:30	0	0	1	0	0	0	0	1	0	0	1	2	0	0	0	3
15:30 - 15:45	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1
15:45 - 16:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	0	0	3	0	0	0	0	3	0	0	2	3	0	0	0	5
16:00 - 16:15	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
16:15 - 16:30	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
16:30 - 16:45	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3
16:45 - 17:00	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
Hourly Total	0	0	4	0	0	0	0	4	0	0	13	0	0	0	0	13
17:00 - 17:15	0	0	5	1	0	0	0	6	0	0	4	0	0	0	0	4
17:15 - 17:30	0	0	1	0	0	1	0	2	0	0	4	0	0	0	0	4
17:30 - 17:45	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2
17:45 - 18:00	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
Hourly Total	0	0	10	1	0	1	0	12	0	0	13	0	0	0	0	13
18:00 - 18:15	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
18:15 - 18:30	0	0	1	0	0	0	0	1	0	0	12	0	0	0	0	12
18:30 - 18:45	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7
18:45 - 19:00	0	0	1	0	0	0	0	1	0	0	11	0	0	0	0	11
Hourly Total	0	0	4	0	0	0	0	4	0	0	34	0	0	0	0	34
TOTAL	0	1	69	10	0	1	0	81	2	0	138	21	2	0	1	164

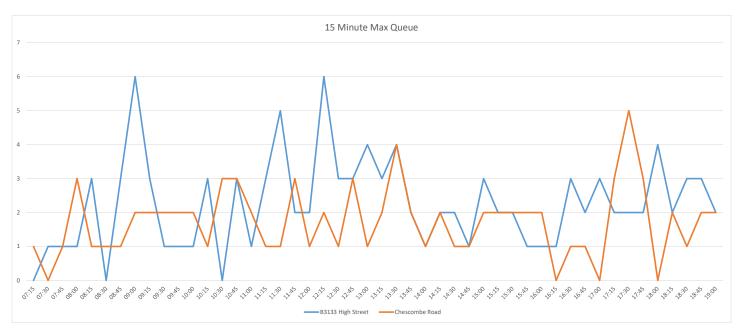
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Time	B3133 High Street	Grassmere Road
07:15	0	2
07:30	0	3
07:45	0	2
08:00	0	3
08:15	3	5
08:30	0	1
08:45	1	3
09:00	0	2
09:15	1	2
09:30	0	2
09:45	0	2
10:00	0	2
10:15	0	2
10:30	1	3
10:45	1	1
11:00	2	1
11:15	1	2
11:30	0	1
11:45	0	1
12:00	1	1
12:15	1	3
12:30	0	2
12:45	0	3
13:00	0	2
13:15	1	2
13:30	0	1
13:45	0	2
14:00	2	2
14:15	0	3
14:30	0	4
14:45	0	3
15:00	0	2
15:15	0	3
15:30	0	2
15:45	0	3
16:00	1	2
16:15	1 2	3
16:30		2
16:45	0	3
17:00	0	2
17:15 17:30	2	2
17:30	1	
17:45	0	2 2
18:15	0	1
18:30	0	3
18:45	0	2
19:00	0	2
19.00	U	



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Traffic 18721	stint Ce	sulturery

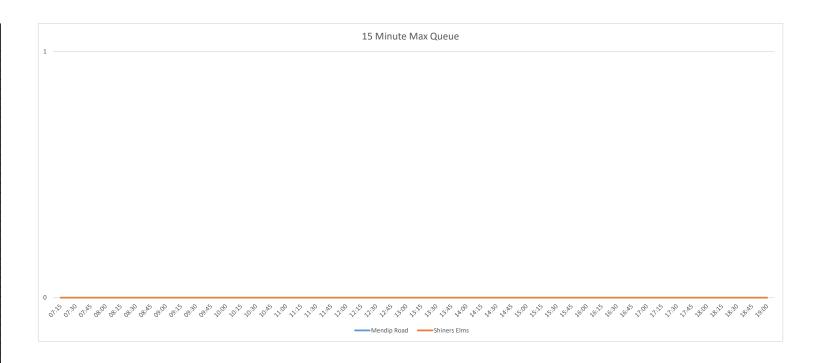
Time	B3133 High Street	Chescombe Road
07:15	0	1
07:30	1	0
07:45	1	1
08:00	1	3
08:15	3	1
08:30	0	1
08:45	3	1
09:00	6	2
09:15	3	2
09:30	1	2
09:45	1	2
10:00	1	2
10:15	3	1
10:30	0	3
10:45	3	3
11:00	1	2
11:15	3	1
11:30	5	1
11:45	2	3
12:00	2	1
12:15	6	2
12:30	3	1
12:45	3	3
13:00	4	1
13:15	3	2
13:30	4	4
13:45	2	2
14:00	1	1
14:15	2	2
14:30	2	1
14:45	1	1
15:00	3	2
15:15	2	2
15:30	2	2
15:45	1	2
16:00	1	2
16:15	1	0
16:30	3	1
16:45	2	1
17:00	3	0
17:15	2	3
17:30	2	5
17:45	2	3
18:00	4	0
18:15	2	2
18:30	3	1
18:45	3	2
19:00	2	2





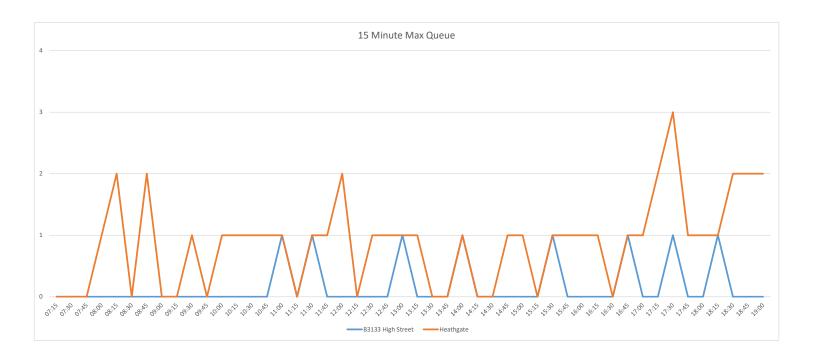
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Time	Mendip Road	Shiners Elms
07:15	0	0
07:30	0	0
07:45	0	0
08:00	0	0
08:15	0	0
08:30	0	0
08:45	0	0
09:00	0	0
09:15	0	0
09:30	0	0
09:45	0	0
10:00	0	0
10:15	0	0
10:30	0	0
10:45	0	0
11:00	0	0
11:15	0	0
11:30	0	0
11:45	0	0
12:00	0	0
12:15	0	0
12:30	0	0
12:45	0	0
13:00	0	0
13:15	0	0
13:30	0	0
13:45	0	0
14:00	0	0
14:15	0	0
14:30	0	0
14:45	0	0
15:00	0	0
15:15	0	0
15:30	0	0
15:45	0	0
16:00	0	0
16:15	0	0
16:30	0	0
16:45	0	0
17:00	0	0
17:15	0	0
17:30	0	0
17:45	0	0
18:00	0	0
18:15	0	0
18:30	0	0
18:30 18:45 19:00	0 0	0



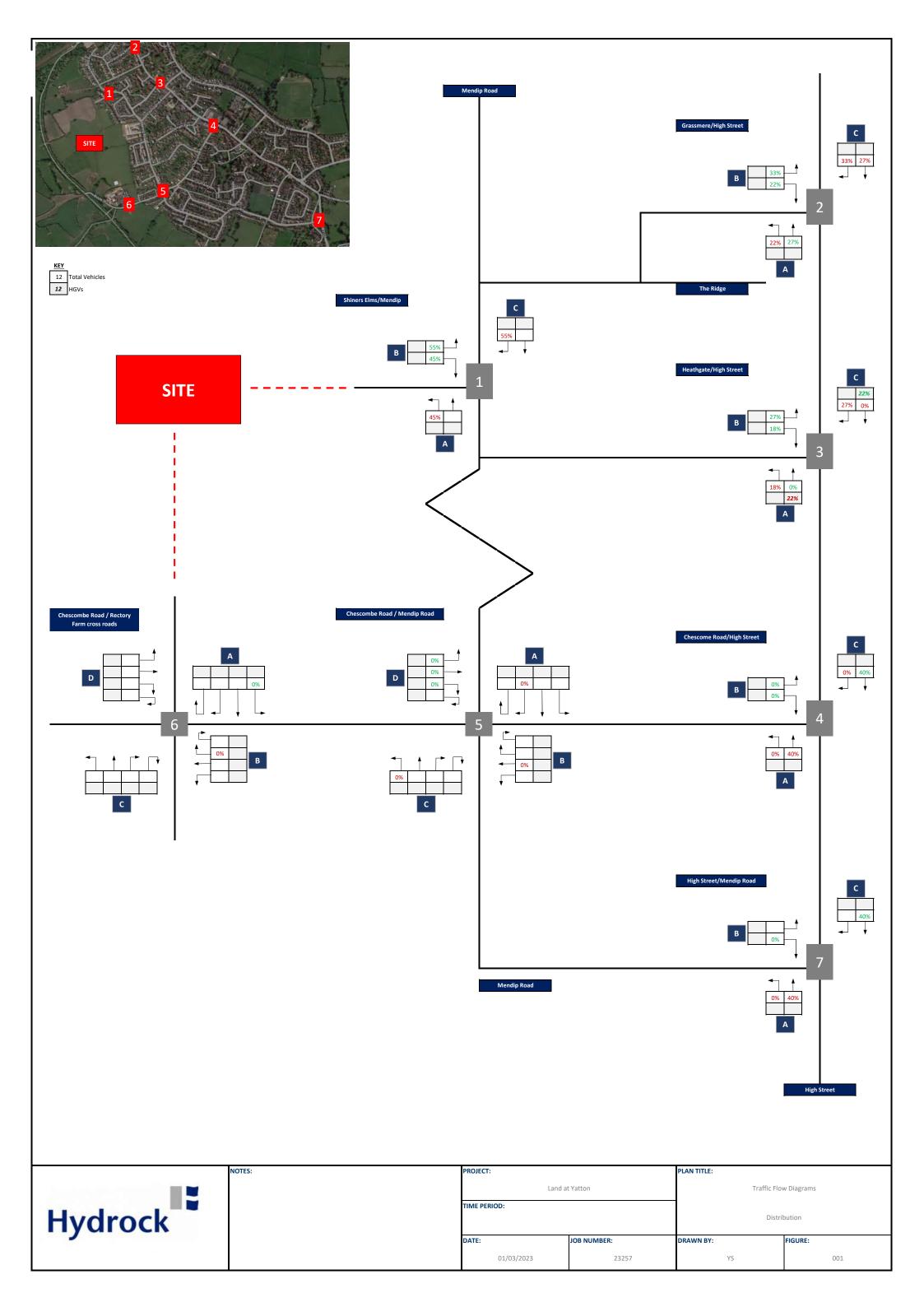
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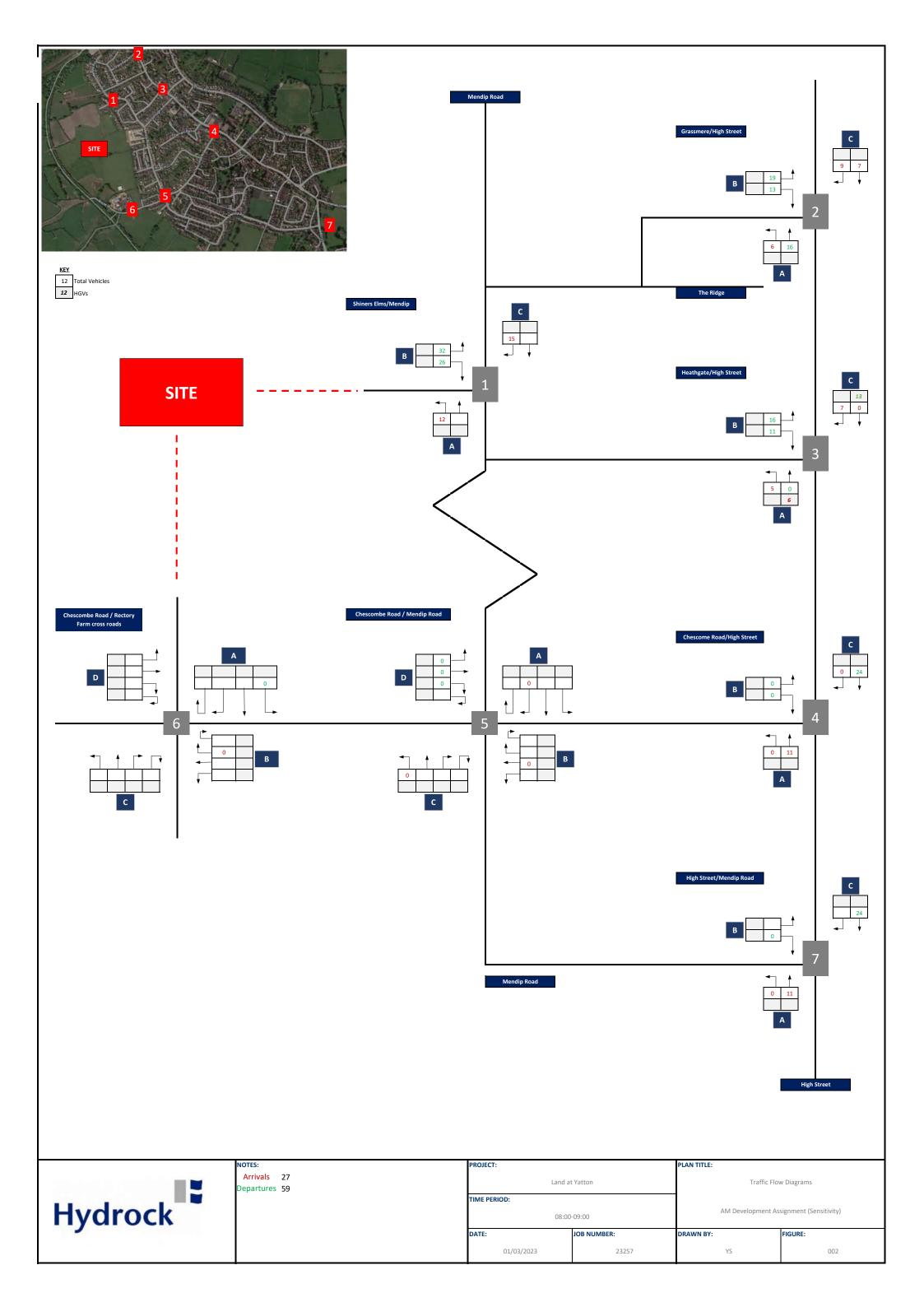
Time	B3133 High Street	Heathgate
07:15	0	0
07:30	0	0
07:45	0	0
08:00	0	1
08:15	0	2
08:30	0	0
08:45	0	2
09:00	0	0
09:15	0	0
09:30	0	1
09:45	0	0
10:00	0	1
10:15	0	1
10:30	0	1
10:45	0	1
11:00	1	1
11:15	0	0
11:30	1	1
11:45	0	1
12:00	0	2
12:15	0	0
12:30	0	1
12:45	0	1
13:00	1	1
13:15	0	1
13:30	0	0
13:45	0	0
14:00	1	1
14:15	0	0
14:30	0	0
14:45	0	1
15:00	0	1
15:15	0	0
15:30	1	1
15:45	0	1
16:00	0	1
16:15	0	1
16:30	0	0
16:45	1	1
17:00	0	1
17:15	0	2
17:30	1	3
17:45	0	1
18:00	0	1
18:15	1	1
18:30	0	2
18:45	0	2
19:00	0	2

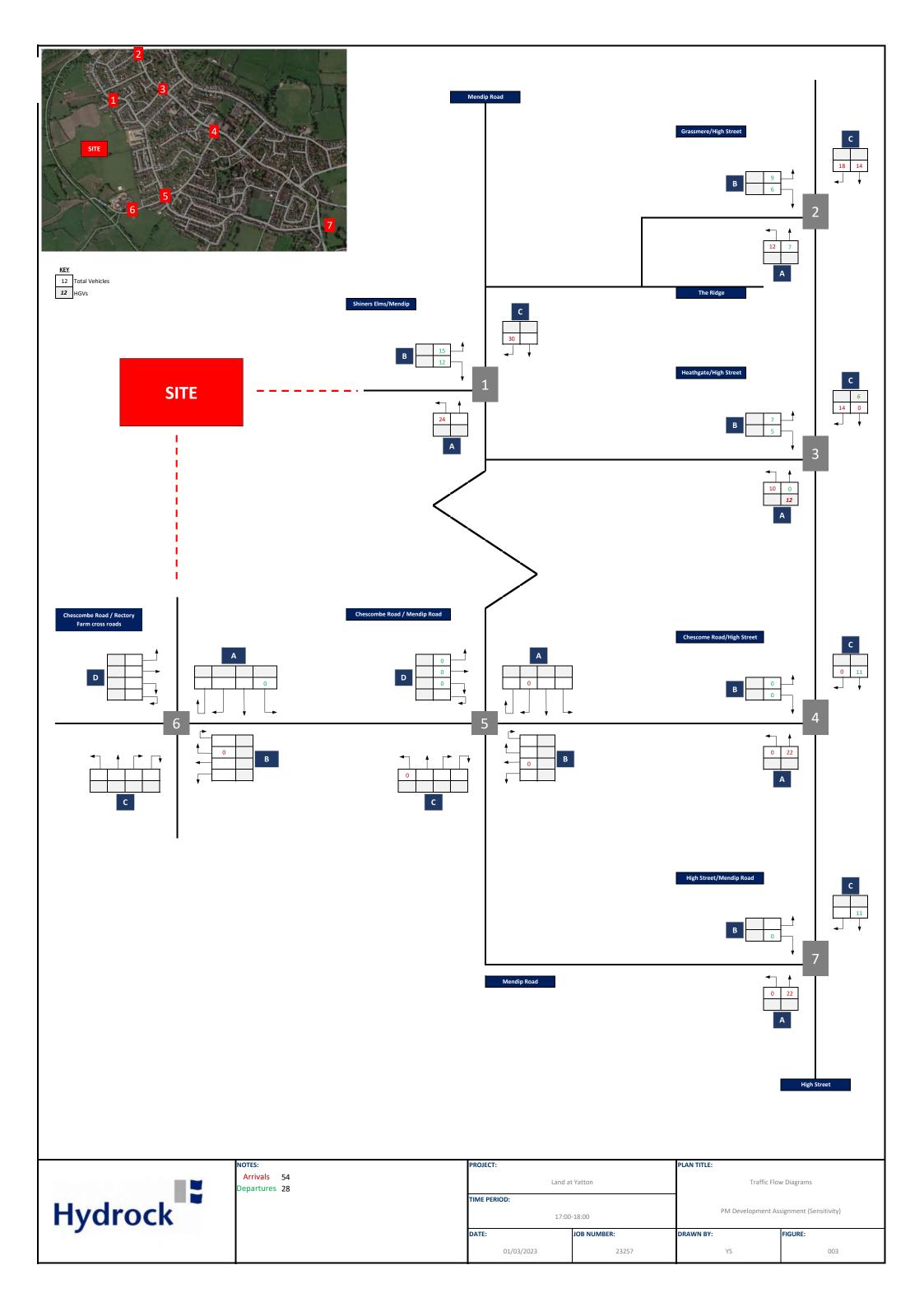


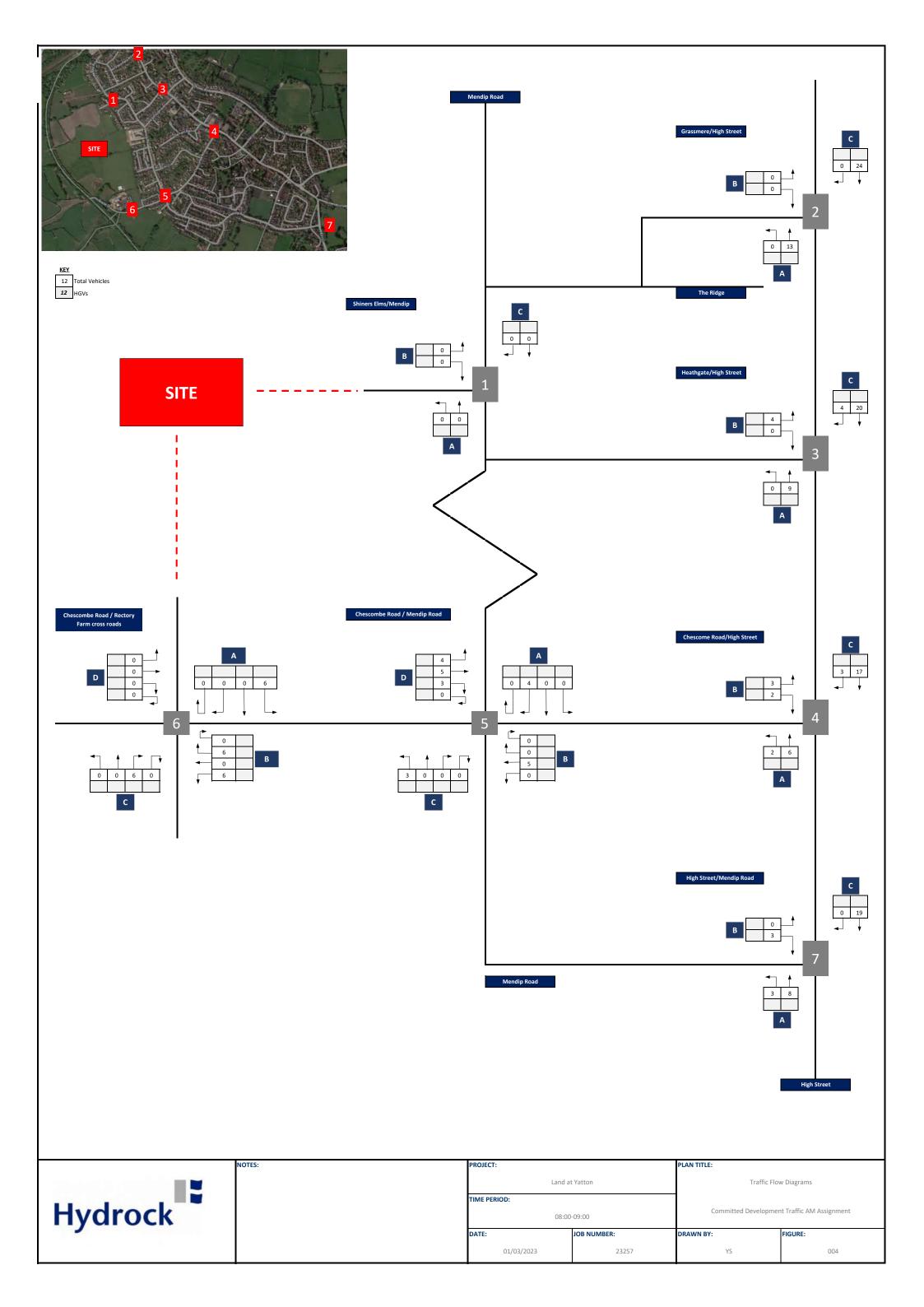


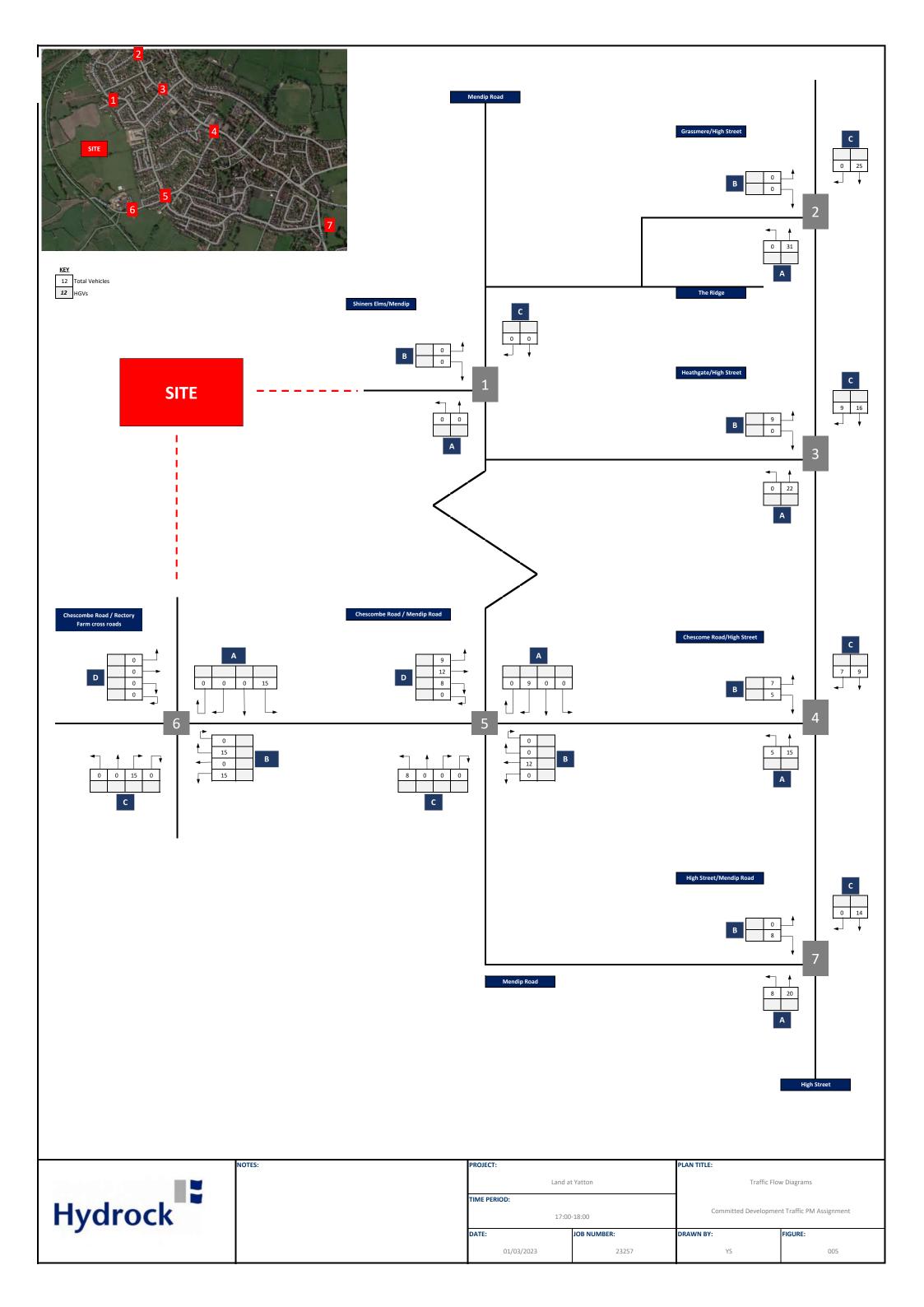
# Appendix D Traffic Flow Diagrams

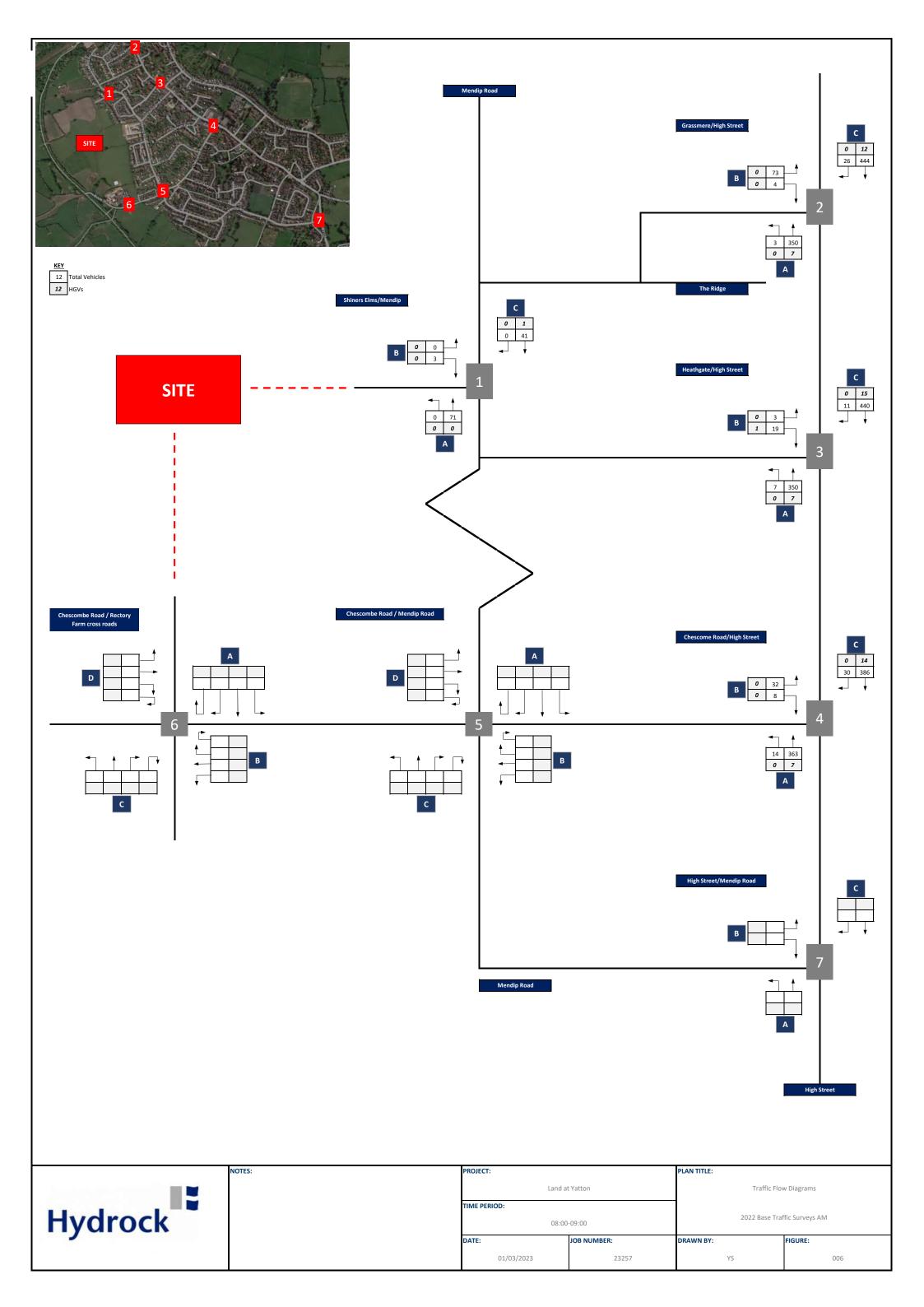


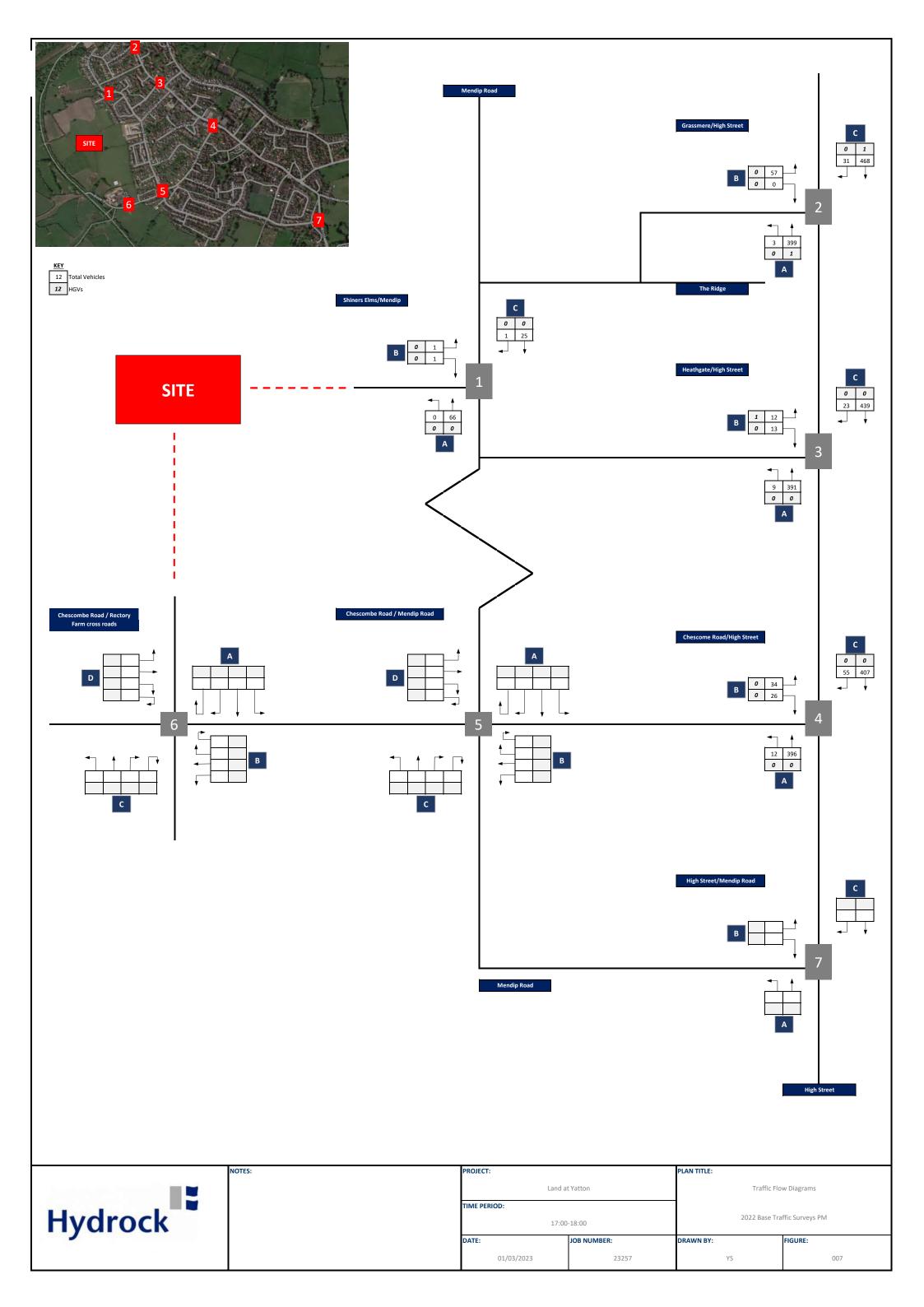


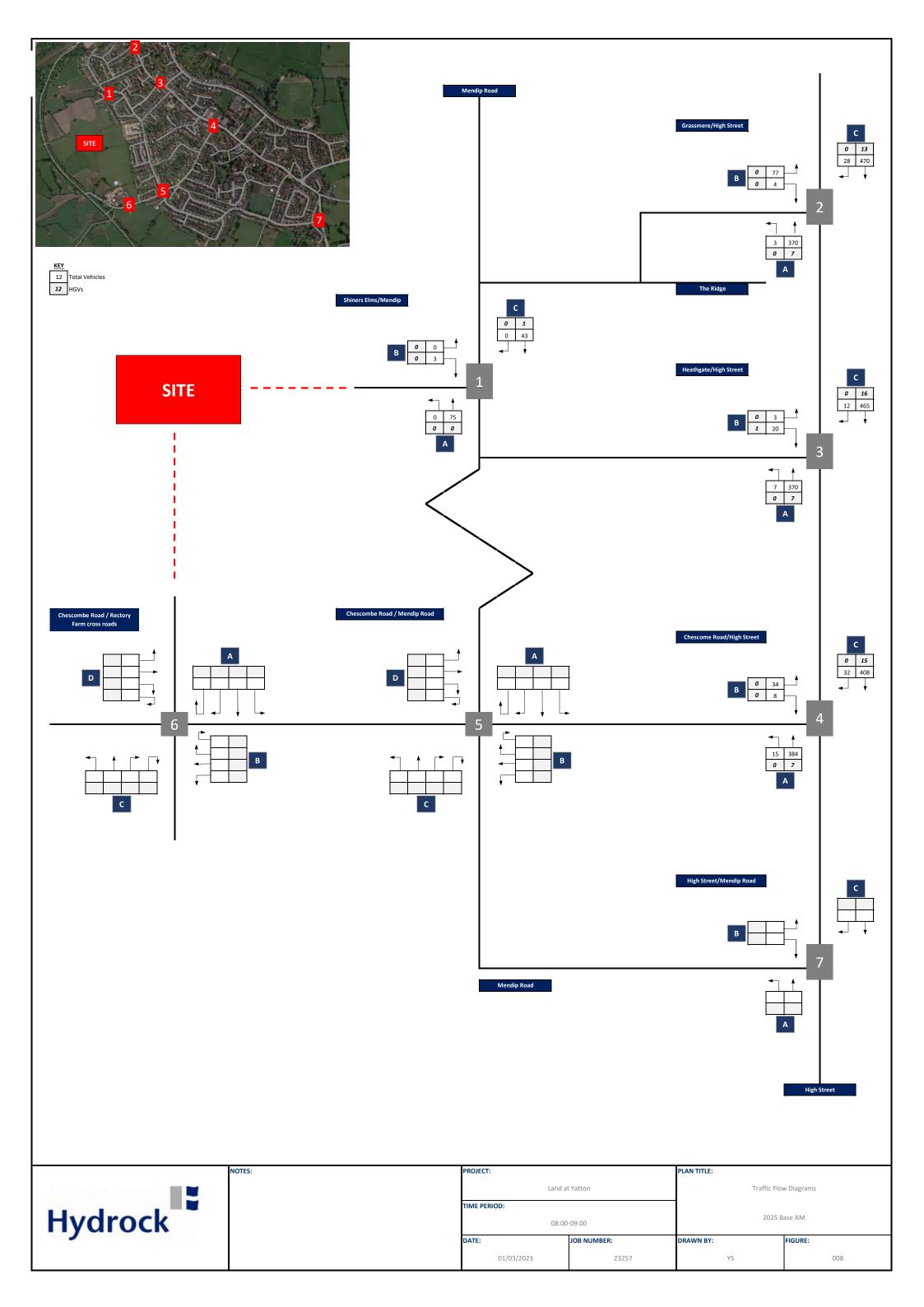


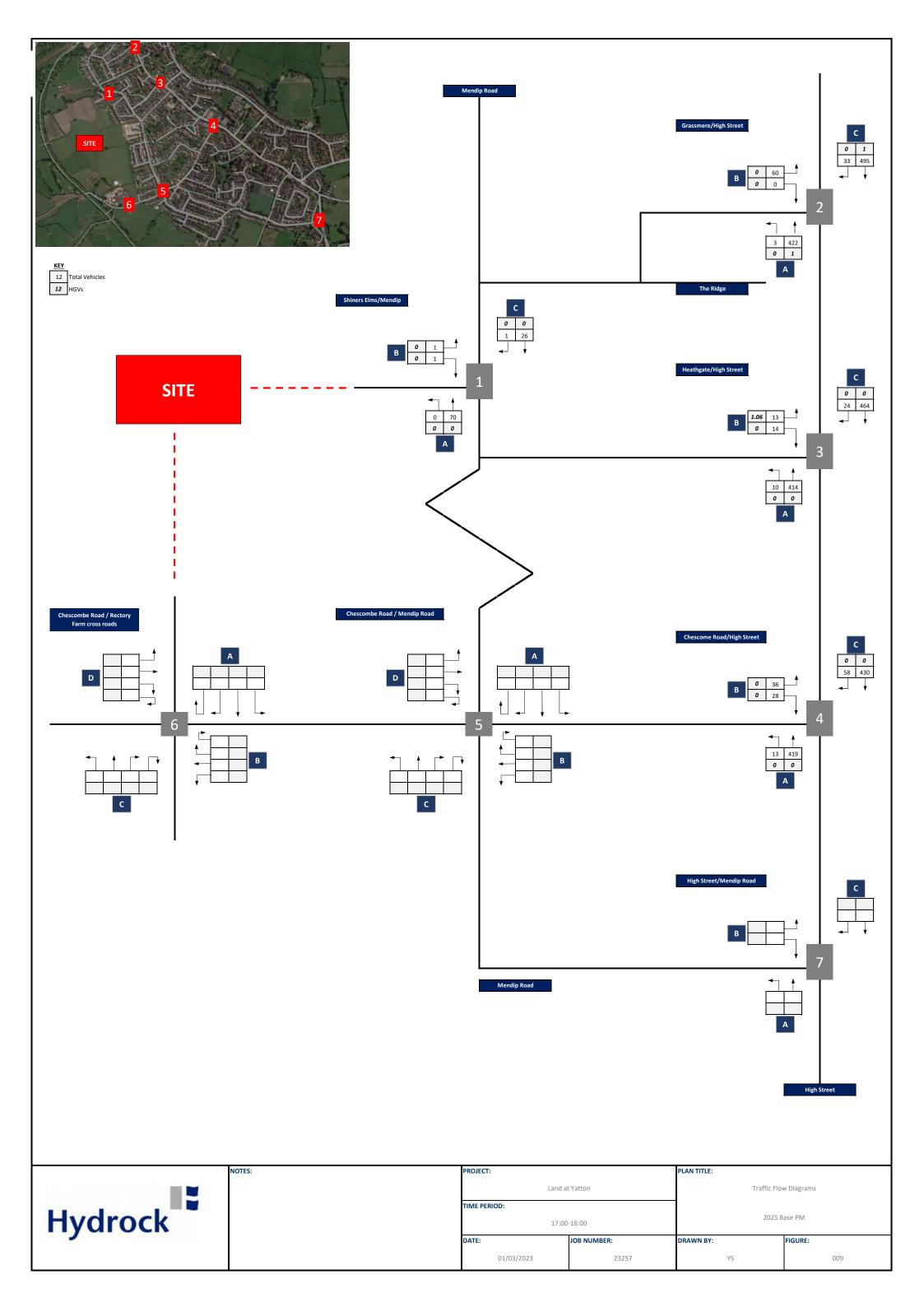


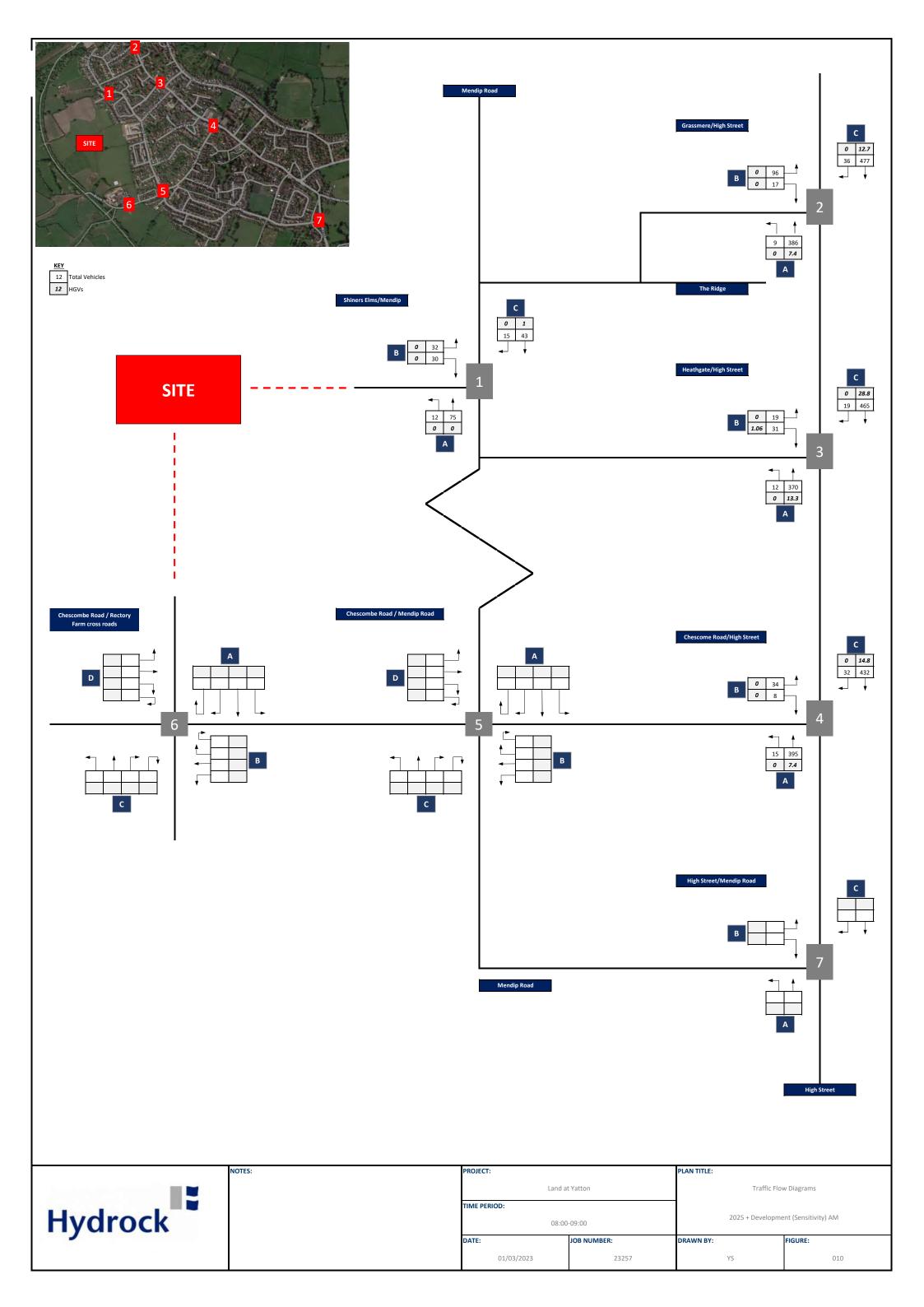


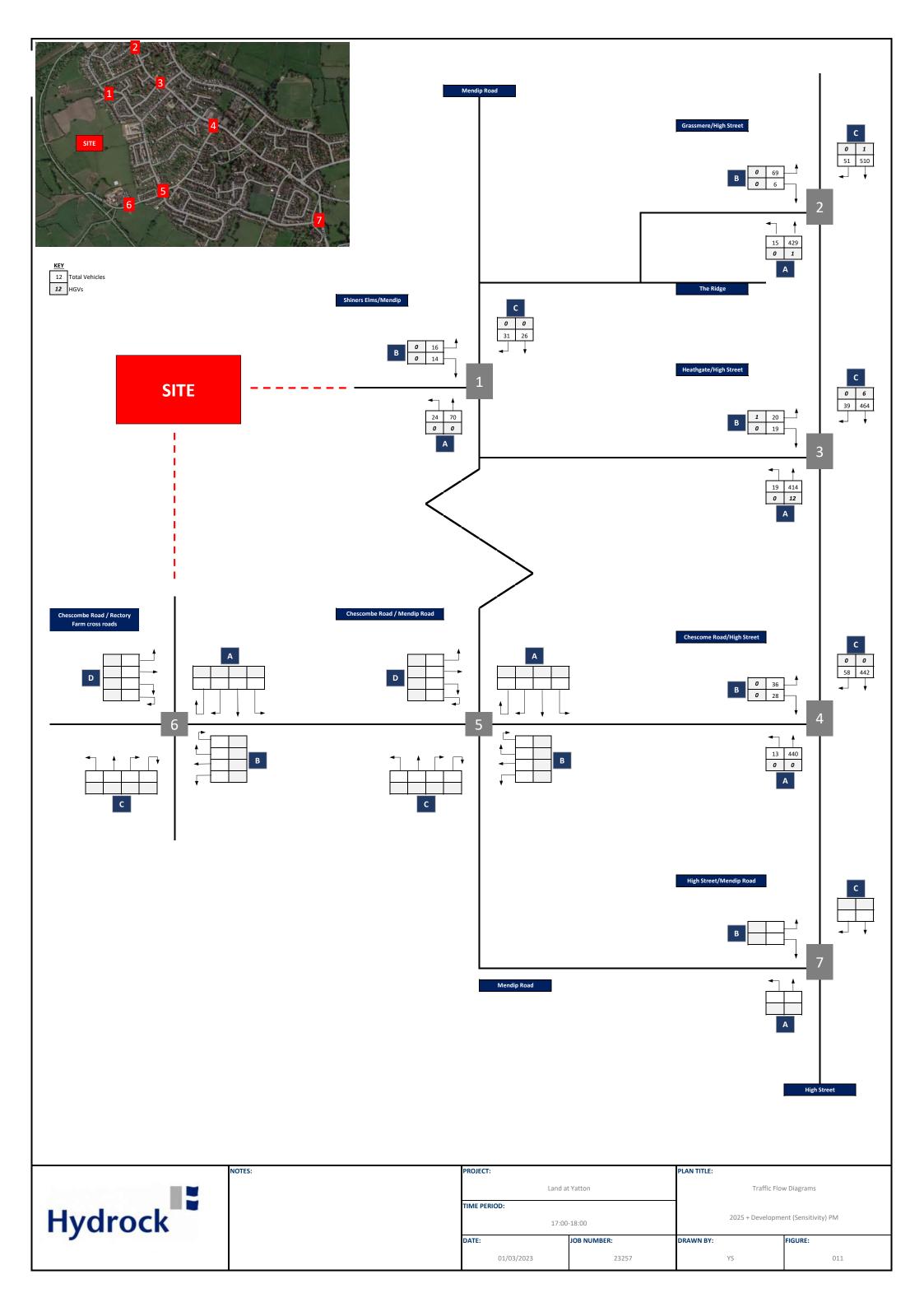


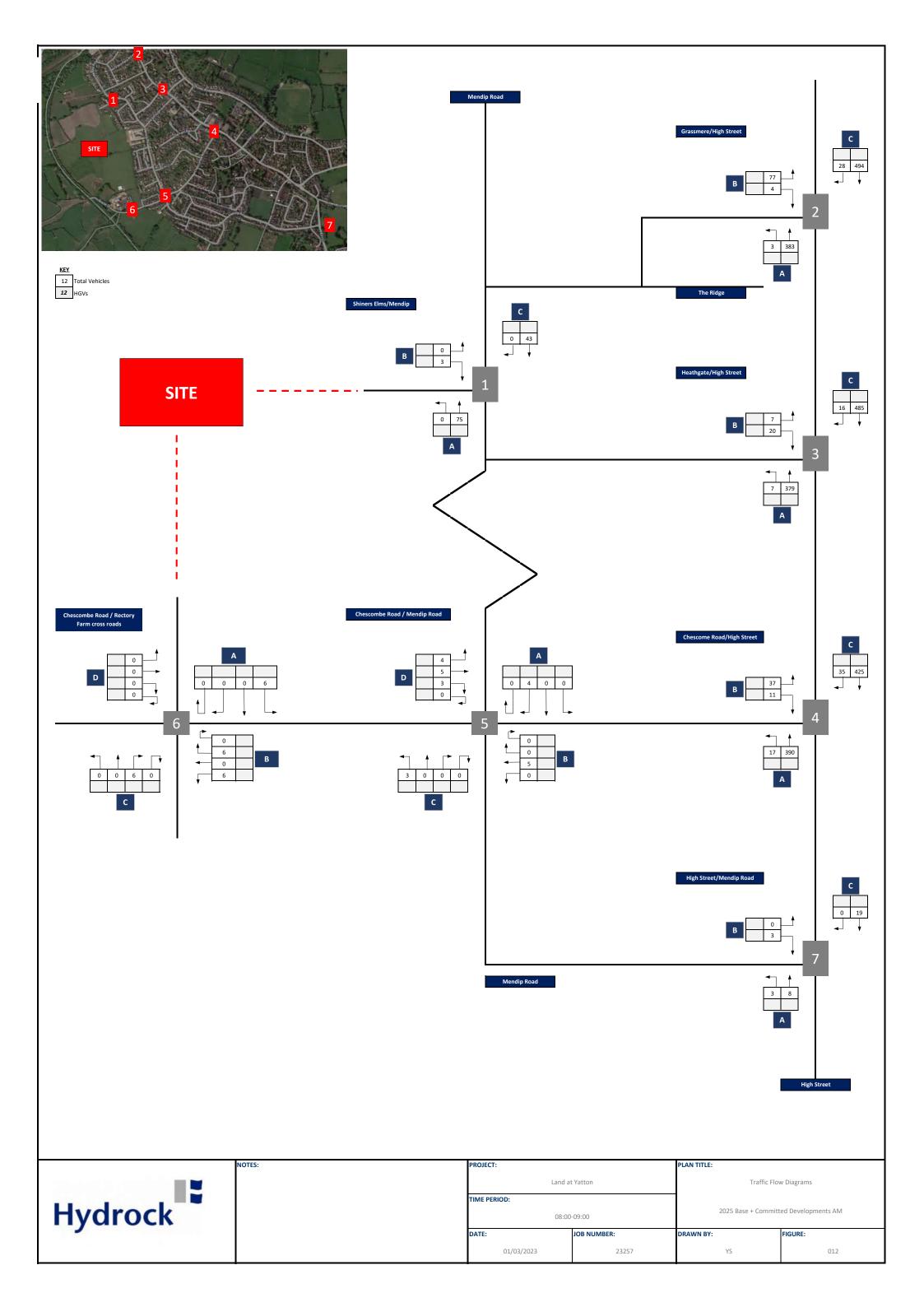


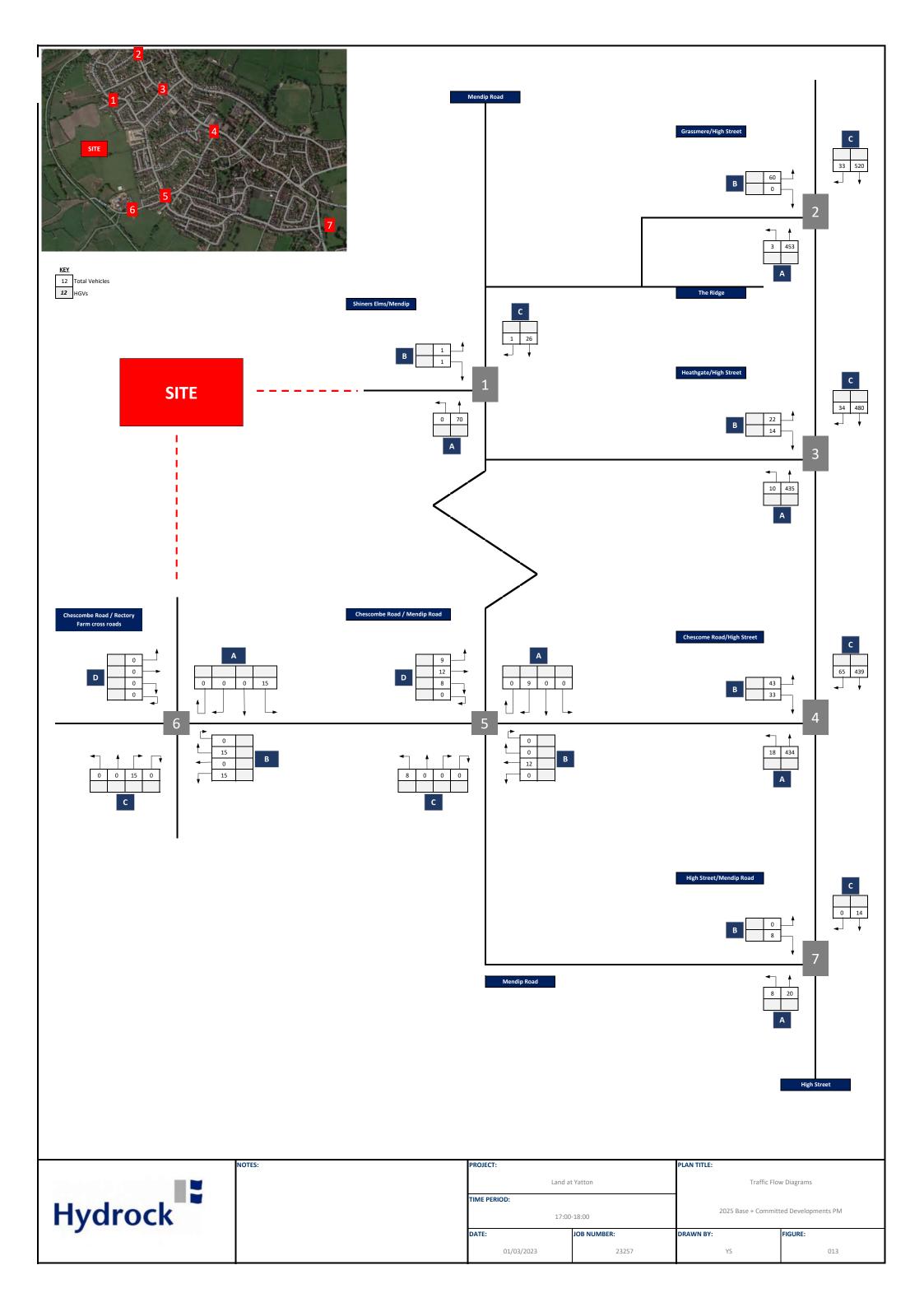


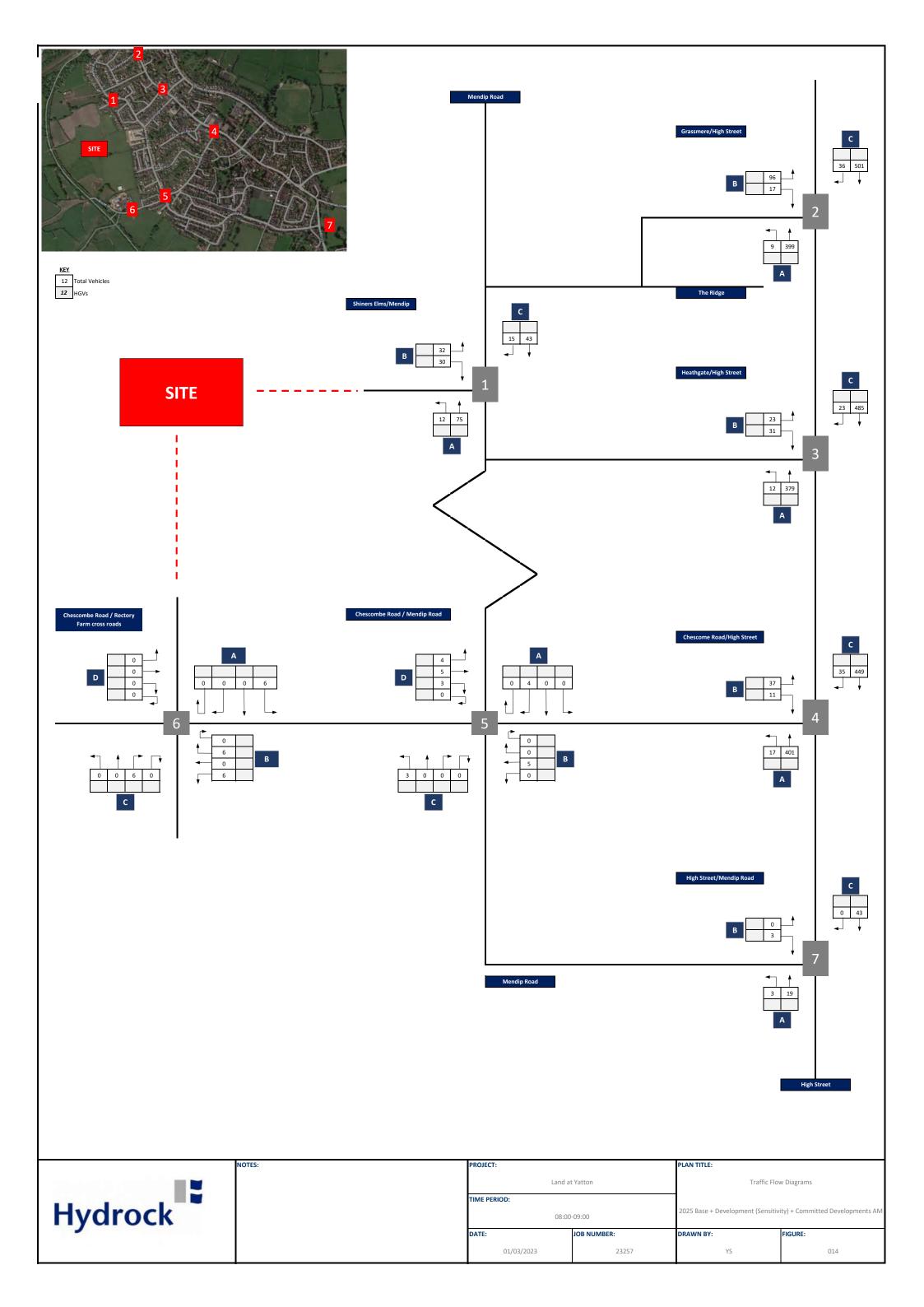


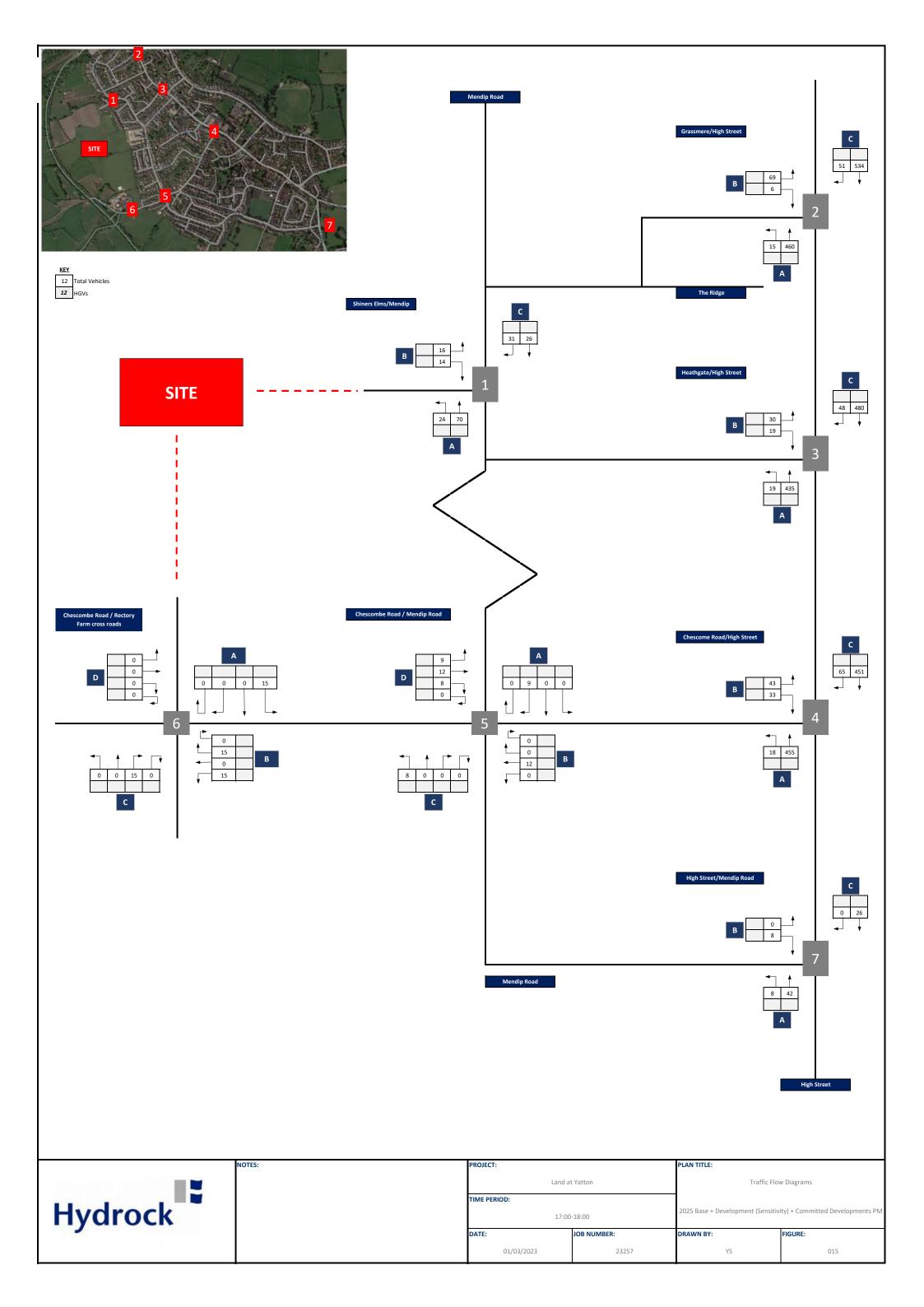


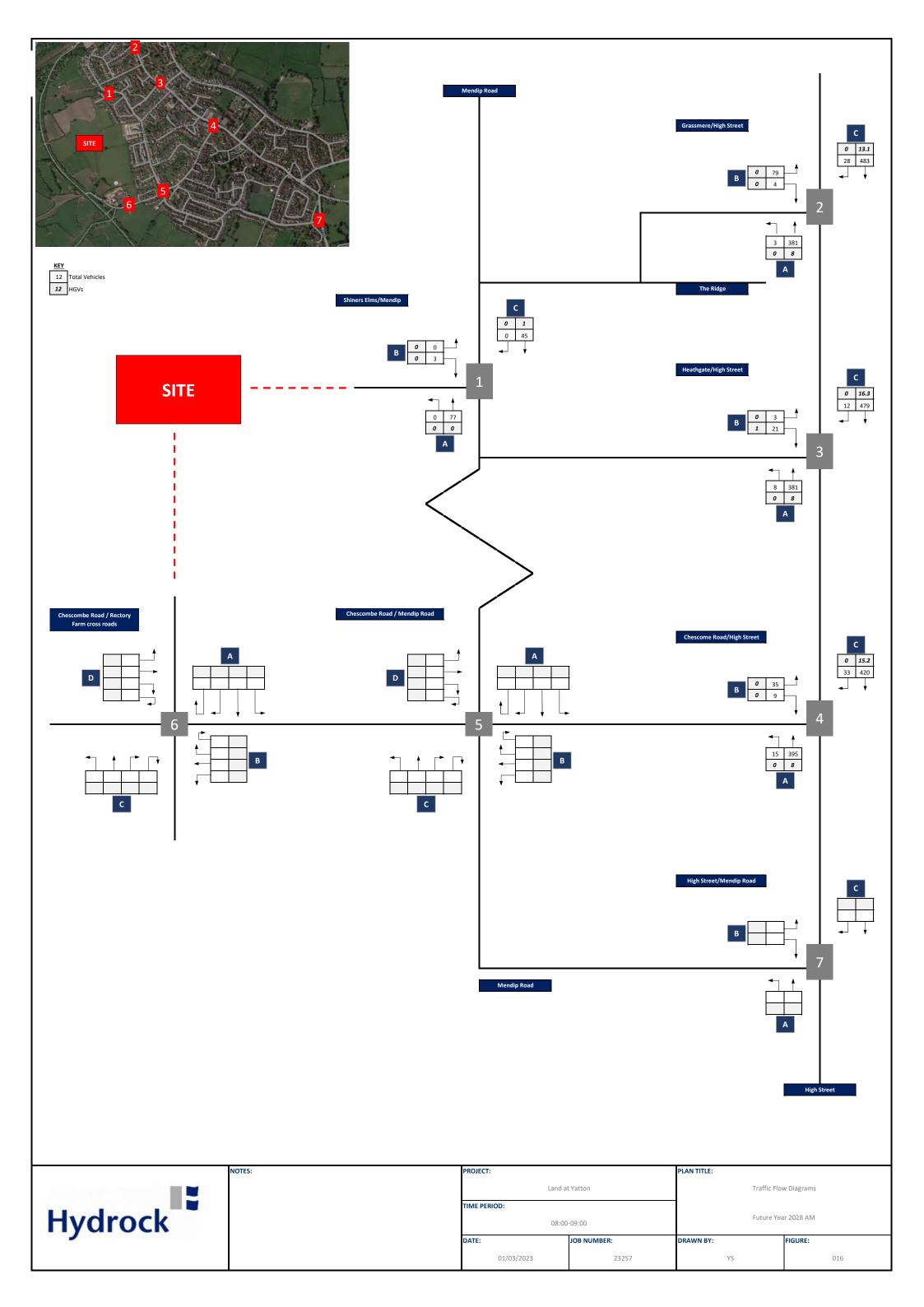


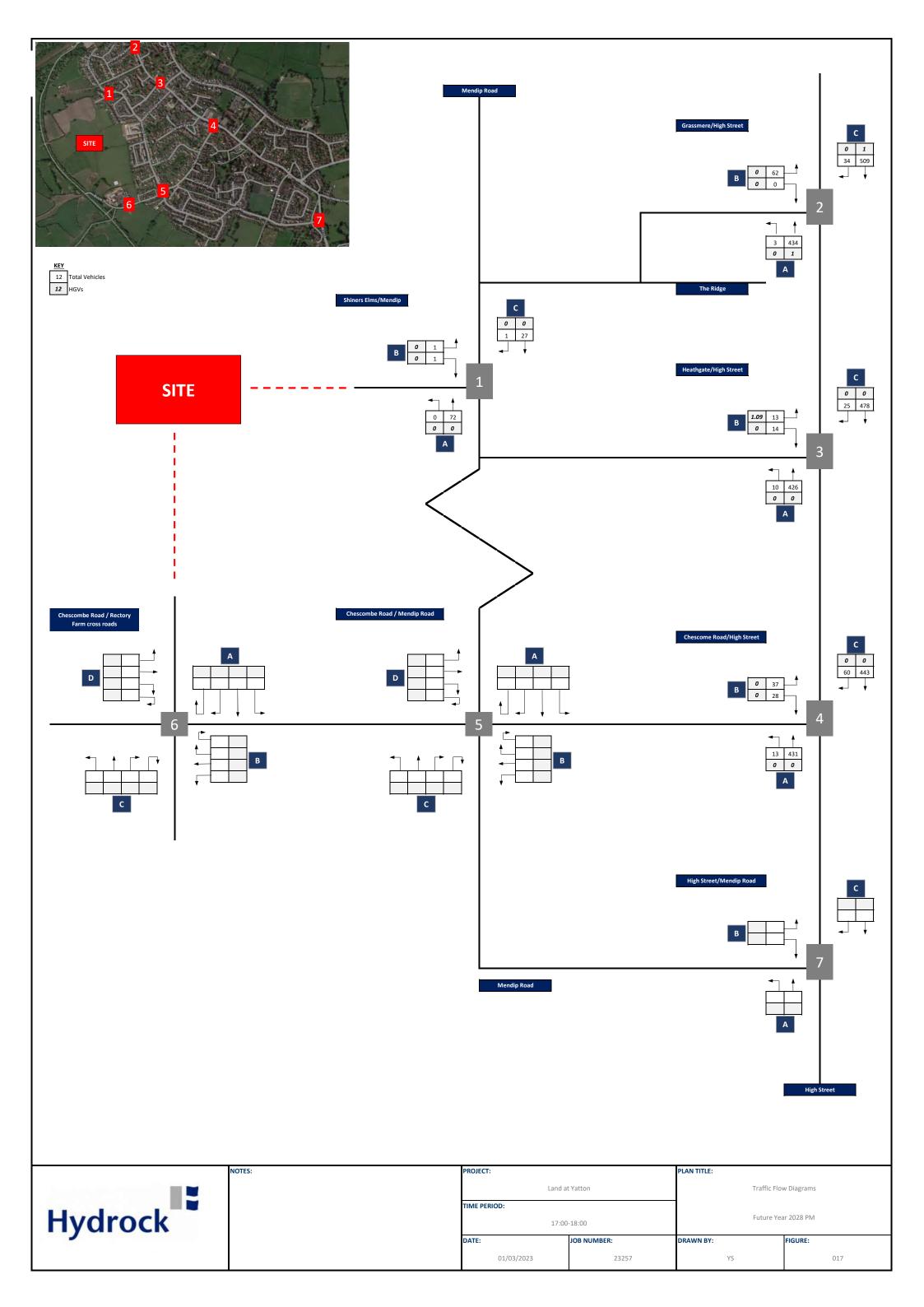


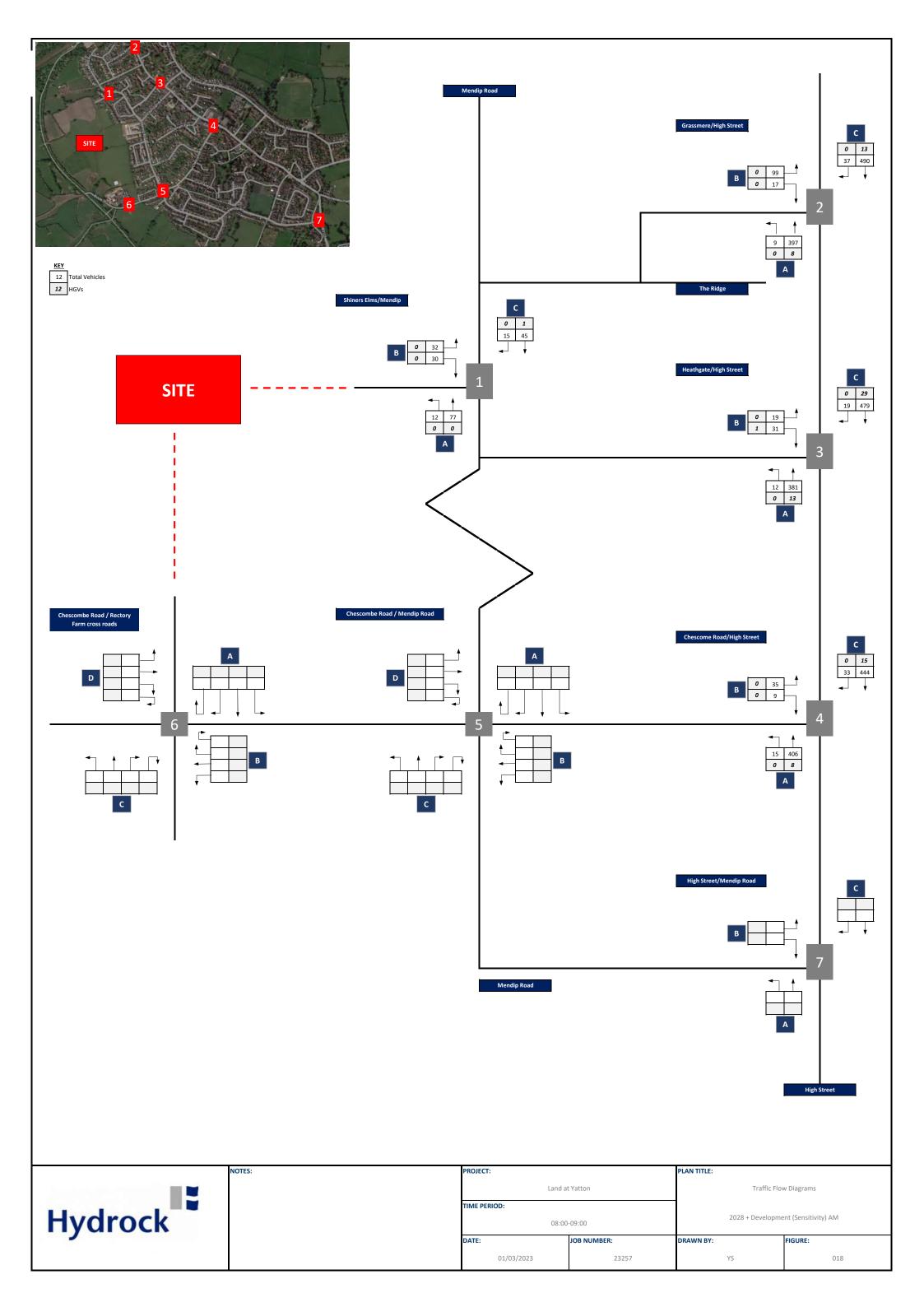


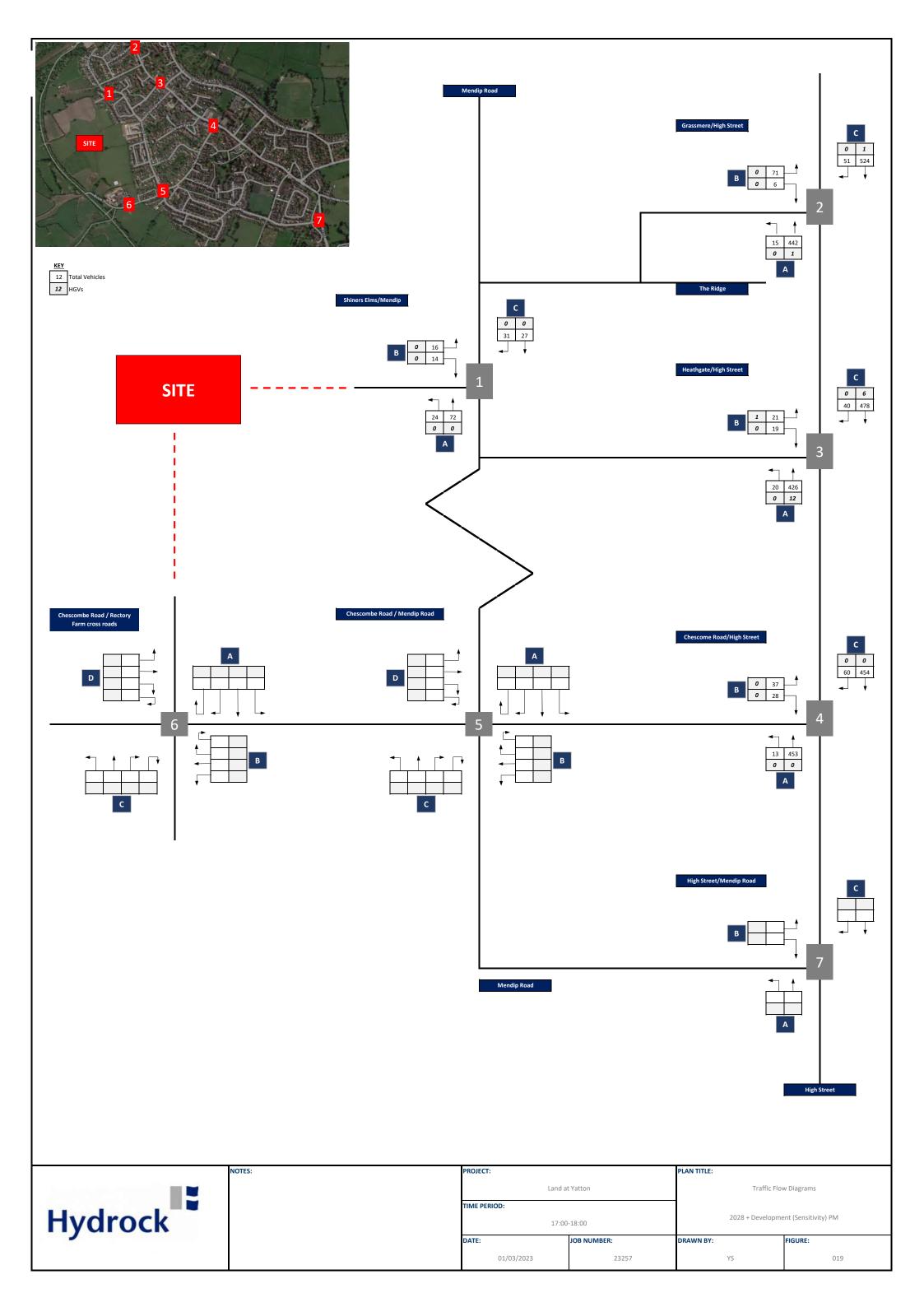


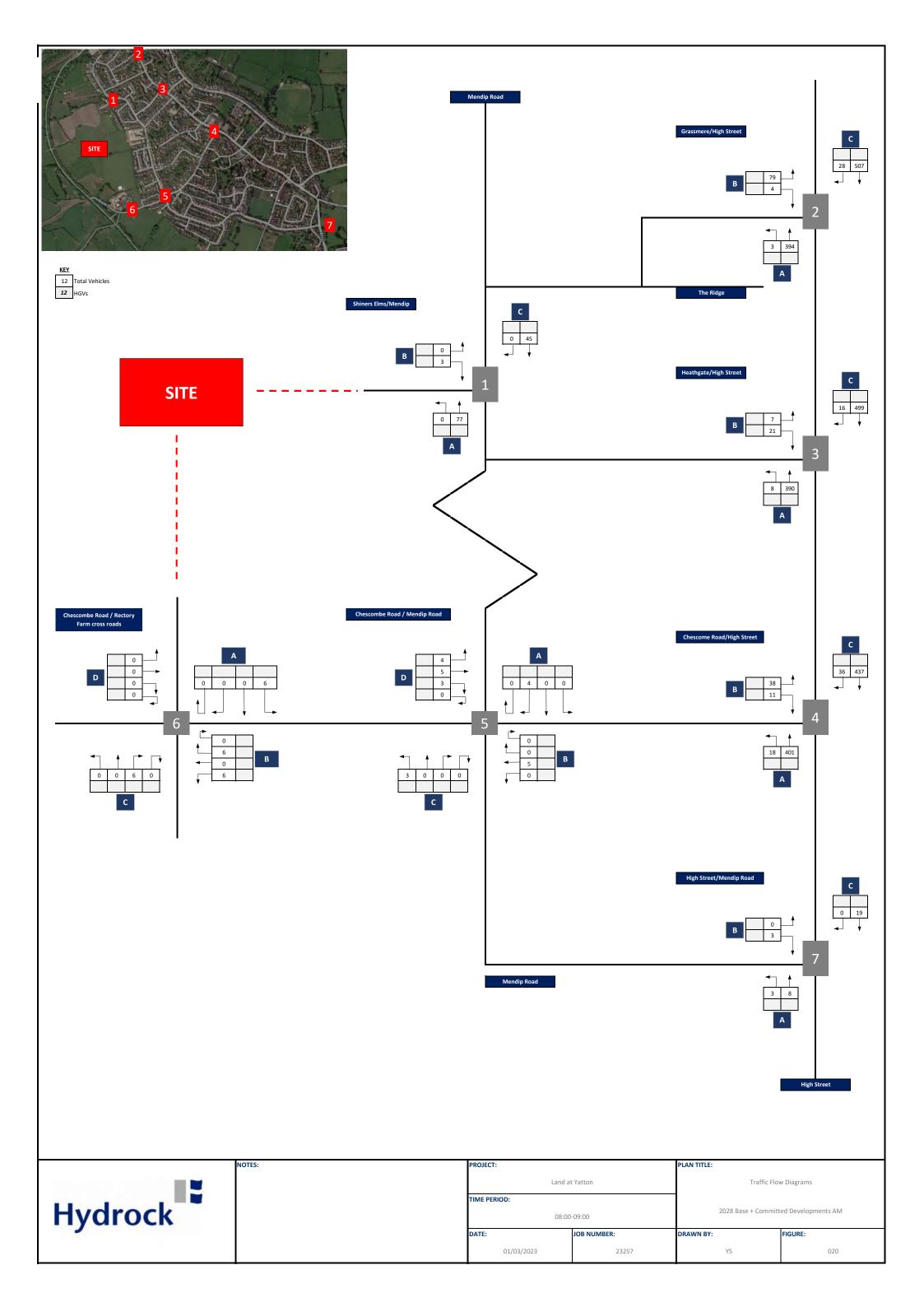


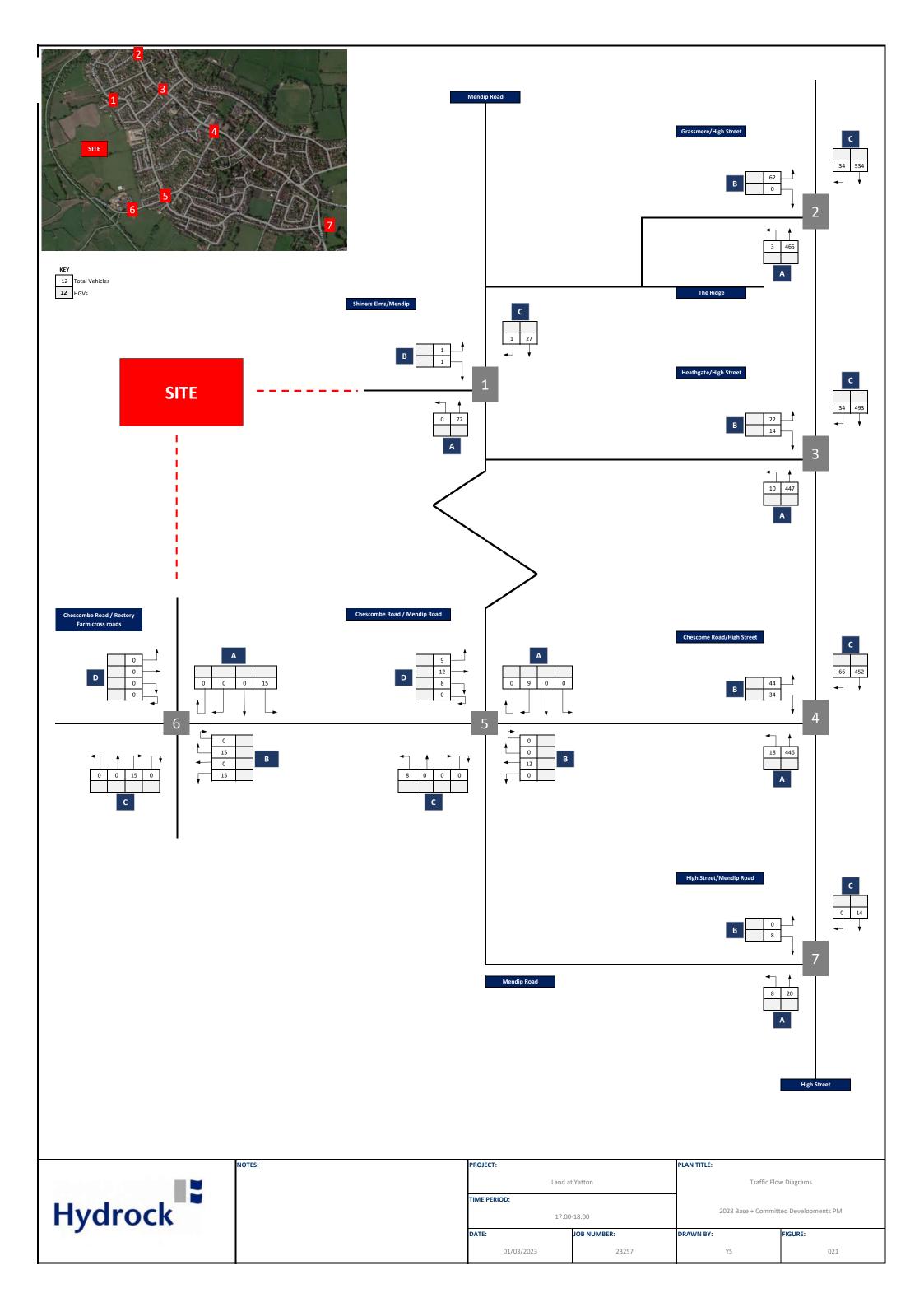


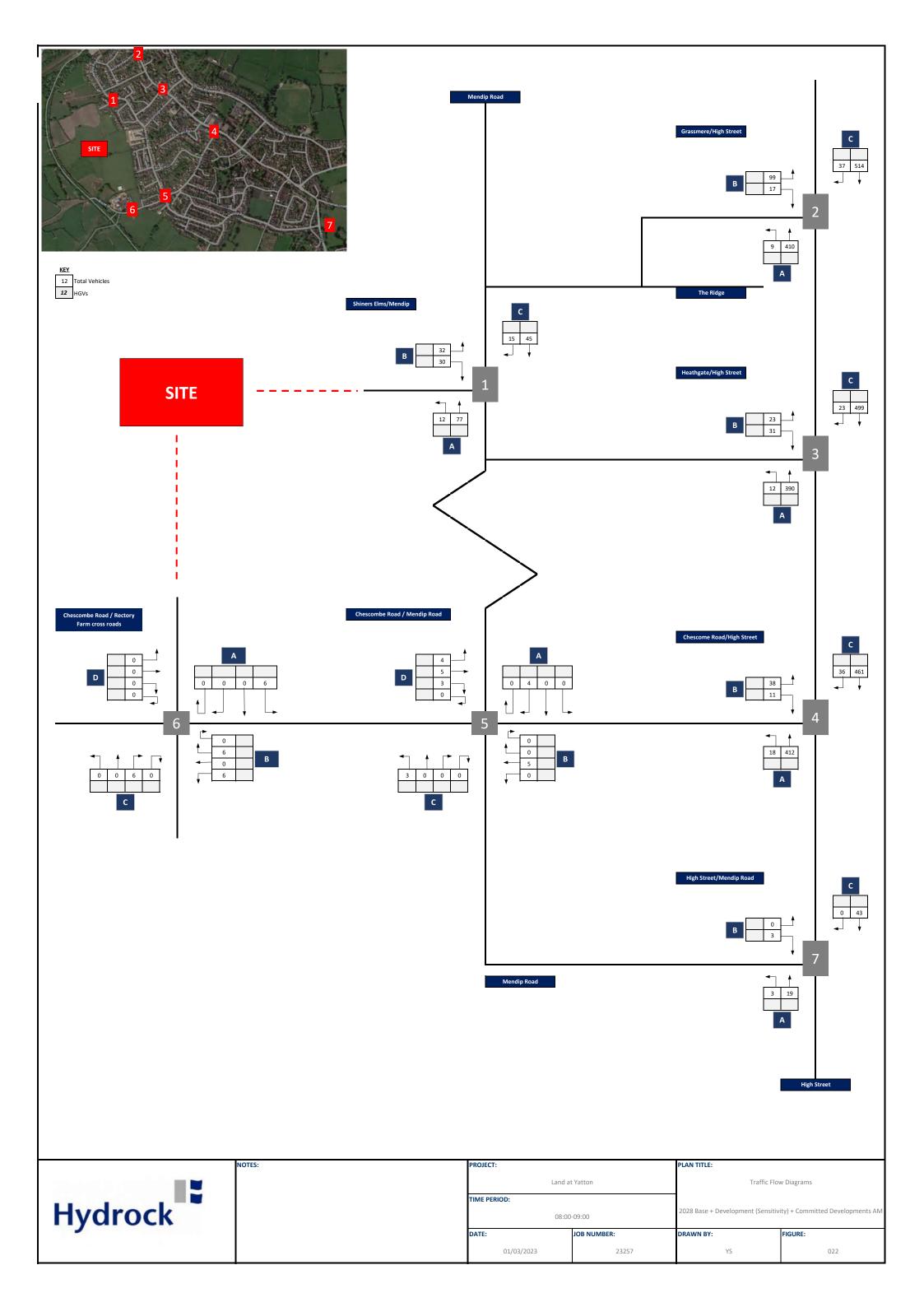


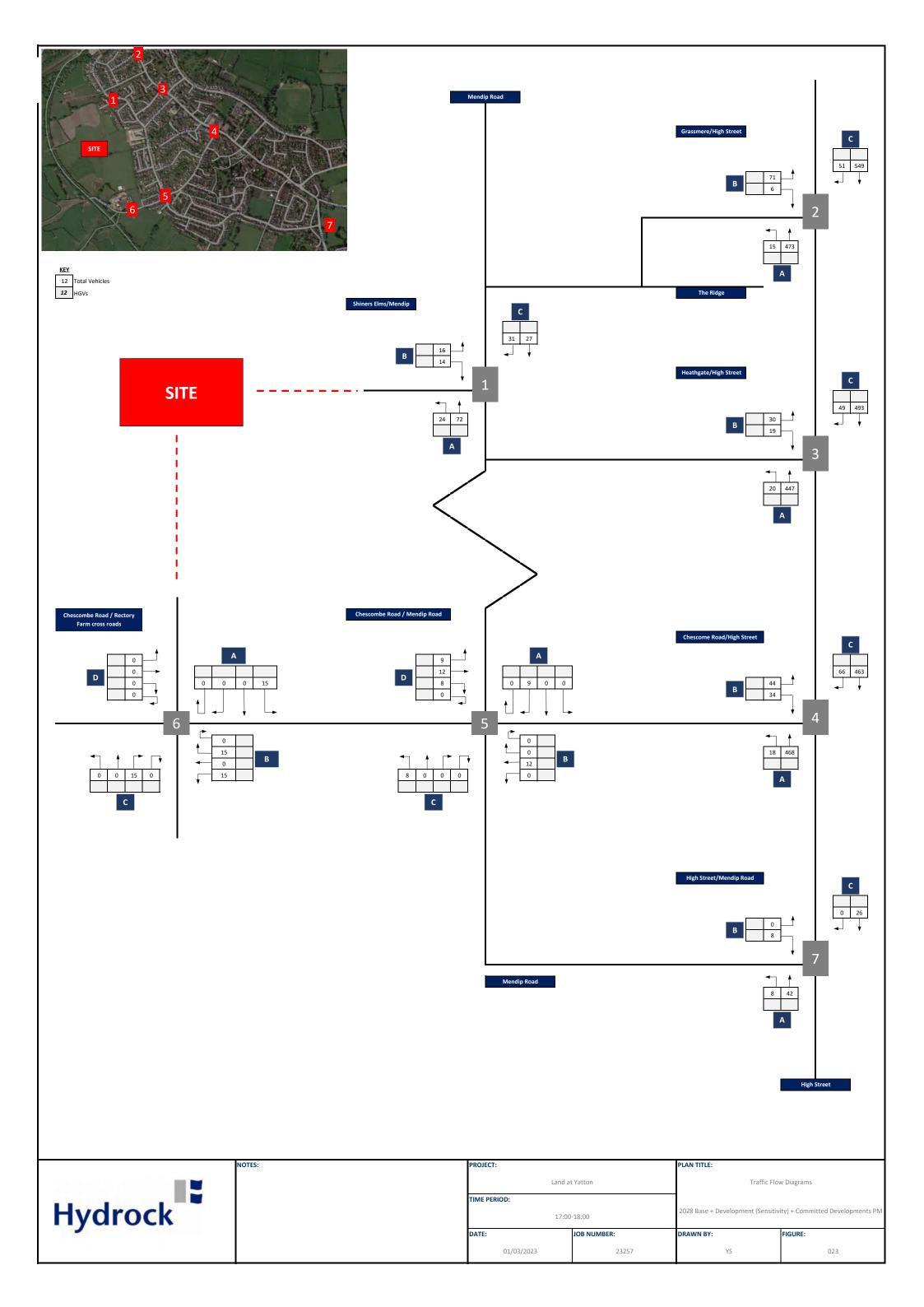


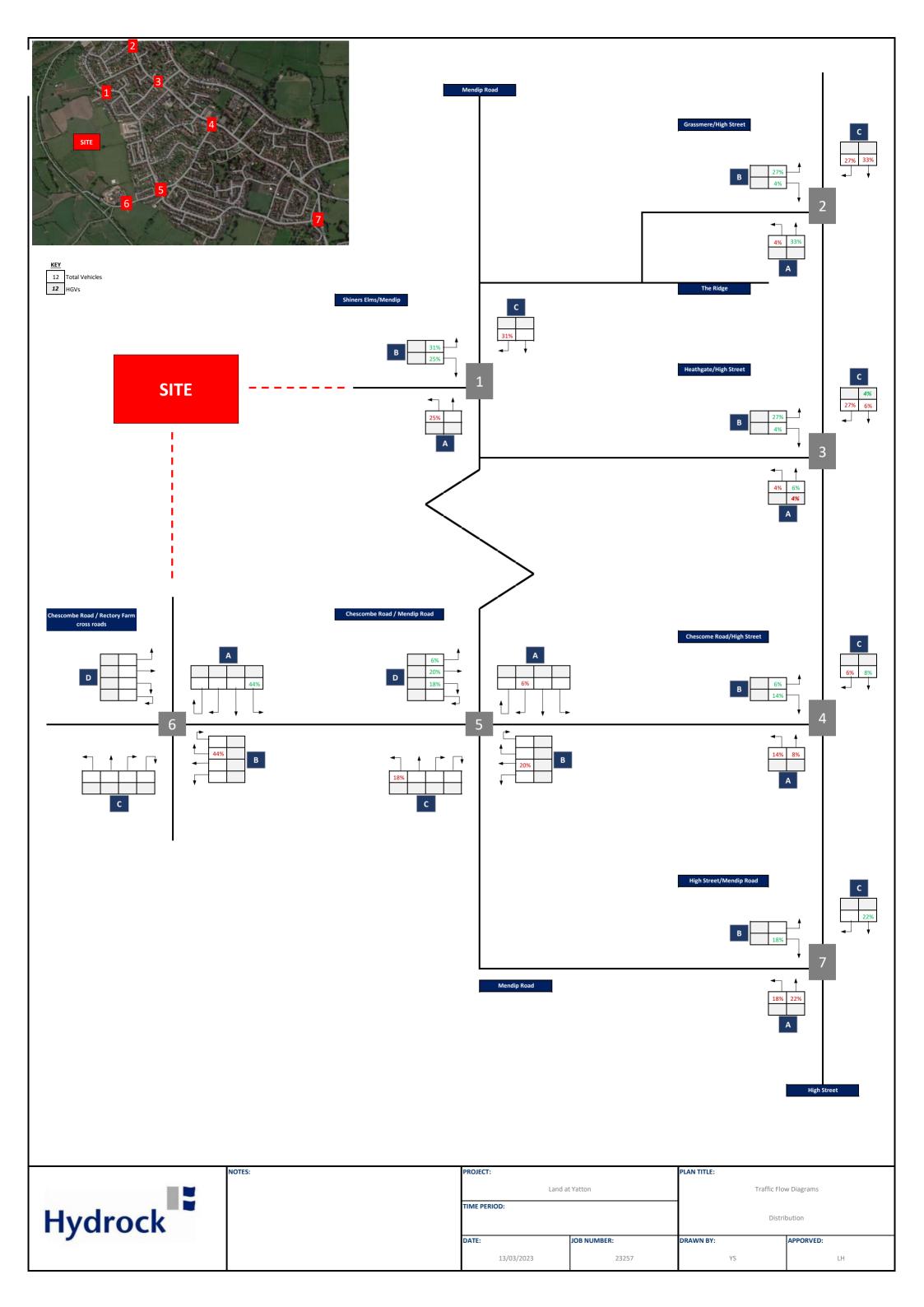


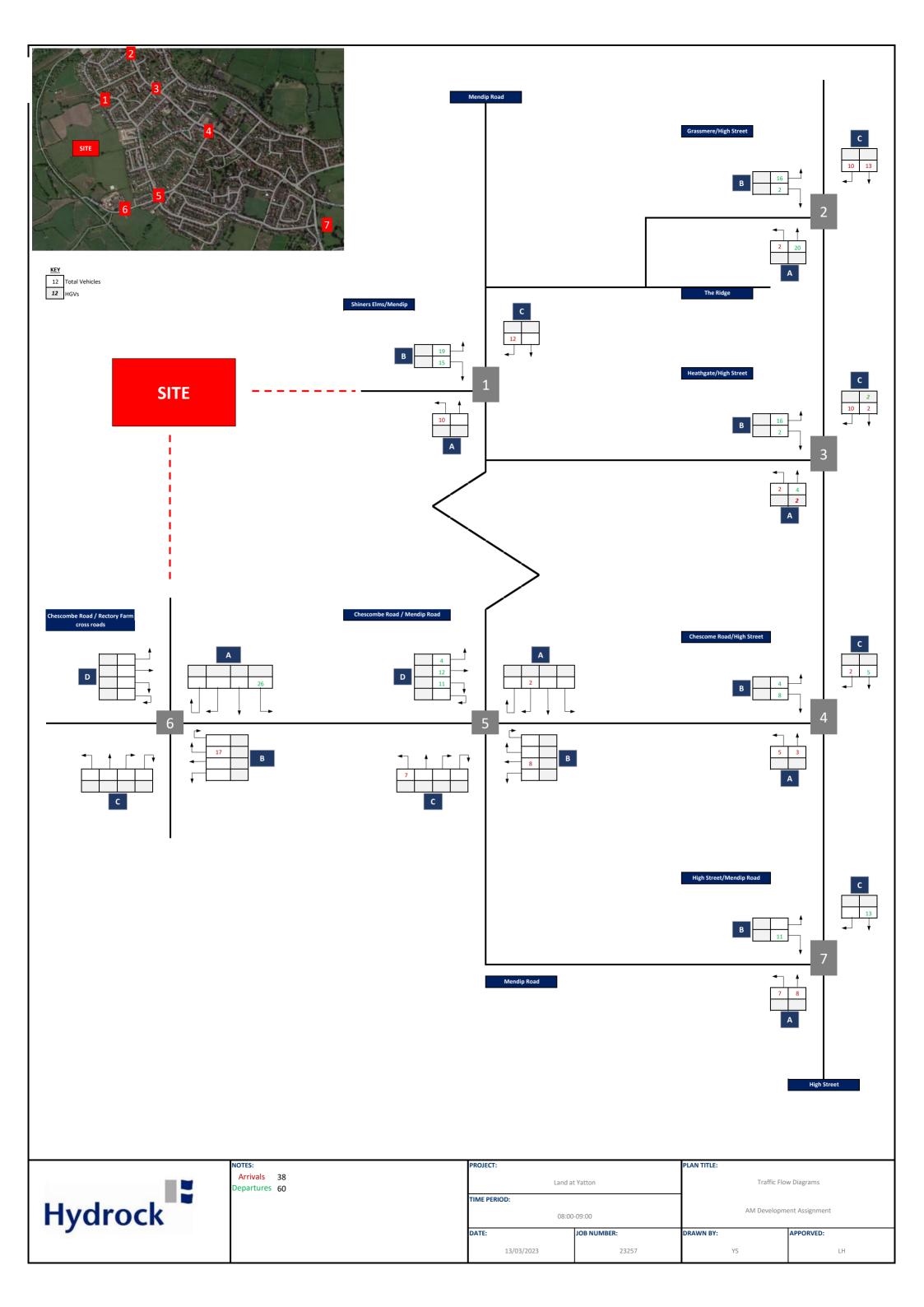


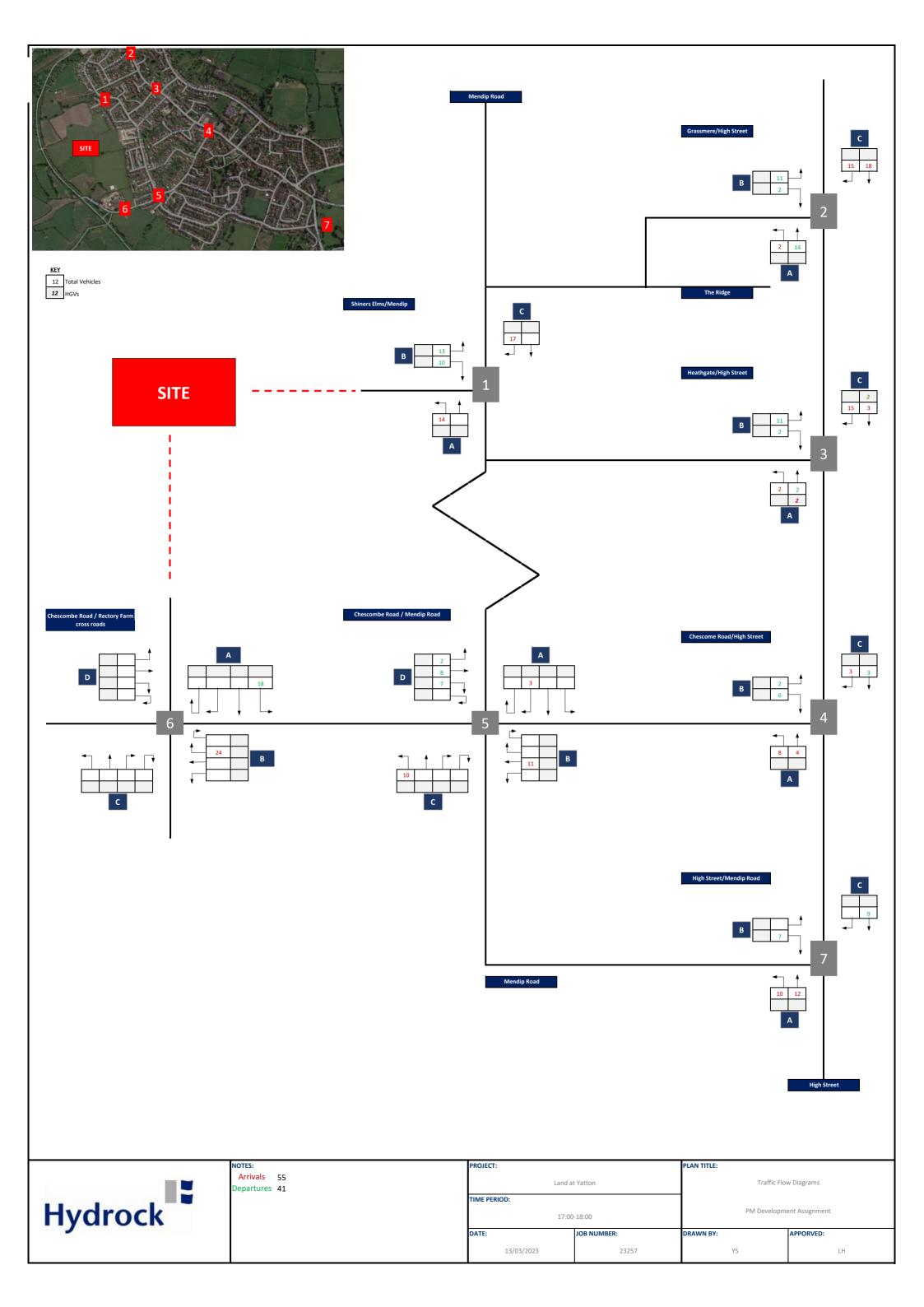


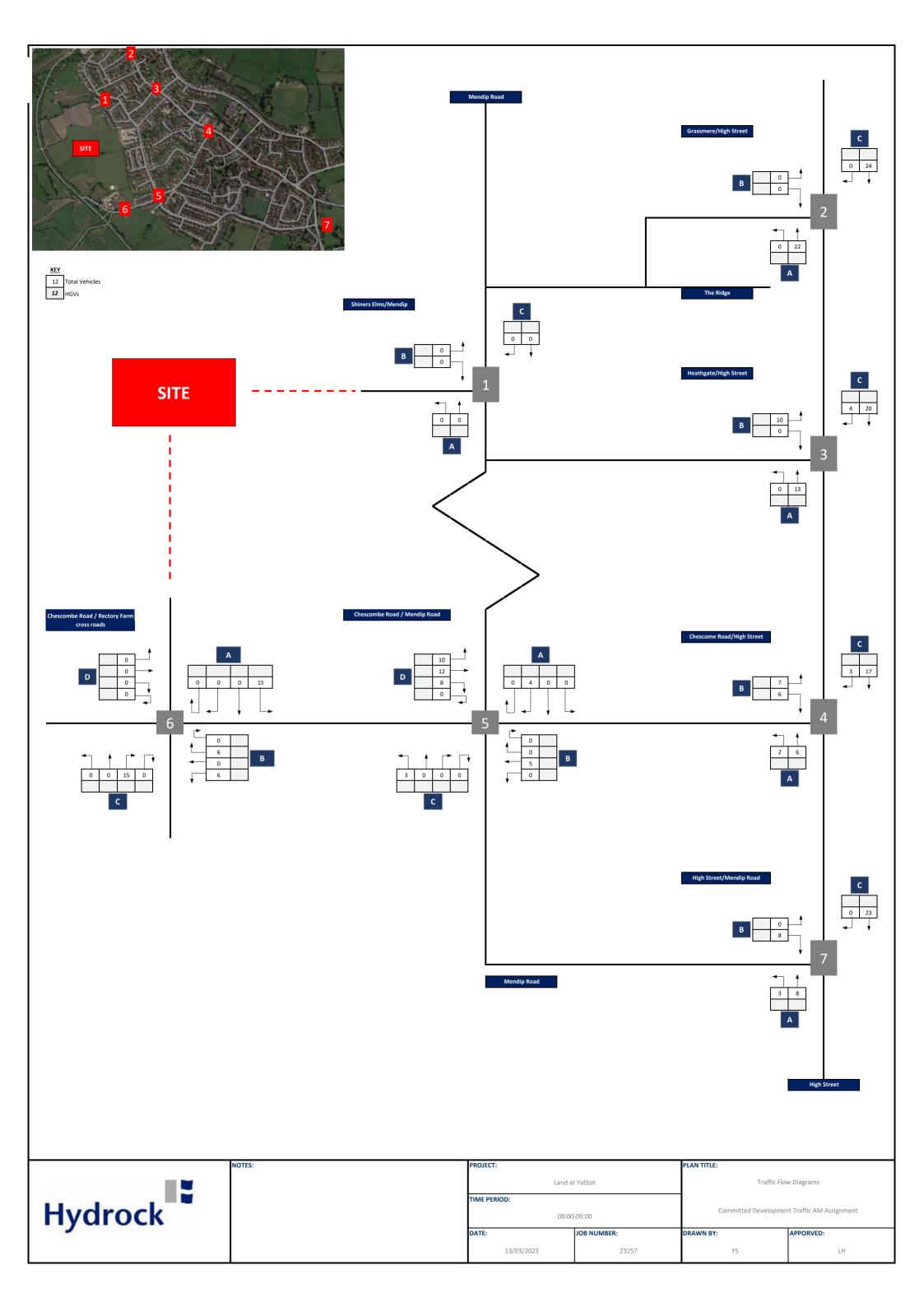


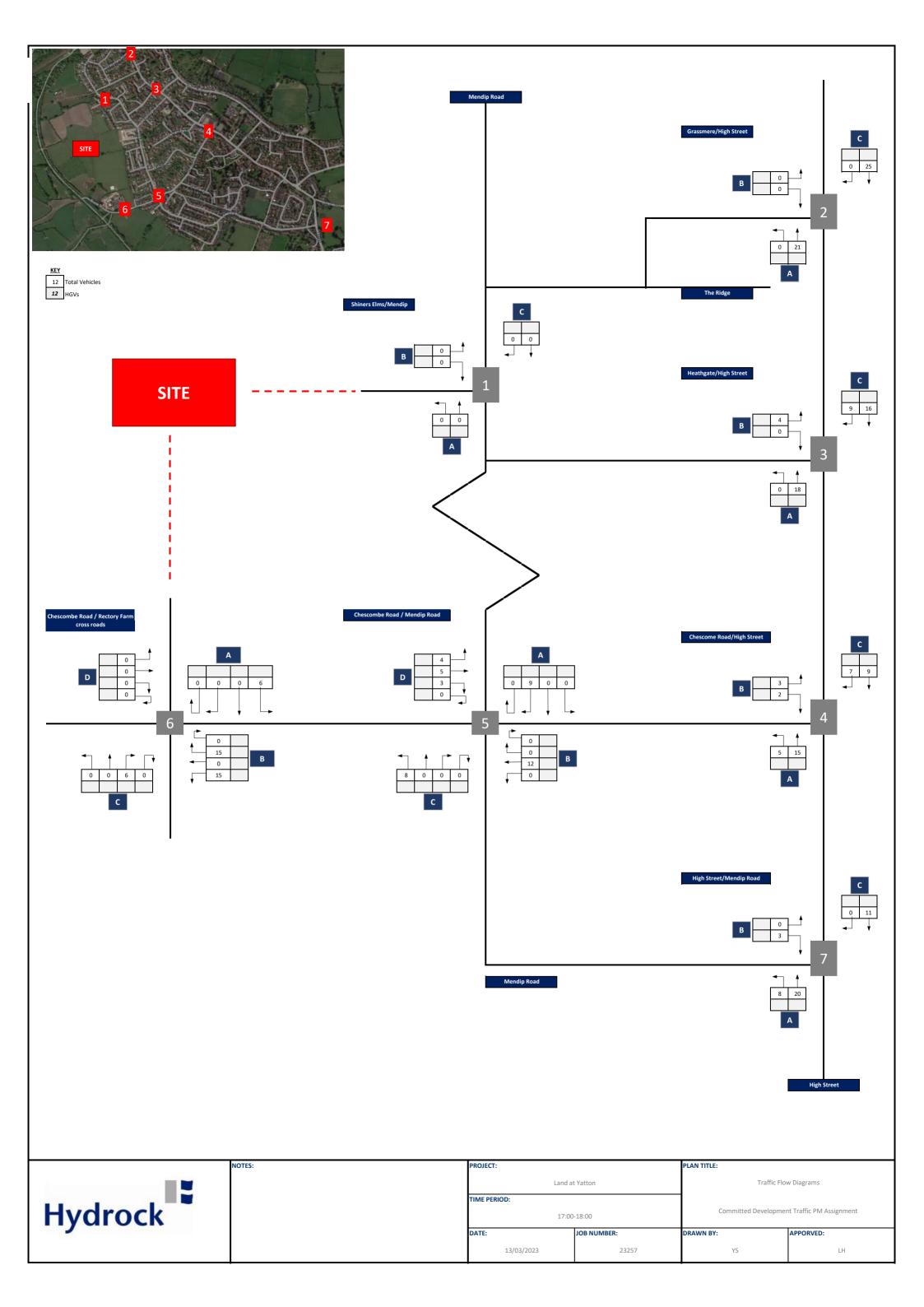


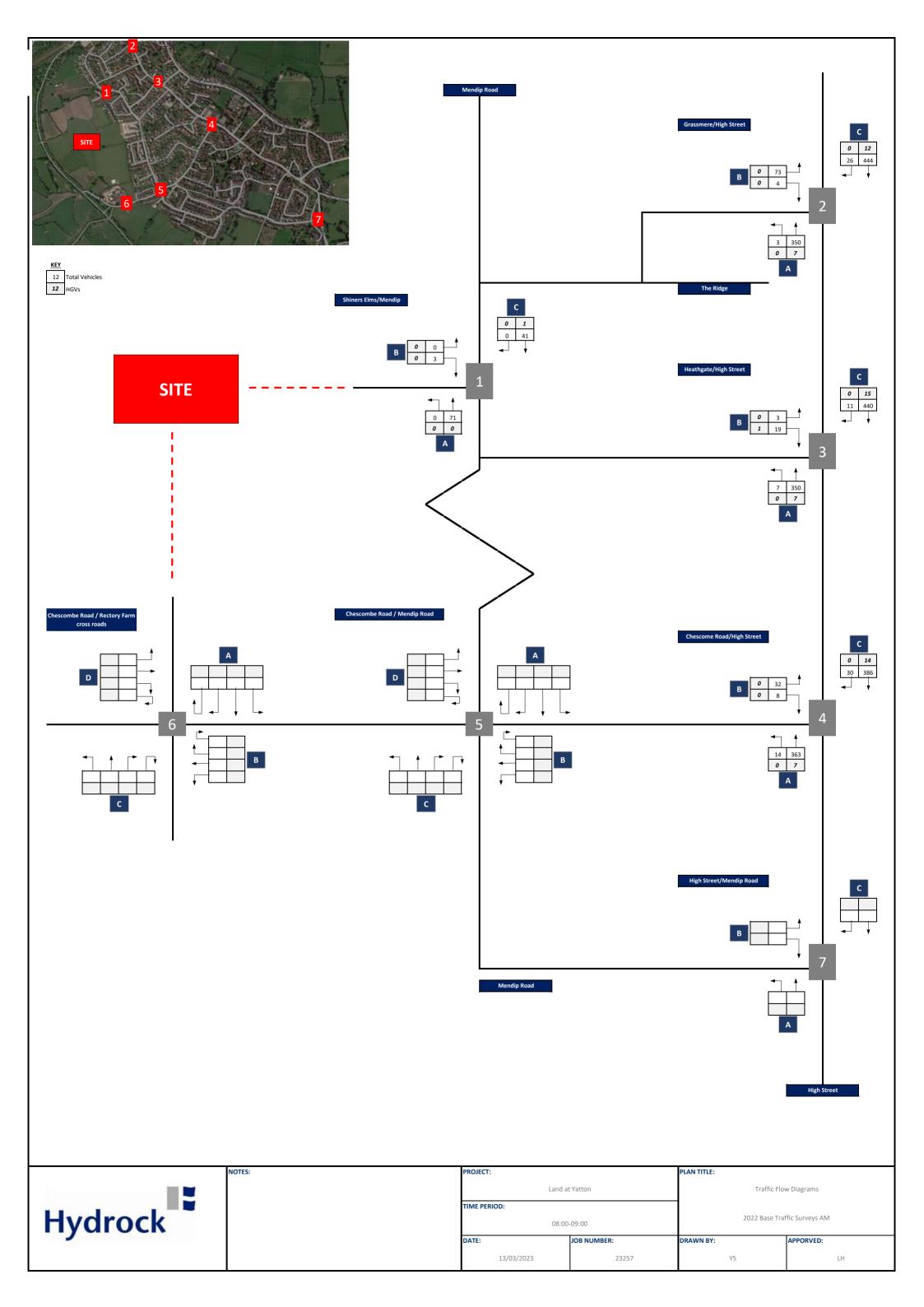


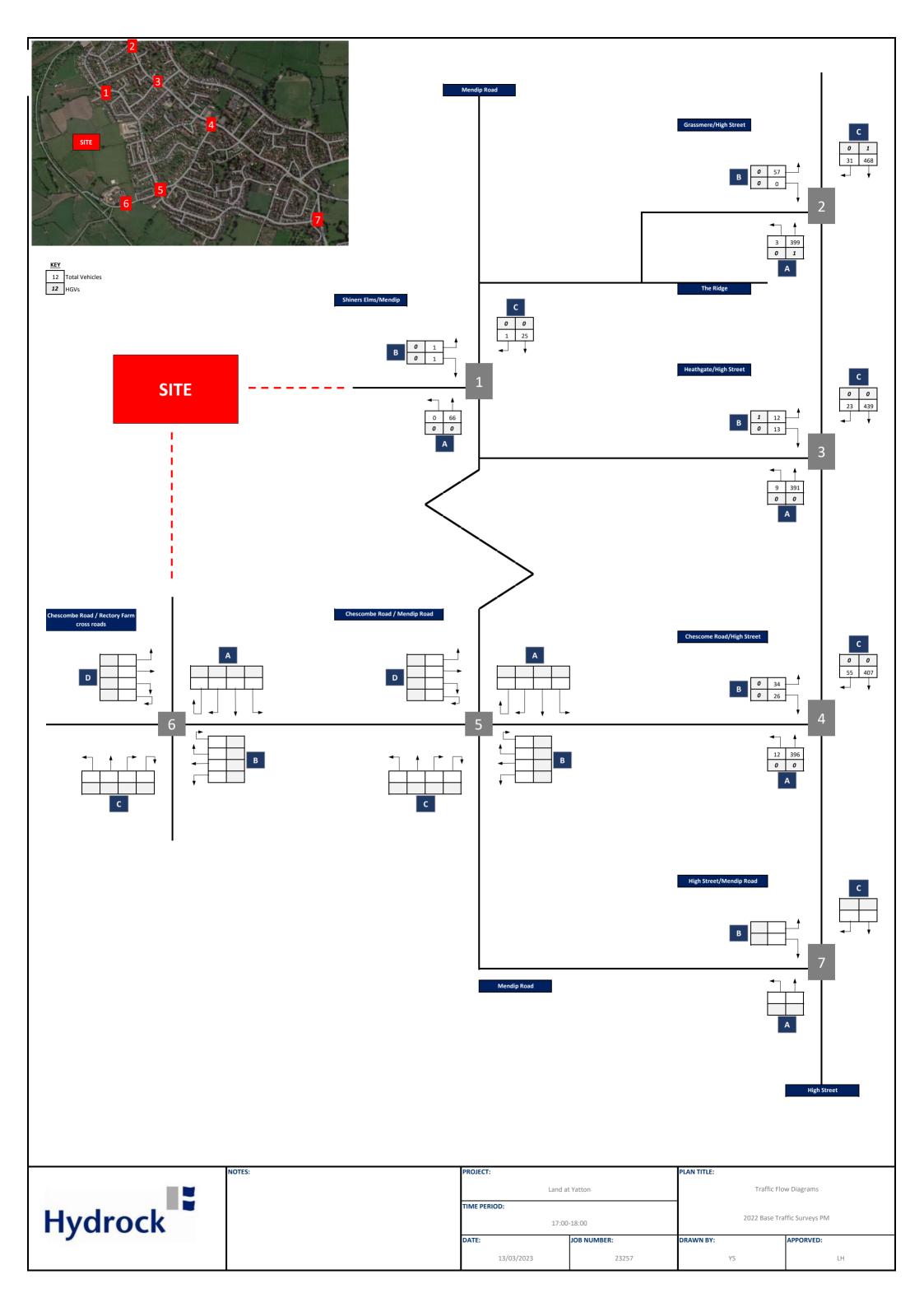


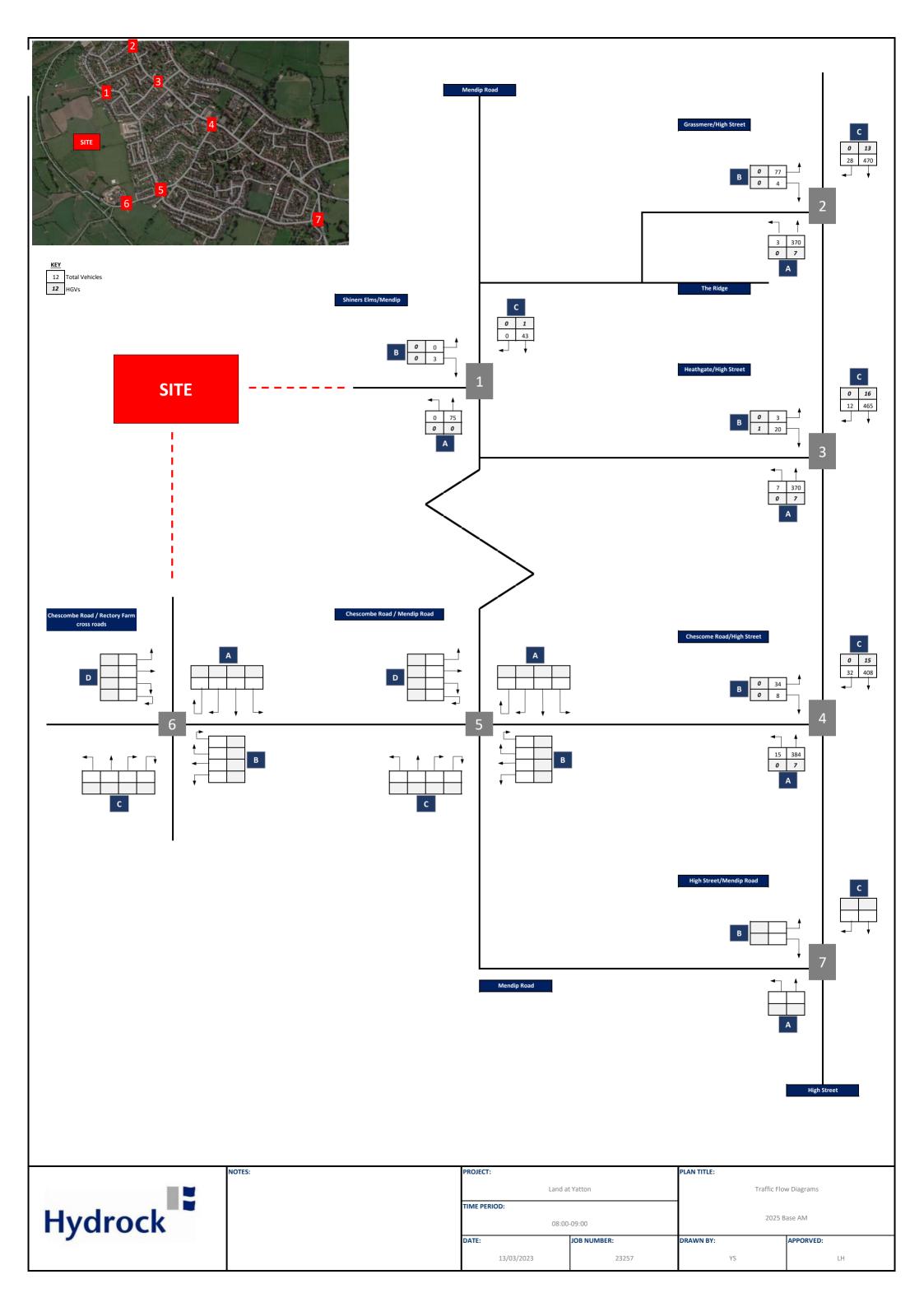


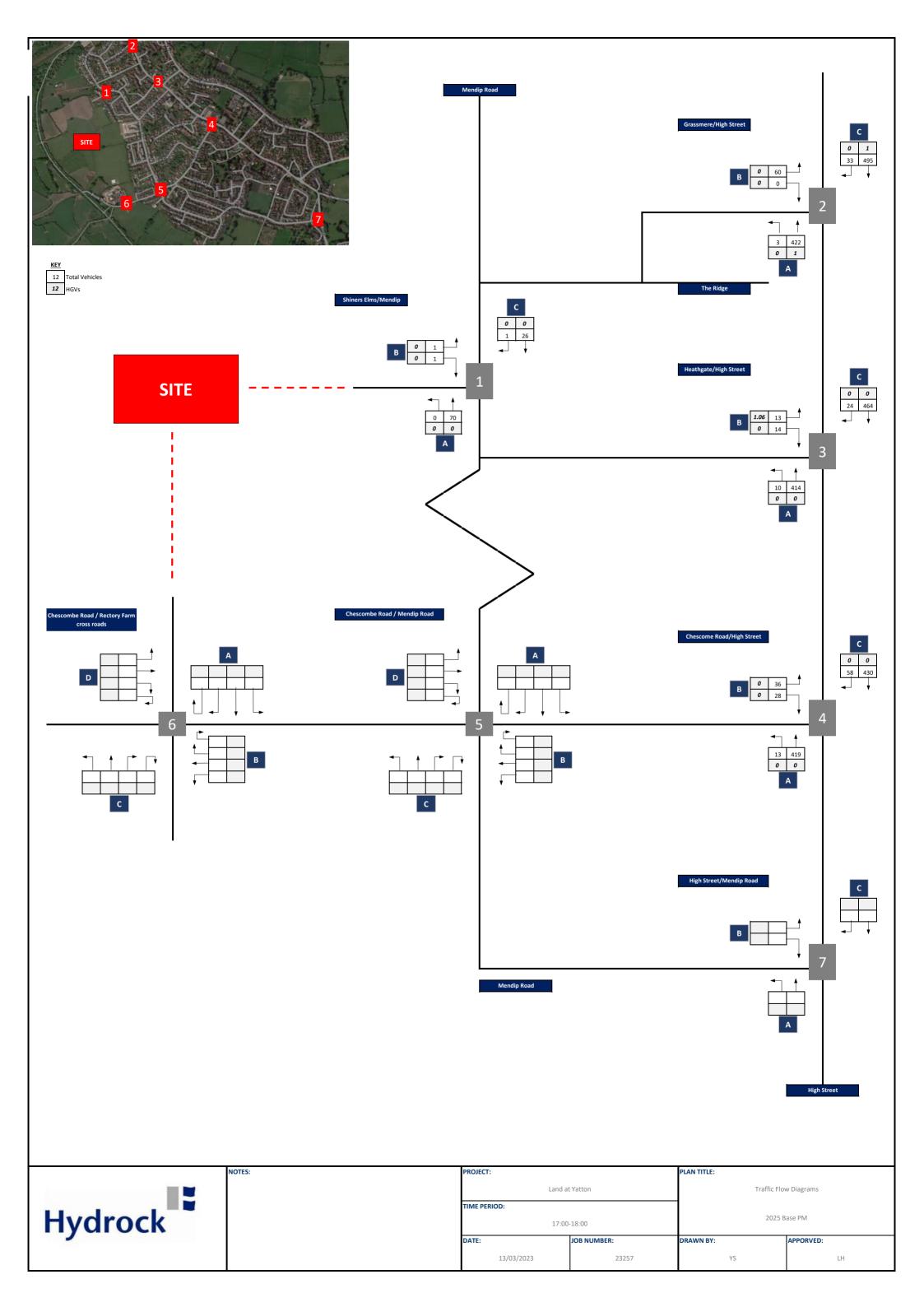


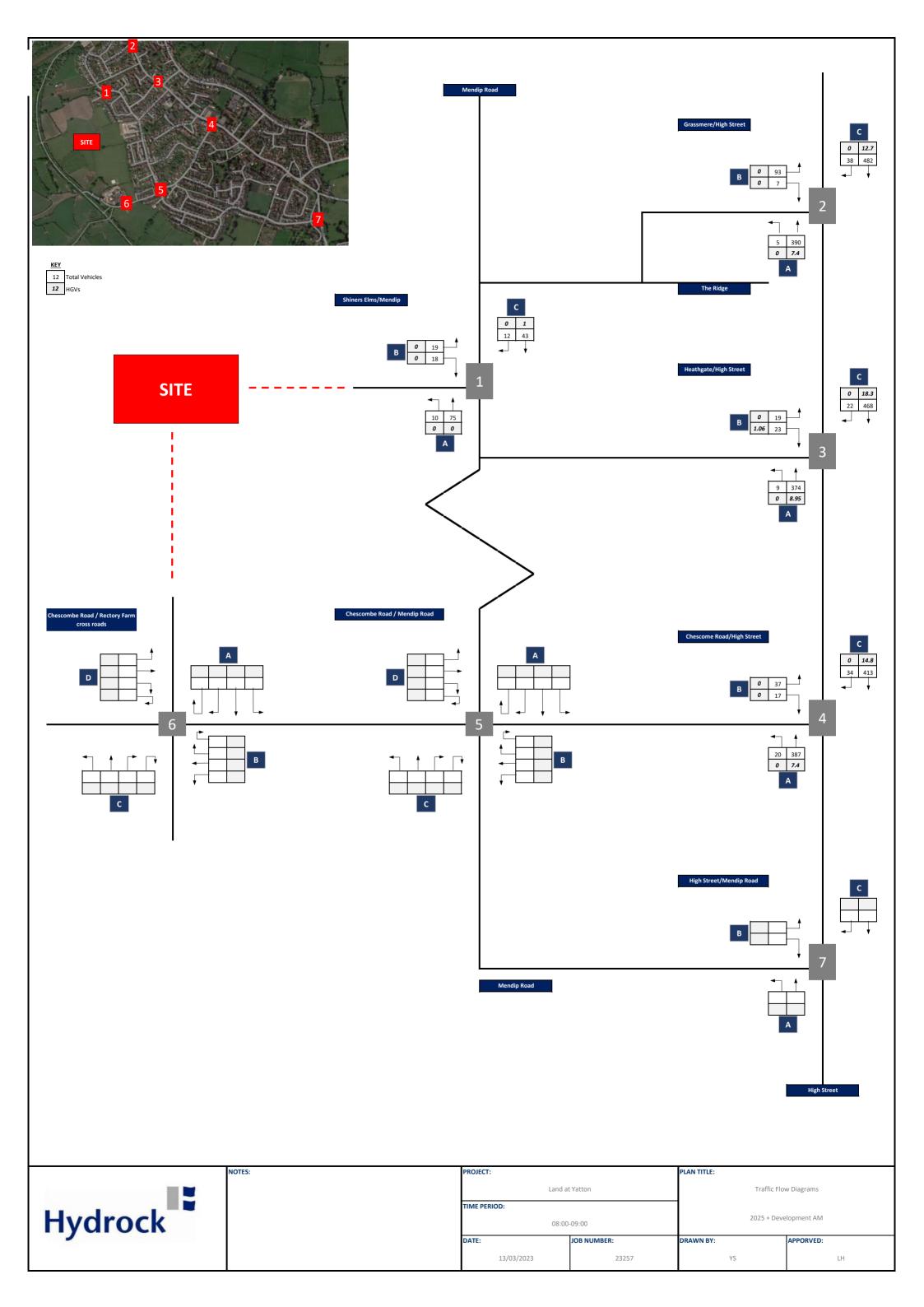


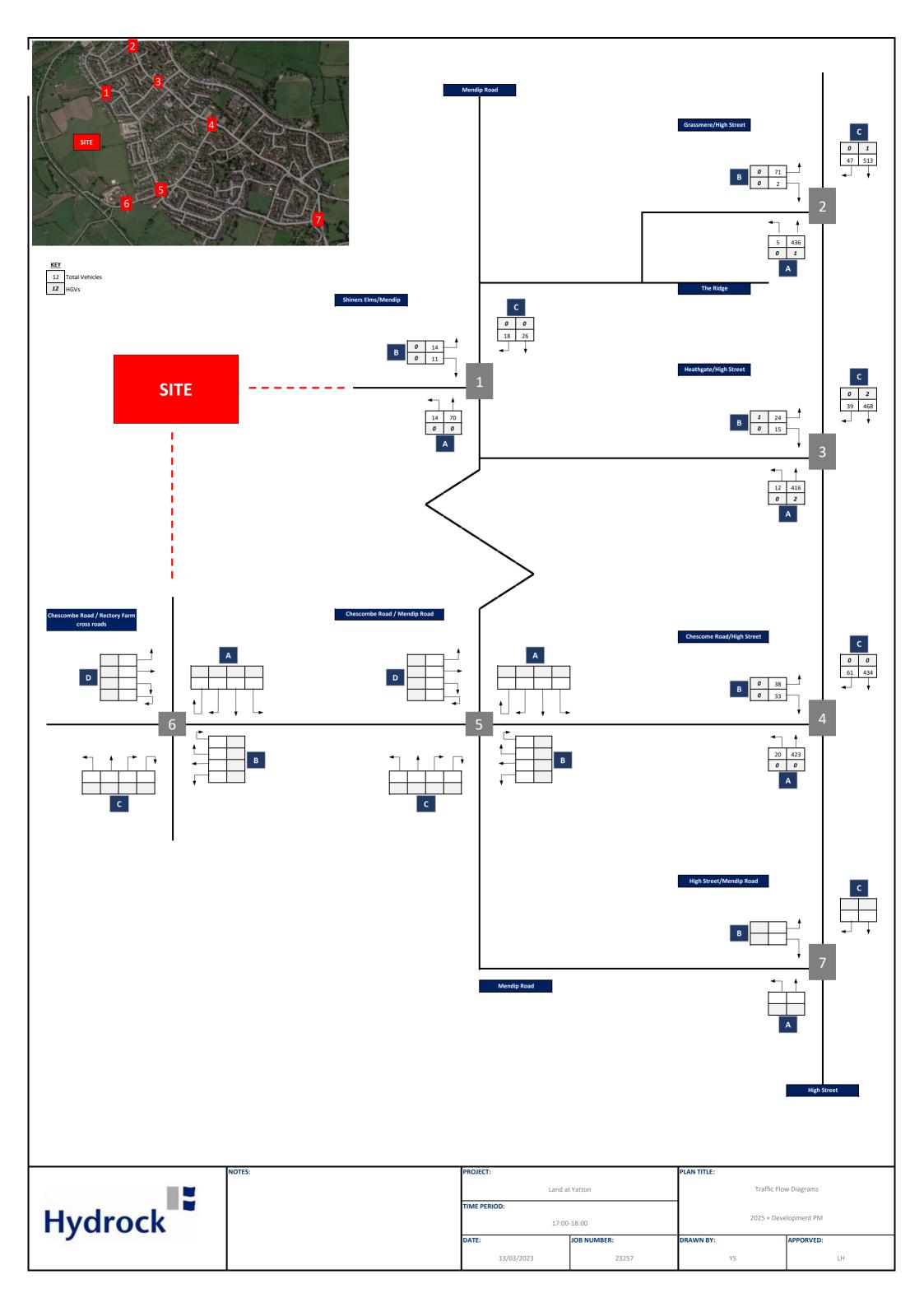


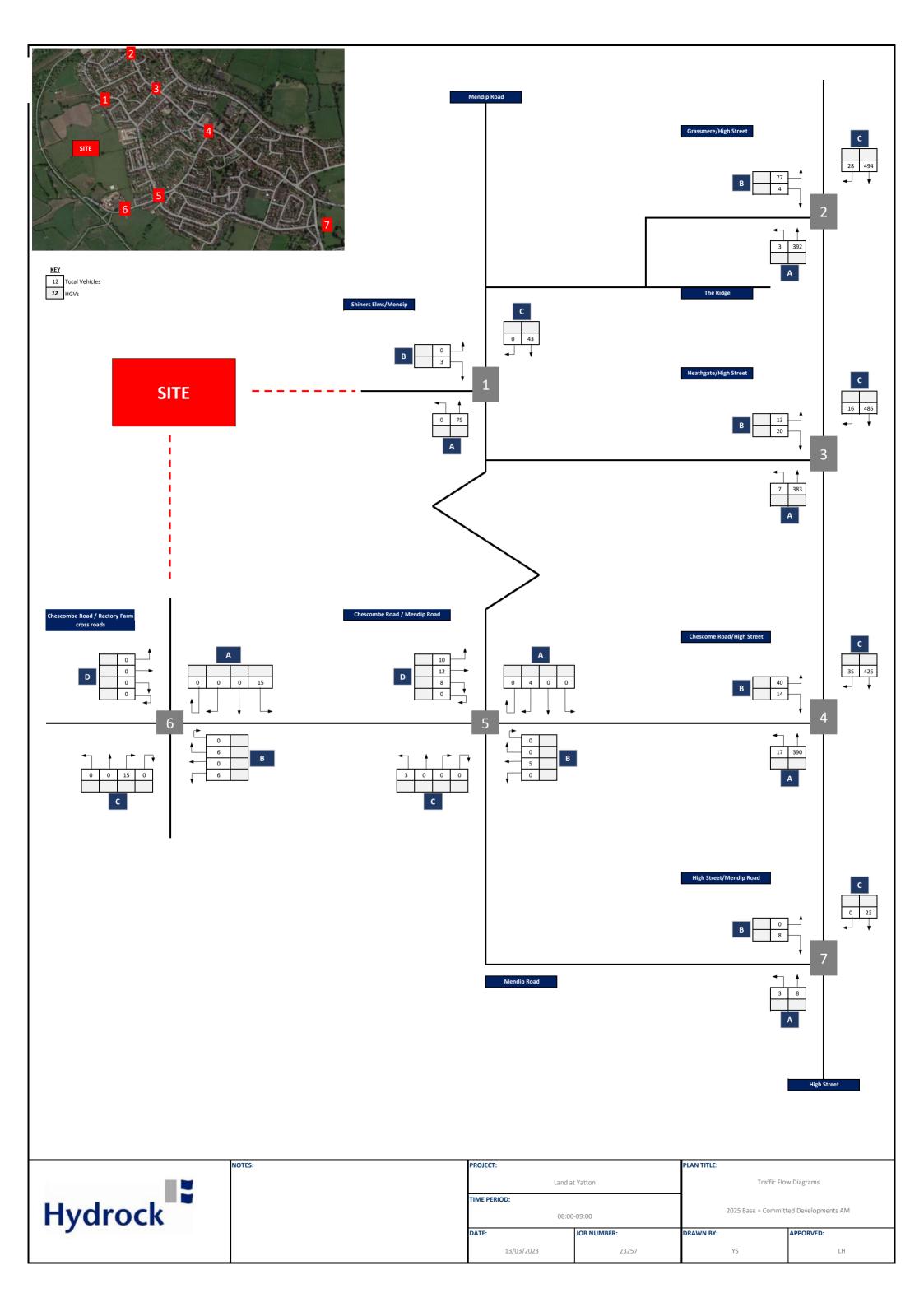


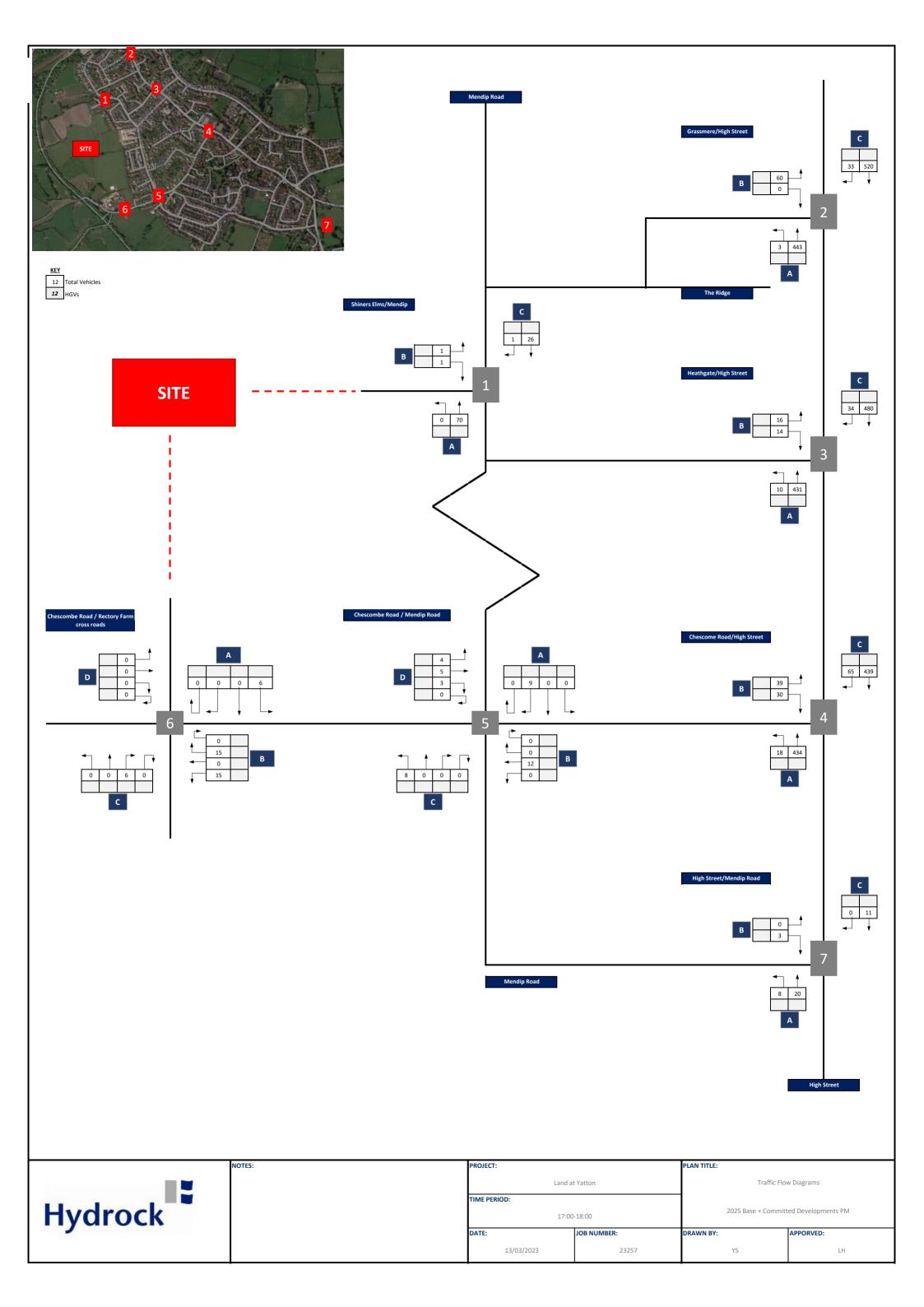


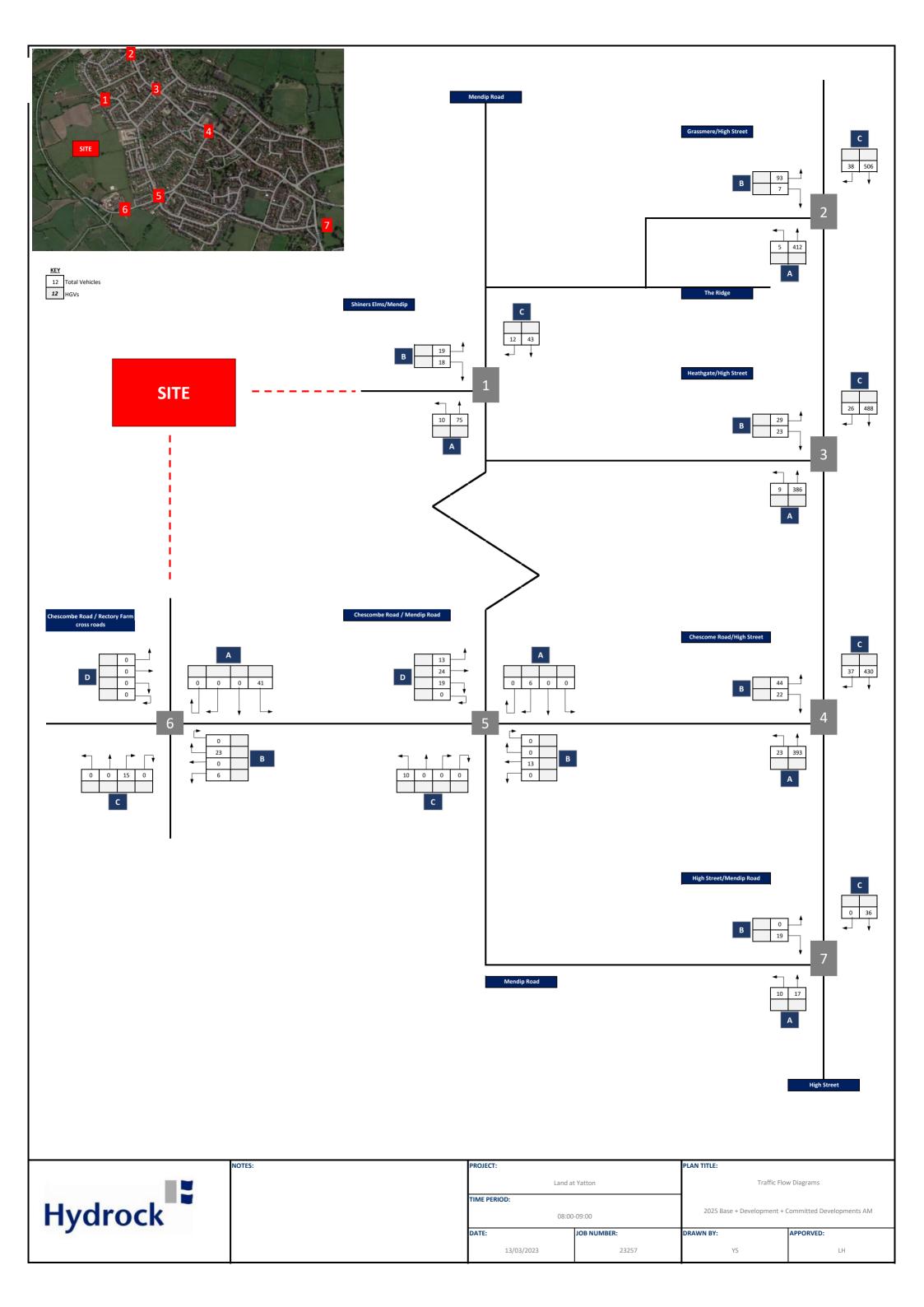


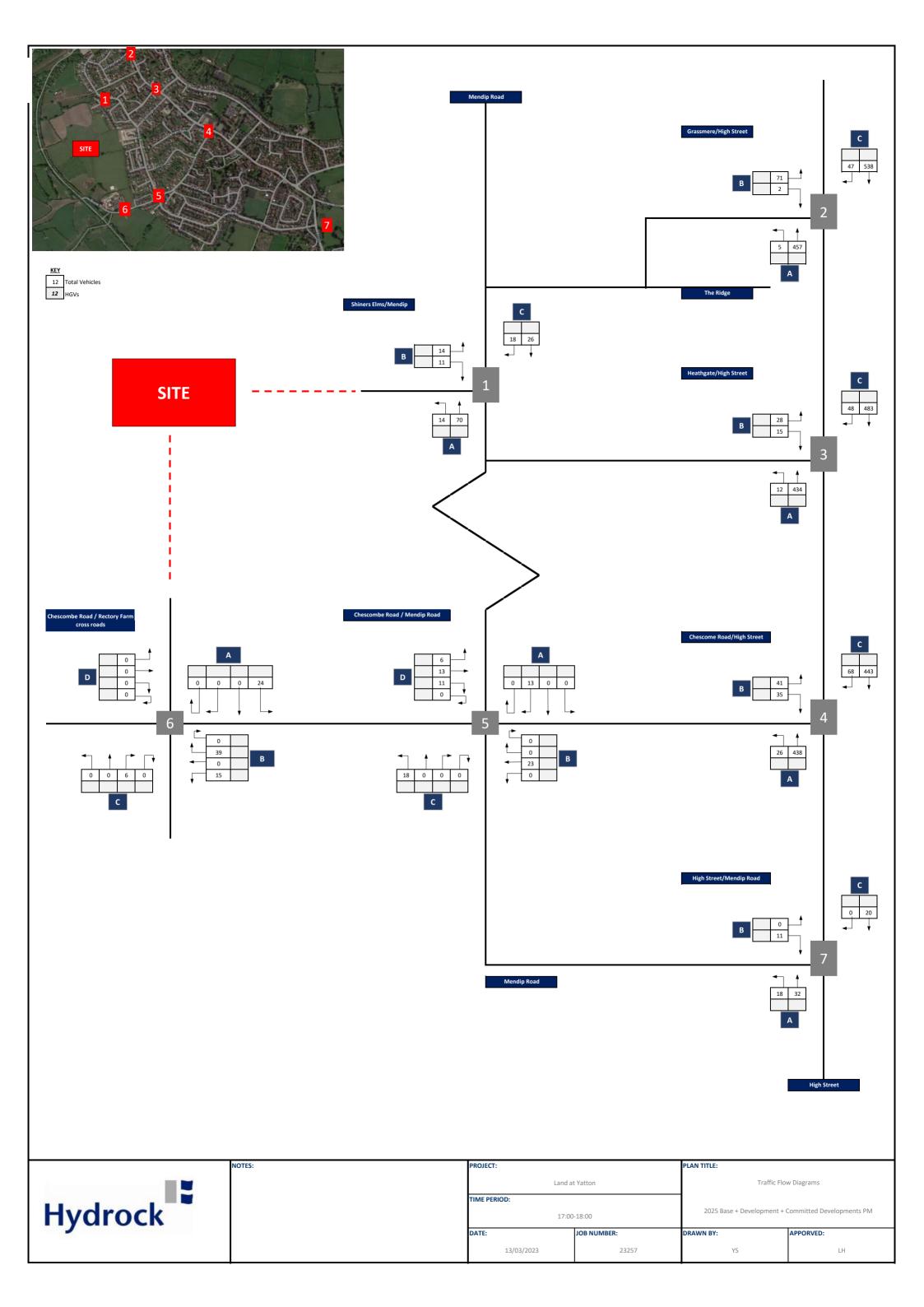


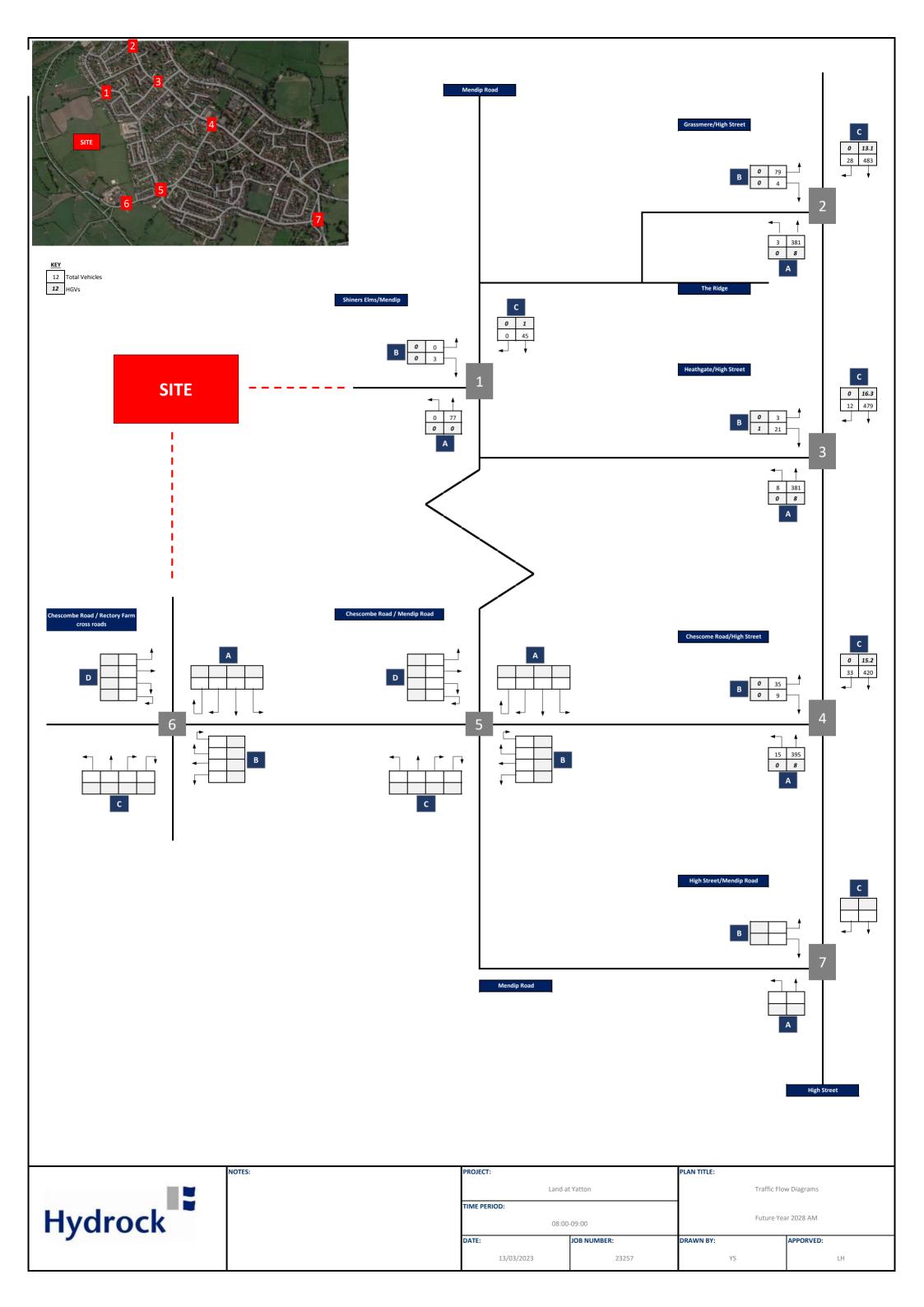


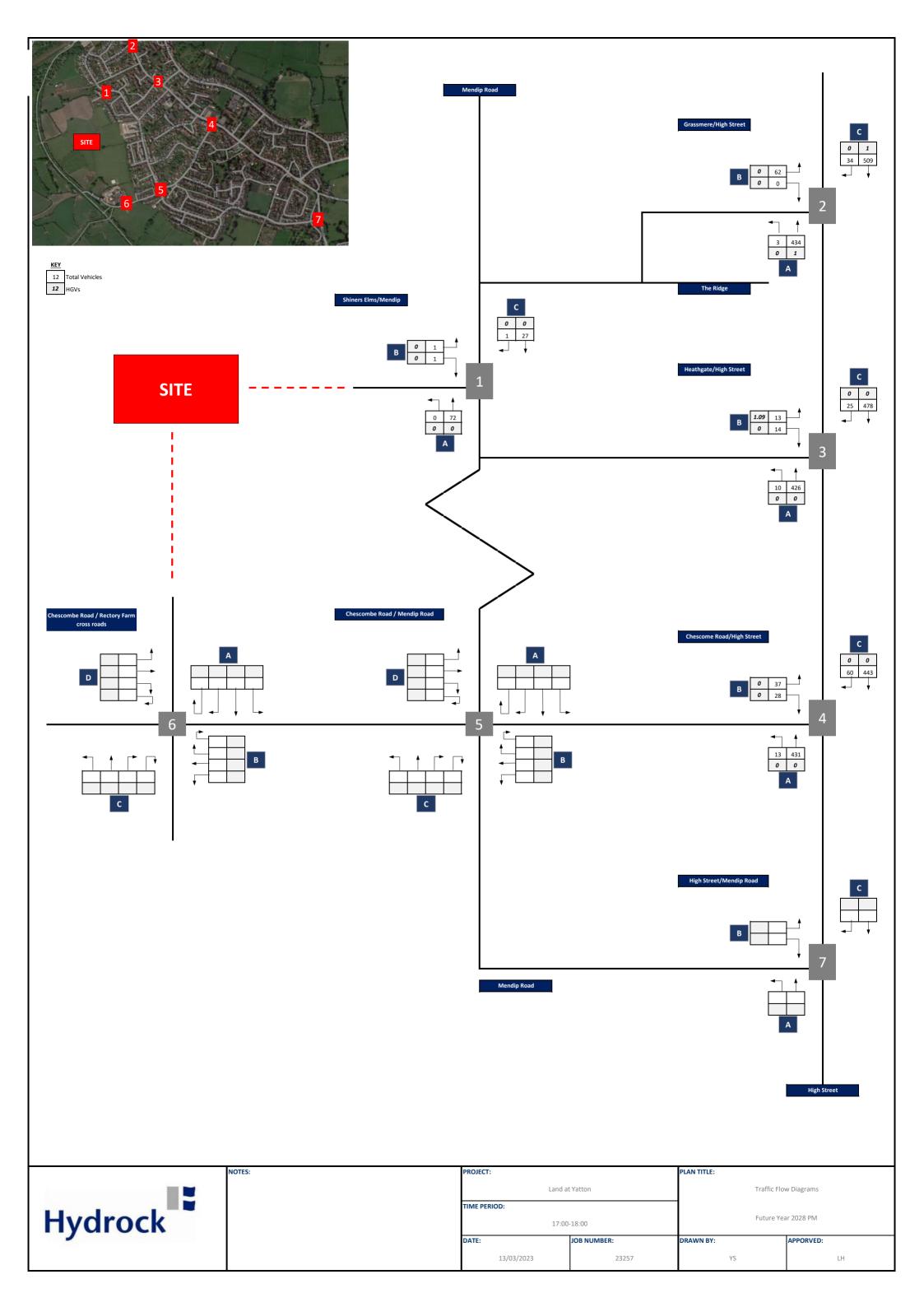


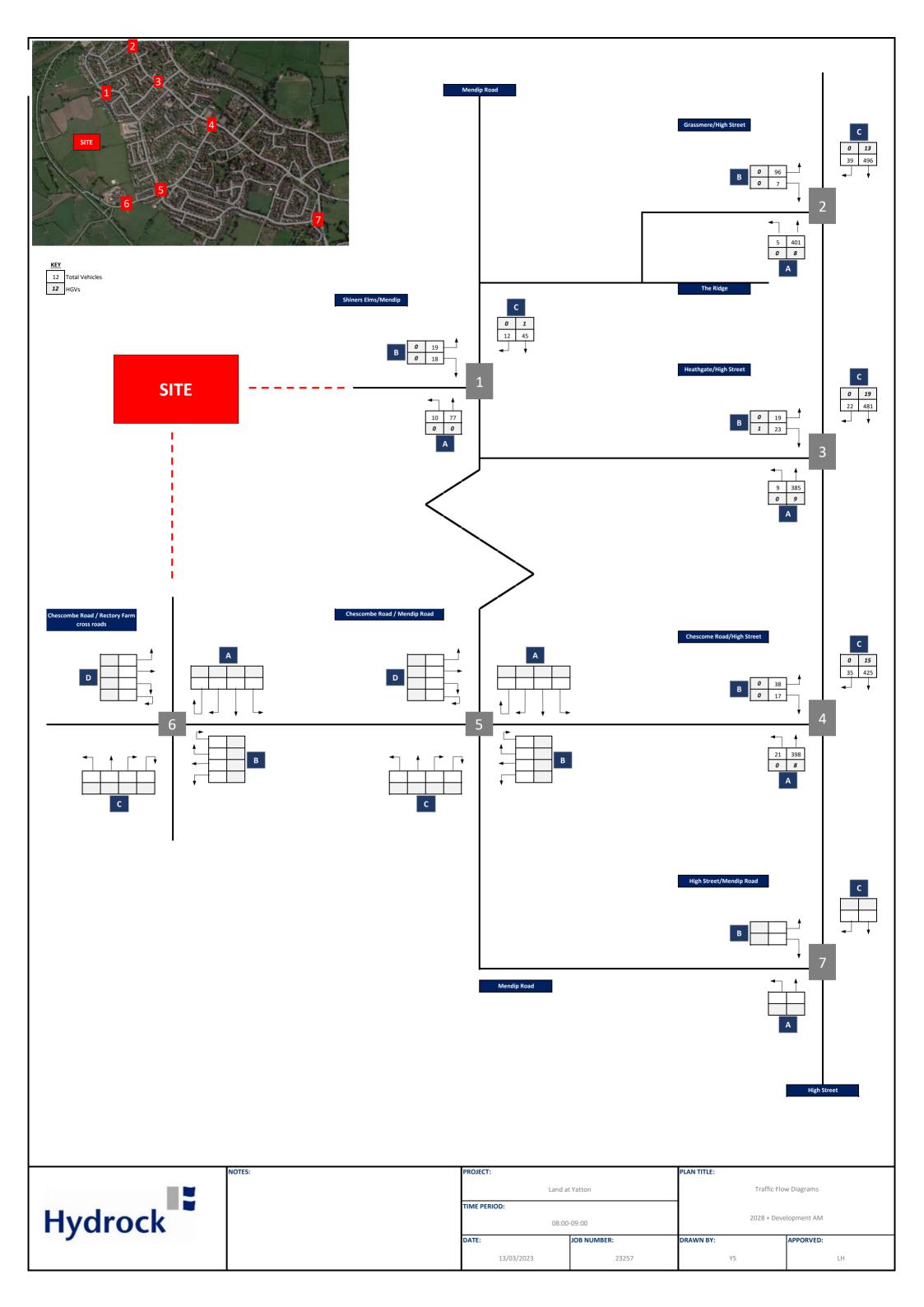


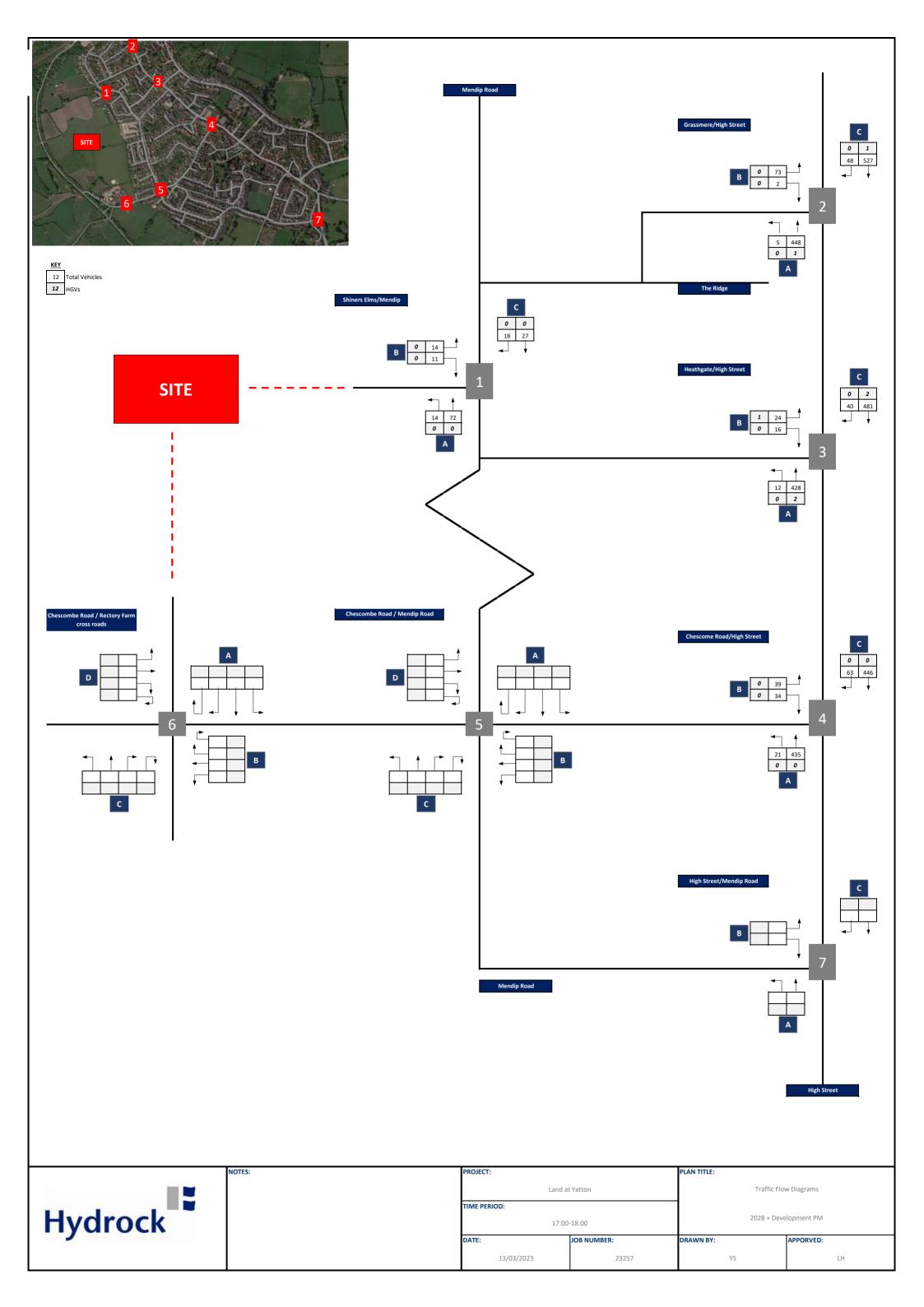


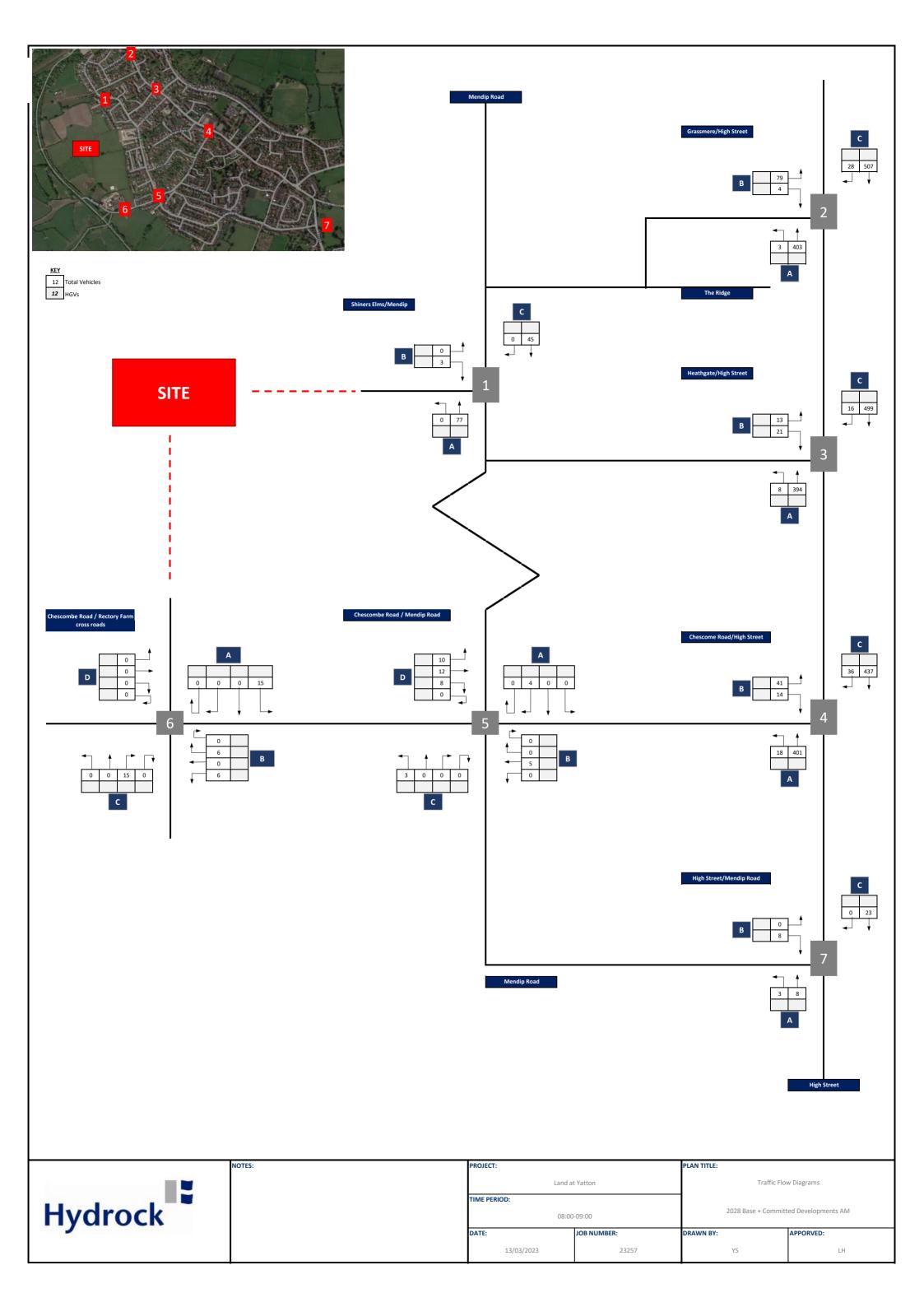


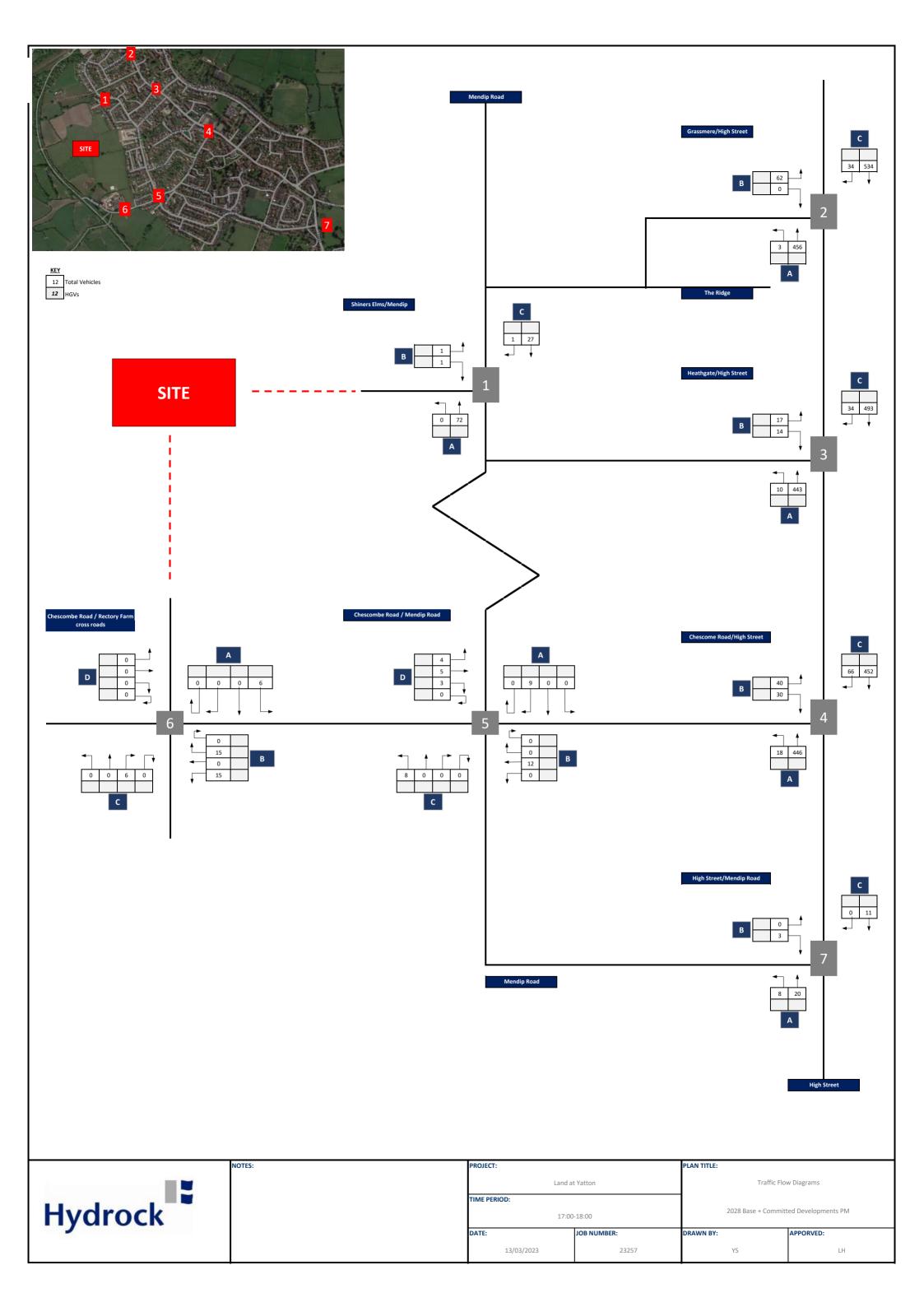


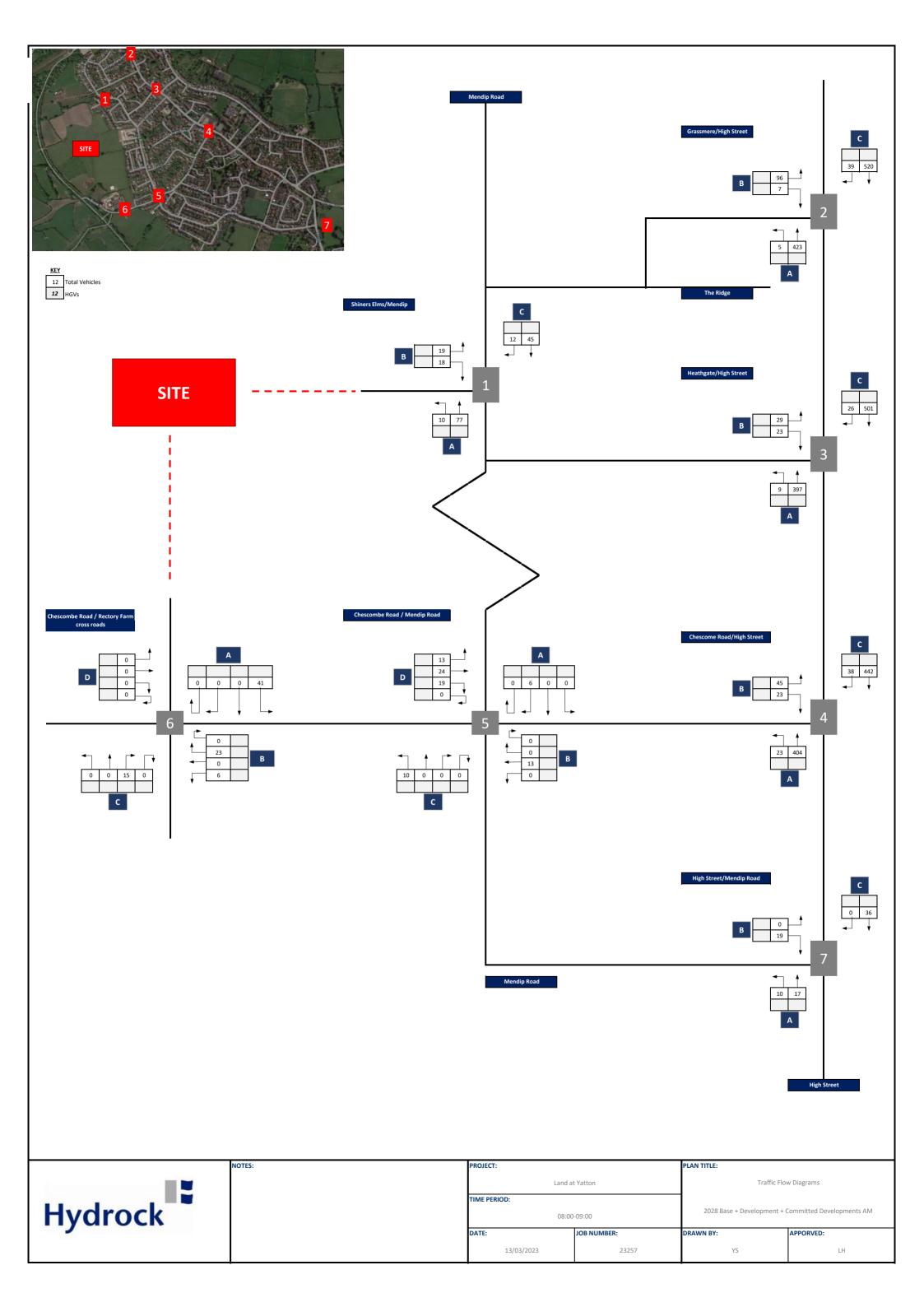


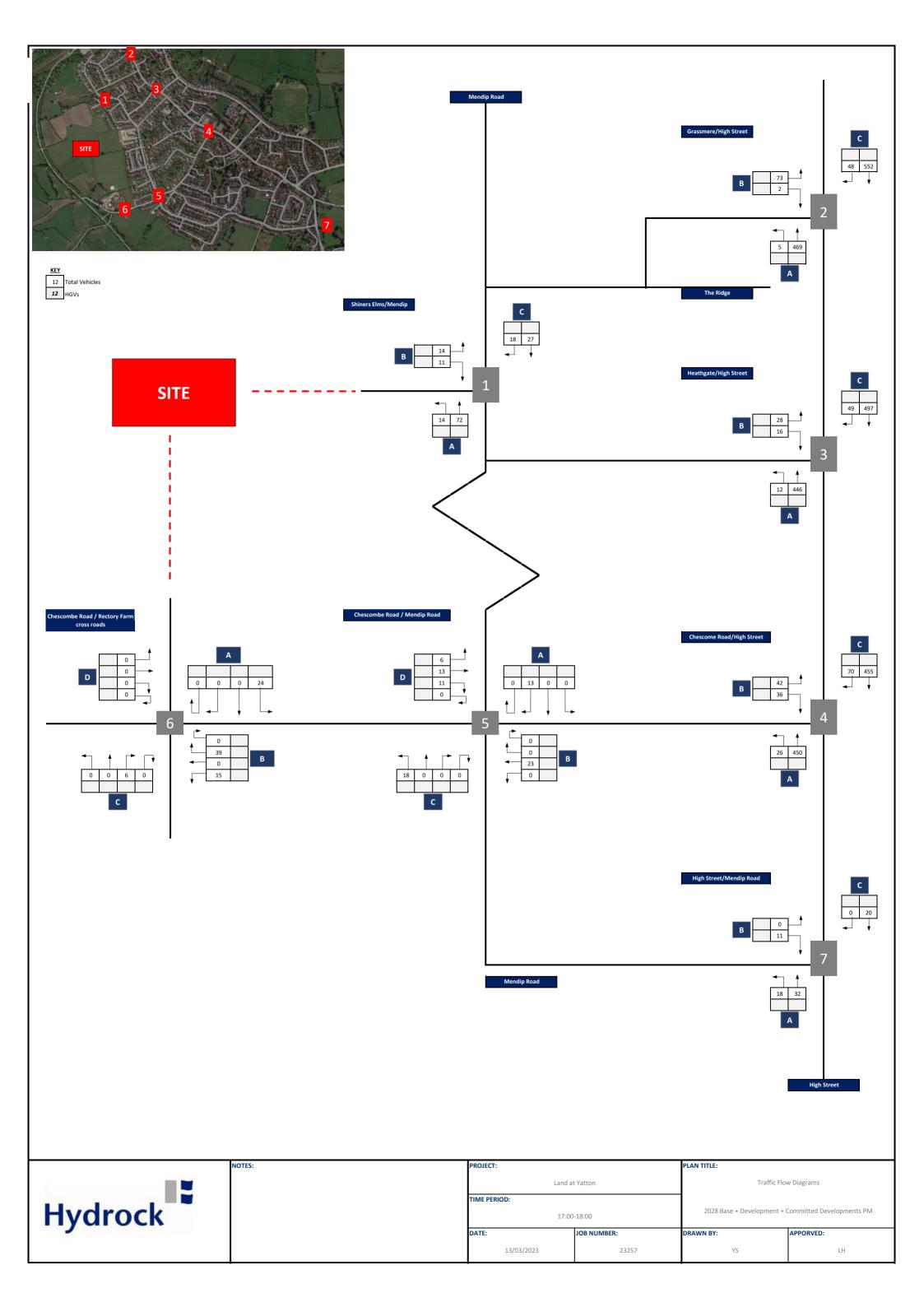






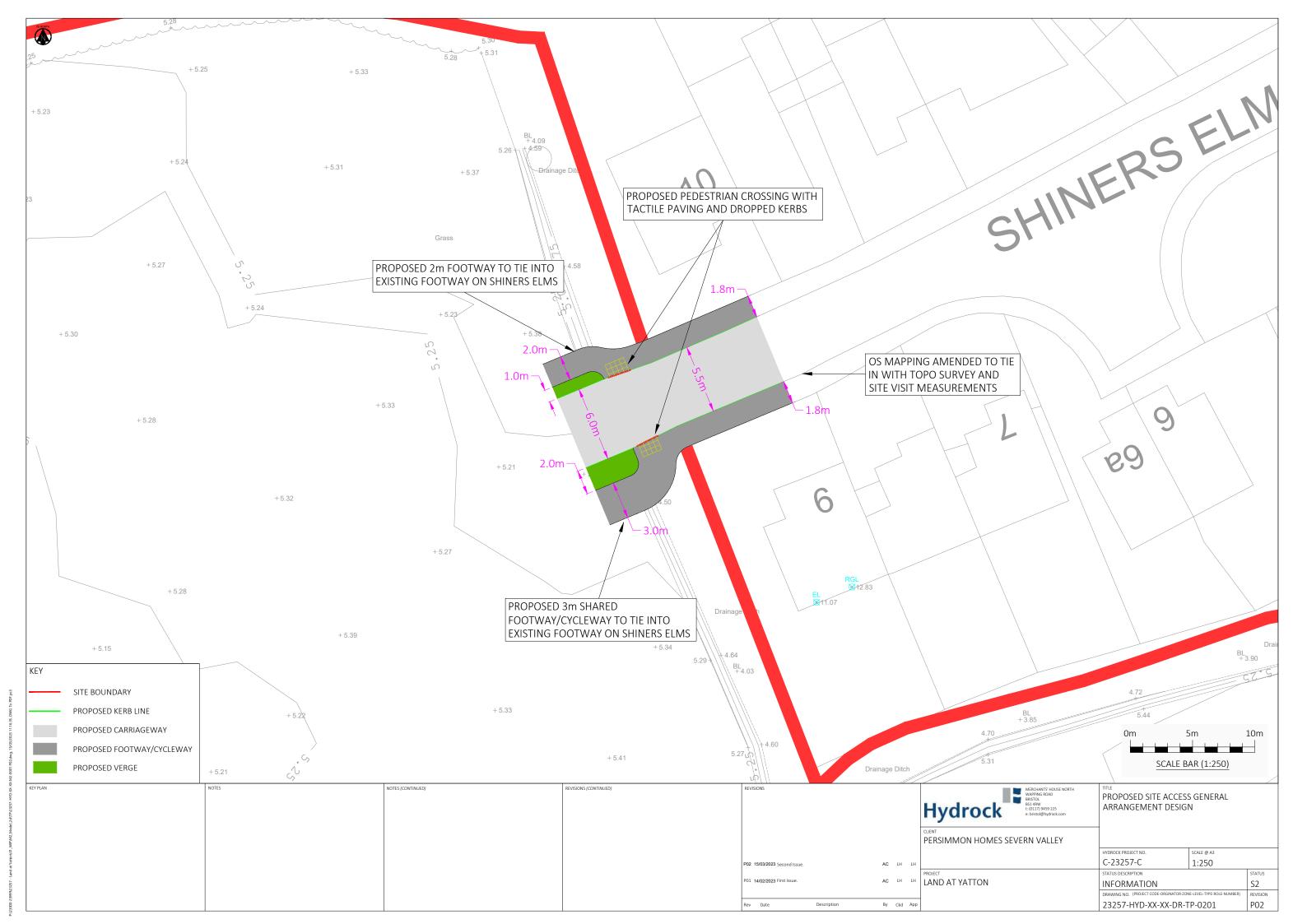








# Appendix E Site Access General Arrangement





# Appendix F TRICS Trip Rate Reports

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne Licence No: 540501

Filtering Summary

Land Use 02/A EMPLOYMENT/OFFICE
Selected Trip Rate Calculation Parameter Range 118-3000 sqm GFA

Scientific Transfer Tarameter Transfer Tre 5555 Squit Grit

Actual Trip Rate Calculation Parameter Range

Date Range Minimum: 01/01/13 Maximum: 01/03/23

1230-2500 sqm GFA

Parking Spaces Range All Surveys Included

Days of the week selected Tuesday 2

Main Location Types selected Edge of Town 2

Inclusion of Servicing Vehicles Counts
Servicing vehicles Included
Servicing vehicles Excluded
1 - Selected
3 - Selected

Population within 500m All Surveys Included

Population <1 Mile ranges selected 1,001 to 5,000 1 10,001 to 15,000 1

Population <5 Mile ranges selected 25,001 to 50,000 1 125,001 to 250,000 1

Car Ownership <5 Mile ranges selected
0.6 to 1.0
1.1 to 1.5

PTAL Rating No PTAL Present 2

Filter by Site Operations Breakdown All Surveys Included

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne Licence No: 540501

Calculation Reference: AUDIT-540501-230303-0355

#### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE TOTAL VEHICLES

#### Selected regions and areas:

03 SOUTH WEST

WL WILTSHIRE 1 days

07 YORKSHIRE & NORTH LINCOLNSHIRE

WY WEST YORKSHIRE 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: 1230 to 2500 (units: sqm) Range Selected by User: 118 to 3000 (units: sqm)

Parking Spaces Range: All Surveys Included

# Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 01/03/23

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:

Tuesday 2 days

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

# Selected survey types:

Manual count 2 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 undertaking using machines.

#### Selected Locations:

Edge of Town 2

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:

Development Zone 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, Out of Town, High Street and No Sub Category.

#### Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 1 days - Selected Servicing vehicles Excluded 3 days - Selected

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne Licence No: 540501

Secondary Filtering selection:

Use Class:

Not Known 2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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 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 125,001 to 250,000 1 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 1 days 1.1 to 1.5 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 2 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 2 days

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

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne Licence No: 540501

## LIST OF SITES relevant to selection parameters

1 WL-02-A-01 PET INSURANCE COMPANY WILTSHIRE

THE CRESCENT
AMESBURY
SUNRISE WAY
Edge of Town
Development Zone

Total Gross floor area: 2500 sqm

Survey date: TUESDAY 18/09/18 Survey Type: MANUAL
D2-A-05 OFFICES WEST YORKSHIRE

2 WY-02-A-05 OFFICES
PIONEER WAY
CASTLEFORD
WHITWOOD
Edge of Town

Total Gross floor area: 1230 sqm

Survey date: TUESDAY 23/05/17 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.

## MANUALLY DESELECTED SITES

No Sub Category

Site Ref	Reason for Deselection
EC-02-A-04	N/A
NF-02-A-04	N/A

Licence No: 540501

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

> TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE TOTAL VEHICLES

Calculation factor: 100 sqm

Estimated TRIP rate value per 100 SQM shown in shaded columns

BOLD print indicates peak (busiest) period

	ARRIVALS					DEP	ARTURES		TOTALS			
	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated
Time Range	Days	GFA	Rate	Trip Rate	Days	GFA	Rate	Trip Rate	Days	GFA	Rate	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												
06:00 - 07:00												
07:00 - 08:00	2	1865	0.268	0.000	2	1865	0.188	0.000	2	1865	0.456	0.000
08:00 - 09:00	2	1865	2.359	0.000	2	1865	0.268	0.000	2	1865	2.627	0.000
09:00 - 10:00	2	1865	2.520	0.000	2	1865	0.107	0.000	2	1865	2.627	0.000
10:00 - 11:00	2	1865	0.885	0.000	2	1865	0.161	0.000	2	1865	1.046	0.000
11:00 - 12:00	2	1865	0.107	0.000	2	1865	0.188	0.000	2	1865	0.295	0.000
12:00 - 13:00	2	1865	0.349	0.000	2	1865	0.777	0.000	2	1865	1.126	0.000
13:00 - 14:00	2	1865	0.751	0.000	2	1865	0.536	0.000	2	1865	1.287	0.000
14:00 - 15:00	2	1865	0.483	0.000	2	1865	0.402	0.000	2	1865	0.885	0.000
15:00 - 16:00	2	1865	0.349	0.000	2	1865	0.509	0.000	2	1865	0.858	0.000
16:00 - 17:00	2	1865	0.241	0.000	2	1865	1.635	0.000	2	1865	1.876	0.000
17:00 - 18:00	2	1865	0.134	0.000	2	1865	2.708	0.000	2	1865	2.842	0.000
18:00 - 19:00	1	2500	0.160	0.000	1	2500	1.480	0.000	1	2500	1.640	0.000
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			8.606	0.000			8.959	0.000			17.565	0.000

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.

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

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#### Parameter summary

1230 - 2500 (units: sqm) Trip rate parameter range selected: Survey date date range: 01/01/13 - 01/03/23

Number of weekdays (Monday-Friday): Number of Saturdays: 0 Number of Sundays: 0 Surveys automatically removed from selection: 0 Surveys manually removed from selection: 2

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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Wednesday 28/09/22 Page 1

Calculation Reference: AUDIT-540501-220928-0923

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne Licence No: 540501

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Selected regions and areas:

SOUTH EAST **EAST SUSSEX** ES 1 days **HAMPSHIRE** HC 1 days KC 1 days KENT SC **SURREY** 1 days WS WEST SUSSEX 3 days 04 EAST ANGLIA **SUFFOLK** SF 1 days 06 WEST MIDLANDS SH **SHROPSHIRE** 1 days ST STAFFORDSHIRE 1 days 07 YORKSHIRE & NORTH LINCOLNSHIRE NORTH EAST LINCOLNSHIRE 1 days **NORTH WEST** 80 CHESHIRE CH 2 days 13 **MUNSTER** WATERFORD WA 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: No of Dwellings Actual Range: 16 to 918 (units: ) Range Selected by User: 4 to 4334 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

# <u>Public Transport Provision:</u>

Selection by: Include all surveys

Date Range: 01/01/14 to 24/11/21

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 4 days Wednesday 4 days Thursday 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 undertaking using machines.

#### Selected Locations:

Edge of Town 14

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.

Page 2 Licence No: 540501

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

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:

3 14 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®.

#### Population within 500m Range:

All Surveys Included <u>Population within 1 mile:</u> 5,001 to 10,000

4 days

10,001 to 15,000 10 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 7 days 75,001 to 100,000 6 days 100,001 to 125,000 1 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 3 days 1.1 to 1.5 11 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:

Yes 6 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

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

Tolvaddon Energy Park Licence No: 540501 Hydrock Consultants Ltd Camborne

LIST OF SITES relevant to selection parameters

**CHESHIRE TERRACED HOUSES** 

**GREYSTOKE ROAD** MACCLESFIELD HURDSFIELD Edge of Town Residential Zone

CH-03-A-09

1

Total No of Dwellings: 24

Survey date: MONDAY 24/11/14 Survey Type: MANUAL

CH-03-A-10 SEMI-DETACHED & TERRACED **CHESHIRE** MEADOW DRIVE

**NORTHWICH BARNTON** Edge of Town Residential Zone

Total No of Dwellings: 40

Survey date: TUESDAY Survey Type: MANUAL 04/06/19

EAST SUSSEX 3 ES-03-A-07 MIXED HOUSES & FLATS

**NEW ROAD** HAILSHAM **HELLINGLY** Edge of Town Residential Zone

Total No of Dwellings: 91

Survey date: THURSDAY 07/11/19 Survey Type: MANUAL

HC-03-A-27 MIXED HOUSES HAMPSHI RE

DAIRY ROAD **ANDOVER** 

> Edge of Town Residential Zone

Total No of Dwellings: 73

Survey Type: MANUAL Survey date: TUESDAY 16/11/21

5 KC-03-A-07 MIXED HOUSES **KENT** 

RECULVER ROAD HERNE BAY

> Edge of Town Residential Zone

Total No of Dwellings: 288

Survey date: WEDNESDAY 27/09/17 Survey Type: MANUAL

NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE

HANOVER WALK **SCUNTHORPE** 

Edge of Town No Sub Category

Total No of Dwellings: 432

Survey date: MONDAY 12/05/14 Survey Type: MANUAL

SC-03-A-04 **DETACHED & TERRACED** SURREY

HIGH ROAD **BYFLEET** 

Edge of Town Residential Zone

Total No of Dwellings: 71

Survey date: THURSDAY 23/01/14 Survey Type: MANUAL

SF-03-A-05 **DETACHED HOUSES** SUFFOLK 8

VALE LANE

BURY ST EDMUNDS

Edge of Town Residential Zone

Total No of Dwellings: 18

09/09/15 Survey date: WEDNESDAY Survey Type: MANUAL

Licence No: 540501 Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

LIST OF SITES relevant to selection parameters (Cont.)

9 **SHROPSHIRE** SH-03-A-06 **BUNGALOWS** 

**ELLESMERE ROAD SHREWSBURY** 

Edge of Town Residential Zone

Total No of Dwellings: 16

Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

ST-03-A-07 STAFFORDSHI RE DETACHED & SEMI-DETACHED

**BEACONSIDE STAFFORD** MARSTON GATE Edge of Town Residential Zone

Total No of Dwellings: 248

Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

WA-03-A-04 WATERFORD 11 **DETACHED** 

MAYPARK LANE WATERFORD

Edge of Town Residential Zone

Total No of Dwellings: 280

Survey date: TUESDAY 24/06/14 Survey Type: MANUAL

WS-03-A-04 MIXED HOUSES WEST SUSSEX

HILLS FARM LANE HORSHAM

**BROADBRIDGE HEATH** 

Edge of Town Residential Zone

Total No of Dwellings: 151

Survey Type: MANUAL Survey date: THURSDAY 11/12/14

WS-03-A-11 MIXED HOUSES WEST SUSSEX

**ELLIS ROAD** WEST HORSHAM

S BROADBRIDGE HEATH Edge of Town Residential Zone

Total No of Dwellings: 918

Survey date: TUESDAY 02/04/19 Survey Type: MANUAL

WS-03-A-12 MIXED HOUSES WEST SUSSEX

MADGWICK LANE CHICHESTER WESTHAMPNETT Edge of Town Village

Total No of Dwellings: 152

Survey date: WEDNESDAY 16/06/21 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.

Licence No: 540501

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 1 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

	ARRIVALS				DEPARTURES				TOTALS			
	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated
Time Range	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	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												
06:00 - 07:00												
07:00 - 08:00	14	200	0.068	0.000	14	200	0.279	0.000	14	200	0.347	0.000
08:00 - 09:00	14	200	0.137	0.000	14	200	0.403	0.000	14	200	0.540	0.000
09:00 - 10:00	14	200	0.132	0.000	14	200	0.157	0.000	14	200	0.289	0.000
10:00 - 11:00	14	200	0.117	0.000	14	200	0.150	0.000	14	200	0.267	0.000
11:00 - 12:00	14	200	0.121	0.000	14	200	0.147	0.000	14	200	0.268	0.000
12:00 - 13:00	14	200	0.163	0.000	14	200	0.150	0.000	14	200	0.313	0.000
13:00 - 14:00	14	200	0.159	0.000	14	200	0.159	0.000	14	200	0.318	0.000
14:00 - 15:00	14	200	0.186	0.000	14	200	0.194	0.000	14	200	0.380	0.000
15:00 - 16:00	14	200	0.282	0.000	14	200	0.188	0.000	14	200	0.470	0.000
16:00 - 17:00	14	200	0.278	0.000	14	200	0.171	0.000	14	200	0.449	0.000
17:00 - 18:00	14	200	0.364	0.000	14	200	0.157	0.000	14	200	0.521	0.000
18:00 - 19:00	14	200	0.282	0.000	14	200	0.178	0.000	14	200	0.460	0.000
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.289	0.000			2.333	0.000			4.622	0.000

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: 16 - 918 (units: )
Survey date date range: 01/01/14 - 24/11/21

Number of weekdays (Monday-Friday): 14
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 1
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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Monday 31/10/22

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

Calculation Reference: AUDIT-540501-221031-1040

Page 1

Licence No: 540501

#### TRIP RATE CALCULATION SELECTION PARAMETERS:

: 03 - RESIDENTIAL Land Use

: B - AFFORDABLE/LOCAL AUTHORITY HOUSES

TOTAL VEHICLES

## Selected regions and areas:

SOUTH EAST

**EAST SUSSEX** ES 1 days

YORKSHIRE & NORTH LINCOLNSHIRE 07

WEST YORKSHIRE 2 days

WY 09 NORTH

> CB **CUMBRIA** 1 days NORTHUMBERLAND NB 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.

No of Dwellings Parameter: 14 to 135 (units: ) Actual Range: Range Selected by User: 11 to 750 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

#### Public Transport Provision:

Selection by: Include all surveys

01/01/00 to 22/10/21 Date Range:

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 Thursday 1 days Friday 1 days

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

#### Selected survey types:

Manual count 5 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 undertaking using machines.

5

#### Selected Locations:

Edge of Town

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:

Residential Zone 5

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, Retall Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

TRICS 7.9.3 071022 B20.58 Database right of TRICS Consortium Limited, 2022. All rights reserved Monday 31/10/22 Page 2

Licence No: 540501 Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

Secondary Filtering selection:

*Use Class:* C3

5 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®.

## Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000 3 days 10,001 to 15,000 2 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 2 days 1 days 75,001 to 100,000 125,001 to 250,000 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 4 days 1.1 to 1.5 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 5 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 5 days

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

Tolvaddon Energy Park Licence No: 540501 Hydrock Consultants Ltd Camborne

LIST OF SITES relevant to selection parameters

**TERRACED CUMBRIA** 1 CB-03-B-01

VICTORIA ROAD CARLISLE **BOTCHERBY** Edge of Town Residential Zone

Total No of Dwellings: 135

Survey date: TUESDAY 28/10/03 Survey Type: MANUAL

ES-03-B-01 **BUNGALOWS EAST SUSSEX** 

**BOWLEY ROAD HAILSHAM** 

Edge of Town Residential Zone

Total No of Dwellings:

Survey date: THURSDAY 03/07/03 Survey Type: MANUAL NORTHUMBÉRLAND 3 NB-03-B-01 SEMI DET. & TERRACED

**WESTLEA BEDLINGTON** 

Edge of Town Residential Zone

Total No of Dwellings: 97

Survey date: MONDAY 19/11/12 Survey Type: MANUAL WY-03-B-02 MIXED HOUSES WEST YORKSHIRE

WHITEACRE STREET HUDDERSFIELD **DEIGHTON** Edge of Town Residential Zone

Total No of Dwellings: 54

Survey date: TUESDAY 17/09/13 Survey Type: MANUAL WEST YÖRKSHIRE

5 WY-03-B-04 **TERRACED HOUSES** 

SYKES CLOSE **BATLEY** 

Edge of Town Residential Zone

Total No of Dwellings: 17

Survey date: FRIDAY 19/10/18 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.

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne

Licence No: 540501

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES

TOTAL VEHICLES

Calculation factor: 1 DWELLS

Estimated TRIP rate value per 1 DWELLS shown in shaded columns

BOLD print indicates peak (busiest) period

		AF	RRIVALS			DEP	ARTURES			Т	OTALS	
	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated	No.	Ave.	Trip	Estimated
Time Range	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	Trip Rate	Days	DWELLS	Rate	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												
06:00 - 07:00												
07:00 - 08:00	5	63	0.057	0.000	5	63	0.132	0.000	5	63	0.189	0.000
08:00 - 09:00	5	63	0.148	0.000	5	63	0.227	0.000	5	63	0.375	0.000
09:00 - 10:00	5	63	0.151	0.000	5	63	0.215	0.000	5	63	0.366	0.000
10:00 - 11:00	5	63	0.186	0.000	5	63	0.170	0.000	5	63	0.356	0.000
11:00 - 12:00	5	63	0.145	0.000	5	63	0.177	0.000	5	63	0.322	0.000
12:00 - 13:00	5	63	0.164	0.000	5	63	0.151	0.000	5	63	0.315	0.000
13:00 - 14:00	5	63	0.151	0.000	5	63	0.151	0.000	5	63	0.302	0.000
14:00 - 15:00	5	63	0.208	0.000	5	63	0.158	0.000	5	63	0.366	0.000
15:00 - 16:00	5	63	0.199	0.000	5	63	0.192	0.000	5	63	0.391	0.000
16:00 - 17:00	5	63	0.243	0.000	5	63	0.180	0.000	5	63	0.423	0.000
17:00 - 18:00	5	63	0.224	0.000	5	63	0.145	0.000	5	63	0.369	0.000
18:00 - 19:00	5	63	0.174	0.000	5	63	0.148	0.000	5	63	0.322	0.000
19:00 - 20:00												
20:00 - 21:00												
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			2.050	0.000			2.046	0.000			4.096	0.000

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: 14 - 135 (units: )
Survey date date range: 01/01/00 - 22/10/21

Number of weekdays (Monday-Friday):5Number of Saturdays:0Number of Sundays:0Surveys automatically removed from selection:0Surveys 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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



# Appendix G Junction Capacity Modelling



# **Junctions 9**

# **PICADY 9 - Priority Intersection Module**

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Filename: Chescombe Road High Street Junction.j9

Path: P:\23000-23999\23257 - Land at Yatton\01\_WIP\CA\_Calculation\TP\Modelling

**Report generation date:** 13/03/2023 14:15:18

»2022 Base, AM
»2025 Base, AM
»2025 Base, AM
»2025 Base, PM
»2025 Base + Committed Dev, AM
»2025 Base + Committed Dev, PM
»2025 Base + Committed Dev + Proposed Dev, AM
»2025 Base + Committed Dev + Proposed Dev, PM
»2028 Base + Committed Dev + Proposed Dev, PM
»2028 Base, AM
»2028 Base + Committed Dev , AM
»2028 Base + Committed Dev , PM
»2028 Base + Committed Dev + Proposed Dev , AM
»2028 Base + Committed Dev + Proposed Dev , PM
»2028 Base + Committed Dev + Proposed Dev , PM



# Summary of junction performance

		AM				PM		
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
				2022	Base			
Stream B-AC	0.1	8.33	0.09	А	0.2	10.56	0.16	В
Stream C-AB	0.2	5.16	0.09	А	0.4	5.34	0.16	Α
				2025	Base			
Stream B-AC	0.1	8.54	0.10	А	0.2	11.01	0.18	В
Stream C-AB	0.2	5.13	0.10	А	0.4	5.31	0.18	Α
		202	5 Bas	e + C	ommitted D	ev		
Stream B-AC	0.2	9.16	0.13	А	0.2	11.46	0.19	В
Stream C-AB	0.2	5.07	0.10	А	0.5	5.39	0.20	Α
	202	5 Base +	Com	mitte	d Dev + Pro	posed D	ev	
Stream B-AC	0.2	10.07	0.17	В	0.3	12.20	0.22	В
Stream C-AB	0.3	5.08	0.11	А	0.5	5.47	0.21	Α
				2028	Base			
Stream B-AC	0.1	8.65	0.10	А	0.2	11.27	0.18	В
Stream C-AB	0.2	5.11	0.10	А	0.5	5.31	0.19	Α
		202	8 Bas	e + C	ommitted D	ev		
Stream B-AC	0.2	9.29	0.14	А	0.2	11.75	0.20	В
Stream C-AB	0.2	5.05	0.11	А	0.5	5.40	0.21	Α
	202	8 Base +	Corr	mitte	d Dev + Pro	posed D	ev	
Stream B-AC	0.2	10.22	0.17	В	0.3	12.51	0.23	В
Stream C-AB	0.3	5.06	0.12	А	0.6	5.48	0.22	Α

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

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

# File summary

# **File Description**

Title	
Location	
Site number	
Date	14/02/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HYDROCK\AnnieChapelton
Description	

# **Units**

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

# **Analysis Options**

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



# **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2025 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2025 Base	PM	ONE HOUR	17:00	18:30	15	✓
D5	2025 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D6	2025 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓
D7	2025 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D8	2025 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	✓
D9	2028 Base	AM	ONE HOUR	08:00	09:30	15	✓
D10	2028 Base	PM	ONE HOUR	17:00	18:30	15	✓
D11	2028 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D12	2028 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓
D13	2028 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D14	2028 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	✓

# **Analysis Set Details**

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



# **2022** Base, AM

## **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.74	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# Arms

#### **Arms**

Arm	Name	Description	Arm type
Α	untitled		Major
В	untitled		Minor
С	untitled		Major

## **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
С	5.85			50.0	✓	0.00

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

# **Minor Arm Geometry**

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)	
В	One lane	2.80	43	43	

# Slope / Intercept / Capacity

## **Priority Intersection Slopes and Intercepts**

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	502	0.092	0.233	0.146	0.333
1	B-C	638	0.098	0.249	-	-
1	С-В	603	0.235	0.235	-	-

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

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

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



# **Traffic Demand**

# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm   Profile type		Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	377	100.000	
В		ONE HOUR	✓	40	100.000	
С		ONE HOUR	✓	416	100.000	

# **Origin-Destination Data**

# Demand (Veh/hr)

		То					
		Α	В	С			
	Α	0	14	363			
From	В	8	0	32			
	С	386	30	0			

# Vehicle Mix

# **Heavy Vehicle Percentages**

	То					
		Α	В	ပ		
	Α	0	0	2		
From	В	0	0	0		
	С	4	0	0		

# Results

# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	8.33	0.1	А	37	55
C-AB	0.09	5.16	0.2	А	52	79
C-A					329	494
A-B					13	19
A-C					333	500



# Main Results for each time segment

## 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	8	518	0.058	30	0.0	0.1	7.365	А
C-AB	37	9	736	0.051	37	0.0	0.1	5.149	А
C-A	276	69			276				
A-B	11	3			11				
A-C	273	68			273				

# 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	9	501	0.072	36	0.1	0.1	7.741	A
C-AB	50	12	765	0.065	49	0.1	0.1	5.031	A
C-A	324	81			324				
A-B	13	3			13				
A-C	326	82			326				

## 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44	11	476	0.092	44	0.1	0.1	8.327	Α
C-AB	70	18	805	0.087	70	0.1	0.2	4.892	A
C-A	388	97			388				
A-B	15	4			15				
A-C	400	100			400				

# 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	44	11	476	0.092	44	0.1	0.1	8.330	A
C-AB	70	18	805	0.087	70	0.2	0.2	4.901	A
C-A	388	97			388				
A-B	15	4			15				
A-C	400	100			400				

## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	36	9	501	0.072	36	0.1	0.1	7.747	А
C-AB	50	12	765	0.065	50	0.2	0.1	5.047	А
C-A	324	81			324				
A-B	13	3			13				
A-C	326	82			326				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	8	518	0.058	30	0.1	0.1	7.373	А
C-AB	37	9	736	0.051	38	0.1	0.1	5.164	A
C-A	276	69			276				
A-B	11	3			11				
A-C	273	68			273				

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# **2022 Base, PM**

# **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.30	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm Profile type		Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	408	100.000	
В		ONE HOUR	✓	60	100.000	
С		ONE HOUR	✓	462	100.000	

# **Origin-Destination Data**

# Demand (Veh/hr)

	То					
		Α	В	С		
F	Α	0	12	396		
From	В	26	0	34		
	С	407	55	0		

# **Vehicle Mix**

	То				
		Α	В	С	
	Α	0	0	0	
From	В	0	0	0	
	С	0	0	0	



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.16	10.56	0.2	В	55	83
C-AB	0.16	5.34	0.4	А	99	149
C-A					324	487
A-B					11	17
A-C					363	545

# Main Results for each time segment

# 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	11	461	0.098	45	0.0	0.1	8.634	A
C-AB	70	18	746	0.094	70	0.0	0.2	5.317	A
C-A	278	69			278				
A-B	9	2			9				
A-C	298	75			298				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	13	439	0.123	54	0.1	0.1	9.348	А
C-AB	94	23	777	0.121	94	0.2	0.3	5.268	A
C-A	322	80			322				
A-B	11	3			11				
A-C	356	89			356				

## 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	17	407	0.162	66	0.1	0.2	10.543	В
C-AB	134	33	821	0.163	133	0.3	0.4	5.238	А
C-A	375	94			375				
A-B	13	3			13				
A-C	436	109			436				

## 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	17	407	0.162	66	0.2	0.2	10.558	В
C-AB	134	34	822	0.163	134	0.4	0.4	5.248	A
C-A	374	94			374				
A-B	13	3			13				
A-C	436	109			436				

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# 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	13	439	0.123	54	0.2	0.1	9.366	А
C-AB	94	24	778	0.121	95	0.4	0.3	5.283	A
C-A	321	80			321				
A-B	11	3			11				
A-C	356	89			356				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	11	461	0.098	45	0.1	0.1	8.660	A
C-AB	71	18	747	0.095	71	0.3	0.2	5.336	A
C-A	277	69			277				
A-B	9	2			9				
A-C	298	75			298				



# **2025 Base, AM**

## **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	·	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.76	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 Base	AM	ONE HOUR	08:00	09:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	<b>✓</b>	399	100.000
В		ONE HOUR	✓	42	100.000
С		ONE HOUR	✓	440	100.000

# **Origin-Destination Data**

## Demand (Veh/hr)

	То					
		Α	В	С		
F	Α	0	15	384		
From	В	8	0	34		
	С	408	32	0		

# **Vehicle Mix**

		То					
		Α	В	С			
	Α	0	0	2			
From	В	0	0	0			
	C	4	0	0			



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	8.54	0.1	А	39	58
C-AB	0.10	5.13	0.2	А	58	87
C-A					346	519
A-B					14	20
A-C					352	528

# Main Results for each time segment

# 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	513	0.062	32	0.0	0.1	7.471	A
C-AB	41	10	744	0.055	40	0.0	0.1	5.113	A
C-A	291	73			291				
A-B	11	3			11				
A-C	289	72			289				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	10	495	0.077	38	0.1	0.1	7.882	А
C-AB	54	14	775	0.070	54	0.1	0.1	4.993	A
C-A	341	85			341				
A-B	13	3			13				
A-C	345	86			345				

## 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	468	0.099	46	0.1	0.1	8.533	A
C-AB	78	19	819	0.095	78	0.1	0.2	4.854	А
C-A	407	102			407				
A-B	16	4			16				
A-C	423	106			423				

## 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	468	0.099	47	0.1	0.1	8.537	A
C-AB	78	19	819	0.095	78	0.2	0.2	4.865	A
C-A	407	102			407				
A-B	16	4			16				
A-C	423	106			423				

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## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	10	495	0.077	38	0.1	0.1	7.890	А
C-AB	55	14	775	0.070	55	0.2	0.1	5.012	Α
C-A	341	85			341				
A-B	13	3			13				
A-C	345	86			345				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	513	0.062	32	0.1	0.1	7.482	A
C-AB	41	10	745	0.055	41	0.1	0.1	5.128	A
C-A	290	73			290				
A-B	11	3			11				
A-C	289	72			289				



# **2025 Base, PM**

## **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.35	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 Base	PM	ONE HOUR	17:00	18:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Profile type   Use O-D data   Average Demand (Veh/hr)		Scaling Factor (%)	
Α		ONE HOUR	✓	432	100.000	
В		ONE HOUR    ✓ 63		63	100.000	
С		ONE HOUR	✓	489	100.000	

# **Origin-Destination Data**

# Demand (Veh/hr)

	То						
From		Α	В	С			
	Α	0	13	419			
	В	28	0	36			
	С	430	58	0			

# **Vehicle Mix**

	То					
From		Α	В	С		
	Α	0	0	0		
	В	0	0	0		
	С	0	0	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	11.01	0.2	В	58	87
C-AB	0.18	5.31	0.4	A	110	165
C-A					339	508
A-B					12	17
A-C					384	577

# Main Results for each time segment

# 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	455	0.105	47	0.0	0.1	8.827	A
C-AB	77	19	755	0.102	76	0.0	0.2	5.297	A
C-A	291	73			291				
A-B	10	2			10				
A-C	315	79			315				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	431	0.132	57	0.1	0.2	9.630	А
C-AB	103	26	789	0.131	103	0.2	0.3	5.257	А
C-A	336	84			336				
A-B	11	3			11				
A-C	377	94			377				

## 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	397	0.176	70	0.2	0.2	10.992	В
C-AB	149	37	836	0.178	148	0.3	0.4	5.243	А
C-A	389	97			389				
A-B	14	3			14				
A-C	461	115			461				

## 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	397	0.176	70	0.2	0.2	11.010	В
C-AB	149	37	836	0.178	149	0.4	0.4	5.255	A
C-A	389	97			389				
A-B	14	3			14				
A-C	461	115			461				

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# 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	431	0.132	57	0.2	0.2	9.650	А
C-AB	103	26	789	0.131	104	0.4	0.3	5.271	Α
C-A	336	84			336				
A-B	11	3			11				
A-C	377	94			377				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	454	0.105	48	0.2	0.1	8.859	A
C-AB	77	19	756	0.102	77	0.3	0.2	5.315	A
C-A	291	73			291				
A-B	10	2			10				
A-C	315	79			315				

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# 2025 Base + Committed Dev, AM

## **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	unction Name Junction type M		Major road direction	jor road direction Use circulating lanes		Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.93	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2025 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)		
Α		ONE HOUR	✓	407	100.000		
В		ONE HOUR	✓	54	100.000		
С		ONE HOUR	✓	460	100.000		

# **Origin-Destination Data**

## Demand (Veh/hr)

	То					
		Α	В	O		
	Α	0	17	390		
From	В	14	0	40		
	С	425	35	0		

# **Vehicle Mix**

		То					
		Α	В	ပ			
	Α	0	0	0			
From	В	0	0	0			
	С	0	0	0			



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	9.16	0.2	A	50	75
C-AB	0.10	5.07	0.2	А	64	96
C-A					358	537
A-B					16	24
A-C					358	537

# Main Results for each time segment

## 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	10	500	0.082	41	0.0	0.1	7.826	A
C-AB	45	11	757	0.060	45	0.0	0.1	5.057	А
C-A	301	75			301				
A-B	13	3			13				
A-C	294	73			294				

# 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	481	0.102	49	0.1	0.1	8.335	A
C-AB	61	15	790	0.077	60	0.1	0.1	4.938	А
C-A	353	88			353				
A-B	15	4			15				
A-C	351	88			351				

# 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service			
B-AC	60	15	453	0.132	60	0.1	0.2	9.153	A			
C-AB	87	22	837	0.104	87	0.1	0.2	4.805	A			
C-A	419	105			419							
A-B	19	5			19							
A-C	429	107			429							

# 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	453	0.132	60	0.2	0.2	9.161	А
C-AB	87	22	837	0.104	87	0.2	0.2	4.807	Α
C-A	419	105			419				
A-B	19	5			19				
A-C	429	107			429				



## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	481	0.102	49	0.2	0.1	8.345	А
C-AB	61	15	790	0.077	61	0.2	0.1	4.944	Α
C-A	353	88			353				
A-B	15	4			15				
A-C	351	88			351				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	10	500	0.082	41	0.1	0.1	7.843	A
C-AB	45	11	757	0.060	46	0.1	0.1	5.066	A
C-A	301	75			301				
A-B	13	3			13				
A-C	294	73			294				



# 2025 Base + Committed Dev, PM

## **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

ĺ	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.48	А

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2025 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	452	100.000
В		ONE HOUR	✓	68	100.000
С		ONE HOUR	✓	504	100.000

# **Origin-Destination Data**

## Demand (Veh/hr)

		То					
From		Α	В	O			
	Α	0	18	434			
	В	30	0	39			
	С	439	65	0			

# **Vehicle Mix**

		То					
		Α	В	ပ			
	Α	0	0	0			
From	В	0	0	0			
	С	0	0	0			



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	11.46	0.2	В	63	94
C-AB	0.20	5.39	0.5	А	124	187
C-A					338	507
A-B					17	25
A-C					398	597

# Main Results for each time segment

## 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	450	0.114	51	0.0	0.1	9.016	А
C-AB	87	22	758	0.114	86	0.0	0.2	5.357	А
C-A	293	73			293				
A-B	14	3			14				
A-C	327	82			327				

## 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	425	0.144	61	0.1	0.2	9.900	A
C-AB	117	29	791	0.148	116	0.2	0.3	5.341	A
C-A	337	84			337				
A-B	16	4			16				
A-C	390	98			390				

# 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	389	0.193	75	0.2	0.2	11.440	В
C-AB	169	42	840	0.202	169	0.3	0.5	5.373	A
C-A	386	96			386				
A-B	20	5			20				
A-C	478	119			478				

# 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	389	0.193	75	0.2	0.2	11.464	В
C-AB	170	42	840	0.202	170	0.5	0.5	5.386	А
C-A	386	96			386				
A-B	20	5			20				
A-C	478	119			478				



## 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	425	0.145	62	0.2	0.2	9.929	А
C-AB	117	29	792	0.148	118	0.5	0.3	5.355	А
C-A	336	84			336				
A-B	16	4			16				
A-C	390	98			390				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	449	0.114	52	0.2	0.1	9.050	Α
C-AB	87	22	758	0.115	87	0.3	0.2	5.378	A
C-A	293	73			293				
A-B	14	3			14				
A-C	327	82			327				

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# 2025 Base + Committed Dev + Proposed Dev, AM

## **Data Errors and Warnings**

Severity	/ Area Item		Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.11	А

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2025 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	<b>✓</b>

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	416	100.000
В		ONE HOUR	✓	66	100.000
С		ONE HOUR	✓	467	100.000

# **Origin-Destination Data**

## Demand (Veh/hr)

	То						
From		Α	В	С			
	Α	0	23	393			
	В	22	0	44			
	С	430	37	0			

# **Vehicle Mix**

		То				
		Α	В	ပ		
	Α	0	0	0		
From	В	0	0	0		
	С	0	0	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	10.07	0.2	В	61	91
C-AB	0.11	5.08	0.3	А	69	104
C-A					359	539
A-B					21	31
A-C					361	541

# Main Results for each time segment

## 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	482	0.104	50	0.0	0.1	8.323	A
C-AB	48	12	758	0.064	48	0.0	0.1	5.073	A
C-A	303	76			303				
A-B	17	4			17				
A-C	296	74			296				

# 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	461	0.130	60	0.1	0.1	8.974	A
C-AB	65	16	791	0.082	65	0.1	0.2	4.960	А
C-A	355	89			355				
A-B	20	5			20				
A-C	353	88			353				

# 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	431	0.170	73	0.1	0.2	10.052	В
C-AB	94	23	839	0.112	93	0.2	0.2	4.832	А
C-A	420	105			420				
A-B	25	6			25				
A-C	433	108			433				

# 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	431	0.170	73	0.2	0.2	10.065	В
C-AB	94	23	839	0.112	94	0.2	0.3	4.839	Α
C-A	420	105			420				
A-B	25	6			25				
A-C	433	108			433				



## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	461	0.130	60	0.2	0.2	8.992	А
C-AB	65	16	791	0.083	66	0.3	0.2	4.967	А
C-A	355	89			355				
A-B	20	5			20				
A-C	353	88			353				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	482	0.104	50	0.2	0.1	8.346	A
C-AB	49	12	758	0.064	49	0.2	0.1	5.081	A
C-A	303	76			303				
A-B	17	4			17				
A-C	296	74			296				



# 2025 Base + Committed Dev + Proposed Dev, PM

## **Data Errors and Warnings**

Severity	Area	Item	Description				
Warning	Varning Major arm width Arm C - Major arm geometry		For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.				
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.				

# **Junction Network**

#### **Junctions**

ĺ	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.63	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2025 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	<b>✓</b>

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	464	100.000	
В		ONE HOUR	✓	77	100.000	
С		ONE HOUR	✓	511	100.000	

# **Origin-Destination Data**

## Demand (Veh/hr)

	То					
		Α	В	С		
	Α	0	26	438		
From	В	35	0	41		
	С	443	68	0		

# **Vehicle Mix**

	То					
From		Α	В	ပ		
	Α	0	0	0		
	В	0	0	0		
	С	0	0	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	12.20	0.3	В	70	105
C-AB	0.21	5.47	0.5	А	132	198
C-A					337	505
A-B					24	36
A-C					402	603

# Main Results for each time segment

## 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	442	0.130	57	0.0	0.1	9.341	Α
C-AB	91	23	758	0.121	90	0.0	0.2	5.394	A
C-A	293	73			293				
A-B	19	5			19				
A-C	330	82			330				

# 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	416	0.165	69	0.1	0.2	10.356	В
C-AB	124	31	792	0.156	123	0.2	0.3	5.394	А
C-A	336	84			336				
A-B	23	6			23				
A-C	394	98			394				

# 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	379	0.222	84	0.2	0.3	12.160	В
C-AB	180	45	840	0.214	179	0.3	0.5	5.456	А
C-A	383	96			383				
A-B	28	7			28				
A-C	483	121			483				

# 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	379	0.222	84	0.3	0.3	12.197	В
C-AB	180	45	840	0.214	180	0.5	0.5	5.466	А
C-A	383	96			383				
A-B	28	7			28				
A-C	483	121			483				



## 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	416	0.165	69	0.3	0.2	10.392	В
C-AB	124	31	792	0.157	125	0.5	0.4	5.412	А
C-A	335	84			335				
A-B	23	6			23				
A-C	394	98			394				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	442	0.130	58	0.2	0.2	9.386	А
C-AB	92	23	758	0.121	92	0.4	0.3	5.419	А
C-A	293	73			293				
A-B	19	5			19				
A-C	330	82			330				



# **2028 Base, AM**

## **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.78	А

# **Junction Network Options**

Driving side	Lighting		
Left	Normal/unknown		

# **Traffic Demand**

## **Demand Set Details**

	ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
Г	D9	2028 Base	AM	ONE HOUR	08:00	09:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm Profile type		Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	410	100.000	
В		ONE HOUR	✓	44	100.000	
С		ONE HOUR	✓	453	100.000	

# Origin-Destination Data

# Demand (Veh/hr)

		То					
		Α	В	O			
F	Α	0	15	395			
From	В	9	0	35			
	С	420	33	0			

# **Vehicle Mix**

		То				
		Α	В	С		
	Α	0	0	2		
From	В	0	0	0		
	C	4	0	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	8.65	0.1	А	40	60
C-AB	0.10	5.11	0.2	А	61	91
C-A					355	532
A-B					14	21
A-C					363	544

# Main Results for each time segment

# 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	511	0.064	33	0.0	0.1	7.528	A
C-AB	43	11	749	0.057	42	0.0	0.1	5.094	A
C-A	298	75			298				
A-B	11	3			11				
A-C	297	74			297				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	491	0.080	39	0.1	0.1	7.960	А
C-AB	57	14	780	0.073	57	0.1	0.1	4.971	A
C-A	350	87			350				
A-B	14	3			14				
A-C	355	89			355				

## 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	464	0.103	48	0.1	0.1	8.648	А
C-AB	82	21	826	0.099	82	0.1	0.2	4.836	А
C-A	416	104			416				
A-B	17	4			17				
A-C	435	109			435				

## 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	464	0.103	48	0.1	0.1	8.652	A
C-AB	82	21	826	0.100	82	0.2	0.2	4.845	A
C-A	416	104			416				
A-B	17	4			17				
A-C	435	109			435				

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## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	10	491	0.080	39	0.1	0.1	7.966	А
C-AB	57	14	781	0.073	58	0.2	0.1	4.991	А
C-A	350	87			350				
A-B	14	3			14				
A-C	355	89			355				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	8	510	0.064	33	0.1	0.1	7.537	А
C-AB	43	11	749	0.057	43	0.1	0.1	5.109	A
C-A	298	75			298				
A-B	11	3			11				
A-C	297	74			297				



# 2028 Base , PM

## **Data Errors and Warnings**

Severity	ity Area Item		Area Item Description			
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.			

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.38	А

# **Junction Network Options**

Driving side	Lighting	
Left	Normal/unknown	

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2028 Base	PM	ONE HOUR	17:00	18:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	444	100.000
В		ONE HOUR	✓	65	100.000
С		ONE HOUR	✓	503	100.000

# Origin-Destination Data

# Demand (Veh/hr)

	То				
		Α	В	С	
F	Α	0	13	431	
From	В	28	0	37	
	С	443	60	0	

# **Vehicle Mix**

	То			
		Α	В	С
	Α	0	0	0
From	В	0	0	0
	C	0	0	0



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	11.27	0.2	В	60	90
C-AB	0.19	5.31	0.5	А	116	173
C-A					346	519
A-B					12	18
A-C					395	593

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	451	0.109	49	0.0	0.1	8.934	A
C-AB	80	20	760	0.106	79	0.0	0.2	5.287	A
C-A	298	75			298				
A-B	10	2			10				
A-C	324	81			324				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	426	0.138	59	0.1	0.2	9.781	А
C-AB	108	27	795	0.136	108	0.2	0.3	5.251	Α
C-A	344	86			344				
A-B	12	3			12				
A-C	387	97			387				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	18	391	0.184	72	0.2	0.2	11.248	В
C-AB	157	39	843	0.186	157	0.3	0.5	5.249	А
C-A	396	99			396				
A-B	14	4			14				
A-C	475	119			475				

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	18	391	0.184	72	0.2	0.2	11.269	В
C-AB	158	39	844	0.187	158	0.5	0.5	5.259	A
C-A	396	99			396				
A-B	14	4			14				
A-C	475	119			475				

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#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	426	0.138	59	0.2	0.2	9.808	А
C-AB	109	27	795	0.137	109	0.5	0.3	5.264	А
C-A	343	86			343				
A-B	12	3			12				
A-C	387	97			387				

#### 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	451	0.109	49	0.2	0.1	8.968	A
C-AB	81	20	761	0.106	81	0.3	0.2	5.306	A
C-A	298	74			298				
A-B	10	2			10				
A-C	324	81			324				



# 2028 Base + Committed Dev , AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.94	Α

### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	419	100.000	
В		ONE HOUR ✓		56	100.000	
С		ONE HOUR	✓	473	100.000	

# **Origin-Destination Data**

#### Demand (Veh/hr)

		Т	o	
		Α	В	С
	Α	0	18	401
From	В	14	0	41
	С	437	36	0

## **Vehicle Mix**

		T	·o	
		Α	В	ပ
	Α	0	0	0
From	В	0	0	0
	С	0	0	0



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	9.29	0.2	A	51	77
C-AB	0.11	5.05	0.2	А	67	101
C-A					366	549
A-B					16	24
A-C					368	552

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	10	498	0.084	42	0.0	0.1	7.879	A
C-AB	47	12	761	0.062	47	0.0	0.1	5.038	A
C-A	309	77			309				
A-B	13	3			13				
A-C	302	75			302				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	478	0.105	50	0.1	0.1	8.418	A
C-AB	63	16	795	0.080	63	0.1	0.1	4.919	A
C-A	362	90			362				
A-B	16	4			16				
A-C	361	90			361				

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	449	0.137	61	0.1	0.2	9.280	A
C-AB	91	23	844	0.108	91	0.1	0.2	4.785	А
C-A	429	107			429				
A-B	19	5			19				
A-C	442	110			442				

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	449	0.137	61	0.2	0.2	9.288	А
C-AB	92	23	844	0.109	92	0.2	0.2	4.792	A
C-A	429	107			429				
A-B	19	5			19				
A-C	442	110			442				



#### 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	477	0.105	50	0.2	0.1	8.428	А
C-AB	64	16	795	0.080	64	0.2	0.2	4.928	А
C-A	361	90			361				
A-B	16	4			16				
A-C	361	90			361				

### 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	42	10	498	0.084	42	0.1	0.1	7.903	А
C-AB	47	12	761	0.062	48	0.2	0.1	5.045	А
C-A	308	77			308				
A-B	13	3			13				
A-C	302	75			302				



# 2028 Base + Committed Dev , PM

#### **Data Errors and Warnings**

Severity	Area Item		Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.51	Α

### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	464	100.000	
В		ONE HOUR	✓	70	100.000	
С		ONE HOUR	✓	518	100.000	

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То						
From		Α	В	С			
	Α	0	18	446			
	В	30	0	40			
	С	452	66	0			

## **Vehicle Mix**

	То						
From		Α	В	ပ			
	Α	0	0	0			
	В	0	0	0			
	С	0	0	0			



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	11.75	0.2	В	64	96
C-AB	0.21	5.40	0.5	А	131	196
C-A					345	518
A-B					17	25
A-C					409	614

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	13	446	0.118	52	0.0	0.1	9.127	A
C-AB	90	23	763	0.118	89	0.0	0.2	5.343	A
C-A	300	75			300				
A-B	14	3			14				
A-C	336	84			336				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	420	0.150	63	0.1	0.2	10.065	В
C-AB	122	31	797	0.153	122	0.2	0.3	5.338	A
C-A	344	86			344				
A-B	17	4			17				
A-C	401	100			401				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	384	0.201	77	0.2	0.2	11.717	В
C-AB	178	45	847	0.210	178	0.3	0.5	5.387	А
C-A	392	98			392				
A-B	20	5			20		·		
A-C	491	123			491				

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	384	0.201	77	0.2	0.2	11.746	В
C-AB	179	45	848	0.211	179	0.5	0.5	5.396	А
C-A	392	98			392				
A-B	20	5			20				
A-C	491	123			491				



#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	420	0.150	63	0.2	0.2	10.096	В
C-AB	123	31	798	0.154	124	0.5	0.4	5.353	А
C-A	343	86			343				
A-B	17	4			17				
A-C	401	100			401				

#### 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	53	13	446	0.118	53	0.2	0.1	9.166	A
C-AB	91	23	763	0.119	91	0.4	0.2	5.368	A
C-A	299	75			299				
A-B	14	3			14				
A-C	336	84			336				



# 2028 Base + Committed Dev + Proposed Dev , AM

#### **Data Errors and Warnings**

Severity	y Area Item		Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.12	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2028 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	427	100.000	
В		ONE HOUR	✓	68	100.000	
С		ONE HOUR	✓	480	100.000	

# **Origin-Destination Data**

#### Demand (Veh/hr)

		То					
From		Α	В	С			
	Α	0	23	404			
	В	23	0	45			
	С	442	38	0			

## **Vehicle Mix**

		То					
		Α	В	ပ			
	Α	0	0	0			
From	В	0	0	0			
	С	0	0	0			



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	10.22	0.2	В	62	93
C-AB	0.12	5.06	0.3	А	72	109
C-A					368	552
A-B					21	32
A-C					371	556

## Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	479	0.106	50	0.0	0.1	8.387	A
C-AB	51	13	763	0.066	50	0.0	0.1	5.050	А
C-A	311	78			311				
A-B	17	4			17				
A-C	304	76			304				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	458	0.133	61	0.1	0.2	9.069	A
C-AB	68	17	797	0.085	68	0.1	0.2	4.939	A
C-A	363	91			363				
A-B	21	5			21				
A-C	363	91			363				

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	427	0.175	74	0.2	0.2	10.205	В
C-AB	98	25	846	0.116	98	0.2	0.3	4.816	A
C-A	430	107			430				
A-B	25	6			25				
A-C	445	111			445				

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	427	0.175	75	0.2	0.2	10.219	В
C-AB	99	25	846	0.117	99	0.3	0.3	4.823	А
C-A	430	107			430				
A-B	25	6			25				
A-C	445	111			445				



#### 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	457	0.133	61	0.2	0.2	9.088	А
C-AB	68	17	797	0.086	69	0.3	0.2	4.947	А
C-A	363	91			363				
A-B	21	5			21				
A-C	363	91			363				

### 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	479	0.106	51	0.2	0.1	8.414	A
C-AB	51	13	763	0.067	51	0.2	0.1	5.062	A
C-A	310	78			310				
A-B	17	4			17				
A-C	304	76			304				



# 2028 Base + Committed Dev + Proposed Dev , PM

#### **Data Errors and Warnings**

Severity	everity Area Item		Description		
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.		
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.		

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.67	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	477	100.000
В		ONE HOUR	✓	78	100.000
С		ONE HOUR	✓	525	100.000

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То					
		Α	В	O		
	Α	0	26	450		
From	В	36	0	42		
	C	455	70	0		

## **Vehicle Mix**

	То			
		Α	В	ပ
	Α	0	0	0
From	В	0	0	0
	С	0	0	0



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.23	12.51	0.3	В	72	108
C-AB	0.22	5.48	0.6	А	138	207
C-A					344	515
A-B					24	36
A-C					413	620

## Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	438	0.135	58	0.0	0.2	9.458	А
C-AB	95	24	763	0.125	94	0.0	0.3	5.385	А
C-A	300	75			300				
A-B	20	5			20				
A-C	339	85			339				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	412	0.171	70	0.2	0.2	10.533	В
C-AB	129	32	798	0.162	129	0.3	0.4	5.392	A
C-A	343	86			343				
A-B	24	6			24				
A-C	405	101			405				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	86	22	374	0.231	86	0.2	0.3	12.476	В
C-AB	189	47	848	0.223	188	0.4	0.6	5.470	А
C-A	389	97			389				
A-B	29	7			29		·		
A-C	496	124			496				

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	86	22	374	0.231	86	0.3	0.3	12.514	В
C-AB	189	47	848	0.223	189	0.6	0.6	5.483	А
C-A	389	97			389				
A-B	29	7			29				
A-C	496	124			496				



#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	412	0.171	71	0.3	0.2	10.573	В
C-AB	130	32	798	0.163	131	0.6	0.4	5.409	A
C-A	342	86			342				
A-B	24	6			24				
A-C	405	101			405				

#### 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	438	0.135	59	0.2	0.2	9.506	A
C-AB	96	24	763	0.126	96	0.4	0.3	5.411	A
C-A	299	75			299				
A-B	20	5			20				
A-C	339	85			339				



# **Junctions 9**

### **PICADY 9 - Priority Intersection Module**

Version: 9.5.0.6896 © Copyright TRL Limited, 2018

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Filename: Grassmere Road High Street Junction.j9

Path: P:\23000-23999\23257 - Land at Yatton\01\_WIP\CA\_Calculation\TP\Modelling

Report generation date: 13/03/2023 15:22:59

»2022 Base, AM
»2025 Base, AM
»2025 Base, PM
»2025 Base, PM
»2025 Base + Committed Dev, AM
»2025 Base + Committed Dev, PM
»2025 Base + Committed Dev + Proposed Dev, AM
»2025 Base + Committed Dev + Proposed Dev, PM
»2028 Base + Committed Dev + Proposed Dev, PM
»2028 Base, AM
»2028 Base + Committed Dev , AM
»2028 Base + Committed Dev , PM
»2028 Base + Committed Dev + Proposed Dev , AM
»2028 Base + Committed Dev + Proposed Dev , PM
»2028 Base + Committed Dev + Proposed Dev , PM



### Summary of junction performance

		AM				PM		
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
				2022	Base			
Stream B-AC	0.2	9.14	0.18	Α	0.1	8.53	0.13	А
Stream C-AB	0.1	4.64	0.07	А	0.2	4.64	0.09	Α
				2025	Base			
Stream B-AC	0.2	9.40	0.19	А	0.2	8.73	0.14	А
Stream C-AB	0.1	4.60	0.08	А	0.2	4.60	0.10	Α
		202	5 Bas	se + C	ommitted D	ev		
Stream B-AC	0.2	9.51	0.19	А	0.2	8.84	0.14	А
Stream C-AB	0.1	4.53	0.08	А	0.2	4.55	0.10	Α
	202	5 Base +	Com	mitte	d Dev + Pro	posed D	ev	
Stream B-AC	0.3	10.38	0.24	В	0.2	9.48	0.17	А
Stream C-AB	0.3	4.60	0.11	А	0.4	4.64	0.15	Α
				2028	Base			
Stream B-AC	0.2	9.55	0.20	А	0.2	8.84	0.14	А
Stream C-AB	0.2	4.58	0.08	А	0.2	4.58	0.10	Α
		202	8 Bas	se + C	ommitted D	ev		
Stream B-AC	0.2	9.65	0.20	А	0.2	8.96	0.15	А
Stream C-AB	0.2	4.51	0.08	А	0.2	4.53	0.11	Α
	202	8 Base +	Com	mitte	d Dev + Pro	posed D	ev	
Stream B-AC	0.3	10.55	0.25	В	0.2	9.61	0.18	А
Stream C-AB	0.3	4.58	0.12	А	0.4	4.63	0.16	Α

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

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

#### File summary

### **File Description**

Title	
Location	
Site number	
Date	14/02/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HYDROCK\AnnieChapelton
Description	

#### **Units**

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

#### **Analysis Options**

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



## **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2025 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2025 Base	PM	ONE HOUR	17:00	18:30	15	✓
D5	2025 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D6	2025 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓
D7	2025 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D8	2025 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	✓
D9	2028 Base	AM	ONE HOUR	08:00	09:30	15	✓
D10	2028 Base	PM	ONE HOUR	17:00	18:30	15	✓
D11	2028 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D12	2028 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓
D13	2028 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	✓
D14	2028 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	✓

### **Analysis Set Details**

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



# **2022** Base, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.03	Α

#### **Junction Network Options**

Driving side	Lighting	
Left	Normal/unknown	

## Arms

#### **Arms**

Arm	Name	Description	Arm type
Α	untitled		Major
В	untitled		Minor
С	untitled		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
С	5.00			150.0	✓	0.00

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

#### **Minor Arm Geometry**

ĺ	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
ſ	В	One lane	2.30	17	17

### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	457	0.087	0.220	0.138	0.314
1	B-C	590	0.094	0.239	-	-
1	С-В	661	0.267	0.267	-	-

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

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

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



# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Base	AM	ONE HOUR	08:00	09:30	15	✓

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

### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	353	100.000
В		ONE HOUR	✓	77	100.000
С		ONE HOUR	✓	470	100.000

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То				
		Α	В	С	
F	Α	0	3	350	
From	В	4	0	73	
	С	444	26	0	

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То					
		Α	В	С			
	Α	0	0	2			
From	В	0	0	0			
	С	3	0	0			

# Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	9.14	0.2	А	71	106
C-AB	0.07	4.64	0.1	А	47	71
C-A					384	576
A-B					3	4
A-C					321	482



## Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	512	0.113	57	0.0	0.1	7.915	A
C-AB	33	8	810	0.041	33	0.0	0.1	4.630	А
C-A	321	80			321				
A-B	2	0.56			2				
A-C	263	66			263				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	498	0.139	69	0.1	0.2	8.390	A
C-AB	45	11	843	0.053	44	0.1	0.1	4.508	A
C-A	378	94			378				
A-B	3	0.67			3				
A-C	315	79			315				

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	21	479	0.177	85	0.2	0.2	9.129	Α
C-AB	64	16	889	0.072	64	0.1	0.1	4.358	А
C-A	454	113			454				
A-B	3	0.83			3				
A-C	385	96			385				

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	21	479	0.177	85	0.2	0.2	9.138	A
C-AB	64	16	889	0.072	64	0.1	0.1	4.365	A
C-A	454	113			454				
A-B	3	0.83			3				
A-C	385	96			385				

#### 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	498	0.139	69	0.2	0.2	8.405	Α
C-AB	45	11	843	0.053	45	0.1	0.1	4.518	А
C-A	378	94			378				
A-B	3	0.67			3				
A-C	315	79			315				

#### 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	512	0.113	58	0.2	0.1	7.938	A
C-AB	33	8	811	0.041	34	0.1	0.1	4.640	А
C-A	320	80			320				
A-B	2	0.56			2				
A-C	263	66			263				

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# **2022 Base, PM**

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width		For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.82	Α

#### **Junction Network Options**

Driving side				
Left	Normal/unknown			

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Base	PM	ONE HOUR	17:00	18:30	15	✓

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

### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	402	100.000	
В		ONE HOUR	✓	57	100.000	
С		ONE HOUR	✓	499	100.000	

# Origin-Destination Data

#### Demand (Veh/hr)

	То						
		Α	В	С			
From	Α	0	3	399			
	В	0	0	57			
	С	468	31	0			

## **Vehicle Mix**

	То					
		Α	В	С		
From	Α	0	0	0		
	В	0	0	0		
	C	0	0	0		



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	8.53	0.1	А	52	78
C-AB	0.09	4.64	0.2	А	59	88
C-A					399	599
A-B					3	4
A-C					366	549

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	11	518	0.083	43	0.0	0.1	7.566	A
C-AB	41	10	818	0.050	41	0.0	0.1	4.628	A
C-A	335	84			335				
A-B	2	0.56			2				
A-C	300	75			300				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	504	0.102	51	0.1	0.1	7.945	А
C-AB	55	14	853	0.065	55	0.1	0.1	4.515	А
C-A	393	98			393				
A-B	3	0.67			3				
A-C	359	90			359				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	485	0.129	63	0.1	0.1	8.525	A
C-AB	80	20	902	0.089	80	0.1	0.2	4.379	А
C-A	469	117			469				
A-B	3	0.83			3				
A-C	439	110			439				

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	485	0.129	63	0.1	0.1	8.530	А
C-AB	80	20	902	0.089	80	0.2	0.2	4.382	A
C-A	469	117			469				
A-B	3	0.83			3				
A-C	439	110			439				

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#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	504	0.102	51	0.1	0.1	7.953	А
C-AB	55	14	853	0.065	56	0.2	0.1	4.520	A
C-A	393	98			393				
A-B	3	0.67			3				
A-C	359	90			359				

#### 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	11	518	0.083	43	0.1	0.1	7.581	A
C-AB	41	10	819	0.050	41	0.1	0.1	4.635	A
C-A	335	84			335				
A-B	2	0.56			2				
A-C	300	75			300				



# **2025 Base, AM**

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.06	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025 Base	AM	ONE HOUR	08:00	09:30	15	✓

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

### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)		
Α		ONE HOUR	✓	373	100.000		
В		ONE HOUR	✓	81	100.000		
С		ONE HOUR	✓	497	100.000		

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То					
		Α	В	O		
F	Α	0	3	370		
From	В	4	0	77		
	С	470	28	0		

## **Vehicle Mix**

	То				
		Α	В	С	
	Α	0	0	2	
From	В	0	0	0	
	С	3	0	0	



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	9.40	0.2	А	75	112
C-AB	0.08	4.60	0.1	А	52	78
C-A					404	606
A-B					3	4
A-C					340	510

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	508	0.121	61	0.0	0.1	8.045	A
C-AB	36	9	820	0.044	36	0.0	0.1	4.592	A
C-A	338	84			338				
A-B	2	0.60			2				
A-C	279	70			279				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service		
B-AC	73	18	493	0.148	73	0.1	0.2	8.569	A		
C-AB	49	12	854	0.057	49	0.1	0.1	4.467	А		
C-A	398	99			398						
A-B	3	0.71			3						
A-C	333	83			333						

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	473	0.190	89	0.2	0.2	9.390	А
C-AB	71	18	904	0.079	71	0.1	0.1	4.317	А
C-A	476	119			476				
A-B	3	0.87			3				
A-C	408	102			408				

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	473	0.190	90	0.2	0.2	9.402	А
C-AB	71	18	904	0.079	71	0.1	0.1	4.323	A
C-A	476	119			476				
A-B	3	0.87			3				
A-C	408	102			408				

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#### 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	493	0.148	73	0.2	0.2	8.583	А
C-AB	49	12	855	0.057	49	0.1	0.1	4.478	А
C-A	398	99			398				
A-B	3	0.71			3				
A-C	333	83			333				

### 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	508	0.121	61	0.2	0.1	8.071	A
C-AB	37	9	820	0.045	37	0.1	0.1	4.601	A
C-A	338	84			338				
A-B	2	0.60			2				
A-C	279	70			279				



# **2025 Base, PM**

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.84	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025 Base	PM	ONE HOUR	17:00	18:30	15	✓

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

### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	425	100.000
В		ONE HOUR	✓	60	100.000
С		ONE HOUR	✓	528	100.000

# **Origin-Destination Data**

#### Demand (Veh/hr)

		То					
		Α	В	С			
F	Α	0	3	422			
From	В	0	0	60			
	С	495	33	0			

## **Vehicle Mix**

	То				
		Α	В	С	
	Α	0	0	0	
From	В	0	0	0	
	С	0	0	0	



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	8.73	0.2	А	55	83
C-AB	0.10	4.60	0.2	А	65	98
C-A					419	629
A-B					3	4
A-C					387	581

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	11	514	0.088	45	0.0	0.1	7.671	A
C-AB	45	11	828	0.054	45	0.0	0.1	4.592	A
C-A	352	88			352				
A-B	2	0.60			2				
A-C	318	79			318				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	499	0.109	54	0.1	0.1	8.087	А
C-AB	61	15	865	0.070	61	0.1	0.1	4.475	A
C-A	414	103			414				
A-B	3	0.71			3				
A-C	379	95			379				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	17	479	0.139	66	0.1	0.2	8.728	А
C-AB	89	22	918	0.097	89	0.1	0.2	4.344	А
C-A	492	123			492				
A-B	3	0.87			3				
A-C	465	116			465				

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	17	479	0.139	66	0.2	0.2	8.731	А
C-AB	89	22	918	0.097	89	0.2	0.2	4.347	A
C-A	492	123			492				
A-B	3	0.87			3				
A-C	465	116			465				

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#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	499	0.109	54	0.2	0.1	8.097	А
C-AB	61	15	865	0.071	61	0.2	0.1	4.481	А
C-A	413	103			413				
A-B	3	0.71			3				
A-C	379	95			379				

#### 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	11	514	0.088	45	0.1	0.1	7.686	Α
C-AB	45	11	829	0.054	45	0.1	0.1	4.597	А
C-A	352	88			352				
A-B	2	0.60			2				
A-C	318	79			318				



# 2025 Base + Committed Dev, AM

#### **Data Errors and Warnings**

Severity	Area Item		Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.04	Α

### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2025 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	396	100.000
В		ONE HOUR	✓	81	100.000
С		ONE HOUR	✓	521	100.000

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То						
From		Α	В	С			
	Α	0	3	392			
	В	4	0	77			
	С	494	28	0			

## **Vehicle Mix**

		То					
		Α	В	ပ			
From	Α	0	0	0			
	В	0	0	0			
	С	0	0	0			



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	9.51	0.2	А	75	112
C-AB	0.08	4.53	0.1	А	54	81
C-A					424	636
A-B					3	4
A-C					360	540

## Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	505	0.121	61	0.0	0.1	8.096	A
C-AB	37	9	833	0.045	37	0.0	0.1	4.523	А
C-A	355	89			355				
A-B	2	0.60			2				
A-C	295	74			295				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	490	0.150	73	0.1	0.2	8.638	A
C-AB	51	13	870	0.058	50	0.1	0.1	4.392	A
C-A	418	104			418				
A-B	3	0.71			3				
A-C	353	88			353				

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service	
B-AC	90	22	468	0.191	89	0.2	0.2	9.494	A	
C-AB	74	18	924	0.080	74	0.1	0.1	4.237	А	
C-A	500	125			500					
A-B	3	0.87			3					
A-C	432	108			432					

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	468	0.191	90	0.2	0.2	9.506	А
C-AB	74	18	924	0.080	74	0.1	0.1	4.239	А
C-A	500	125			500				
A-B	3	0.87			3				
A-C	432	108			432				



#### 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	490	0.150	73	0.2	0.2	8.653	А
C-AB	51	13	870	0.058	51	0.1	0.1	4.395	А
C-A	418	104			418				
A-B	3	0.71			3				
A-C	353	88			353				

### 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	505	0.121	61	0.2	0.1	8.121	А
C-AB	38	9	833	0.045	38	0.1	0.1	4.529	А
C-A	355	89			355				
A-B	2	0.60			2				
A-C	295	74			295				



# 2025 Base + Committed Dev, PM

#### **Data Errors and Warnings**

Severity	ty Area Item		Description
Warning	arning Major arm width Arm C - Majo geometry		For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.82	Α

### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2025 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	447	100.000
В		ONE HOUR	✓	60	100.000
С		ONE HOUR	✓	553	100.000

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То						
		Α	В	С			
_	Α	0	3	443			
From	В	0	0	60			
	С	520	33	0			

## **Vehicle Mix**

	То					
From		Α	В	ပ		
	Α	0	0	0		
	В	0	0	0		
	С	0	0	0		



## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	8.84	0.2	А	55	83
C-AB	0.10	4.55	0.2	А	68	102
C-A					439	659
A-B					3	4
A-C					407	610

## Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	11	510	0.089	45	0.0	0.1	7.731	A
C-AB	46	12	838	0.055	46	0.0	0.1	4.543	А
C-A	370	92			370				
A-B	2	0.60			2				
A-C	334	83			334				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	495	0.110	54	0.1	0.1	8.167	A
C-AB	63	16	877	0.072	63	0.1	0.1	4.424	A
C-A	434	108			434				
A-B	3	0.71			3				
A-C	399	100			399				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	17	473	0.140	66	0.1	0.2	8.835	А
C-AB	94	23	934	0.100	93	0.1	0.2	4.287	A
C-A	515	129			515				
A-B	3	0.87			3				
A-C	488	122			488				

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	17	473	0.140	66	0.2	0.2	8.845	А
C-AB	94	23	934	0.101	94	0.2	0.2	4.290	А
C-A	515	129			515				
A-B	3	0.87			3				
A-C	488	122			488				



#### 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	495	0.110	54	0.2	0.1	8.177	А
C-AB	63	16	878	0.072	64	0.2	0.1	4.428	А
C-A	433	108			433				
A-B	3	0.71			3				
A-C	399	100			399				

#### 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	45	11	510	0.089	45	0.1	0.1	7.746	A
C-AB	47	12	838	0.055	47	0.1	0.1	4.548	А
C-A	370	92			370				
A-B	2	0.60			2				
A-C	334	83			334				



# 2025 Base + Committed Dev + Proposed Dev, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.34	Α

#### **Junction Network Options**

Driving side	Lighting	
Left	Normal/unknown	

# **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2025 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	<b>✓</b>

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	417	100.000
В		ONE HOUR	✓	100	100.000
С		ONE HOUR	✓	544	100.000

# **Origin-Destination Data**

#### Demand (Veh/hr)

	То			
		Α	В	С
	Α	0	5	412
From	В	7	0	93
	U	506	38	0

## **Vehicle Mix**

	То			
		Α	В	ပ
	Α	0	0	0
From	В	0	0	0
	С	0	0	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	10.38	0.3	В	92	138
C-AB	0.11	4.60	0.3	А	76	114
C-A					423	635
A-B					4	6
A-C					378	567

# Main Results for each time segment

## 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	497	0.151	75	0.0	0.2	8.513	A
C-AB	52	13	836	0.063	52	0.0	0.1	4.592	А
C-A	357	89			357				
A-B	4	0.89			4				
A-C	310	78			310				

# 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	480	0.187	90	0.2	0.2	9.211	A
C-AB	71	18	874	0.081	71	0.1	0.2	4.483	A
C-A	418	104			418				
A-B	4	1			4				
A-C	370	93			370				

# 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	28	457	0.241	110	0.2	0.3	10.355	В
C-AB	105	26	929	0.113	104	0.2	0.3	4.366	Α
C-A	494	124			494				
A-B	5	1			5				
A-C	454	113			454				

# 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	28	457	0.241	110	0.3	0.3	10.376	В
C-AB	105	26	929	0.113	105	0.3	0.3	4.370	А
C-A	494	124			494				
A-B	5	1			5				
A-C	454	113			454				



## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	480	0.187	90	0.3	0.2	9.238	А
C-AB	71	18	874	0.082	72	0.3	0.2	4.491	Α
C-A	418	104			418				
A-B	4	1			4				
A-C	370	93			370				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	497	0.152	75	0.2	0.2	8.551	А
C-AB	53	13	836	0.063	53	0.2	0.1	4.599	А
C-A	357	89			357				
A-B	4	0.89			4				
A-C	310	78			310				



# 2025 Base + Committed Dev + Proposed Dev, PM

## **Data Errors and Warnings**

Severity	erity Area Item		Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.08	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2025 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	<b>✓</b>

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	462	100.000
В		ONE HOUR	✓	73	100.000
С		ONE HOUR	✓	585	100.000

# **Origin-Destination Data**

## Demand (Veh/hr)

		Т	o	
		Α	В	С
_	Α	0	5	457
From	В	2	0	71
	С	538	47	0

# **Vehicle Mix**

	То					
		Α	В	С		
	Α	0	0	0		
From	В	0	0	0		
	С	0	0	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	9.48	0.2	A	67	101
C-AB	0.15	4.64	0.4	А	101	152
C-A					436	653
A-B					5	7
A-C					419	629

# Main Results for each time segment

## 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	14	501	0.110	55	0.0	0.1	8.059	A
C-AB	69	17	845	0.081	68	0.0	0.2	4.632	А
C-A	372	93			372				
A-B	4	1			4				
A-C	344	86			344				

# 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	16	484	0.136	66	0.1	0.2	8.604	A
C-AB	94	24	886	0.107	94	0.2	0.2	4.549	A
C-A	432	108			432				
A-B	5	1			5				
A-C	411	103			411				

# 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	460	0.175	80	0.2	0.2	9.471	A
C-AB	141	35	945	0.149	140	0.2	0.4	4.480	А
C-A	504	126			504				
A-B	6	1			6				
A-C	503	126			503				

# 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	460	0.175	80	0.2	0.2	9.479	А
C-AB	141	35	945	0.149	141	0.4	0.4	4.487	А
C-A	503	126			503				
A-B	6	1			6				
A-C	503	126			503				



# 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	16	484	0.136	66	0.2	0.2	8.620	А
C-AB	95	24	886	0.107	95	0.4	0.2	4.560	А
C-A	431	108			431				
A-B	5	1			5				
A-C	411	103			411				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	14	501	0.110	55	0.2	0.1	8.082	А
C-AB	69	17	845	0.082	69	0.2	0.2	4.645	A
C-A	372	93			372				
A-B	4	1			4				
A-C	344	86			344				



# **2028 Base, AM**

## **Data Errors and Warnings**

Severity	everity Area Item		Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.08	Α

# **Junction Network Options**

Driving side	Lighting			
Left	Normal/unknown			

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2028 Base	AM	ONE HOUR	08:00	09:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type Use O-D data		Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	384	100.000	
В		ONE HOUR	✓	84	100.000	
С		ONE HOUR	✓	512	100.000	

# **Origin-Destination Data**

## Demand (Veh/hr)

	То						
From		Α	В	С			
	Α	0	3	381			
	В	4	0	79			
	С	483	28	0			

# **Vehicle Mix**

	То					
From		Α	В	С		
	Α	0	0	2		
	В	0	0	0		
	C	3	0	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	9.55	0.2	А	77	115
C-AB	0.08	4.58	0.2	А	55	82
C-A					414	622
A-B					3	4
A-C					350	524

# Main Results for each time segment

# 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	506	0.125	63	0.0	0.1	8.117	A
C-AB	38	10	825	0.046	38	0.0	0.1	4.572	A
C-A	347	87			347				
A-B	2	0.61			2				
A-C	287	72			287				

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	490	0.154	75	0.1	0.2	8.667	А
C-AB	52	13	861	0.060	51	0.1	0.1	4.446	A
C-A	408	102			408				
A-B	3	0.73			3				
A-C	342	86			342				

## 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	469	0.197	92	0.2	0.2	9.537	А
C-AB	75	19	912	0.082	75	0.1	0.2	4.296	А
C-A	488	122			488				
A-B	4	0.90			4				
A-C	419	105			419				

## 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	469	0.197	92	0.2	0.2	9.548	A
C-AB	75	19	912	0.082	75	0.2	0.2	4.303	A
C-A	488	122			488				
A-B	4	0.90			4				
A-C	419	105			419				

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## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	490	0.154	76	0.2	0.2	8.684	А
C-AB	52	13	861	0.060	52	0.2	0.1	4.459	А
C-A	408	102			408				
A-B	3	0.73			3				
A-C	342	86			342				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	506	0.125	63	0.2	0.1	8.144	A
C-AB	38	10	825	0.046	38	0.1	0.1	4.583	A
C-A	347	87			347				
A-B	2	0.61			2				
A-C	287	72			287				



# 2028 Base , PM

# **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.85	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2028 Base	PM	ONE HOUR	17:00	18:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Linked arm Profile type		inked arm Profile type Use O-D data		Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	438	100.000			
В		ONE HOUR	✓	62	100.000			
С		ONE HOUR	✓	543	100.000			

# **Origin-Destination Data**

## Demand (Veh/hr)

		То					
		Α	В	С			
F	Α	0	3	434			
From	В	0	0	62			
	С	509	34	0			

# **Vehicle Mix**

	То				
		Α	В	С	
	Α	0	0	0	
From	В	0	0	0	
	C	0	0	0	



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	8.84	0.2	А	57	85
C-AB	0.10	4.58	0.2	А	69	103
C-A					430	645
A-B					3	4
A-C					398	598

# Main Results for each time segment

# 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	512	0.091	46	0.0	0.1	7.729	A
C-AB	47	12	834	0.056	47	0.0	0.1	4.573	A
C-A	362	90			362				
A-B	2	0.61			2				
A-C	327	82			327				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	496	0.112	56	0.1	0.1	8.164	А
C-AB	64	16	872	0.074	64	0.1	0.1	4.458	А
C-A	424	106			424				
A-B	3	0.73			3				
A-C	390	98			390				

## 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	475	0.144	68	0.1	0.2	8.834	Α
C-AB	95	24	927	0.102	94	0.1	0.2	4.325	A
C-A	503	126			503				
A-B	4	0.90			4				
A-C	478	120			478				

## 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	475	0.144	68	0.2	0.2	8.841	A
C-AB	95	24	927	0.102	95	0.2	0.2	4.329	A
C-A	503	126			503				
A-B	4	0.90			4				
A-C	478	120			478				

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# 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	496	0.112	56	0.2	0.1	8.175	А
C-AB	64	16	872	0.074	65	0.2	0.1	4.464	A
C-A	424	106			424				
A-B	3	0.73			3				
A-C	390	98			390				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	512	0.091	47	0.1	0.1	7.744	A
C-AB	47	12	834	0.057	47	0.1	0.1	4.579	A
C-A	362	90			362				
A-B	2	0.61			2				
A-C	327	82			327				



# 2028 Base + Committed Dev , AM

## **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.06	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028 Base + Committed Dev	AM	ONE HOUR	08:00	09:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	406	100.000
В		ONE HOUR	✓	84	100.000
С		ONE HOUR	✓	536	100.000

# **Origin-Destination Data**

## Demand (Veh/hr)

	То				
		Α	В	O	
_	Α	0	3	403	
From	В	4	0	79	
	U	507	28	0	

# **Vehicle Mix**

	То				
		Α	В	ပ	
	Α	0	0	0	
From	В	0	0	0	
	С	0	0	0	



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	9.65	0.2	А	77	115
C-AB	0.08	4.51	0.2	А	57	85
C-A					435	652
A-B					3	4
A-C					370	555

# Main Results for each time segment

## 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	503	0.125	63	0.0	0.1	8.166	А
C-AB	39	10	838	0.047	39	0.0	0.1	4.503	А
C-A	364	91			364				
A-B	2	0.61			2				
A-C	303	76			303				

# 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	487	0.155	75	0.1	0.2	8.739	А
C-AB	53	13	877	0.061	53	0.1	0.1	4.371	А
C-A	428	107			428				
A-B	3	0.73			3				
A-C	362	91			362				

# 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	465	0.198	92	0.2	0.2	9.641	A
C-AB	78	20	932	0.084	78	0.1	0.2	4.215	А
C-A	512	128			512				
A-B	4	0.90			4				
A-C	444	111			444				

# 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	465	0.198	92	0.2	0.2	9.654	А
C-AB	78	20	932	0.084	78	0.2	0.2	4.219	Α
C-A	511	128			511				
A-B	4	0.90			4				
A-C	444	111			444				



## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	487	0.155	76	0.2	0.2	8.752	А
C-AB	53	13	877	0.061	54	0.2	0.1	4.377	А
C-A	428	107			428				
A-B	3	0.73			3				
A-C	362	91			362				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	16	503	0.126	63	0.2	0.1	8.195	Α
C-AB	39	10	838	0.047	39	0.1	0.1	4.507	А
C-A	364	91			364				
A-B	2	0.61			2				
A-C	303	76			303				



# 2028 Base + Committed Dev , PM

## **Data Errors and Warnings**

Severity	y Area Item		Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.83	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028 Base + Committed Dev	PM	ONE HOUR	17:00	18:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	459	100.000
В	ONE HOUR ✓		✓	62	100.000
С		ONE HOUR	✓	568	100.000

# **Origin-Destination Data**

## Demand (Veh/hr)

		Т	o	
From		Α	В	С
	A	0	3	456
	В	0	0	62
	С	534	34	0

# **Vehicle Mix**

		T	·o	
		Α	В	ပ
	Α	0	0	0
From	В	0	0	0
	С	0	0	0



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.15	8.96	0.2	А	57	85
C-AB	0.11	4.53	0.2	А	72	107
C-A					450	674
A-B					3	4
A-C					418	627

# Main Results for each time segment

## 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	508	0.092	46	0.0	0.1	7.790	A
C-AB	49	12	844	0.058	48	0.0	0.1	4.525	A
C-A	379	95			379				
A-B	2	0.61			2				
A-C	343	86			343				

# 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	492	0.113	56	0.1	0.1	8.246	A
C-AB	67	17	884	0.075	66	0.1	0.1	4.405	А
C-A	444	111			444				
A-B	3	0.73			3				
A-C	410	102			410				

# 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	470	0.145	68	0.1	0.2	8.951	A
C-AB	99	25	942	0.105	99	0.1	0.2	4.271	А
C-A	526	132			526				
A-B	4	0.90			4				
A-C	502	125			502				

# 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	470	0.145	68	0.2	0.2	8.958	А
C-AB	99	25	943	0.106	99	0.2	0.2	4.273	А
C-A	526	131			526				
A-B	4	0.90			4				
A-C	502	125			502				



# 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	492	0.113	56	0.2	0.1	8.257	А
C-AB	67	17	884	0.076	67	0.2	0.1	4.410	А
C-A	444	111			444				
A-B	3	0.73			3				
A-C	410	102			410				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	508	0.092	47	0.1	0.1	7.807	A
C-AB	49	12	844	0.058	49	0.1	0.1	4.530	A
C-A	379	95			379				
A-B	2	0.61			2				
A-C	343	86			343				



# 2028 Base + Committed Dev + Proposed Dev , AM

## **Data Errors and Warnings**

Severity	Area Item		Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.36	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2028 Base + Committed Dev + Proposed Dev	AM	ONE HOUR	08:00	09:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)	
Α		ONE HOUR	✓	428	100.000	
В		ONE HOUR	✓	102	100.000	
С		ONE HOUR	✓	558	100.000	

# **Origin-Destination Data**

## Demand (Veh/hr)

	То						
From		Α	В	С			
	Α	0	5	423			
	В	7	0	96			
	С	520	39	0			

# **Vehicle Mix**

	То					
From		Α	В	ပ		
	Α	0	0	0		
	В	0	0	0		
	С	0	0	0		



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.25	10.55	0.3	В	94	141
C-AB	0.12	4.58	0.3	А	80	119
C-A					433	649
A-B					4	7
A-C					388	582

# Main Results for each time segment

## 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	495	0.156	76	0.0	0.2	8.591	А
C-AB	54	14	841	0.065	54	0.0	0.1	4.573	A
C-A	366	92			366				
A-B	4	0.90			4				
A-C	318	80			318				

## 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	478	0.193	92	0.2	0.2	9.323	A
C-AB	74	19	881	0.084	74	0.1	0.2	4.464	A
C-A	428	107			428				
A-B	4	1			4				
A-C	380	95			380				

# 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	454	0.248	112	0.2	0.3	10.530	В
C-AB	110	27	938	0.117	109	0.2	0.3	4.349	А
C-A	505	126			505				
A-B	5	1			5				
A-C	466	116			466				

# 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	454	0.248	113	0.3	0.3	10.553	В
C-AB	110	27	938	0.117	110	0.3	0.3	4.354	Α
C-A	505	126			505				
A-B	5	1			5				
A-C	466	116			466				



## 09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	23	478	0.193	92	0.3	0.2	9.351	А
C-AB	75	19	881	0.085	75	0.3	0.2	4.471	А
C-A	428	107			428				
A-B	4	1			4				
A-C	380	95			380				

# 09:15 - 09:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	495	0.156	77	0.2	0.2	8.629	A
C-AB	55	14	841	0.065	55	0.2	0.1	4.581	A
C-A	366	91			366				
A-B	4	0.90			4				
A-C	318	80			318				



# 2028 Base + Committed Dev + Proposed Dev , PM

## **Data Errors and Warnings**

Severity	Area Item		Description
Warning	Major arm width	,	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.09	Α

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Traffic Demand**

## **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2028 Base + Committed Dev + Proposed Dev	PM	ONE HOUR	17:00	18:30	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
Α		ONE HOUR	✓	475	100.000
В		ONE HOUR	✓	75	100.000
С		ONE HOUR	✓	601	100.000

# **Origin-Destination Data**

## Demand (Veh/hr)

		То					
From		Α	В	O			
	A	0	5	469			
	В	2	0	73			
	U	552	48	0			

# **Vehicle Mix**

		То					
		Α	В	ပ			
	Α	0	0	0			
From	В	0	0	0			
	С	0	0	0			



# Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	9.61	0.2	А	69	103
C-AB	0.16	4.63	0.4	А	106	159
C-A					445	668
A-B					5	8
A-C					431	646

# Main Results for each time segment

## 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	499	0.113	56	0.0	0.1	8.123	A
C-AB	71	18	851	0.084	71	0.0	0.2	4.615	А
C-A	381	95			381				
A-B	4	1			4				
A-C	353	88			353				

# 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	481	0.140	67	0.1	0.2	8.691	A
C-AB	99	25	893	0.110	98	0.2	0.2	4.535	A
C-A	441	110			441				
A-B	5	1			5				
A-C	422	105			422				

# 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service	
B-AC	82	21	457	0.180	82	0.2	0.2	9.599	A	
C-AB	148	37	954	0.155	147	0.2	0.4	4.473	А	
C-A	513	128			513					
A-B	6	2			6					
A-C	517	129			517					

# 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	82	21	457	0.180	82	0.2	0.2	9.610	А
C-AB	148	37	954	0.156	148	0.4	0.4	4.480	А
C-A	513	128			513				
A-B	6	2			6				
A-C	517	129			517				



## 18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	481	0.140	67	0.2	0.2	8.707	А
C-AB	99	25	893	0.111	100	0.4	0.3	4.547	А
C-A	441	110			441				
A-B	5	1			5				
A-C	422	105			422				

# 18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	499	0.113	56	0.2	0.1	8.146	A
C-AB	72	18	851	0.084	72	0.3	0.2	4.629	A
C-A	380	95			380				
A-B	4	1			4				
A-C	353	88			353				



# Appendix H Distribution Model

Project	Title
Land at Yatton	Trip Distribution: 2011 Census Travel to Work (WU03EW)
Job Number	Drawn by
23257	Ysabella Sach
Date	Reference
01/11/2022	23257-HYD-XX-XX-CA-TP-0001-P01

Southern Access (Chescombe Road Via Rectory Farm)

Northern Access (Shiners Elms) Travelling North Travelling South

	Southern Access (Chescombe Road Via Rectory Farm)									Northern Access (Shiners Elms)								
	Travelling North Travelling South								Travelling North Travelling South									
	Driving a		Mendip F	Road-	Chescombe Road -		Mendip R	oad-High			Mendip Ro Ridge - As		Mendip	Poad -	Mendip Road - The Ridge - Ashleigh		Mendin R	Poad -
place of work	car or		Heathgate-High		High Street		Street		High Street		Road-Grassmere		Heathgate		Road-Grassmere		Mendip Road - Heathgate	
	van		Stree	et					-		Rd			_	Ro	d	_	
TOTAL	2,706	100%		6%		6%		18%		14%		27%		21%		4%		4%
E02003065 : North Somerset 001	33	1.22%	10%	0.12%	10%	0.1%	0%	0.0%	0%	0.00%	45%	0.5%	35%	0.4%	0%	0.0%	0%	0.0%
E02003066 : North Somerset 002	26	0.96%	10%	0.10%	10%	0.1%	0%	0.0%	0%	0.00%	45%	0.4%	35%	0.3%	0%	0.0%	0%	0.0%
E02003067 : North Somerset 003	39	1.44%	10%	0.14%	10%	0.1%	0%	0.0%	0%	0.00%	45%	0.6%	35%	0.5%	0%	0.0%	0%	0.0%
E02003068 : North Somerset 004 E02003069 : North Somerset 005	45	1.66%	5%	0.08%	5%	0.1%	23%	0.4%	18%	0.29%	23%	0.4%	18%	0.3%	5%	0.1%	5%	0.1%
E02003069 : North Somerset 005	71 75	2.62% 2.77%	10% 0%	0.26% 0.00%	10% 0%	0.3%	0% 45%	0.0% 1.2%	0% 35%	0.00% 0.97%	45% 0%	1.2% 0.0%	35% 0%	0.9% 0.0%	0% 10%	0.0%	0% 10%	0.0%
E02003070 : North Somerset 000	125	4.62%	10%	0.46%	10%	0.5%	0%	0.0%	0%	0.97%	45%	2.1%	35%	1.6%	0%	0.5%	0%	0.5%
E02003072 : North Somerset 008	67	2.48%	5%	0.12%	5%	0.1%	23%	0.6%	18%	0.43%	23%	0.6%	18%	0.4%	5%	0.1%	5%	0.1%
E02003073 : North Somerset 009	25	0.92%	10%	0.09%	10%	0.1%	0%	0.0%	0%	0.00%	45%	0.4%	35%	0.3%	0%	0.0%	0%	0.0%
E02003074 : North Somerset 010	55	2.03%	10%	0.20%	10%	0.2%	0%	0.0%	0%	0.00%	45%	0.9%	35%	0.7%	0%	0.0%	0%	0.0%
E02003075 : North Somerset 011	68	2.51%	5%	0.13%	5%	0.1%	23%	0.6%	18%	0.44%	23%	0.6%	18%	0.4%	5%	0.1%	5%	0.1%
E02003076 : North Somerset 012	327	12.08%	5%	0.60%	5%	0.6%	23%	2.7%	18%	2.11%	23%	2.7%	18%	2.1%	5%	0.6%	5%	0.6%
E02003077 : North Somerset 013	93	3.44%	0%	0.00%	0%	0.0%	45%	1.5%	35%	1.20%	0%	0.0%	0%	0.0%	10%	0.3%	10%	0.3%
E02003078 : North Somerset 014 E02003079 : North Somerset 015	105 7	3.88%	0%	0.00%	0%	0.0%	45%	1.7%	35%	1.36%	0%	0.0%	0%	0.0%	10%	0.4%	10%	0.4%
E02003079 : North Somerset 015	7 17	0.26% 0.63%	0% 0%	0.00%	0% 0%	0.0% 0.0%	45% 45%	0.1% 0.3%	35% 35%	0.09% 0.22%	0% 0%	0.0%	0% 0%	0.0%	10% 10%	0.0%	10% 10%	0.0%
E02003081 : North Somerset 017	16	0.59%	0%	0.00%	0%	0.0%	45%	0.3%	35%	0.21%	0%	0.0%	0%	0.0%	10%	0.1%	10%	0.1%
E02003082 : North Somerset 018	19	0.70%	0%	0.00%	0%	0.0%	45%	0.3%	35%	0.25%	0%	0.0%	0%	0.0%	10%	0.1%	10%	0.1%
E02003084 : North Somerset 020	41	1.52%	0%	0.00%	0%	0.0%	45%	0.7%	35%	0.53%	0%	0.0%	0%	0.0%	10%	0.2%	10%	0.2%
E02003085 : North Somerset 021	24	0.89%	0%	0.00%	0%	0.0%	45%	0.4%	35%	0.31%	0%	0.0%	0%	0.0%	10%	0.1%	10%	0.1%
E02003086 : North Somerset 022	4	0.15%	0%	0.00%	0%	0.0%	45%	0.1%	35%	0.05%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
E02003087 : North Somerset 023	8	0.30%	0%	0.00%	0%	0.0%	45%	0.1%	35%	0.10%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
E02003088 : North Somerset 024	78	2.88%	0%	0.00%	0%	0.0%	45%	1.3%	35%	1.01%	0%	0.0%	0%	0.0%	10%	0.3%	10%	0.3%
E02003089 : North Somerset 025 E02006845 : North Somerset 026	34	1.26%	0%	0.00%	0%	0.0%	45%	0.6%	35%	0.44%	0%	0.0%	0%	0.0%	10%	0.1%	10%	0.1%
E02006845 : North Somerset 026	25 24	0.92% 0.89%	0% 0%	0.00% 0.00%	0% 0%	0.0% 0.0%	45% 45%	0.4%	35% 35%	0.32% 0.31%	0% 0%	0.0%	0% 0%	0.0%	10% 10%	0.1% 0.1%	10% 10%	0.1% 0.1%
Bath and North East Somerset	34	1.26%	0%	0.00%	0%	0.0%	45%	0.4% 0.6%	35%	0.31%	0%	0.0%	0%	0.0%	10%	0.1%	10%	0.1%
Bournemouth	0	0.00%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.00%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Bristol, City of	712	26.31%	10%	2.63%	10%	2.6%	0%	0.0%	0%	0.00%	45%	11.8%	35%	9.2%	0%	0.0%	0%	0.0%
Cheltenham	3	0.11%	10%	0.01%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.0%	35%	0.0%	0%	0.0%	0%	0.0%
Christchurch	0	0.00%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.00%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Cornwall, Isles of Scilly	0	0.00%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.00%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Cotswold	1	0.04%	10%	0.00%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.0%	35%	0.0%	0%	0.0%	0%	0.0%
East Devon East Dorset	1	0.04%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.01%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Exeter	3	0.00% 0.11%	0% 0%	0.00% 0.00%	0% 0%	0.0% 0.0%	45% 45%	0.0% 0.0%	35% 35%	0.00% 0.04%	0% 0%	0.0%	0% 0%	0.0%	10% 10%	0.0%	10% 10%	0.0%
Forest of Dean	1	0.11%	10%	0.00%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.0%	35%	0.0%	0%	0.0%	0%	0.0%
Gloucester	2	0.07%	10%	0.01%	10%	0.0%		0.0%		0.00%	45%	0.0%	35%	0.0%	0%	0.0%	0%	0.0%
Mendip	10	0.37%	0%	0.00%	0%	0.0%	45%	0.2%	35%	0.13%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Mid Devon	0	0.00%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.00%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
North Devon	1	0.04%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.01%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
North Dorset	0	0.00%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.00%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Plymouth	2	0.07%	0%	0.00%	0%	0.0%		0.0%	35%	0.03%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Poole Purbeck	0 2	0.00% 0.07%	0% 0%	0.00% 0.00%	0% 0%	0.0% 0.0%		0.0% 0.0%	35% 35%	0.00% 0.03%	0% 0%	0.0% 0.0%	0% 0%	0.0% 0.0%	10% 10%	0.0% 0.0%	10% 10%	0.0%
Sedgemoor	46	1.70%	0%	0.00%	0%	0.0%		0.8%		0.59%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
South Gloucestershire	288	10.64%	5%	0.53%	5%	0.5%		2.4%	18%	1.86%	23%	2.4%	18%	1.9%	5%	0.5%	5%	0.5%
South Hams	1	0.04%	0%	0.00%	0%	0.0%		0.0%	35%	0.01%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
South Somerset	2	0.07%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.03%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Stroud	4	0.15%	10%	0.01%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.1%	35%	0.1%	0%	0.0%	0%	0.0%
Swindon	9	0.33%	10%	0.03%	10%	0.0%		0.0%	0%	0.00%	45%	0.1%	35%	0.1%	0%	0.0%	0%	0.0%
Taunton Deane	9	0.33%	0%	0.00%	0%	0.0%		0.1%	35%	0.12%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Tewkesbury	4	0.15%	10%	0.01%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.1%	35%	0.1%	0%	0.0%	0%	0.0%
Torbay Torridge	1	0.04% 0.04%	0% 0%	0.00% 0.00%	0% 0%	0.0% 0.0%		0.0% 0.0%	35% 35%	0.01% 0.01%	0% 0%	0.0% 0.0%	0% 0%	0.0%	10% 10%	0.0% 0.0%	10% 10%	0.0%
Weymouth and Portland	1	0.04%	0%	0.00%	0%	0.0%	45%	0.0%	35%	0.01%	0%	0.0%	0%	0.0%	10%	0.0%	10%	0.0%
Wiltshire	12	0.44%	5%	0.02%	5%	0.0%		0.1%	18%	0.01%	23%	0.1%	18%	0.1%	5%	0.0%	5%	0.0%
East	9	0.33%	10%	0.03%	10%	0.0%		0.0%	0%	0.00%	45%	0.1%	35%	0.1%	0%	0.0%	0%	0.0%
East Midlands	4	0.15%	10%	0.01%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.1%	35%	0.1%	0%	0.0%	0%	0.0%
London	11	0.41%	10%	0.04%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.2%	35%	0.1%	0%	0.0%	0%	0.0%
North East	0	0.00%	10%	0.00%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.0%	35%	0.0%	0%	0.0%	0%	0.0%
North West	9	0.33%	10%	0.03%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.1%	35%	0.1%	0%	0.0%	0%	0.0%
Northern Ireland	1	0.04%	10%	0.00%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.0%	35%	0.0%	0%	0.0%	0%	0.0%
Scotland South Fast	2	0.07%	10%	0.01%	10%	0.0%	0%	0.0%	0%	0.00%	45%	0.0%	35%	0.0%	0%	0.0%	0%	0.0%
South East Wales	23 19	0.85% 0.70%	10% 10%	0.08% 0.07%	10% 10%	0.1% 0.1%	0% 0%	0.0% 0.0%	0% 0%	0.00%	45% 45%	0.4% 0.3%	35% 35%	0.3% 0.2%	0% 0%	0.0% 0.0%	0% 0%	0.0%
West Midlands	18	0.70%	10%	0.07%	10%	0.1%	0%	0.0%	0%	0.00%	45% 45%	0.3%	35%	0.2%	0%	0.0%	0%	0.0%
Yorkshire and The Humber	9	0.33%	10%	0.03%	10%	0.1%		0.0%		0.00%	45%	0.1%	35%	0.1%	0%	0.0%	0%	0.0%
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