Monte Blackburn Ltd

Proposed Hotel Extension, Stanley House Hotel,
Mellor, Blackburn

Transport Assessment

3702720

DYNAMIC
TRANSPORT
PLANNING

DECEMBER 2020

Report Details

Report Number:	3702720-TA
Report Title:	Transport Assessment, Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn
Client:	Monte Blackburn Ltd
Date:	02 December 2020
Status:	-

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1 Introduction

1.1 General

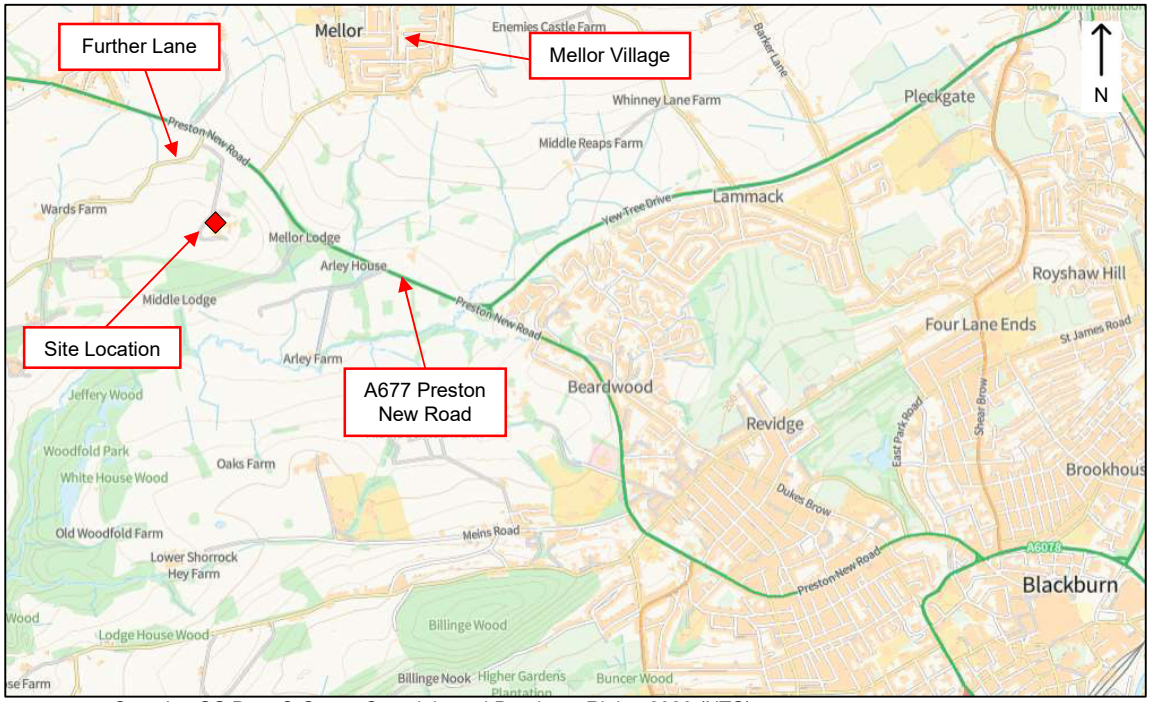
Dynamic Transport Planning Ltd is instructed by Monte Blackburn Ltd to report on the anticipated highways and transportation issues related with the proposals for the extension of Stanley House Hotel, Mellor, Blackburn. The proposals will comprise of the development of a spa, bedroom block and banquet building within the existing hotel's grounds.

1.2 Site Location

Stanley House Hotel is located just to the south-west of Mellor Village and 5km north-west of Blackburn. Access to the hotel is provided by a private driveway leading from Further Lane which leads directly to the A677 Preston New Road to the north.

The location of the site is illustrated at **Figure 1.1** below:

Figure 1.1 – Site Location Plan



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The extent of the application site's red line boundary is shown in **Appendix 1**.

1.3 Planning History & Pre-Application Discussions

The development site is situated within the Local Planning Authority of Ribble Valley Borough Council with Lancashire County Council the Local Highway Authority. Pre-application discussions have taken place with Lancashire County Council regarding the scheme and associated assessments undertaken herein.

The site has been subject to various historical planning applications including an approval in 2008 (with conditions) for an additional 38 hotel bedrooms, health spa/leisure facilities, a new brasserie and supporting office accommodation with revised access/parking areas (Application Ref: 3/2008/0574).

In total, the application sought to provide circa. 10,750m^2 GFA of new development on site. The main element to have been constructed as part of the approved application is the provision of an additional 18 bedrooms. The proposals now being advanced relate to a reconfiguration of parts of the approved development, with new development being the new bedroom block and banquet suite.

In terms of transport and highways, the current development proposals will offer an improvement with reference to the existing situation and the previously approved application with provision of the following which will be detailed herein:

- External and internal pedestrian access improvements including enhancement of the adjacent Public Footpath and new footway provision between the Stanley House Hotel access road and A677 Preston New Road;
- Improvements to the Hotel's existing access with provision of dedicated passing places;
- Provision of electric vehicle charging bays; and
- Submission of a Framework Travel Plan.

1.4 Purpose and Structure of Report

The purpose of this report is to examine the development proposals in the context of the application site, review the site access proposals including swept path analysis, consider the accessibility of the site and assess the impact of the proposed development on the local highway network.

In accordance with best practice, this Transport Assessment (TA) has been prepared in reference to the Department for Transports (DfTs) '*Guidance on Transport Assessment'* document.

This report is structured as follows:

- Section 2 provides a reference to relevant planning policy;
- Section 3 sets out the existing conditions of and around the application site;
- Section 4 provides a description of the proposed development;
- Section 5 details sustainable access opportunities;
- Section 6 assesses the trip generating potential of the development proposals;
- Section 7 provides a junction capacity assessment and;
- Section 8 presents the summary and conclusions.

2 Policy Context

2.1 General

It is necessary to understand the national and local planning policies which relate to the development. Therefore, the following chapter sets out key policies and demonstrates how the proposals accord with them.

2.2 National Policy

2.2.1 National Planning Policy Framework (NPPF), 2019

In February 2019 the Ministry of Housing, Communities and Local Government published the revised National Planning Policy Framework (NPPF) which is the current revision of the NPPF.

Paragraph 108 of the new NPPF states that in assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- *"Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *Safe and suitable access to the site can be achieved for all users; and*
- *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."*

Paragraph 110 of the NPPF states that applications for development should:

- *"Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter and respond to local character and design standards;*
- *Allow for the efficient delivery of good, and access by service and emergency vehicles; and*
- *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."*

Furthermore, Paragraph 111 states that all developments that will generate significant amounts of movement should be required to provide a Travel Plan, supported by a Transport Statement or Transport Assessment.

Paragraph 109 provides the key test for assessing the highways related impacts of development proposals, stating that *"development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe"*

2.3 Local Policy

2.3.1 Ribble Valley Borough Council Core Strategy (adopted December 2014)

The RVBC Core Strategy is the central document to the Local Development Framework (LDF) and sets the key principles that guide the development of the area. It describes the characteristics of the Borough in terms of connectivity, suggesting that the area is well located in relation to existing transport infrastructure.

Key Statement DM12: Transport Considerations states that:

- New development should be located to minimise the need to travel, and should incorporate good access by foot and cycle and have convenient links to public transport to reduce the need for travel by private car;
- Schemes offering opportunities for more sustainable means of transport and sustainable travel improvements will be supported; and
- Major applications should always be accompanied by a comprehensive travel plan.

The Core Strategy identifies that in determining planning applications, development must:

- Consider the potential traffic and car parking implications;
- Ensure safe access can be provided which is suitable to accommodate the scale and type of traffic likely to be generated; and
- Consider the protection and enhancement of public rights of way.

Policy DMG3: *Transport and Mobility* outlines that in making decisions on development proposals the local planning authority will attach considerable weight to:

- The availability and adequacy of public transport and associated infrastructure to serve those moving to and from the development;
- The relationship of the site to the primary route network and the strategic road network;
- The provision made for access to the development by pedestrian, cyclists and those with reduced mobility; and
- Proposals which limit parking provision for developments to discourage reliance on the car for work and other journeys where there are effective alternatives.

The policy continues to state that all major proposals should offer opportunities for increased use of, or the improved provision of, bus and rail facilities. Additionally, all development proposals will be required to provide adequate car parking and servicing space in line with currently standards.

2.3.2 Lancashire County Council Local Transport Plan 2011 - 2021

The LCC Local Transport Plan (LTP) sets out the County's transport priorities for the ten-year period between 2011 and 2021 as listed below:

- Improving access into areas of economic growth and regeneration;
- Providing better access to education and employment;
- Reducing carbon emissions and its effects;
- Improving people's quality of life and wellbeing;
- Maintaining our assets;
- Improving safety of our streets for our most vulnerable residents; and
- Providing safe, reliable, convenient and affordable transport alternatives to the car.

3 Existing Conditions

3.1 General

The proposed development will be constructed within the grounds of the existing operational Stanley House Hotel. The hotel currently provides the following facilities:

- 30-bedroom hotel;
- Functions/events suite for up to 250 guests;
- Spa and leisure facilities;
- 65-cover restaurant;
- Bar; and
- 195-space car park.

Access to Stanley House is gained via a priority T-junction arrangement from Further Lane. Gates into the estate are situated approximately 20m inwards of the hotel's private access road to ensure adequate stacking capacity of any queuing vehicles wishing to gain access to the hotel, should the gates be closed.

The hotel's access routes in a southerly direction towards two smaller parking areas situated to the west and to the north of the hotel, with the main carpark situated to the south of the hotel buildings. The hotel's access road is supported by internal traffic-calming measures in the form of speed-humps, and also forms part of a Public Right of Way (Footpath No. 68).

The proposed additional facilities forming the current planning application will be constructed across the hotel's garden areas and areas currently consisting of hardstanding associated with the site's existing car parks.

The immediate surrounding area is predominantly farmland with British Aerospace's Samlesbury site boundary and the Blackburn urban area borough boundary just over one kilometre from the site. The closest residential areas are Mellor to the north-east and Mellor-Brook to the north-west of the site.

The location of the site in the context of the local area is illustrated at **Figure 3.1**:

Figure 3.1 – Site Context Plan

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3.2 Surrounding Highway Network

3.2.1 Further Lane

Further Lane is a lightly trafficked minor road which meets the A677 Preston New road in the form of a ghost-island priority junction arrangement with a splitter-island provided at the Further Lane approach. It is subject to the national speed-limit and benefits from street-lighting within the vicinity of the A677 Preston New Road junction.

The existing Stanley House Hotel access is located approximately 50m south of the A677 Preston New Road junction, in the form of a simple priority T-junction arrangement.

As a result of previous applications at the site, highway improvements have been introduced at the Further Lane/A677 Preston New Road junction and the Stanley House Hotel access from Further Lane.

Routeing to the south-west, Further Lane provides a link to various small residential/agricultural properties through a predominantly rural area. Along its length, the carriageway is absent of road-markings and becomes relatively narrow to single-lane width. It is also absent of footway provision along the majority of its length.

3.2.2 A677 Preston New Road

Preston New Road (A677) is a primary route which links Blackburn in the east to Preston in the west. Within the vicinity of the Further Lane junction, it is subject to a 50mph speed limit although this is reduced to 30mph approximately 290m to the west upon approach to Mellor Brook.

On-road advisory cycle lanes and a pedestrian-crossing island are provided long the A677 Preston New Road within the vicinity of the Further Lane junction. It is supported by street-lighting and footways to the northern aspect of the highway within the vicinity of the Further Lane junction, with a short section of footway along the eastern aspect of Further Lane enabling connectivity to the northern provision by the uncontrolled pedestrian crossing.

Approximately 300m east of the Further Lane junction is Mire Ash Brow, which meets the A677 Preston New Road in the form of a priority T-junction. Mire Ash Brow is a minor road link, with white centre line and lighting, connecting the site to Mellor Village. It is subject to a 30mph speed limit and benefits from footway provision along its western aspect.

Situated directly opposite Mire Ash Brow is a Public Right of Way (Footpath No. 68), which was previously a historic vehicular access to Stanley House Hotel. The footpath now provides a direct link from the A677 Preston New Road (and the adjacent bus stops) to Stanley House Hotel.

3.3 Road Safety

Accident statistics have been obtained for the local highway network in the vicinity of the application site for the latest available five years data from the Department for Transport (DfT) as presented below:

Figure 3.2 – Accident Data Plot

Source: collisionmap.uk/DfT, 2020

The assessment shows that there has been a total of six accidents along the A677 Preston New Road between the Further Lane and Mire Ash Brow priority junctions.

All the recorded accidents were of slight severity, with the incident situated furthest west including the collision of a motorcycle. None of the accidents included pedestrians or cyclists.

On review of the data it is considered that the existing accident record over the last five-year period does not demonstrate any pre-existing patterns or trends of incidents that could be affected by the development proposals.

4 Proposed Development

4.1 General

The application seeks full planning permission for the extension of Stanley House Hotel to replace approved but unbuilt development from 2008 planning consent. The proposals will comprise the refurbishment of existing facilities including Stanley House, the existing Barns and existing bedroom block. The proposals also include the construction of new spa buildings, an additional bedroom block and banquet building within the existing hotel's grounds, supported by additional parking facilities and re-alignment of the hotel's existing access road.

The Gross External Area (GEA) of each of the newly constructed facilities is provided below;

- Spa buildings – 3,667m^2
- Bedroom block – 2,937m^2
- Banquet building – 1,224m^2
- Restaurant extension – 82m^2

The proposed site layout is included at **Appendix 1** of this report.

As illustrated on the proposed layout plan, the proposed spa buildings will be situated to the north-west of the site. The new banquet building will be situated further to the south and will be connected to the existing barn building. The bedroom block will be situated to the south-east of the site, with a green-roof link connecting to the existing bedroom block to the north.

4.2 Proposed Site Access and Servicing Arrangements

4.2.1 Vehicular Access & Servicing

It is proposed that access to the Stanley House Hotel site will be retained by the existing access road leading from Further Lane, although this will be subject to some realignment works to facilitate the construction of the new facilities and the associated parking areas. Additional passing places will also be provided along the access drive to cater for the passing of two larger vehicles such as service vehicles and coaches.

Swept path analysis has been undertaken along the realigned site access road and internal arrangements for a large car, 10m rigid service vehicle and 15m coach. The vehicle tracking is shown on the plan included at **Appendix 2.**

The site current operations work well for deliveries/refuse collection, with a separate area located within the staff parking area. It is envisaged that there will be only minor changes in the number of service vehicles visiting the site and that the vehicle types will remain as existing. The existing arrangement for servicing is therefore reflected within the new layout.

4.2.2 Pedestrian Access

The site has been configured to maximise access and movement through the site, with the proposed developments supported by internal connections to the hotel's existing facilities and parking areas. The proposals also incorporate new pedestrian routes around the grounds with the aim to provide attractive and pleasant walking environment within the site to limit the need for guests to travel off site.

Externally, the proposals will also incorporate the following pedestrian improvements as detailed within **Appendix 3**:

- Enhancement of part of Footpath No. 68 in the form of clearance of obstructions and provision of hardstanding to provide a direct pedestrian link between the hotel and A677 Preston New Road/Mellor Village; and
- Provision of a footway along Further Lane's eastern aspect to provide a pedestrian link between the Stanley House Hotel access road and existing footway provision along the A677 Preston New Road (and the existing pedestrian crossing point).

The proposals will also require a minor diversion to Footpath No. 68 in order to accommodate the proposed development scheme. These works will be subject to standard footpath diversion procedure and approval from the Local Authority.

4.3 Parking Provision

Additional parking provision has been made available on-site to cater for the development proposals, including areas of green overflow parking. Designated coach parking has also been incorporated into the scheme.

Parking provision has been assessed in consideration of Lancashire County Council standards. The Lancashire Joint Structure Plan presents parking standards for new developments:

Table 4.1 – LCC JSP Parking Standards

Land-use	Staff/Operational Parking Requirement
Hotel	1 per 1 bedroom
Leisure Space	1 per 25m² GFA
Food & Drink	1 per 10m² GFA

The following table provides an assessment of car parking provision against the parking standards:

Table 4.2 – Car Parking Provision Assessment

Land-use	GFA/PFA/Beds	Car Max.	Total Car Proposed
Hotel	70 beds	70	400
Leisure Space	4,090m²	164	
Food & Drink	2,580m²	258	
Total		492	400

The above table demonstrates that the proposed level of parking does not exceed the maximum level of acceptable provision. The proposed 400-space provision provides around 80% of the parking standard which will provide an adequate level of provision in recognition of the shared facilities/linked trips taking place across the Stanley House Hotel site.

Whilst no local standards are stipulated regarding electric vehicle charging bays, the proposed scheme will incorporate a number of such bays to enhance the sustainability of the site.

5 Access by Non-Car Modes

5.1 Accessibility

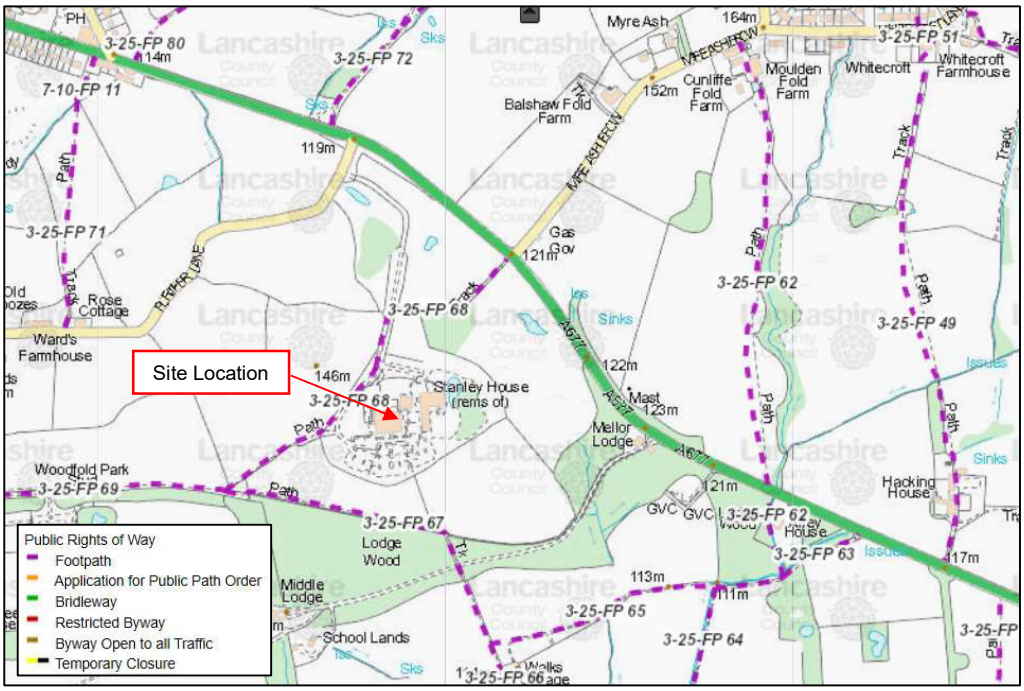
The location of the site offers the potential for some visitors and staff to access the site by sustainable modes of transport other than the private car. The opportunities for accessing the site by sustainable modes are discussed in more detail below.

5.1.1 Pedestrian Access

Whilst the majority of the surrounding highway network is supported by a reasonable level of pedestrian infrastructure, the development proposals include enhancement and provision of additional external pedestrian facilities to further encourage access to the hotel by foot.

The site also benefits from being surrounded by a good network of Public Rights of Way, as shown below:

Figure 5.1 – Public Rights of Way Plan

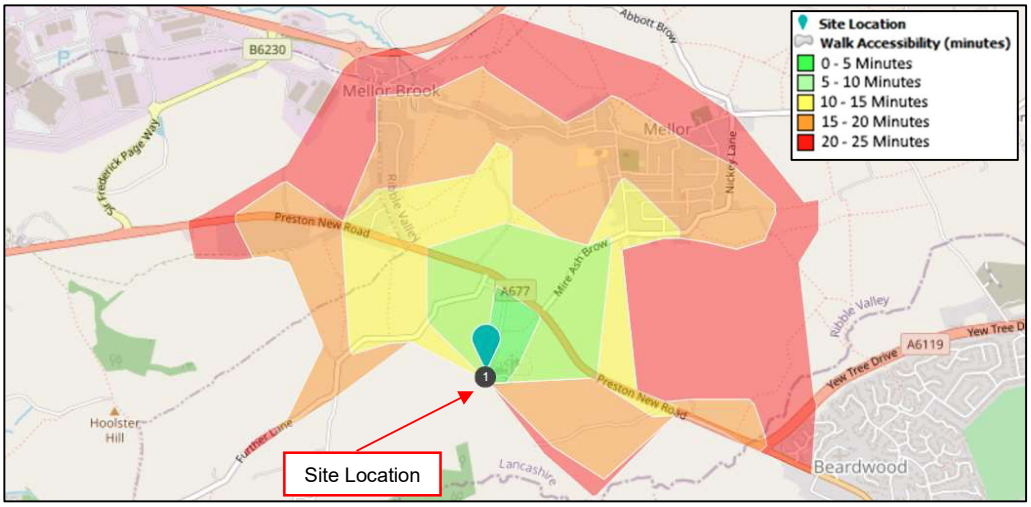


Source: Lancashire County Council MARIO (2020)

Relevant guidance provided in Manual for Streets (MfS) states that walking offers the greatest potential to replace short car trips, particularly those under 2km. A walk accessibility plan provided at **Figure 5.2** below highlights the accessible walking area within approximately 2km of the site, equivalent to 25 minutes.

The walk accessibility plan illustrates that Mellor Village, Mellor Brook and part of Beardwood can be accessed within a reasonable walking distance of the site.

Figure 5.2 - Walk Accessibility Plan

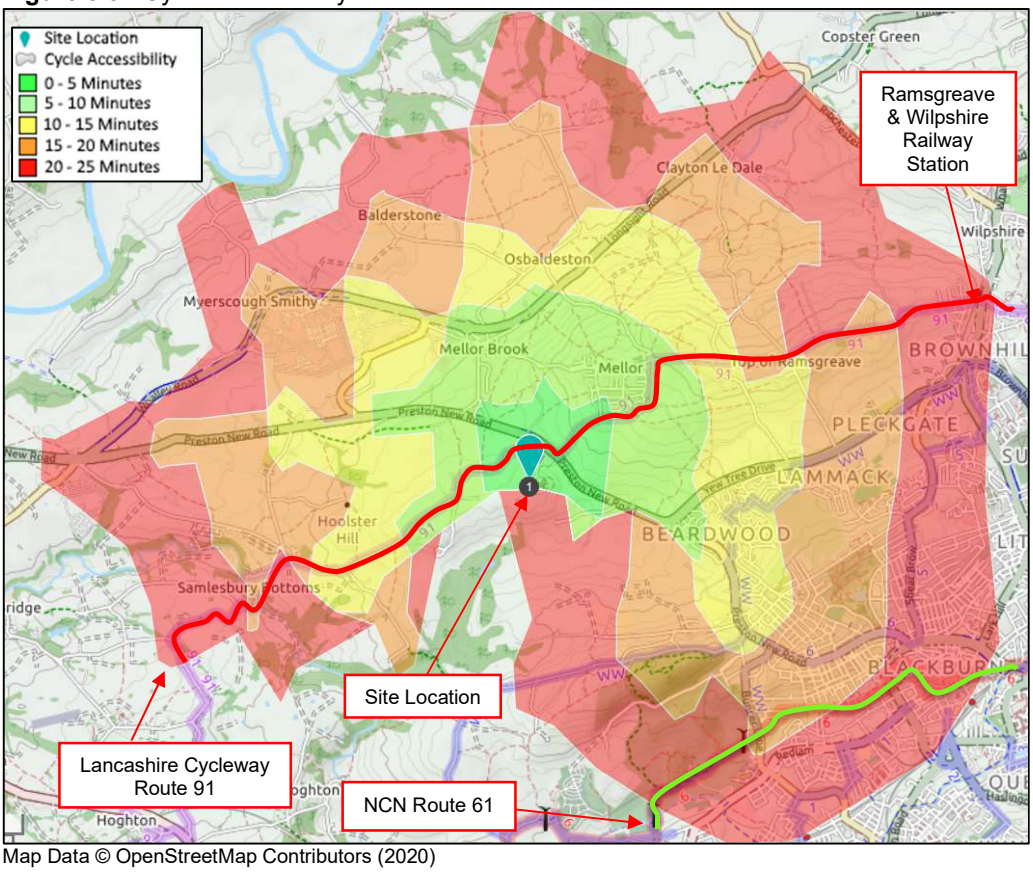


Map Data © OpenStreetMap Contributors (2020)

5.1.2 Cycle Access

It is widely recognised that cycling has the potential to substitute shorter car journeys for work and leisure purposes. A plan illustrating the areas located within 5km (a journey time of approximately 25 minutes), from the site is shown below.

Figure 5.3 - Cycle Accessibility Plan



Map Data © OpenStreetMap Contributors (2020)

Locally, a signed on-road cycle route (Lancashire Cycleway Route 91) routes along Further Lane, Preston New Road and Mire Ash Brow which connects Leyland in the south-west to Whalley in the north-west. The route also runs directly past Ramsgreave and Wilpshire Railway Station which is situated within the 5km cycle catchment area.

Access to the National Cycle Network is provided via NCN Route 6 to the east, also situated within the 5km cycle catchment area. NCN Route 6 provides on-road and off-road facilities through Blackburn Town Centre and on to other local destinations such as Accrington and Pleasington.

Cycle accessibility within the vicinity of the site is considered to be good, with access to large residential areas and Blackburn Town Centre which is also amplified by the surrounding cycle route networks.

5.1.3 Public Transport Access

The nearest bus stops are located on the A677 Preston New Road within the vicinity of the Mire Ash Brow junction. The shortest route to the bus stops is provided by the existing Footpath No. 68 at just under 300m from the hotel grounds.

A bus service frequency summary of the aforementioned bus stops is provided below:

Table 5.1: Bus Service Summary

Service	Route Description	Frequency Weekdays	Weekend Frequency
59	Preston – Blackburn (via Samlesbury & Mellor Brook)	30 mins	Sat: 30 mins Sun: 60 mins

Source: Lancashire County Council Bus Timetables

The above table shows that the nearby bus stops provide a regular service between Blackburn and Preston during the week and weekend periods. Additional bus services also operating through Mellor Village to Preston and Blackburn, with such bus stops situated approximately 750m north of the hotel grounds.

Stanley House also currently operates a mini-bus service for guests upon request, predominately operating between the site and Blackburn bus/rail interchange. This service will be retained to serve the proposed hotel's extension of facilities.

Overall, the site benefits from a good level of accessibility to frequent bus services to the local destinations such as Preston and Blackburn with access to additional destinations achievable via associated interchange facilities.

5.1.4 Train

Whilst no rail stations are situated within direct vicinity of the site, access to several local rail stations can be obtained by various modes as summarised in the following table:

Table 5.2: Rail Station & Service Summary

Rail Station	Services/Line	Min. Daily Frequency	Access Options
Ramsgreave & Wilpshire	Manchester Victoria to Clitheroe rail line	Hourly	Lancashire Cycle Route 91
Blackburn	Manchester to Victoria, Blackpool South to Colne and Blackpool North to York rail lines		Bus Service 59 / Within 5km Cycle Catchment/ Hotel Mini-Bus
Preston	West Coast Mainline		Bus Service 59/Hotel Mini-Bus

Access by rail may therefore be a reasonable modal choice for visitors wishing to access the site from outside of the local area.

5.2 Accessibility Summary

Whilst the hotel's surrounding environment encourages visitors due to the rural nature of the site for recreational activities, the level of pedestrian and cycle routes/ infrastructure also work to encourage sustainable access for both visitors and staff.

Overall, it can be summarised that the site offers good potential for some journeys, particularly those by visitors and staff from the neighbouring residential areas to be undertaken by modes other than car.

The development proposals will also encourage access by sustainable modes due to the local pedestrian improvements and improving linkages between the hotel and local bus services currently operating along the A677 Preston New Road.

6 Trip Generation

6.1 General

This chapter provides an estimation of the likely levels of trip generation resulting from the proposed development on the adjacent highway network.

6.2 Trip Generation

6.2.1 Hotel

The TRICS database has been used to derive the likely numbers of trips expected to be generated by the proposed Spa facilities, with the selection criteria for the comparative sites used is as follows:

- Land use – 'Hotel Food & Drink', Sub land use – 'Hotel';
- All London and Ireland sites excluded;
- Weekday surveys only; and
- Selection by number of beds.

All TRICS outputs are provided within **Appendix 4**.

A summary of the trip rates is shown below:

Table 6.1 - TRICS Trip Rates (per 100m² GFA) Hotel

	Weekday AM Peak Hour (0900-1000)		Weekday PM Peak Hour (1700-1800)	
	Arrivals	**Departures**	**Arrivals**	**Departures**
Trip Rate	0.421	0.500	0.289	0.621

Due to the absence of existing surveyed traffic flows and the previous approval for improvements to the site, the above trip rates have been applied to the following scenarios to get the resulting vehicle movements:

- Existing GFA (5000m^2 GFA)
- Previously Approved (10,750m^2 GFA)
- Currently Proposed (12,970m^2 GFA)

Table 6.2 - Estimated Trip Generation – Hotel

	Weekday AM Peak Hour (0800-0900)		Weekday PM Peak Hour (1700-1800)	
	Arrivals	**Departures**	**Arrivals**	**Departures**
Existing	21	25	14	17
Previously Approved	45	54	31	36
Now Proposed	55	65	37	43

The results show that during the busiest hour on the local highway network, the proposed Hotel improvements would result in around 120 two-way movements, or an increase of 20 two-way movements from the previously approved scenario. The total trip generation equates to around 2 vehicle movements per minute in the busiest peak hour, with the majority of trips already lawfully approved in relation to the planning context of the site.

It should also be noted that by their nature the uses, both existing and proposed on the site, are not focused around the traditional highway peak hour periods with trips spread further across the day.

7 Anticipated Highway Impacts

This chapter describes the impact of the additional trips generated by the proposed development on the operation of the proposed site access

7.1 Baseline Traffic Data

Traffic data has been obtained from DfT for A677 Preston New Road in the vicinity of the application site. Analysis of the data identified the following AM and PM peak-hour periods:

- AM: 08:00 – 09:00; and
- PM: 16:00 – 17:00.

The total junction inflow was recorded as 1,668 PCUs during the AM peak hour and 1,386 PCUs during the PM peak hour.

The surveyed traffic flows are illustrated at **Appendix 5**, with the full survey data at **Appendix 6**.

7.2 Assessment Scenarios

Capacity assessments have been undertaken for the following scenarios to ensure that the junction in can operate with the proposed development in place at opening, and in the future:

- 2021 (opening year) + development; and
- 2025 (5 years post-application) + development.

To account for background traffic growth, the observed traffic flows are typically factored using the DfT's TEMPRO 7.2 computer programme using the National Trip End Model (NTEM) dataset 7.2 and the National Travel Model (NTM).

For the interrogation of the TEMPRO database the growth rates for 'car drivers only' were selected with the trip end type being defined as 'origin/destination'.

Trip rates were obtained for the weekday AM and PM peaks. Once the trip rates were calculated, an adjustment was applied to provide a local growth rate. An NTM growth calculation for 'U roads was weighted to each TEMPRO growth rate using the NTM dataset.

The growth factors are summarised in **Table 7.1** below:

Table 7.1 – TEMPRO Growth Factors

	TEMPRO Growth Factors	
	AM	**PM**
2018-2021	1.0185	1.0174
2021-2025	1.0223	1.0205

In order to provide a robust assessment, the local network peak-period traffic flows have been combined with the TRICS peak-peak period trip generation figures for each 'with development' assessment scenario.

7.3 Assessment Methodology

JUNCTIONS 9 (PICADY modules) are used to assess capacity and delay of roundabout and priority junctions respectively. The software program uses geometric parameters along with traffic flows for the junction to assess its performance. The outputs of the modelling program are the Ratio of the Flow to Capacity (RFC) and predicted queue lengths (in Passenger Car Units (PCUs) for individual approaches.

An RFC value between 0 and 0.85 indicates that the junction is operating well within capacity. An RFC value between 0.85 and 1.0 means that the junction is still operating within capacity, but localised delays and queues may occur. An RFC value over 1.0 signifies that the junction will be operating above its predicted capacity.

The following provides a summary of the operational analysis results in support of this assessment. A full copy of the model outputs is contained within **Appendix 7**.

In order to ensure the robustness of the assessment, the highway peak hour and the development peak hour within the AM and PM peak periods have been combined to give a worst-case assessment as the highway and development peaks don't directly align.

7.4 Site Access/A677 Preston New Road

The results for the 2021 and 2025 With Development scenarios are summarised below:

Table 7.2 – Site Access Capacity Assessment 2020 With Development

Approach	2021 With Development				2025 With Development			
	AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	MMQ	RFC	MMQ	RFC	MMQ	RFC	MMQ
Further Lane (LT)	0.07	0.1	0.04	0.1	0.08	0.1	0.05	0.1
Further Lane (RT)	0.20	0.2	0.09	0.1	0.22	0.3	0.09	0.1
A677 Preston New Road West (RT)	0.06	0.1	0.04	0.1	0.06	0.1	0.04	0.0

The results of the modelling show that the proposed site access junction would operate with significant spare capacity in the opening year and design year assessment scenarios.

8 Summary and Conclusions

Dynamic Transport Planning Ltd are instructed by Monte Blackburn Ltd to report on the anticipated highways and transportation issues related with the proposals for the extension of Stanley House Hotel, Mellor, Blackburn. The proposals include new development to replace approved but unbuilt development from 2008 planning consent.

Access to the site will be taken from the existing site access priority T-Junction on Further Lane, providing both access and egress to the development for vehicles and pedestrians.

Pedestrian provision will be improved by provision of a pedestrian link between the Stanley House Hotel access road and existing footway provision along the A677 Preston New Road (and the existing pedestrian crossing point). Further pedestrian links currently provided via the Footpath No. 68 will also be enhanced as part of the development proposals.

The access road into the site will be subject to improvement with the provision of dedicated passing places along the route.

The highway accident data has been reviewed for the most recently available five-year road safety record for the area surrounding the site. On review it is not considered that the data demonstrate any pre-existing patterns or trends of incidents that could be affected by the development proposals.

The level of proposed parking provision on the site has been considered in accordance with the Lancashire County Council parking standards and demonstrated to be compliant with provision also including electric vehicle charging bays, mobility standard bays and cycle parking.

The accessibility of the site for non-car modes of travel has been assessed. Overall, it is considered that the site benefits from a good level of sustainable access provision, promoting access by foot, bicycle and public transport. The site therefore offers the potential for some journeys to be undertaken by modes other than car.

The TRICS database has been utilised to generate anticipated vehicle movements associated with the proposed development. It is anticipated that the vehicle movements resulting from the development would total 120 (including both arrivals and departures) during the busiest peak hour period. The total trip generation equates to around 2 vehicle movements per minute in the busiest peak hour, with the majority of trips already lawfully approved in relation to the planning context of the site.

A capacity assessment of the A677 / Further Lane has been carried out which demonstrates that that the junction would not be materially impacted by the addition of the development related traffic.

In terms of transport and highways, the development proposals offer an improvement to both the existing situation and the previous approvals, with pedestrian accessibility enhancements, improvement to the Hotel's access road, provision of electric vehicle charging bays and submission of a Framework Travel Plan.

Overall, on the basis of the above assessment it is concluded that there are no outstanding reasons why the proposed redevelopment of the site should not be granted planning permission on highways grounds.

Appendix 1
Site Layout & Red Line Boundary

issue:

A: original issue

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access road re-routed from existing position

new spa car car park - 70 spaces including accessible spaces

new single storey spa building with 2 storey barn

cloister and gardens to spa members area

spa / staff parking area - 54 spaces

service courtyard

informal banquet terrace with open pergola seating to perimeter

new function / banquetting hall extended from existing barn

existing barn and hotel entrance remodelled to feature new entrance and restaurant areas

existing parking areas

new access road

new access road

70 spaces

spa entrance

54 spaces

informal terrace

banquet hall entrance

stanley house entrance

coach drop off

15 spaces

restaurant + bar entrance

bedroom entrance

coaches

43 spaces

17 spaces

47 spaces

52 overflow spaces

56 overflow spaces

46 spaces

dense planting

dense planting

dense planting

new 2 storey bedroom wing with single storey link to existing wing

remodelled entrance and extended restaurant area

existing parking remodelled to sui new bedroom wing

additional parking area with green overflow spaces and dense buffer planting

North

0 10 20 30 40 50m

scale 1:500

campbelldriverpartnership architects

client: monte group

project: stanley house

mellor, blackburn

sheet: SITE - proposed site plan 1:500

job no:	dwg no:	
20.105	003	D

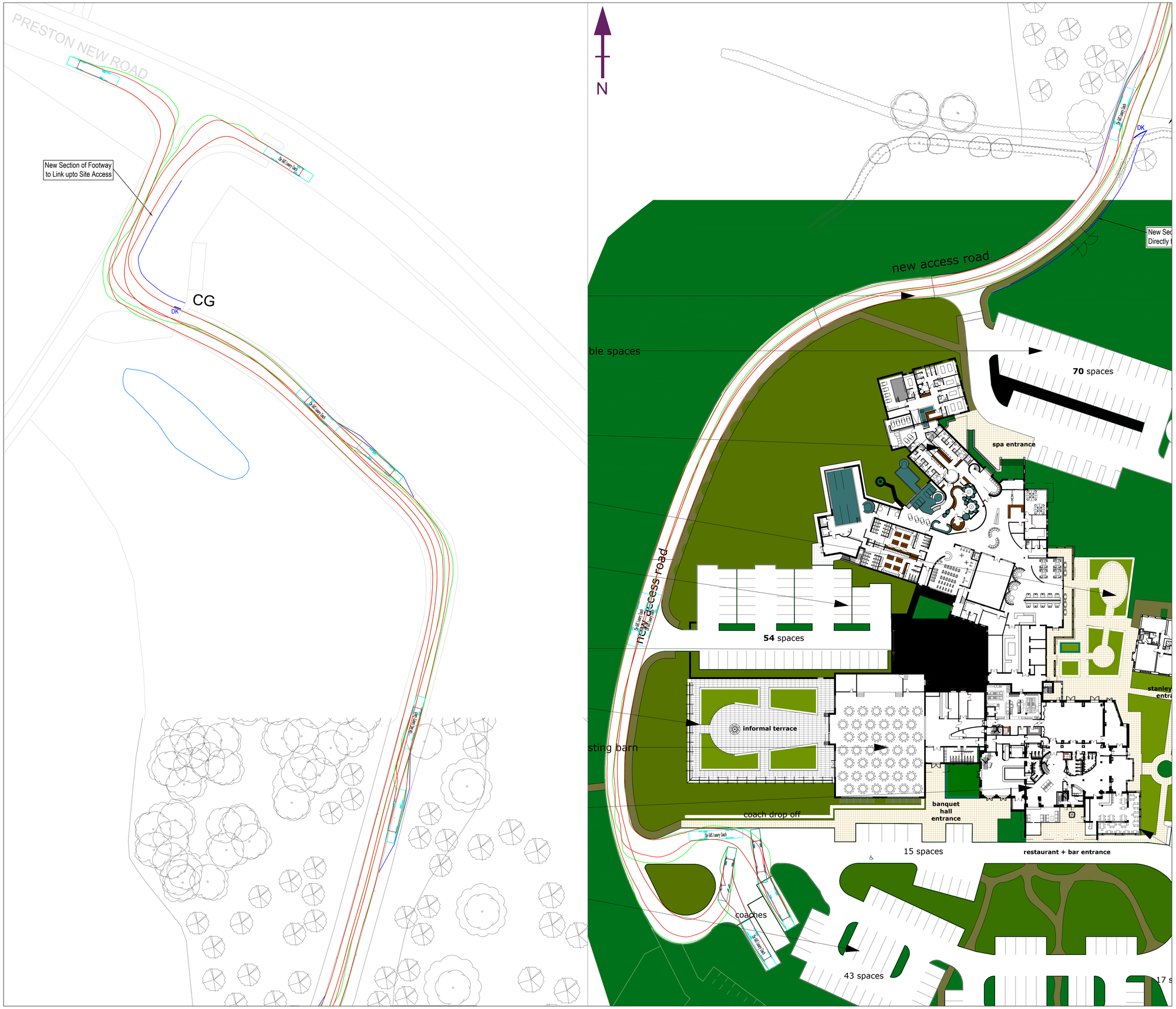
scale: 1:500 @ A1

date: 11.11.20

drawn: dh

capricorn park
blakewater road
blackburn bb1 5qr
t: 01254 297700
e: design@cdparchitects.co.uk

Appendix 2
Swept-Path Analysis



Notes

Rev.	Date	Revisions	Drawn
B	1/12/2020	Architect Site Layout Plan Update	GS

DYNAMIC TRANSPORT PLANNING
+44 (0) 7411 751 693
www.dynamictransportplanning.co.uk
enquiries@dynamictransportplanning.co.uk

Client

Monte Blackburn Ltd

Project

Proposed Hotel Redevelopment,
Stanley House Hotel,
Mellor, Blackburn

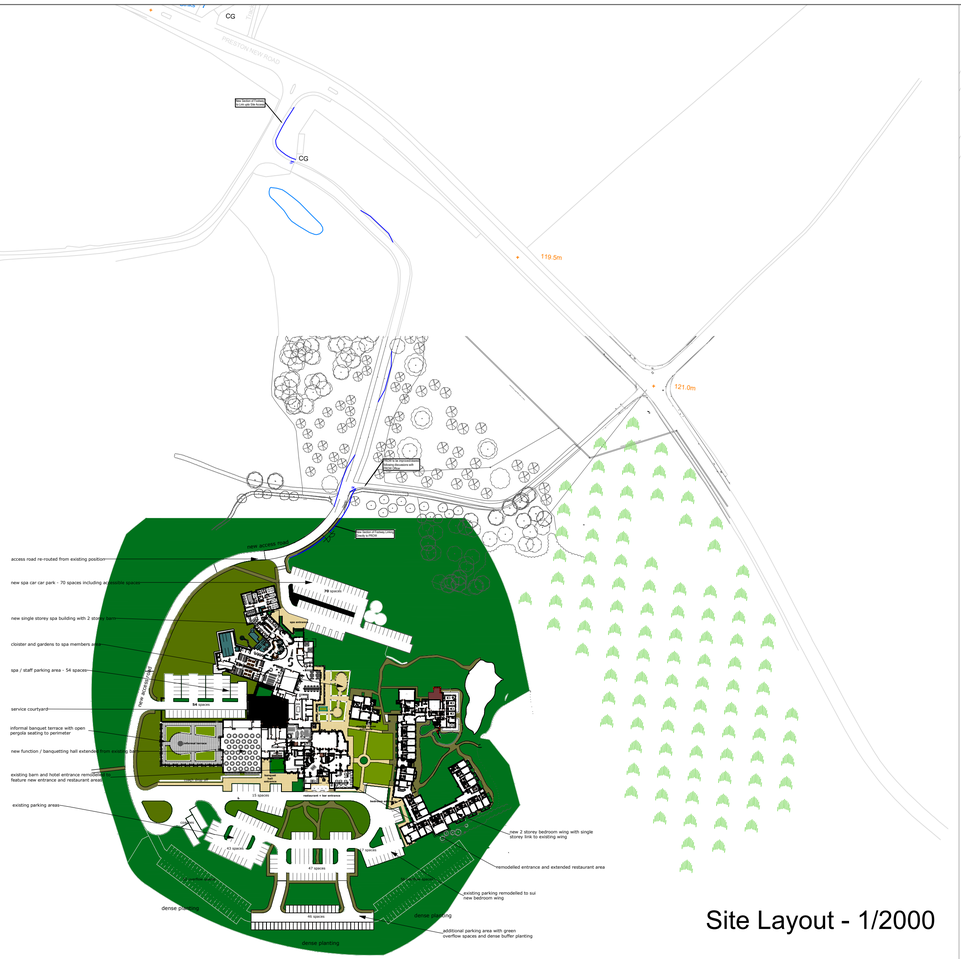
Drawing Title

Proposed Site Layout
Swept Path Analysis
15m Coach & 10m Rigid

Date	Scale
October 2020	1/500 @ A1
Drawn: MS	Approved: GS

Drawing Number	Rev.
DTP/3702720/ATR001	B

Appendix 3
Pedestrian Improvements


CG
CG
119.5m
121.0m
access road re-routed from existing position
new spa car car park - 70 spaces including
new single storey spa building with 2 storey
cloister and gardens to spa members
spa / staff parking area - 54 spaces
service courtyard
informal banquet terrace with open pergola seating to perimeter
new function / banqueting hall extension
existing barn and hotel entrance reception feature new entrance and restaurant area
existing parking areas
new 2 storey bedroom wing with single storey link to existing wing
remodelled entrance and extended restaurant area
existing parking remodelled to suit new bedroom wing
additional parking area with green overflow spaces and dense buffer planting
dense planting
dense planting
dense

Appendix 4
TRICS Outputs

Calculation Reference: AUDIT-262601-200812-0800

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : A - HOTELS

VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	BU	BUCKINGHAMSHIRE	1 days
05	**EAST MIDLANDS**		
	LE	LEICESTERSHIRE	1 days
10	**WALES**		
	CF	CARDIFF	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: 4675 to 17624 (units: sqm)
Range Selected by User: 720 to 17624 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 25/11/19

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

Selected survey days:

Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	3 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:

Suburban Area (PPS6 Out of Centre)	1
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:

Commercial Zone	1
Residential Zone	1
Out of Town	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.

Secondary Filtering selection:

Use Class:

C1	3 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days
20,001 to 25,000	1 days

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

Population within 5 miles:

100,001 to 125,000	1 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 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	3 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

1 **BU-06-A-02** **HOLIDAY INN** **BUCKINGHAMSHIRE**
NEW ROAD
AYLESBURY
WESTON TURVILLE
Edge of Town
Out of Town
Total Gross floor area: 4675 sqm
Survey date: WEDNESDAY *01/10/14* *Survey Type: MANUAL*

2 **CF-06-A-05** **PARK INN BY RADISSON** **CARDIFF**
CIRCLE WAY EAST
CARDIFF
LLANEDEYRN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 5710 sqm
Survey date: WEDNESDAY *21/03/18* *Survey Type: MANUAL*

3 **LE-06-A-01** **MARRIOTT** **LEICESTERSHIRE**
SMITH WAY
LEICESTER
ENDERBY
Edge of Town
Commercial Zone
Total Gross floor area: 17624 sqm
Survey date: THURSDAY *12/07/18* *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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
AG-06-A-01	Not appropriate
DV-06-A-03	Not appropriate
GS-06-A-02	Not appropriate
SW-06-A-01	Not appropriate
TW-06-A-02	Not appropriate
WK-06-A-01	Not appropriate
WL-06-A-03	Not appropriate
WM-06-A-05	Not appropriate

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	9336	0.232	3	9336	0.386	3	9336	0.618
08:00 - 09:00	3	9336	0.421	**3**	**9336**	**0.500**	3	9336	0.921
09:00 - 10:00	**3**	**9336**	**0.561**	3	9336	0.364	**3**	**9336**	**0.925**
10:00 - 11:00	3	9336	0.375	3	9336	0.250	3	9336	0.625
11:00 - 12:00	3	9336	0.154	3	9336	0.303	3	9336	0.457
12:00 - 13:00	3	9336	0.303	3	9336	0.236	3	9336	0.539
13:00 - 14:00	3	9336	0.371	3	9336	0.286	3	9336	0.657
14:00 - 15:00	3	9336	0.261	3	9336	0.271	3	9336	0.532
15:00 - 16:00	3	9336	0.293	3	9336	0.343	3	9336	0.636
16:00 - 17:00	3	9336	0.264	3	9336	0.361	3	9336	0.625
17:00 - 18:00	3	9336	0.289	3	9336	0.332	3	9336	0.621
18:00 - 19:00	3	9336	0.353	3	9336	0.343	3	9336	0.696
19:00 - 20:00	3	9336	0.246	3	9336	0.278	3	9336	0.524
20:00 - 21:00	3	9336	0.228	3	9336	0.150	3	9336	0.378
21:00 - 22:00	3	9336	0.146	3	9336	0.189	3	9336	0.335
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.497			4.592			9.089

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:	4675 - 17624 (units: sqm)
Survey date date range:	01/01/12 - 25/11/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	8

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.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	9336	0.021	3	9336	0.021	3	9336	0.042
08:00 - 09:00	**3**	**9336**	**0.039**	**3**	**9336**	**0.029**	**3**	**9336**	**0.068**
09:00 - 10:00	3	9336	0.018	3	9336	0.029	3	9336	0.047
10:00 - 11:00	3	9336	0.014	3	9336	0.021	3	9336	0.035
11:00 - 12:00	3	9336	0.007	3	9336	0.011	3	9336	0.018
12:00 - 13:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
13:00 - 14:00	3	9336	0.011	3	9336	0.007	3	9336	0.018
14:00 - 15:00	3	9336	0.025	3	9336	0.021	3	9336	0.046
15:00 - 16:00	3	9336	0.007	3	9336	0.007	3	9336	0.014
16:00 - 17:00	3	9336	0.004	3	9336	0.007	3	9336	0.011
17:00 - 18:00	3	9336	0.018	3	9336	0.018	3	9336	0.036
18:00 - 19:00	3	9336	0.025	3	9336	0.025	3	9336	0.050
19:00 - 20:00	3	9336	0.014	3	9336	0.007	3	9336	0.021
20:00 - 21:00	3	9336	0.014	3	9336	0.011	3	9336	0.025
21:00 - 22:00	3	9336	0.018	3	9336	0.018	3	9336	0.036
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.235			0.232			0.467

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**3**	**9336**	**0.007**	3	9336	0.004	3	9336	0.011
08:00 - 09:00	3	9336	0.007	**3**	**9336**	**0.007**	**3**	**9336**	**0.014**
09:00 - 10:00	3	9336	0.000	3	9336	0.004	3	9336	0.004
10:00 - 11:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
11:00 - 12:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
12:00 - 13:00	3	9336	0.004	3	9336	0.000	3	9336	0.004
13:00 - 14:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
14:00 - 15:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
15:00 - 16:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
16:00 - 17:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
17:00 - 18:00	3	9336	0.000	3	9336	0.004	3	9336	0.004
18:00 - 19:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
19:00 - 20:00	3	9336	0.004	3	9336	0.000	3	9336	0.004
20:00 - 21:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
21:00 - 22:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.039			0.081

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

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TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

PSVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	**3**	**9336**	**0.011**	**3**	**9336**	**0.011**	**3**	**9336**	**0.022**
08:00 - 09:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
09:00 - 10:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
10:00 - 11:00	3	9336	0.011	3	9336	0.007	3	9336	0.018
11:00 - 12:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
12:00 - 13:00	3	9336	0.000	3	9336	0.004	3	9336	0.004
13:00 - 14:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
14:00 - 15:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
15:00 - 16:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
16:00 - 17:00	3	9336	0.004	3	9336	0.000	3	9336	0.004
17:00 - 18:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
18:00 - 19:00	3	9336	0.000	3	9336	0.004	3	9336	0.004
19:00 - 20:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
20:00 - 21:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
21:00 - 22:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.030			0.030			0.060

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	9336	0.007	3	9336	0.000	3	9336	0.007
08:00 - 09:00	3	9336	0.004	3	9336	0.000	3	9336	0.004
09:00 - 10:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
10:00 - 11:00	3	9336	0.007	3	9336	0.004	3	9336	0.011
11:00 - 12:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
12:00 - 13:00	**3**	**9336**	**0.011**	3	9336	0.004	3	9336	0.015
13:00 - 14:00	3	9336	0.004	3	9336	0.000	3	9336	0.004
14:00 - 15:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
15:00 - 16:00	3	9336	0.000	3	9336	0.011	3	9336	0.011
16:00 - 17:00	3	9336	0.011	**3**	**9336**	**0.014**	**3**	**9336**	**0.025**
17:00 - 18:00	3	9336	0.004	3	9336	0.011	3	9336	0.015
18:00 - 19:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
19:00 - 20:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
20:00 - 21:00	3	9336	0.011	3	9336	0.007	3	9336	0.018
21:00 - 22:00	3	9336	0.007	3	9336	0.007	3	9336	0.014
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.086			0.078			0.164

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	9336	0.186	3	9336	0.321	3	9336	0.507
08:00 - 09:00	3	9336	0.368	**3**	**9336**	**0.443**	3	9336	0.811
09:00 - 10:00	**3**	**9336**	**0.511**	3	9336	0.303	**3**	**9336**	**0.814**
10:00 - 11:00	3	9336	0.336	3	9336	0.204	3	9336	0.540
11:00 - 12:00	3	9336	0.121	3	9336	0.271	3	9336	0.392
12:00 - 13:00	3	9336	0.293	3	9336	0.225	3	9336	0.518
13:00 - 14:00	3	9336	0.339	3	9336	0.261	3	9336	0.600
14:00 - 15:00	3	9336	0.221	3	9336	0.243	3	9336	0.464
15:00 - 16:00	3	9336	0.271	3	9336	0.321	3	9336	0.592
16:00 - 17:00	3	9336	0.232	3	9336	0.339	3	9336	0.571
17:00 - 18:00	3	9336	0.239	3	9336	0.286	3	9336	0.525
18:00 - 19:00	3	9336	0.314	3	9336	0.300	3	9336	0.614
19:00 - 20:00	3	9336	0.225	3	9336	0.268	3	9336	0.493
20:00 - 21:00	3	9336	0.196	3	9336	0.129	3	9336	0.325
21:00 - 22:00	3	9336	0.111	3	9336	0.157	3	9336	0.268
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.963			4.071			8.034

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	9336	0.007	**3**	**9336**	**0.029**	3	9336	0.036
08:00 - 09:00	3	9336	0.007	3	9336	0.021	3	9336	0.028
09:00 - 10:00	**3**	**9336**	**0.032**	3	9336	0.029	**3**	**9336**	**0.061**
10:00 - 11:00	3	9336	0.014	3	9336	0.018	3	9336	0.032
11:00 - 12:00	3	9336	0.021	3	9336	0.018	3	9336	0.039
12:00 - 13:00	3	9336	0.007	3	9336	0.007	3	9336	0.014
13:00 - 14:00	3	9336	0.018	3	9336	0.011	3	9336	0.029
14:00 - 15:00	3	9336	0.011	3	9336	0.004	3	9336	0.015
15:00 - 16:00	3	9336	0.007	3	9336	0.007	3	9336	0.014
16:00 - 17:00	3	9336	0.021	3	9336	0.011	3	9336	0.032
17:00 - 18:00	3	9336	0.025	3	9336	0.021	3	9336	0.046
18:00 - 19:00	3	9336	0.014	3	9336	0.014	3	9336	0.028
19:00 - 20:00	3	9336	0.004	3	9336	0.004	3	9336	0.008
20:00 - 21:00	3	9336	0.018	3	9336	0.011	3	9336	0.029
21:00 - 22:00	3	9336	0.018	3	9336	0.014	3	9336	0.032
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.224			0.219			0.443

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.*

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

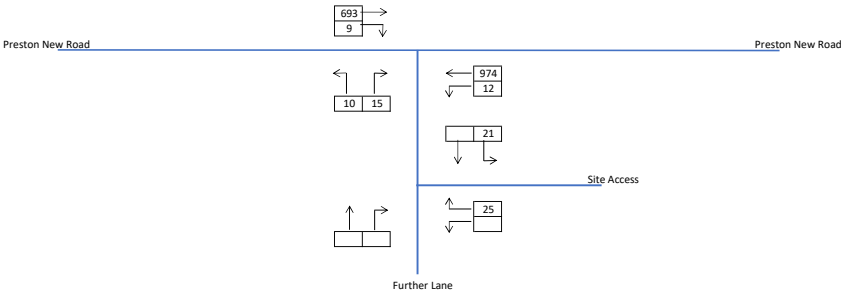
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
08:00 - 09:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
09:00 - 10:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
10:00 - 11:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
11:00 - 12:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
12:00 - 13:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
13:00 - 14:00	3	9336	0.000	**3**	**9336**	**0.004**	3	9336	0.004
14:00 - 15:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
15:00 - 16:00	**3**	**9336**	**0.004**	3	9336	0.004	**3**	**9336**	**0.008**
16:00 - 17:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
17:00 - 18:00	3	9336	0.004	3	9336	0.000	3	9336	0.004
18:00 - 19:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
19:00 - 20:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
20:00 - 21:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
21:00 - 22:00	3	9336	0.000	3	9336	0.000	3	9336	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.008			0.016

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.*

Appendix 5
Traffic Flow Diagrams

AM



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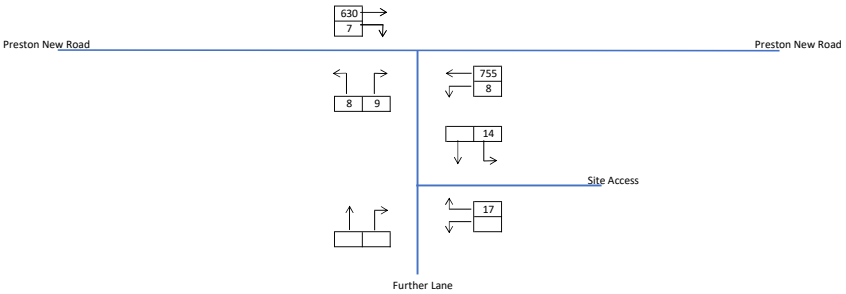
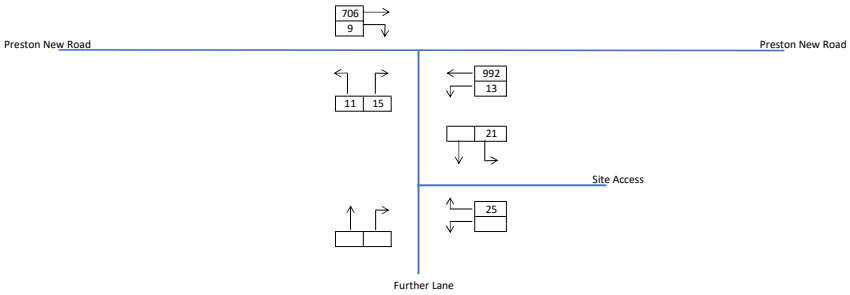


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	2018 Derived Existing Peak Hour Flows		Traffic Figure 1

AM



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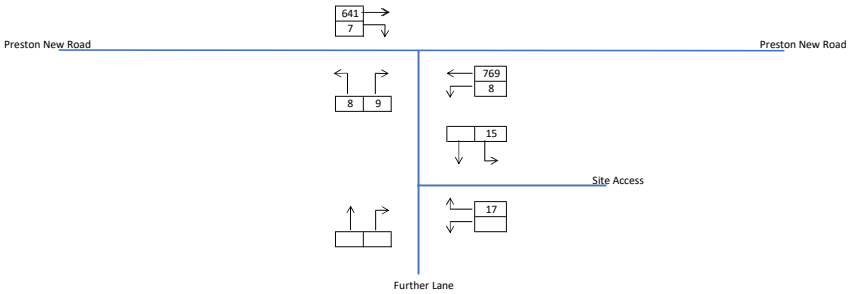
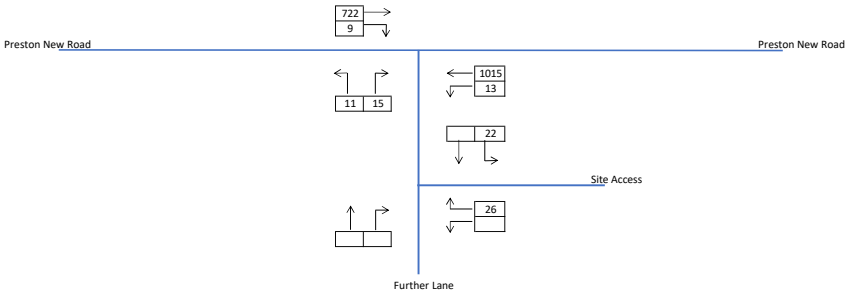


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	2021 Baseline Peak Hour Flows		Traffic Figure 2

AM



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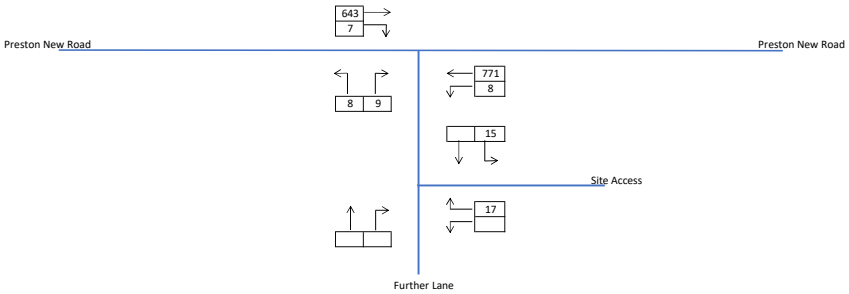
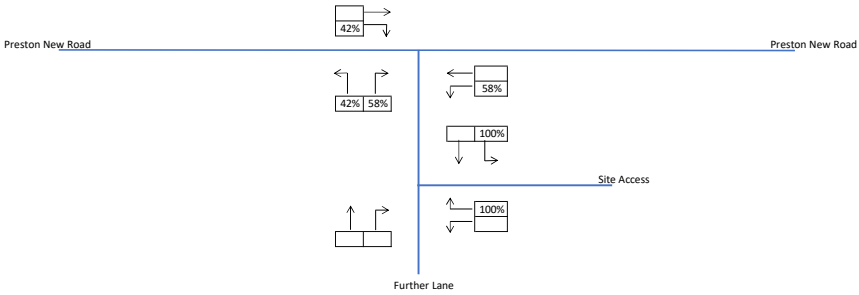


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	2025 Base Peak Hour Flows		Traffic Figure 3

AM



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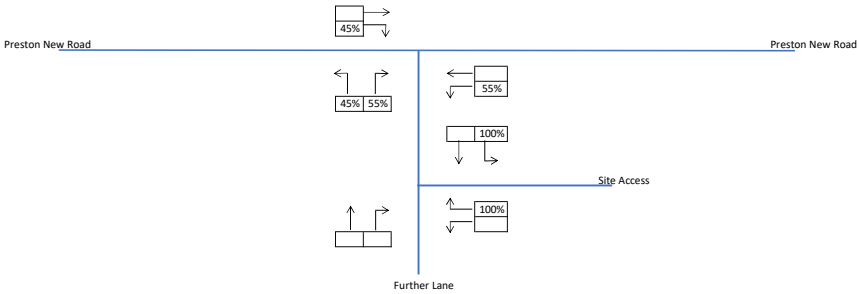
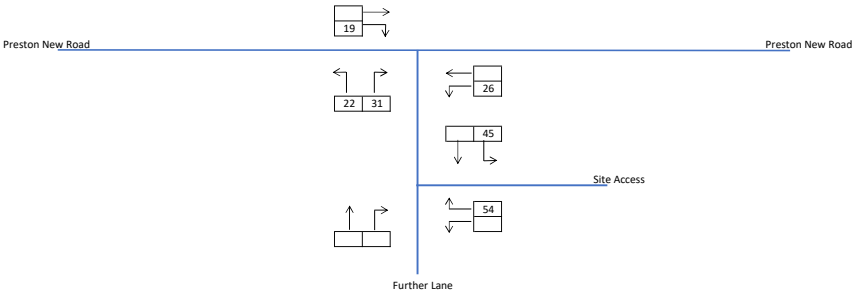


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	New Trip Distribution (Previously Approved)	Traffic Figure 4	

AM



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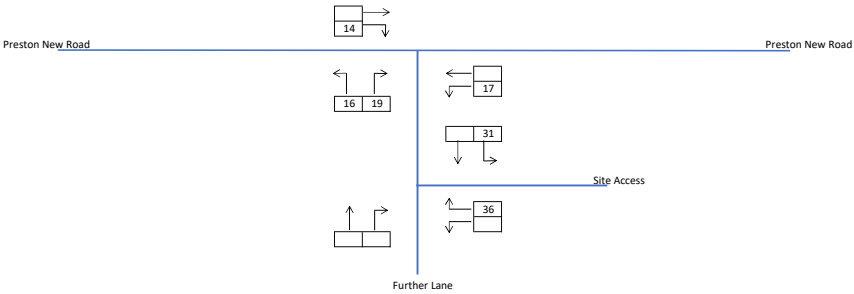
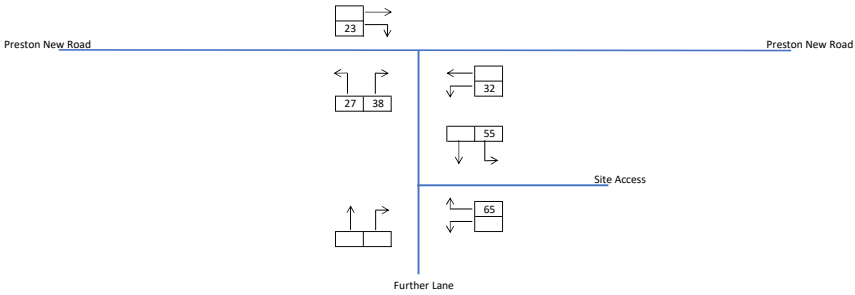


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3700320
	New Trip Assignment (Previously Approved)	Traffic Figure 5	

AM



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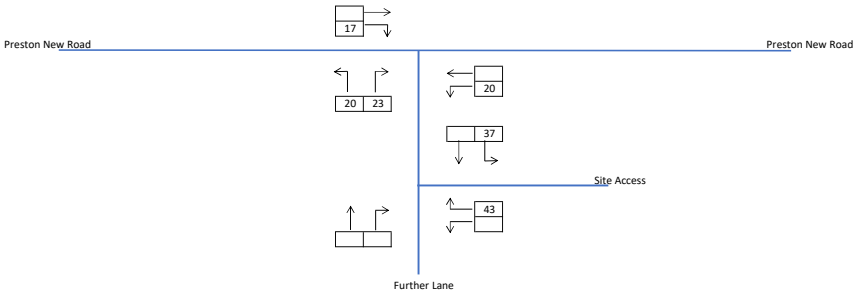
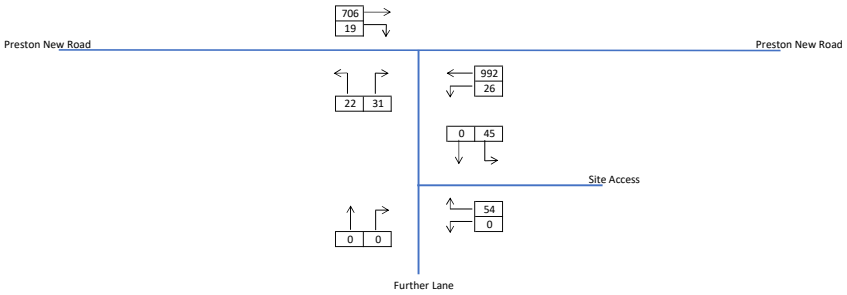


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	New Trip Assignment (Previously Approved)	Traffic Figure 6	

AM



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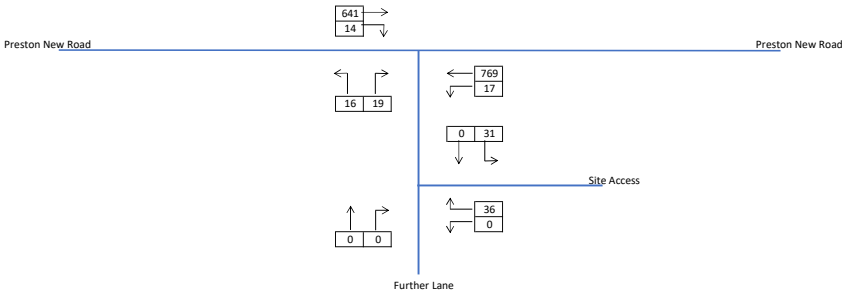
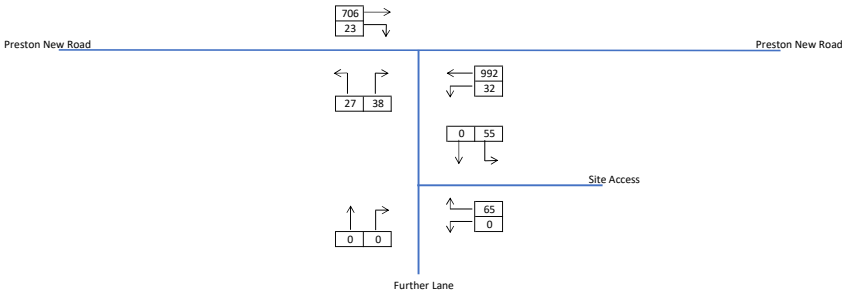


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	2021 Base + Development (Previously Approved)	Traffic Figure 7	

AM



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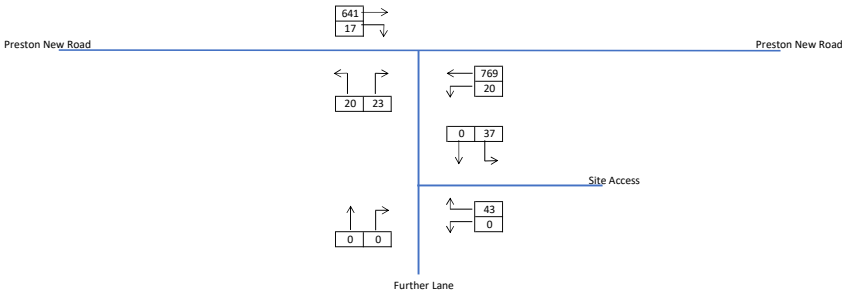
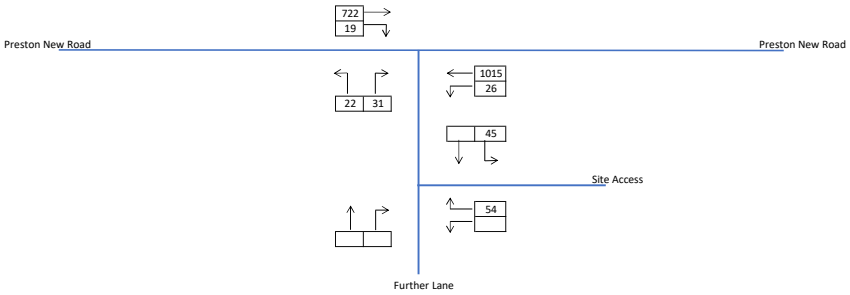


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	2021 Baseline + Development (Proposed)	Traffic Figure 8	

AM



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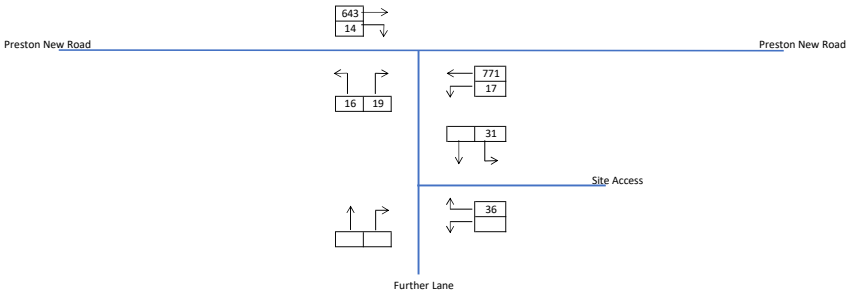
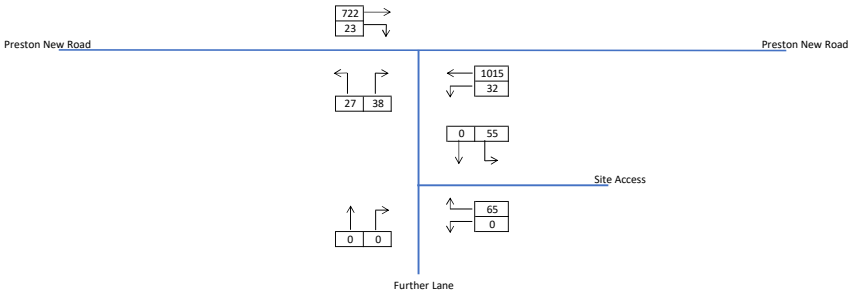


DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	2025 Baseline + Development (Previously Approved)	Traffic Figure 9	

AM



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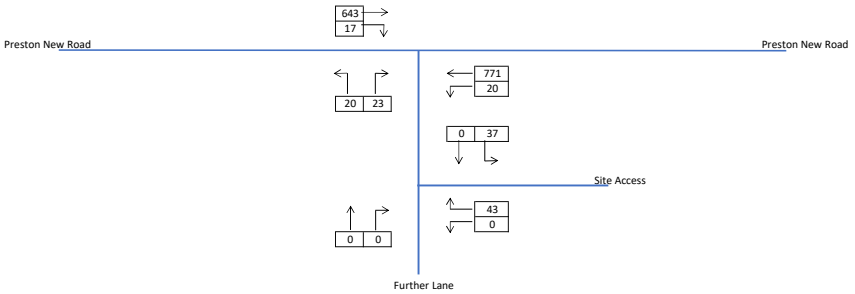

DYNAMIC TRANSPORT PLANNING	Proposed Hotel Extension, Stanley House Hotel, Mellor, Blackburn	27/10/2020	Job Number: DTP-3702720
	2025 Baseline + Development (Proposed)	Traffic Figure 10	

Appendix 6
2018 DFT Survey Data

count_point_id	direction_	year	count_date	hour	region_id	region_nai	local_auth	local_auth	road_nam	road_type	start_junct	end_junctio	easting	northing	latitude	longitude	link_length	link_length	pedal_cycl	two_whee	cars_and_	buses_and	lgvs	hgvs_2_rig	hgvs_3_rig	hgvs_3_or	hgvs_4_or	hgvs_5_ar	hgvs_6_ar	all_hgvs	all_motor_vehicles
17395	E	2018	21/09/2018	7	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	0	428	3	78	3	1	1	3	2	4	14	523
17395	E	2018	21/09/2018	8	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	2	566	3	70	1	7	7	2	2	3	15	656
17395	E	2018	21/09/2018	9	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	0	346	6	77	3	6	6	5	1	4	21	450
17395	E	2018	21/09/2018	10	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	0	246	3	61	7	4	4	3	2	0	16	326
17395	E	2018	21/09/2018	11	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	0	242	2	59	17	5	5	5	3	0	32	335
17395	E	2018	21/09/2018	12	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	1	425	2	64	6	2	2	3	1	2	15	507
17395	E	2018	21/09/2018	13	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	1	377	2	51	9	3	3	5	3	1	21	452
17395	E	2018	21/09/2018	14	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	3	490	3	78	8	2	2	6	3	0	19	593
17395	E	2018	21/09/2018	15	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	1	553	3	78	10	0	0	1	0	3	14	649
17395	E	2018	21/09/2018	16	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	1	557	3	46	5	1	1	0	2	0	9	616
17395	E	2018	21/09/2018	17	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	4	473	7	51	5	0	0	1	0	0	7	542
17395	E	2018	21/09/2018	18	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	0	589	2	32	1	1	1	2	0	0	4	627
17395	W	2018	21/09/2018	7	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	2	647	8	97	10	0	0	1	2	1	15	769
17395	W	2018	21/09/2018	8	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	3	803	8	99	9	2	2	8	3	0	24	937
17395	W	2018	21/09/2018	9	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	1	493	2	72	12	7	7	5	5	3	33	601
17395	W	2018	21/09/2018	10	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	0	380	2	66	9	3	3	5	1	2	20	468
17395	W	2018	21/09/2018	11	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	0	363	2	75	10	3	3	3	2	1	20	460
17395	W	2018	21/09/2018	12	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	1	391	4	66	6	4	4	4	7	0	21	483
17395	W	2018	21/09/2018	13	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	6	341	2	65	13	3	3	3	1	3	25	439
17395	W	2018	21/09/2018	14	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	1	391	3	62	12	1	1	8	4	0	27	484
17395	W	2018	21/09/2018	15	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	1	486	4	65	9	1	1	8	1	3	22	578
17395	W	2018	21/09/2018	16	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	0	646	9	59	2	0	0	1	6	5	14	728
17395	W	2018	21/09/2018	17	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	1	3	636	7	65	2	0	0	3	0	0	5	716
17395	W	2018	21/09/2018	18	5	North Wes	76	Lancashire	A677	Major	A59(T)	A6119	364850	430000	54	-3	5.6	3.48	0	0	528	0	37	6	2	2	0	2	0	10	575

Appendix 7
Model Outputs

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

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Filename: 3702720 Preston New Road Priority Junction.j9
Path: C:\Users\MicahSnow\Dynamic Transport Planning Limited\Dynamic Transport Planning Limited - Job Library\2020\3702720 - Stanley House Hotel, Blackburn\5 - Traffic Data\Junction Analysis
Report generation date: 27/10/2020 15:34:40

»2018, AM
»2018, PM
»2021, AM
»2021, PM
»2025, AM
»2025, PM
»2021 + Dev (Prev), AM
»2021 + Dev (Prev), PM
»2021 + Dev (Proposed), AM
»2021 + Dev (Proposed), PM
»2025 + Dev (Prev), AM
»2025 + Dev (Prev), PM
»2025 + Dev (Proposed), AM
»2025 + Dev (Proposed), PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2018									
Stream B-C	D1	0.0	9.60	0.03	A	D2	0.0	8.04	0.02	A
Stream B-A		0.1	19.92	0.08	C		0.0	14.40	0.03	B
Stream C-AB		0.0	9.41	0.02	A		0.0	8.18	0.02	A
	2021									
Stream B-C	D3	0.0	9.67	0.03	A	D4	0.0	8.11	0.02	A
Stream B-A		0.1	20.92	0.08	C		0.0	14.71	0.04	B
Stream C-AB		0.0	9.52	0.02	A		0.0	8.25	0.02	A
	2025									
Stream B-C	D5	0.0	9.83	0.03	A	D6	0.0	8.12	0.02	A
Stream B-A		0.1	22.04	0.08	C		0.0	14.76	0.04	B
Stream C-AB		0.0	9.67	0.02	A		0.0	8.26	0.02	A
	2021 + Dev (Prev)									
Stream B-C	D7	0.1	10.35	0.06	B	D8	0.0	8.41	0.04	A
Stream B-A		0.2	23.79	0.17	C		0.1	15.50	0.08	C
Stream C-AB		0.1	9.87	0.05	A		0.0	8.43	0.03	A
	2021 + Dev (Proposed)									
Stream B-C	D9	0.1	10.70	0.07	B	D10	0.1	8.51	0.05	A
Stream B-A		0.3	25.34	0.21	D		0.1	15.92	0.09	C
Stream C-AB		0.1	10.02	0.06	B		0.0	8.50	0.04	A
	2025 + Dev (Prev)									
Stream B-C	D11	0.1	10.55	0.06	B	D12	0.0	8.42	0.04	A
Stream B-A		0.2	25.25	0.18	D		0.1	15.55	0.08	C
Stream C-AB		0.1	10.03	0.05	B		0.0	8.44	0.03	A
	2025 + Dev (Proposed)									
Stream B-C	D13	0.1	10.93	0.08	B	D14	0.1	8.52	0.05	A
Stream B-A		0.3	27.00	0.22	D		0.1	15.98	0.09	C
Stream C-AB		0.1	10.18	0.06	B		0.0	8.51	0.04	A

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

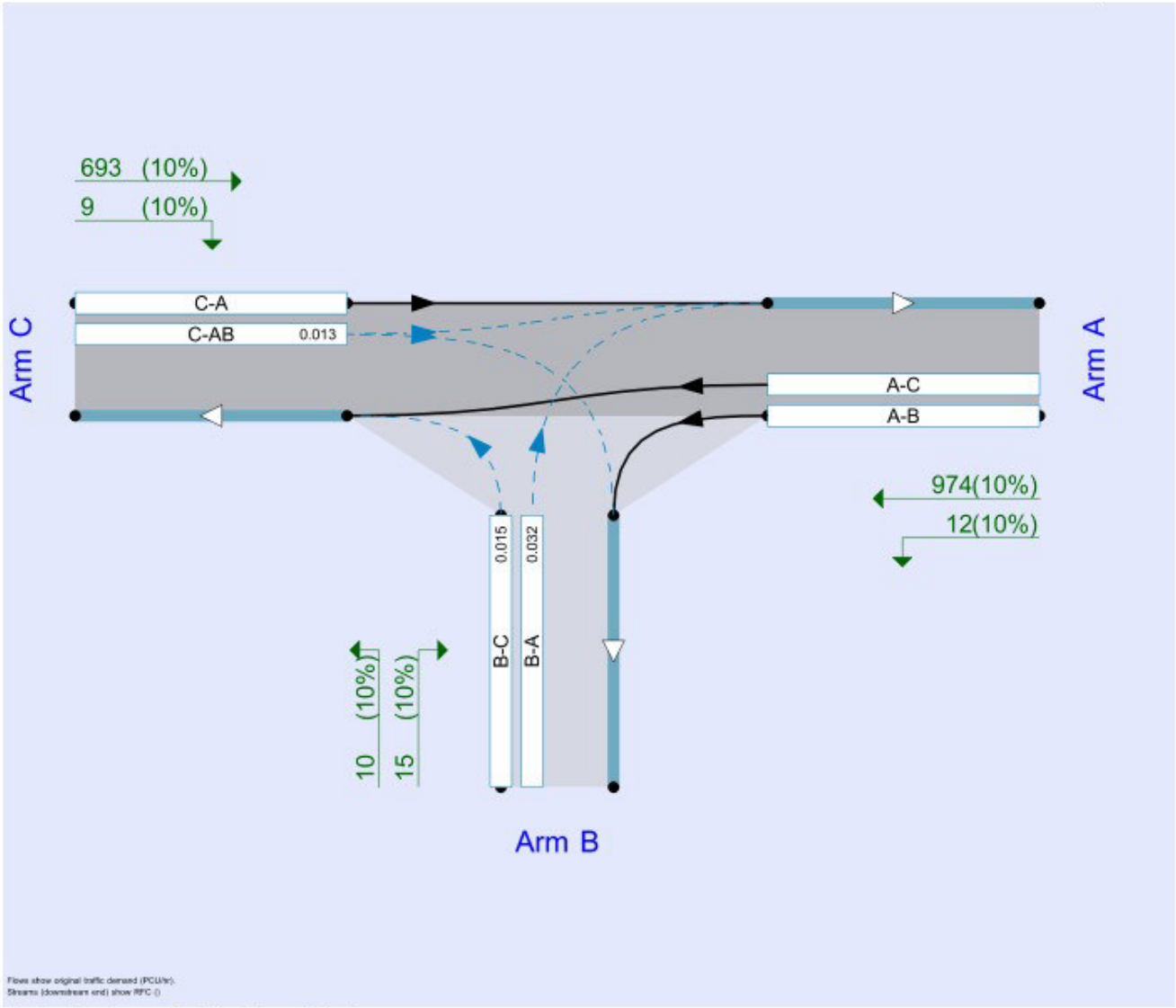
File summary

File Description

Title	
Location	
Site number	
Date	21/10/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\MicahSnow
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2018	AM	ONE HOUR	07:45	09:15	15
D2	2018	PM	ONE HOUR	17:00	18:30	15
D3	2021	AM	ONE HOUR	07:45	09:15	15
D4	2021	PM	ONE HOUR	17:00	18:30	15
D5	2025	AM	ONE HOUR	07:45	09:15	15
D6	2025	PM	ONE HOUR	17:00	18:30	15
D7	2021 + Dev (Prev)	AM	ONE HOUR	07:45	09:15	15
D8	2021 + Dev (Prev)	PM	ONE HOUR	17:00	18:30	15
D9	2021 + Dev (Proposed)	AM	ONE HOUR	07:45	09:15	15
D10	2021 + Dev (Proposed)	PM	ONE HOUR	17:00	18:30	15
D11	2025 + Dev (Prev)	AM	ONE HOUR	07:45	09:15	15
D12	2025 + Dev (Prev)	PM	ONE HOUR	17:00	18:30	15
D13	2025 + Dev (Proposed)	AM	ONE HOUR	07:45	09:15	15
D14	2025 + Dev (Proposed)	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A667 Preston New Road (E)		Major
B	Further Lane		Minor
C	A667 Preston New Road (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.00		✓	3.00	120.0	✓	6.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	7.50	4.50	3.50	3.50	✓	1.00	150	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	634	0.105	0.266	0.168	0.381
B-C	699	0.098	0.247	-	-
C-B	699	0.247	0.247	-	-

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)
D1	2018	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	986	100.000
B		✓	25	100.000
C		✓	702	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	12	974
	B	15	0	10
	C	693	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	9.60	0.0	A
B-A	0.08	19.92	0.1	C
C-AB	0.02	9.41	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	512	0.015	7	0.0	7.841	A
B-A	11	348	0.032	11	0.0	11.765	B
C-AB	7	516	0.013	7	0.0	7.777	A
C-A	522			522			
A-B	9			9			
A-C	733			733			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	475	0.019	9	0.0	8.489	A
B-A	13	292	0.046	13	0.1	14.208	B
C-AB	8	480	0.017	8	0.0	8.388	A
C-A	623			623			
A-B	11			11			
A-C	876			876			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	424	0.026	11	0.0	9.598	A
B-A	17	215	0.077	16	0.1	19.902	C
C-AB	10	431	0.023	10	0.0	9.406	A
C-A	763			763			
A-B	13			13			
A-C	1072			1072			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	423	0.026	11	0.0	9.605	A
B-A	17	215	0.077	17	0.1	19.921	C
C-AB	10	431	0.023	10	0.0	9.406	A
C-A	763			763			
A-B	13			13			
A-C	1072			1072			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	475	0.019	9	0.0	8.501	A
B-A	13	292	0.046	14	0.1	14.219	B
C-AB	8	480	0.017	8	0.0	8.390	A
C-A	623			623			
A-B	11			11			
A-C	876			876			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	512	0.015	8	0.0	7.850	A
B-A	11	348	0.032	11	0.0	11.775	B
C-AB	7	516	0.013	7	0.0	7.781	A
C-A	522			522			
A-B	9			9			
A-C	733			733			

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.18	A

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)
D2	2018	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	763	100.000
B		✓	17	100.000
C		✓	637	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	755
	B	9	0	8
	C	630	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.04	0.0	A
B-A	0.03	14.40	0.0	B
C-AB	0.02	8.18	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	571	0.011	6	0.0	7.013	A
B-A	7	390	0.017	7	0.0	10.324	B
C-AB	5	557	0.009	5	0.0	7.172	A
C-A	474			474			
A-B	6			6			
A-C	568			568			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	542	0.013	7	0.0	7.410	A
B-A	8	346	0.023	8	0.0	11.717	B
C-AB	6	530	0.012	6	0.0	7.563	A
C-A	566			566			
A-B	7			7			
A-C	679			679			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	501	0.018	9	0.0	8.039	A
B-A	10	285	0.035	10	0.0	14.396	B
C-AB	8	492	0.016	8	0.0	8.183	A
C-A	694			694			
A-B	9			9			
A-C	831			831			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	501	0.018	9	0.0	8.042	A
B-A	10	285	0.035	10	0.0	14.394	B
C-AB	8	492	0.016	8	0.0	8.183	A
C-A	694			694			
A-B	9			9			
A-C	831			831			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	541	0.013	7	0.0	7.415	A
B-A	8	346	0.023	8	0.0	11.717	B
C-AB	6	530	0.012	6	0.0	7.564	A
C-A	566			566			
A-B	7			7			
A-C	679			679			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	570	0.011	6	0.0	7.018	A
B-A	7	390	0.017	7	0.0	10.325	B
C-AB	5	557	0.009	5	0.0	7.175	A
C-A	474			474			
A-B	6			6			
A-C	568			568			

2021, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.29	A

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)
D3	2021	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1005	100.000
B		✓	26	100.000
C		✓	715	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	992
	B	15	0	11
	C	706	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	9.67	0.0	A
B-A	0.08	20.92	0.1	C
C-AB	0.02	9.52	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	513	0.016	8	0.0	7.836	A
B-A	11	339	0.033	11	0.0	12.059	B
C-AB	7	512	0.013	7	0.0	7.832	A
C-A	532			532			
A-B	10			10			
A-C	747			747			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	475	0.021	10	0.0	8.505	A
B-A	13	283	0.048	13	0.1	14.669	B
C-AB	8	476	0.017	8	0.0	8.464	A
C-A	635			635			
A-B	12			12			
A-C	892			892			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	422	0.029	12	0.0	9.660	A
B-A	17	206	0.080	16	0.1	20.900	C
C-AB	10	426	0.023	10	0.0	9.523	A
C-A	777			777			
A-B	14			14			
A-C	1092			1092			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	422	0.029	12	0.0	9.668	A
B-A	17	206	0.080	17	0.1	20.923	C
C-AB	10	426	0.023	10	0.0	9.523	A
C-A	777			777			
A-B	14			14			
A-C	1092			1092			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	475	0.021	10	0.0	8.517	A
B-A	13	284	0.048	14	0.1	14.680	B
C-AB	8	476	0.017	8	0.0	8.465	A
C-A	635			635			
A-B	12			12			
A-C	892			892			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	513	0.016	8	0.0	7.847	A
B-A	11	340	0.033	11	0.0	12.068	B
C-AB	7	512	0.013	7	0.0	7.835	A
C-A	532			532			
A-B	10			10			
A-C	747			747			

2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.18	A

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)
D4	2021	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	777	100.000
B		✓	17	100.000
C		✓	648	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	769
	B	9	0	8
	C	641	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.11	0.0	A
B-A	0.04	14.71	0.0	B
C-AB	0.02	8.25	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	568	0.011	6	0.0	7.047	A
B-A	7	386	0.018	7	0.0	10.435	B
C-AB	5	555	0.010	5	0.0	7.206	A
C-A	483			483			
A-B	6			6			
A-C	579			579			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	538	0.013	7	0.0	7.455	A
B-A	8	341	0.024	8	0.0	11.889	B
C-AB	6	527	0.012	6	0.0	7.609	A
C-A	576			576			
A-B	7			7			
A-C	691			691			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	497	0.018	9	0.0	8.105	A
B-A	10	279	0.036	10	0.0	14.710	B
C-AB	8	488	0.016	8	0.0	8.248	A
C-A	706			706			
A-B	9			9			
A-C	847			847			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	497	0.018	9	0.0	8.108	A
B-A	10	279	0.036	10	0.0	14.713	B
C-AB	8	488	0.016	8	0.0	8.248	A
C-A	706			706			
A-B	9			9			
A-C	847			847			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	538	0.013	7	0.0	7.460	A
B-A	8	341	0.024	8	0.0	11.887	B
C-AB	6	527	0.012	6	0.0	7.609	A
C-A	576			576			
A-B	7			7			
A-C	691			691			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	567	0.011	6	0.0	7.052	A
B-A	7	386	0.018	7	0.0	10.439	B
C-AB	5	555	0.010	5	0.0	7.206	A
C-A	483			483			
A-B	6			6			
A-C	579			579			

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.29	A

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)
D5	2025	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1028	100.000
B		✓	26	100.000
C		✓	731	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	1015
	B	15	0	11
	C	722	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	9.83	0.0	A
B-A	0.08	22.04	0.1	C
C-AB	0.02	9.67	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	509	0.016	8	0.0	7.904	A
B-A	11	333	0.034	11	0.0	12.306	B
C-AB	7	508	0.013	7	0.0	7.899	A
C-A	544			544			
A-B	10			10			
A-C	764			764			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	470	0.021	10	0.0	8.602	A
B-A	13	275	0.049	13	0.1	15.109	C
C-AB	8	471	0.017	8	0.0	8.557	A
C-A	649			649			
A-B	12			12			
A-C	912			912			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	415	0.029	12	0.0	9.820	A
B-A	17	196	0.084	16	0.1	22.016	C
C-AB	10	419	0.024	10	0.0	9.669	A
C-A	795			795			
A-B	14			14			
A-C	1118			1118			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	415	0.029	12	0.0	9.829	A
B-A	17	196	0.084	17	0.1	22.041	C
C-AB	10	419	0.024	10	0.0	9.669	A
C-A	795			795			
A-B	14			14			
A-C	1118			1118			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	470	0.021	10	0.0	8.616	A
B-A	13	276	0.049	14	0.1	15.121	C
C-AB	8	471	0.017	8	0.0	8.560	A
C-A	649			649			
A-B	12			12			
A-C	912			912			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	509	0.016	8	0.0	7.916	A
B-A	11	333	0.034	11	0.0	12.312	B
C-AB	7	508	0.013	7	0.0	7.901	A
C-A	544			544			
A-B	10			10			
A-C	764			764			

2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.18	A

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)
D6	2025	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	779	100.000
B		✓	17	100.000
C		✓	650	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	771
	B	9	0	8
	C	643	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.12	0.0	A
B-A	0.04	14.76	0.0	B
C-AB	0.02	8.26	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	567	0.011	6	0.0	7.052	A
B-A	7	385	0.018	7	0.0	10.453	B
C-AB	5	554	0.010	5	0.0	7.210	A
C-A	484			484			
A-B	6			6			
A-C	580			580			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	538	0.013	7	0.0	7.461	A
B-A	8	340	0.024	8	0.0	11.916	B
C-AB	6	526	0.012	6	0.0	7.615	A
C-A	578			578			
A-B	7			7			
A-C	693			693			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	497	0.018	9	0.0	8.114	A
B-A	10	278	0.036	10	0.0	14.763	B
C-AB	8	487	0.016	8	0.0	8.257	A
C-A	708			708			
A-B	9			9			
A-C	849			849			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	497	0.018	9	0.0	8.117	A
B-A	10	278	0.036	10	0.0	14.765	B
C-AB	8	487	0.016	8	0.0	8.257	A
C-A	708			708			
A-B	9			9			
A-C	849			849			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	538	0.013	7	0.0	7.466	A
B-A	8	341	0.024	8	0.0	11.916	B
C-AB	6	526	0.012	6	0.0	7.619	A
C-A	578			578			
A-B	7			7			
A-C	693			693			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	567	0.011	6	0.0	7.059	A
B-A	7	386	0.018	7	0.0	10.456	B
C-AB	5	554	0.010	5	0.0	7.214	A
C-A	484			484			
A-B	6			6			
A-C	580			580			

2021 + Dev (Prev), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.64	A

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)
D7	2021 + Dev (Prev)	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1018	100.000
B		✓	53	100.000
C		✓	725	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	26	992
	B	31	0	22
	C	706	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	10.35	0.1	B
B-A	0.17	23.79	0.2	C
C-AB	0.05	9.87	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	506	0.033	16	0.0	8.083	A
B-A	23	336	0.069	23	0.1	12.620	B
C-AB	14	510	0.028	14	0.0	7.987	A
C-A	532			532			
A-B	20			20			
A-C	747			747			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	466	0.042	20	0.0	8.871	A
B-A	28	279	0.100	28	0.1	15.722	C
C-AB	17	473	0.036	17	0.0	8.684	A
C-A	635			635			
A-B	23			23			
A-C	892			892			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	408	0.059	24	0.1	10.325	B
B-A	34	200	0.170	34	0.2	23.698	C
C-AB	21	422	0.050	21	0.1	9.867	A
C-A	777			777			
A-B	29			29			
A-C	1092			1092			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	407	0.060	24	0.1	10.345	B
B-A	34	201	0.170	34	0.2	23.786	C
C-AB	21	422	0.050	21	0.1	9.869	A
C-A	777			777			
A-B	29			29			
A-C	1092			1092			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	465	0.043	20	0.0	8.894	A
B-A	28	280	0.100	28	0.1	15.773	C
C-AB	17	473	0.036	17	0.0	8.687	A
C-A	635			635			
A-B	23			23			
A-C	892			892			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	505	0.033	17	0.0	8.102	A
B-A	23	337	0.069	24	0.1	12.650	B
C-AB	14	510	0.028	14	0.0	7.993	A
C-A	532			532			
A-B	20			20			
A-C	747			747			

2021 + Dev (Prev), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.37	A

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)
D8	2021 + Dev (Prev)	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	786	100.000
B		✓	35	100.000
C		✓	655	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	769
	B	19	0	16
	C	641	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	8.41	0.0	A
B-A	0.08	15.50	0.1	C
C-AB	0.03	8.43	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	561	0.021	12	0.0	7.206	A
B-A	14	385	0.037	14	0.0	10.665	B
C-AB	11	553	0.019	10	0.0	7.298	A
C-A	483			483			
A-B	13			13			
A-C	579			579			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	531	0.027	14	0.0	7.663	A
B-A	17	340	0.050	17	0.1	12.270	B
C-AB	13	525	0.024	13	0.0	7.733	A
C-A	576			576			
A-B	15			15			
A-C	691			691			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	489	0.036	18	0.0	8.408	A
B-A	21	276	0.076	21	0.1	15.484	C
C-AB	15	485	0.032	15	0.0	8.426	A
C-A	706			706			
A-B	19			19			
A-C	847			847			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	488	0.036	18	0.0	8.412	A
B-A	21	276	0.076	21	0.1	15.495	C
C-AB	15	485	0.032	15	0.0	8.426	A
C-A	706			706			
A-B	19			19			
A-C	847			847			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	531	0.027	14	0.0	7.673	A
B-A	17	340	0.050	17	0.1	12.281	B
C-AB	13	525	0.024	13	0.0	7.734	A
C-A	576			576			
A-B	15			15			
A-C	691			691			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	561	0.021	12	0.0	7.215	A
B-A	14	385	0.037	14	0.0	10.674	B
C-AB	11	553	0.019	11	0.0	7.298	A
C-A	483			483			
A-B	13			13			
A-C	579			579			

2021 + Dev (Proposed), AM

Data Errors and Warnings

No errors or warnings

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	A

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)
D9	2021 + Dev (Proposed)	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1024	100.000
B		✓	65	100.000
C		✓	729	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	992
	B	38	0	27
	C	706	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	10.70	0.1	B
B-A	0.21	25.34	0.3	D
C-AB	0.06	10.02	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	504	0.040	20	0.0	8.190	A
B-A	29	335	0.085	28	0.1	12.899	B
C-AB	17	509	0.034	17	0.0	8.053	A
C-A	532			532			
A-B	24			24			
A-C	747			747			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	462	0.053	24	0.1	9.038	A
B-A	34	277	0.123	34	0.2	16.252	C
C-AB	21	472	0.044	21	0.0	8.777	A
C-A	635			635			
A-B	29			29			
A-C	892			892			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	401	0.074	30	0.1	10.672	B
B-A	42	198	0.211	41	0.3	25.198	D
C-AB	25	421	0.060	25	0.1	10.015	B
C-A	777			777			
A-B	35			35			
A-C	1092			1092			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	400	0.074	30	0.1	10.698	B
B-A	42	198	0.211	42	0.3	25.339	D
C-AB	25	421	0.060	25	0.1	10.020	B
C-A	777			777			
A-B	35			35			
A-C	1092			1092			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	461	0.053	24	0.1	9.067	A
B-A	34	278	0.123	35	0.2	16.328	C
C-AB	21	472	0.044	21	0.1	8.782	A
C-A	635			635			
A-B	29			29			
A-C	892			892			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	503	0.040	20	0.0	8.211	A
B-A	29	335	0.085	29	0.1	12.944	B
C-AB	17	509	0.034	17	0.0	8.059	A
C-A	532			532			
A-B	24			24			
A-C	747			747			

2021 + Dev (Proposed), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.46	A

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)
D10	2021 + Dev (Proposed)	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	789	100.000
B		✓	43	100.000
C		✓	658	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	769
	B	23	0	20
	C	641	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	8.51	0.1	A
B-A	0.09	15.92	0.1	C
C-AB	0.04	8.50	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	562	0.027	15	0.0	7.239	A
B-A	17	383	0.045	17	0.1	10.815	B
C-AB	13	553	0.023	13	0.0	7.336	A
C-A	483			483			
A-B	15			15			
A-C	579			579			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	531	0.034	18	0.0	7.721	A
B-A	21	337	0.061	21	0.1	12.500	B
C-AB	15	524	0.029	15	0.0	7.784	A
C-A	576			576			
A-B	18			18			
A-C	691			691			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	487	0.045	22	0.1	8.507	A
B-A	25	274	0.092	25	0.1	15.905	C
C-AB	19	485	0.039	19	0.0	8.500	A
C-A	706			706			
A-B	22			22			
A-C	847			847			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	487	0.045	22	0.1	8.513	A
B-A	25	274	0.092	25	0.1	15.920	C
C-AB	19	485	0.039	19	0.0	8.500	A
C-A	706			706			
A-B	22			22			
A-C	847			847			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	530	0.034	18	0.0	7.730	A
B-A	21	338	0.061	21	0.1	12.512	B
C-AB	15	524	0.029	15	0.0	7.787	A
C-A	576			576			
A-B	18			18			
A-C	691			691			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	561	0.027	15	0.0	7.249	A
B-A	17	383	0.045	17	0.1	10.825	B
C-AB	13	553	0.023	13	0.0	7.337	A
C-A	483			483			
A-B	15			15			
A-C	579			579			

2025 + Dev (Prev), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.66	A

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)
D11	2025 + Dev (Prev)	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1041	100.000
B		✓	53	100.000
C		✓	741	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	26	1015
	B	31	0	22
	C	722	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	10.55	0.1	B
B-A	0.18	25.25	0.2	D
C-AB	0.05	10.03	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	502	0.033	16	0.0	8.157	A
B-A	23	330	0.071	23	0.1	12.892	B
C-AB	14	506	0.028	14	0.0	8.057	A
C-A	544			544			
A-B	20			20			
A-C	764			764			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	461	0.043	20	0.0	8.980	A
B-A	28	272	0.103	28	0.1	16.227	C
C-AB	17	468	0.037	17	0.0	8.783	A
C-A	649			649			
A-B	23			23			
A-C	912			912			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	400	0.061	24	0.1	10.525	B
B-A	34	191	0.179	34	0.2	25.139	D
C-AB	21	416	0.050	21	0.1	10.023	B
C-A	795			795			
A-B	29			29			
A-C	1118			1118			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	400	0.061	24	0.1	10.547	B
B-A	34	191	0.179	34	0.2	25.250	D
C-AB	21	416	0.050	21	0.1	10.025	B
C-A	795			795			
A-B	29			29			
A-C	1118			1118			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	460	0.043	20	0.0	9.005	A
B-A	28	272	0.103	28	0.1	16.287	C
C-AB	17	468	0.037	17	0.0	8.787	A
C-A	649			649			
A-B	23			23			
A-C	912			912			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	501	0.033	17	0.0	8.174	A
B-A	23	330	0.071	24	0.1	12.925	B
C-AB	14	506	0.028	14	0.0	8.063	A
C-A	544			544			
A-B	20			20			
A-C	764			764			

2025 + Dev (Prev), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.37	A

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)
D12	2025 + Dev (Prev)	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	788	100.000
B		✓	35	100.000
C		✓	657	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	771
	B	19	0	16
	C	643	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.04	8.42	0.0	A
B-A	0.08	15.55	0.1	C
C-AB	0.03	8.44	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	561	0.021	12	0.0	7.211	A
B-A	14	385	0.037	14	0.0	10.683	B
C-AB	11	553	0.019	10	0.0	7.303	A
C-A	484			484			
A-B	13			13			
A-C	580			580			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	531	0.027	14	0.0	7.670	A
B-A	17	339	0.050	17	0.1	12.299	B
C-AB	13	524	0.024	13	0.0	7.739	A
C-A	578			578			
A-B	15			15			
A-C	693			693			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	488	0.036	18	0.0	8.419	A
B-A	21	275	0.076	21	0.1	15.541	C
C-AB	15	485	0.032	15	0.0	8.436	A
C-A	708			708			
A-B	19			19			
A-C	849			849			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	488	0.036	18	0.0	8.423	A
B-A	21	276	0.076	21	0.1	15.552	C
C-AB	15	485	0.032	15	0.0	8.436	A
C-A	708			708			
A-B	19			19			
A-C	849			849			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	530	0.027	14	0.0	7.680	A
B-A	17	339	0.050	17	0.1	12.308	B
C-AB	13	524	0.024	13	0.0	7.742	A
C-A	578			578			
A-B	15			15			
A-C	693			693			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	561	0.021	12	0.0	7.220	A
B-A	14	385	0.037	14	0.0	10.692	B
C-AB	11	553	0.019	11	0.0	7.306	A
C-A	484			484			
A-B	13			13			
A-C	580			580			

2025 + Dev (Proposed), AM

Data Errors and Warnings

No errors or warnings

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	A

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)
D13	2025 + Dev (Proposed)	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1047	100.000
B		✓	65	100.000
C		✓	745	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	1015
	B	38	0	27
	C	722	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	10.93	0.1	B
B-A	0.22	27.00	0.3	D
C-AB	0.06	10.18	0.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	499	0.041	20	0.0	8.269	A
B-A	29	328	0.087	28	0.1	13.183	B
C-AB	17	504	0.034	17	0.0	8.124	A
C-A	544			544			
A-B	24			24			
A-C	764			764			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	457	0.053	24	0.1	9.153	A
B-A	34	270	0.127	34	0.2	16.794	C
C-AB	21	467	0.044	21	0.1	8.878	A
C-A	649			649			
A-B	29			29			
A-C	912			912			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	393	0.076	30	0.1	10.896	B
B-A	42	188	0.222	41	0.3	26.828	D
C-AB	25	414	0.061	25	0.1	10.177	B
C-A	795			795			
A-B	35			35			
A-C	1118			1118			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	392	0.076	30	0.1	10.928	B
B-A	42	188	0.222	42	0.3	27.005	D
C-AB	25	414	0.061	25	0.1	10.181	B
C-A	795			795			
A-B	35			35			
A-C	1118			1118			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	456	0.053	24	0.1	9.184	A
B-A	34	270	0.127	35	0.2	16.883	C
C-AB	21	467	0.044	21	0.1	8.883	A
C-A	649			649			
A-B	29			29			
A-C	912			912			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	498	0.041	20	0.0	8.288	A
B-A	29	328	0.087	29	0.1	13.227	B
C-AB	17	504	0.034	17	0.0	8.132	A
C-A	544			544			
A-B	24			24			
A-C	764			764			

2025 + Dev (Proposed), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.46	A

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)
D14	2025 + Dev (Proposed)	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	791	100.000
B		✓	43	100.000
C		✓	660	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	771
	B	23	0	20
	C	643	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	8.52	0.1	A
B-A	0.09	15.98	0.1	C
C-AB	0.04	8.51	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	561	0.027	15	0.0	7.244	A
B-A	17	382	0.045	17	0.1	10.834	B
C-AB	13	552	0.023	13	0.0	7.341	A
C-A	484			484			
A-B	15			15			
A-C	580			580			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	530	0.034	18	0.0	7.728	A
B-A	21	337	0.061	21	0.1	12.530	B
C-AB	15	524	0.029	15	0.0	7.791	A
C-A	578			578			
A-B	18			18			
A-C	693			693			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	487	0.045	22	0.1	8.518	A
B-A	25	273	0.093	25	0.1	15.965	C
C-AB	19	484	0.039	19	0.0	8.510	A
C-A	708			708			
A-B	22			22			
A-C	849			849			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	487	0.045	22	0.1	8.524	A
B-A	25	273	0.093	25	0.1	15.980	C
C-AB	19	484	0.039	19	0.0	8.510	A
C-A	708			708			
A-B	22			22			
A-C	849			849			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	530	0.034	18	0.0	7.737	A
B-A	21	337	0.061	21	0.1	12.542	B
C-AB	15	524	0.029	15	0.0	7.794	A
C-A	578			578			
A-B	18			18			
A-C	693			693			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	561	0.027	15	0.0	7.254	A
B-A	17	383	0.045	17	0.1	10.846	B
C-AB	13	552	0.023	13	0.0	7.342	A
C-A	484			484			
A-B	15			15			
A-C	580			580			