



Lady Ann Road, Batley

Transport Statement

December 2022

Project number 1247/D

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Quality Management

	First Issue	Revision 1	Revision 2	Revision 3
Remarks				
Date	December 2022			
Prepared by	LJO			
Checked by	AH			

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1.0 Introduction

- 1.1.1 Paragon Highway Consultants has been appointed to prepare this revision to the original Transport Statement relating to the proposed residential development on land off the Lady Ann Road, Batley in the District of Kirklees. Appendix A shows the site location in relation to the local highway network.
- 1.1.2 The proposal are now to construct a new residential development of circa 65 new dwellings, which will be served from a new single access point and internal road system off the Lady Ann Road in Batley. No direct access to individual dwellings is proposed onto the Lady Ann Road. Drainage, highway layout, street lighting and footways will be provided generally in accordance with the Kirklees Councils current design guidance.
- 1.1.3 The revised Transport Statement considers the traffic impact and transport sustainability provision associated with the proposed development. This statement demonstrates that the proposals should be acceptable for planning approval purposes.
- 1.1.4 A Scoping Report was originally prepared and subsequently accepted by Kirklees Council (Alistair McMurray) and the contents of this report reflect the general assessment of the scoping report and also the consultation response to Planning made by Adam Darwin dated the 20th January 2022 on the reduced scheme.

2.0 Existing Situation

2.1 Site Description

- 2.1.1 The site is located on the northern side of Lady Ann Road approximately half a kilometre to the east of Batley town centre and 700 metres or so from the rail station located just off the Upper Station Road to the south of the application site.
- 2.1.2 The site is bounded to the west by a ribbon development of properties fronting Primrose Hill, to the south by Lady Ann Road and to the east by Lady Ann Business Park. To the north there is a right of way (Batley 20-20) linking Howley Street with Lady Ann Road.
- 2.1.3 The site slopes generally from north to south and west to east and is undeveloped with several informal footpaths crossing the site which are not recorded on the public rights of way map or on any list of claimed rights of way.
- 2.1.4 There is a watercourse, Howley Beck, which flows north to south which follows the path of Lady Ann Road and is located some 3 – 5 metres or so from the back of footway.

2.2 Local Highway Network

- 2.2.1 The application site is to be accessed from the Lady Ann Road which is a two-way single carriageway residential estate road and on the site frontage has footways to both sides. The footway provision when travelling towards the Soothill Road (B6124) (which would be the most likely route when travelling to the town centre) does reduce to a footway on one side only but notwithstanding this it is still considered adequate for its day to day use. Lady Ann Road is lit to side road standards and is the subject of a 30-mph speed limit. Although traffic speeds along the site frontage are estimated to be lower than the speed limit. Lady Ann Road is a bus route with an hourly service to Dewsbury, Batley and Wakefield. More details of the local bus and rail provision are given in Section 4.2 below.
- 2.2.2 Lady Ann Road on the site frontage is not subject to any traffic regulation orders restricting on street parking or waiting and is relatively lightly trafficked even at the recognised peak times.

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- 2.2.3 For pedestrians, there is an alternative route leading towards the town centre. This commences on the western side of Lady Ann Road just to the south of the Primrose Hill junction and leads through a tunnel arrangement under a disused railway and leads eventually onto the B6124 – Rouse Mill Lane. This route is some 420 metres or so in length and is surfaced and lit in parts. This route is shown on the Councils definitive rights of way map as route nos. Batley 38/60 and Batley 38/40.
- 2.2.4 A second potential route for drivers onto the B6124 wishing to travel towards Wakefield, Leeds and the M62 motorway would be via Broomsdale Road and then Grace Leather Lane. Broomsdale Road forms a simple priority junction with Lady Ann Road to the north of the application site. Broomsdale Road is the subject of a weight limit restriction (except for access) and is also laid out as a traditional estate road and is lit to side road standards and is the subject of a 30-mph speed limit. It is a two-way single carriageway through route from Lady Ann Road to the Soothill Road and is approximately 630 metres in length, it is traffic calmed to the east of its junction with Grace Leather Lane.
- 2.2.5 Grace Leather Lane is also a through route from Broomsdale Road to the Soothill Road and is approximately 350 metres in length. It forms part of the local bus route, is lit to side road standards and is the subject of a 30-mph speed limit. This route is also traffic calmed and laid out as a traditional estate road with footway provision to both sides of the two-way single carriageway. Grace Leather Lane is also subject to the same weight restriction as Broomsdale Road.
- 2.2.6 The site is located within easy reach of the bus services available on Lady Ann Road with services in both directions being available from bus stops on the site frontage. Further details of the bus services available from the local fare stages are shown in section below.

2.3 Traffic Surveys

- 2.3.1 In accordance with the original scoping discussions with the Council’s Highways Officer, traffic surveys were carried out at the Lady Ann Road/ Soothill Lane junction and the Grace Leather Lane/ Soothill Lane junction on the 24th November 2022. The surveys were carried out between 7am and 9:30am and between 4pm and 6:30pm and identified that the network peak hours at the Lady Ann Road/ Soothill Lane junction were between 8am and 9am and between 4:15pm and 5:15pm for the Lady Ann Road junction. The survey data can be found at Appendix F.

2.4 Road Traffic Accidents

- 2.4.1 The personal injury accident records for the five-year period up to December 2021 within the search area along Lady Ann Road, Grace Leather Lane and their junctions with Soothill Road have been obtained from the Crashmap website and are included at Appendix B.
- 2.4.2 During the study period there has been one collision on Soothill Lane in the vicinity of the Lady Ann Road junction and two collisions on Grace Leather Lane (with one of those collisions at the junction with Soothill Lane). All of the collisions were classified as slight.
- 2.4.3 The first incident occurred in May 2018 on Grace Leather Lane during daylight hours and with dry road surface conditions and involved a young pedal cyclist and a private car who received slight injuries.
- 2.4.4 The second incident occurred on Soothill Lane to the west of the Lady Ann Road junction during November 2018. This accident occurred during the evening with dry road surface conditions and involved 3no. vehicles. One of the vehicles was parked at the side of the carriageway when a second vehicle collided with the rear of same and the third vehicle collided with the second vehicle. One of the passengers in the second vehicle received slight injuries.
- 2.4.5 The third incident occurred at the Grace Leather Lane/ Soothill Lane junction during February 2020. This collision occurred during the hours of darkness with dry road surface conditions and involved two vehicles. Based on the information it appears a vehicle emerged from Grace Leather Lane turning left at the junction and proceeded to collide with a vehicle travelling along Soothill Lane.
- 2.4.6 Given the injury accident record within the search area there appears to be no indication of a road safety problem that would warrant treatment or be a cause for concern at any particular junction as a result of the increase peak hour flows as a result of the development proposals.

3.0 Development Proposals

3.1 Proposed Development

- 3.1.1 The proposals are to provide a new access road off the Lady Ann Road via a priority junction to serve a residential development of circa 65 new dwellings which will be a mix of detached and semi-detached properties. The details of the proposed layout are shown within Appendix D.
- 3.1.2 The internal road layout, drainage, street lighting and footways will be provided in general accordance with Kirklees Councils current Highway Guidance.
- 3.1.3 Secure cycle storage facilities will be provided within the site, the type and location are to be agreed with the LPA.

3.2 Access

- 3.2.1 Vehicular access to the development will be provided from a new junction on to the Lady Ann Road. The proposed junction will be a simple priority junction with kerbed radii on both sides and 2m wide footways returning into the site. From the traditional estate road a mix of shared driveways and informal shared surface streets are proposed. Turning heads will be provided that can accommodate a Kirklees Council sized refuse vehicle. The proposed junction onto Lady Ann Road contains suitable junction radii to allow for unobstructed access for refuse collection vehicles having regard to some on street parking that occurs opposite the development.
- 3.2.2 The proposed junction will contain visibility splays of 2.4m x 43 metres (to wheel track) in both directions which are generally commensurate with the 30mph speed limit along the Lady Ann Road at this point and guidance contained within the Manual for Streets (MfS 1 and 2). Considering the road traffic accident study in section 2.3 of this report, the proposed simple priority junction serving the site is considered to be suitable and would not have a negative impact on road safety as suitable visibility splays are to be provided
- 3.2.3 The proposed internal road(s) will be designed to generally comply with the guidance given within the current KMC Design Guide.

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- 3.2.4 As part of the proposals and in accordance with the latest consultation response from the Highways Officer it is proposed to provide a junction improvement scheme at the Lady Ann Road/ Soothill Lane junction. The scheme is shown at Appendix D and includes building out the junction to achieve a carriageway width of 6m to improve visibility at the junction to achieve a visibility splay of 2.4m x 43m in both directions.

3.3 Parking Provision

- 3.3.1 The level of parking provision on the site will be in general accordance with the suggested car parking requirements within Kirklees Council's Highway Design Guide.
- 3.3.2 EV charging will be provided within the site as appropriate.

3.4 Pedestrian and Cycle Provision

- 3.4.1 Pedestrian routes through the site will follow natural desire lines and lead pedestrians to the proposed crossing facilities and the existing footway and definitive footpath network. Tactile paving will be provided at the junction of the new estate road with the major road to Local Authority standards if deemed necessary.
- 3.4.2 Secure cycle storage facilities will be provided for the site, the type and location is to be agreed with the LPA.

3.5 Servicing

- 3.5.1 Service vehicles will use the same access to the site as all other traffic. Turning heads are to be provided to allow such vehicles (such as a large refuse vehicle) to enter and leave the site in a forward gear.
- 3.5.2 The servicing requirements for the proposed development can therefore be adequately catered for.

4.0 Transport Sustainability

4.1 Walking

- 4.1.1 The catchment areas for the preferred maximum walking distance of 2km are shown on the plan at Appendix C. The site is well placed for residents to walk to work or shop within this area close to Soothill and Batley .
- 4.1.2 Pedestrian and cycling accessibility are to a good standard given its location close to Batley town centre.
- 4.1.3 Pedestrian accessibility within the site will be via the new junction and internal access road leading into the site with the highway layout being of a traditional layout with footways on one side for a significant proportion of the access road. The development also proposes shared surfaces with hard paved margins and visitor parking spaces together with shared private and individual driveways. Pedestrian access will generally be at a suitable level for all pedestrians including the ambulant disabled.
- 4.1.4 The footway network along Lady Ann Road provides a suitable link with the Soothill Road and from that point towards Batley town centre and the rail and bus stations. The deficiencies of the footway network when travelling along Lady Ann Road have been raised previously in this report. The surrounding footway network (when travelling towards Batley town centre) is considered to be suitable for its day to day use in terms of lighting, width and construction. There is also the definitive footpath network which is mentioned above that will provide at relevant times (i.e. during daylight hours) a traffic free, safe route between the site and Batley town centre. Within the recommended maximum walking distance are the local shops and services within Batley and Soothill including a supermarket, butchers, a bank, a post office, a doctor's surgery, pharmacy and various food and takeaway outlets and cafes. The rail and bus stations are also well within the walking catchment area of the site. To assist pedestrians to safely access these shops and services within the town centre there are pedestrian crossing facilities at most junctions and signalised crossing points on the Bradford Road and within the town centre. The pedestrian catchment is shown at Appendix C.

4.2 Cycling

4.2.1 With regards to cycling, PPG 13: Transport stated that “Cycling also has the potential to substitute for short car trips, particularly those under 5km, and to form part of a longer journey by public transport”. The plan at Appendix C also shows the 5km cycle catchment area from the site. Within the cycle catchment area there is the whole of Batley, Dewsbury, Birstall and Heckmondwike containing many local businesses, community facilities, commercial and retail properties offering potential employment opportunities for occupiers of the proposed development. These towns also contain many shops and supermarkets. There are also primary schools within the catchment area. Batley Railway Station is also located within the pedestrian and cycle catchment. Within cycling distance of the site are the industrial/ business premises located along Grange Road and the A652 which will also offer employment opportunities.

4.3 Public Transport

4.3.1 The nearest bus stops are located on the application site frontage on the Lady Ann Road which have the benefit of a flag / pole and timetable information. These bus stops provide access to the 212-bus service. The table below identifies the bus service that uses the bus stops mentioned above.

Service No	From – To	Frequency Mon – Sat	Late evenings and Sundays
212	Dewsbury – Dewsbury Hospital – Batley – Woodkirk - Kirkhamgate – Flanshaw - Wakefield	60 mins	120 mins

Table 1: Bus Services

4.3.2 As can be identified from the table above there is 1 service per hour that travels to Batley – Dewsbury and the city of Wakefield which is considered to be of a suitable standard for this location. This bus services also travel close to Batley town centre which is then within walking distance of the bus station which has many more bus services leading to additional destinations. Therefore, it is considered that the bus services will provide a reasonably suitable alternative to the private car in line with current Government guidelines.

4.3.3 The nearest railway station from the application site is Batley Railway Station located off the Upper Station Road, which is within the accepted 2km walking distance and the 5km cycling distance for commuting and is on the Huddersfield Line. The local rail services available from this station are as shown below:

Route	Monday to Saturday frequency		Sunday frequency
	Daytime	Late evening	
Huddersfield – Deighton – Mirfield – Ravensthorpe – Dewsbury – Morley – Cottingley – Leeds	60 mins	60 mins	120 mins
Hebden Bridge – Mytholmroyd – Sowerby Bridge – Brighouse – Mirfield – Dewsbury – Morley – Leeds	30 mins	60 mins	120 / 180 mins

Table 2: Train Services

4.3.4 As can be identified from the train routes and services summarised above there are good train links with regular trains to Huddersfield, Dewsbury and Leeds. Huddersfield and Leeds stations also provide access to rail services on the wider rail network.

- 4.3.5 In summary, the site is situated in a sustainable location being within an acceptable walking distance of the nearest bus stops, local shops, employment opportunities and services within Soothill and Batley. Within cycling distance of the site are the industrial / commercial areas around Grange Road and the A652 and Batley rail station (providing the opportunity for multi modal travel). Therefore, the sites location generally conforms to current Government directives for ensuring developments are located in sustainable locations.

5.0 Transport Policy

5.1.1 The revised National Planning Policy Framework published in February 2019 and updated most recently in July 2021, sets out the Government’s planning policies for England and how these are expected to be applied. It recommends 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. Within this context, applications for development with regards to Transport should:

Considerations	Proposals
Consider the potential impacts of the development on the transport network	This matter will be dealt with as part of Section 3 – Development Proposals and Section 6 – Traffic Impact
Provide opportunities to promote cycling, walking and public transport use are identified	The layout of the site will allow access for all potential users
Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places	Onsite parking will be provided as part of the development proposals
Allow for the efficient delivery of goods, and access by service and emergency vehicles	The site access and internal circulation area will allow for safe access within the site, and suitable access and egress onto the major road
Include within the scheme for the charging of plug-in and ultra-low emission vehicles in safe and convenient locations	Charging points for plug-in vehicles will be provided as part of the overall parking scheme

5.1.2 Paragraph 111 of the NPPF states, “Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

5.2 Local Transport Plan

5.2.1 The current Local Transport Plan is the third West Yorkshire Local Transport Plan (LTP3) which covers the period of 2011 to 2026. The key objectives of the LTP3 include:

- To improve access to jobs, education and other key services for everyone
- To reduce delays to the movement of people and goods
- To improve safety for all highway users
- To limit transport emissions of air pollutants, greenhouse gases and noise
- To improve the condition of the transport infrastructure

5.2.2 The LTP sets out the walking and cycling strategy for West Yorkshire to encourage more people to use these modes of travel to help reduce the dependency on private cars. With regards to cycling provision within development proposals, the WYCS seeks to ensure that new development proposals are located and designed to be cycle-friendly and adopt guidelines for cycle parking standards. With regards to walking, the LTP seeks to improve the local environment to make walking more attractive by enhancing safety, security and environmental quality.

5.2.3 The LTP also sets out a bus strategy for West Yorkshire and seeks to increase patronage for all categories of bus passenger and modal shift towards public transport and away from the car.

5.3 Kirklees Local Plan

5.3.1 Local transport policy is set out in the Kirklees Council's Local Plan covering the period between 2013 and 2031.

5.3.2 Policies relating to Transport are contained within Section 10 of the Local Plan.

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- 5.3.3 Policy LP20 – Sustainable Travel states, “New development will be located in accordance with the spatial development strategy to ensure the need to travel is reduced and that essential travel needs can be met by forms of sustainable transport other than the private car.”
 - 5.3.4 Policy LP21 and LP24 relate to parking provision and design for new developments.
 - 5.3.5 The location of the development is in a highly sustainable area close to good bus and rail links, provides suitable access arrangements, parking provision and design. Therefore, the proposals generally meet the requirements for Local and National policy.

6.0 Traffic Impact

6.1 Proposed Traffic

6.1.1 The proposed development is for circa 65 new dwellings. To determine the anticipated traffic generation from the new development, it has been necessary to interrogate data from the national TRICS database.

6.1.2 The table below provides the typical peak hour trip rates (morning peak 0800-0900 hours and evening peak 1700-1800 hours) and likely traffic generation of the proposed 65 no. new houses. The TRICS output is based on average development size of 72 dwellings and edge of town and suburban locations.

	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
Trip Rate	0.147	0.351	0.498	0.335	0.140	0.475
Traffic Generations	10	23	32	22	9	31

Proposed Trip Rates and Traffic Generations

6.1.3 As can be seen from the tables above, the proposals will provide an increase of up to 32 trips during the network peak hours. However, in order to provide a robust assessment Kirklees Council require trip rates of 0.7 per dwelling, which far exceed the TRICS output for similar locations. In the table below are the revised trip rates and generations meeting Kirklees Council's requirements.

	AM Peak			PM Peak		
	Arrive	Depart	Total	Arrive	Depart	Total
Trip Rate	0.2	0.5	0.7	0.5	0.2	0.7
Traffic Generations	13	33	46	33	13	46

Proposed Trip Rates and Traffic Generations (Kirklees Council Rates)

6.1.4 As can be seen from the table above, using the robust trip rates of 0.7 the development is likely to generate up to 46 traffic movements during the network peak hours.

6.2 Traffic Growth

6.2.1 To ascertain the traffic growth TEMPRO 7.2 has been used. The existing peak hour traffic volumes have been increased from the baseline (year of application) plus a further 10 years (allowing for 3 years for planning and construction, plus 7 years). The existing traffic flow scenarios for the 2022 and projected future year 2032 have been considered. The traffic growth factors for the site location (Kirklees 007 E02002277) for 2022 to 2032 are 1.1127 and 1.1133 for the AM and PM peaks respectively.

6.3 Traffic Distribution

6.3.1 To determine the distribution of development traffic from the site access the 2011 census data has been taken from the Nomis website using data from the location of usual residence and place of work. The distribution output from the Nomis website can be found at Appendix G and is also demonstrated on the traffic flow diagrams.

6.4 Junction Assessment

6.4.1 Following the original scoping discussions with Kirklees Council's Highways Officer, it was agreed that the junction performance at the Lady Ann Road/ Soothill Lane junction and the Grace Leather Lane/ Soothill Lane junction be assessed.

Lady Ann Road/ Soothill Lane Junction

6.4.2 A junction capacity assessment has been carried out for this junction using the PICADY computer program. We have modelled the junction in the peak periods in 2022 and then in the future year 2032. Traffic survey data has been used to ascertain the traffic flows.

6.4.3 The results of the PICADY assessment are included at Appendix H and are summarised in the table below.

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
2022 Without Development				
Soothill Business Pk Left Turn	0.02	0.0	0.05	0.1
Soothill Business Pk Right Turn	0.03	0.0	0.06	0.1
Soothill Lane Right Turn (LAR)	0.02	0.0	0.01	0.0
Lady Ann Road Right Turn	0.19	0.3	0.19	0.2
Soothill Lane Right Turn (SBPk)	0.11	0.3	0.02	0.0
2022 With Development				
Soothill Business Pk Left Turn	0.02	0.0	0.05	0.1
Soothill Business Pk Right Turn	0.03	0.0	0.06	0.1
Soothill Lane Right Turn (LAR)	0.03	0.0	0.02	0.0
Lady Ann Road Right Turn	0.28	0.4	0.22	0.3
Soothill Lane Right Turn (SBPk)	0.11	0.3	0.02	0.3
2032 Without Development				
Soothill Business Pk Left Turn	0.02	0.0	0.05	0.1
Soothill Business Pk Right Turn	0.03	0.0	0.07	0.1
Soothill Lane Right Turn (LAR)	0.03	0.0	0.01	0.0
Lady Ann Road Right Turn	0.22	0.3	0.22	0.3

Soothill Lane Right Turn (SBPk)	0.12	0.3	0.02	0.0
2032 With Development				
Soothill Business Pk Left Turn	0.02	0.0	0.05	0.1
Soothill Business Pk Right Turn	0.03	0.0	0.07	0.1
Soothill Lane Right Turn (LAR)	0.04	0.1	0.02	0.0
Lady Ann Road Right Turn	0.32	0.5	0.26	0.4
Soothill Lane Right Turn (SBPk)	0.12	0.3	0.02	0.0

Table 3: PICADY – Lady Ann Road/ Soothill Lane Junction

6.4.4 From the above analyses it can be seen that the junction will operate well within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) during the 2022 and 2032 flow scenarios in the weekday AM and PM peak periods. All queue lengths would be less than 1 PCU.

Grace Leather Lane/ Soothill Lane

6.4.5 A junction capacity assessment has been carried out for this junction using the PICADY computer program. We have modelled the junction in the peak periods in 2022 and then in the future year 2032. Traffic survey data has been used to ascertain the traffic flows.

6.4.6 The results of the PICADY assessment are included at Appendix I and are summarised in the table below.

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
2022 Without Development				
Grace Leather Lane	0.07	0.1	0.03	0.0
Soothill Lane Right Turn	0.05	0.1	0.06	0.1
2022 With Development				
Grace Leather Lane	0.08	0.1	0.03	0.0
Soothill Lane Right Turn	0.05	0.1	0.06	0.1
2032 Without Development				
Grace Leather Lane	0.08	0.1	0.04	0.0
Soothill Lane Right Turn	0.06	0.1	0.06	0.1
2032 With Development				
Grace Leather Lane	0.09	0.1	0.04	0.0
Soothill Lane Right Turn	0.06	0.1	0.07	0.1

Table 4: PICADY – Grace Leather Lane/ Soothill Lane

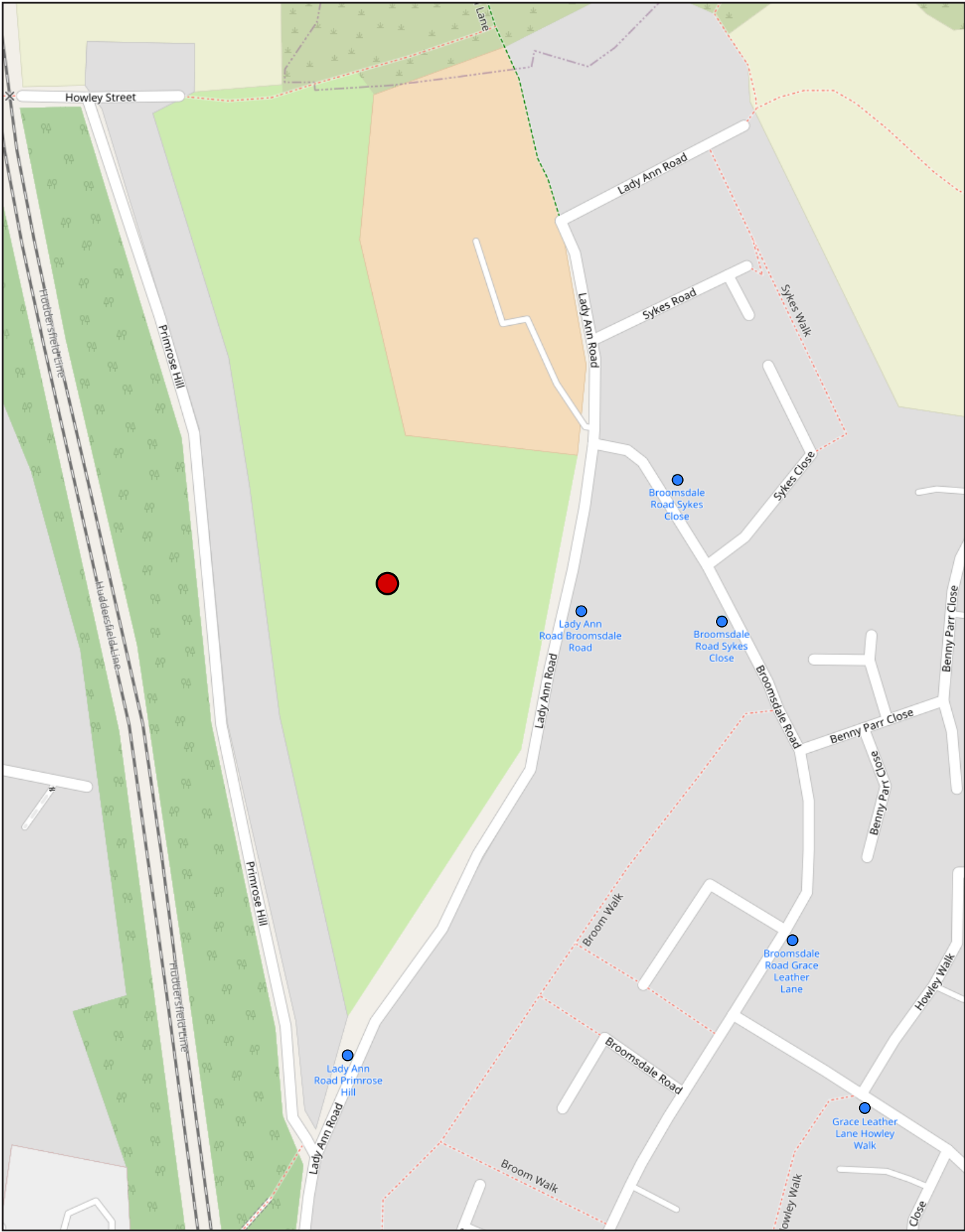
- 6.4.7 From the above analyses it can be seen that the junction will operate well within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) during the 2022 and 2032 flow scenarios in the weekday AM and PM peak periods. All queue lengths would be less than 1 PCU.
- 6.4.8 From the above assessments the proposed development would have little impact on the surrounding junctions, and therefore little to no residual impact on the local highway network. Based on the proposed distribution at Appendix G it is considered that the likely increase in traffic at other nearby junctions would not justify further capacity assessments.

7.0 Conclusion

- 7.1.1 This Transport Statement presents the existing traffic characteristics and infrastructure in the surrounding area of the proposed development. The development proposals are then presented. The traffic impact of the development of around 65 new dwellings is also assessed, together with the highway safety, access aspects and junction assessments associated with the proposals.
- 7.1.2 The site is considered to be in a sustainable location being within an acceptable walking distance of the nearest bus stops, local shops and services within Soothill and Batley and the retail and employment opportunities within the Red Brick Mills area. Within cycling distance of the site are the retail areas within and around Batley and Soothill. Batley Rail station is also within the walking and cycle catchment for the site. Therefore, the site's location generally conforms to current Government directives for ensuring developments are located in sustainable locations.
- 7.1.3 It is considered that the anticipated increase in the level of traffic generated by the proposed development would not be discernible from the daily fluctuations in flows that could be expected on the adjacent highway network. Therefore, the level of traffic generated by the proposals can easily be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network.
- 7.1.4 It is therefore concluded that the development is considered acceptable, and that there are no highway safety or efficiency reasons why planning consent for the proposed development should not be granted.

Appendix A

Location Plan



Legend:

- Site Location
- Closest Unique Bus Stops

Appendix B

Accident Data




Map Satellite

Incident Details
Date: 17/05/2018
Severity: Slight
 Number of Vehicles Involved: 2
 Number of Casualties Involved: 1
[View Detailed Report](#)

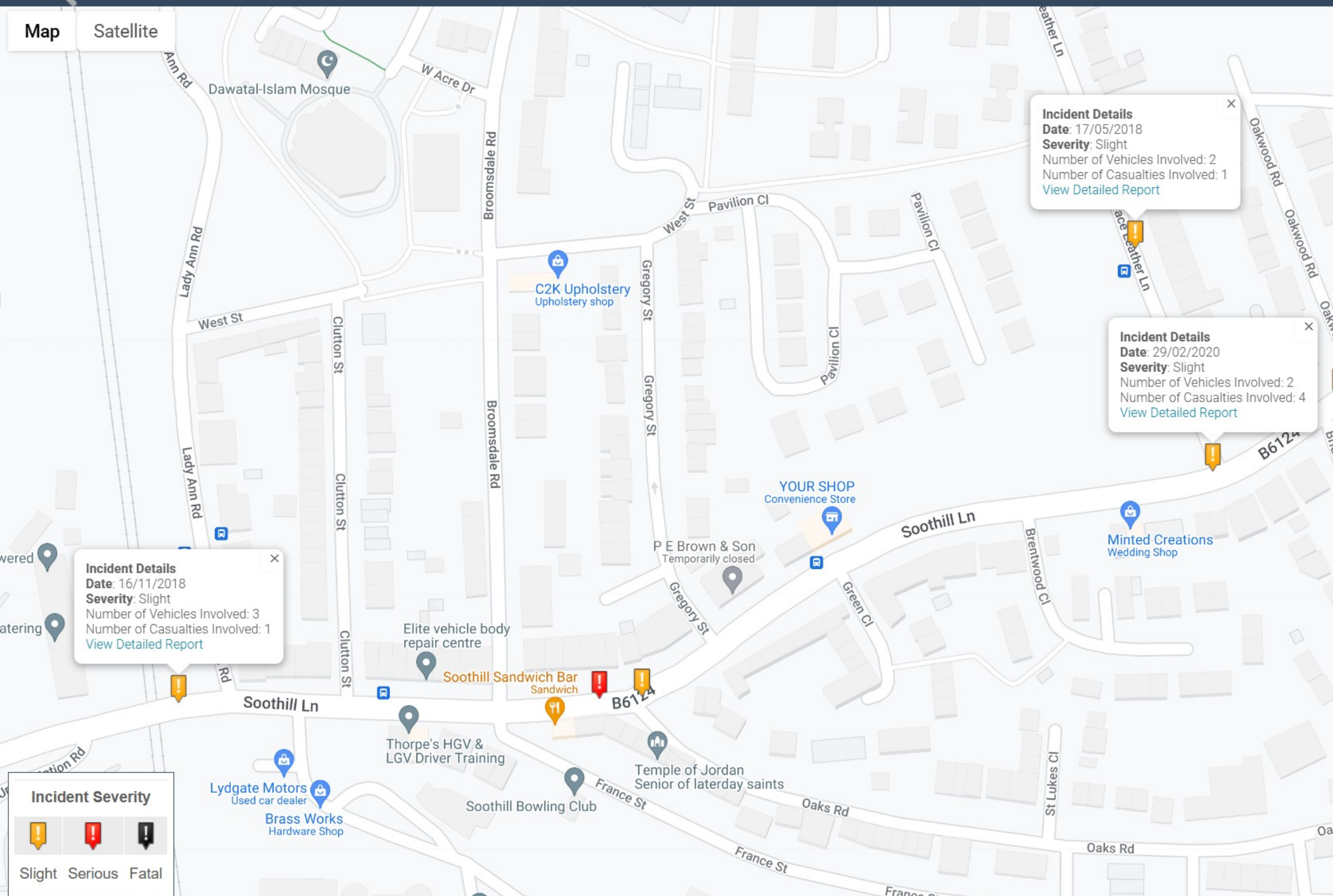
Incident Details
Date: 29/02/2020
Severity: Slight
 Number of Vehicles Involved: 2
 Number of Casualties Involved: 4
[View Detailed Report](#)

Incident Details
Date: 16/11/2018
Severity: Slight
 Number of Vehicles Involved: 3
 Number of Casualties Involved: 1
[View Detailed Report](#)

Incident Severity

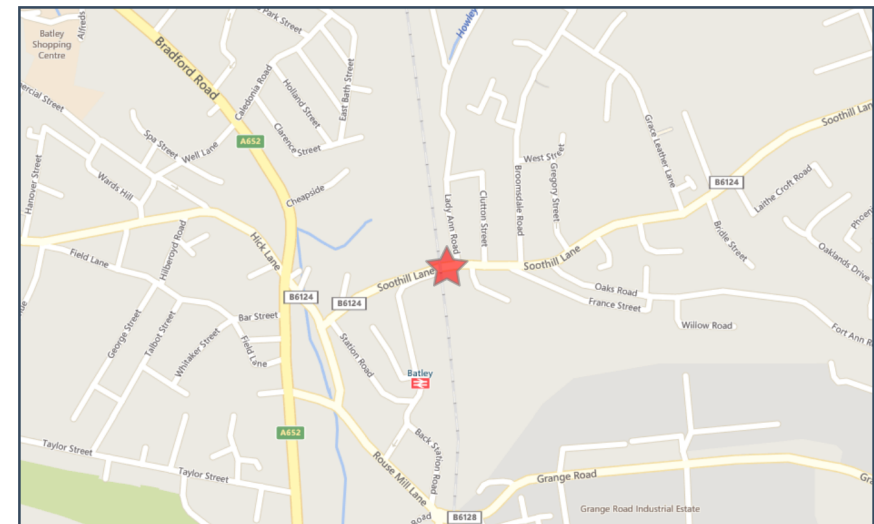
Slight Serious Fatal





Crash Date: Friday, November 16, 2018 **Time of Crash:** 8:50:00 PM **Crash Reference:** 2018135BG1870

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Kirklees	Number of Vehicles:	3	OS Grid Reference:	424965 423996
Local Authority:	Kirklees				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
3	Car (excluding private hire)		Unknown	Unknown	Vehicle is parked in the carriageway	Back	Other	None	None
2	Car (excluding private hire)		Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Other	None	None
1	Car (excluding private hire)		Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Vehicle or pillion passenger	Female	6 - 10	Unknown or other	Unknown or other

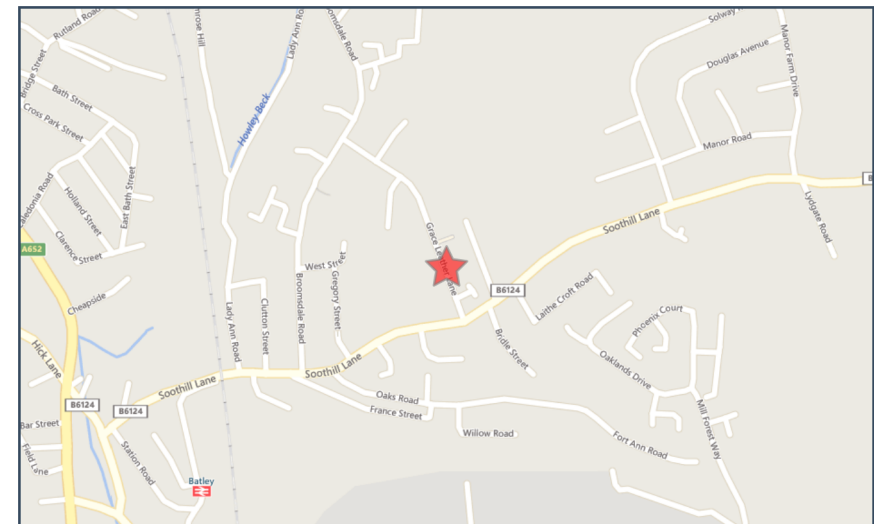
For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



Crash Date: Thursday, May 17, 2018 **Time of Crash:** 8:00:00 PM **Crash Reference:** 20181355H1878

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Kirklees			Number of Vehicles:	2
Local Authority:	Kirklees			OS Grid Reference:	425305 424159
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	20				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Car (excluding private hire)		2 Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Other	None	None
1	Pedal cycle		-1 Male	6 - 10	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

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

For more information about the data please visit: www.crashmap.co.uk/home/Faq

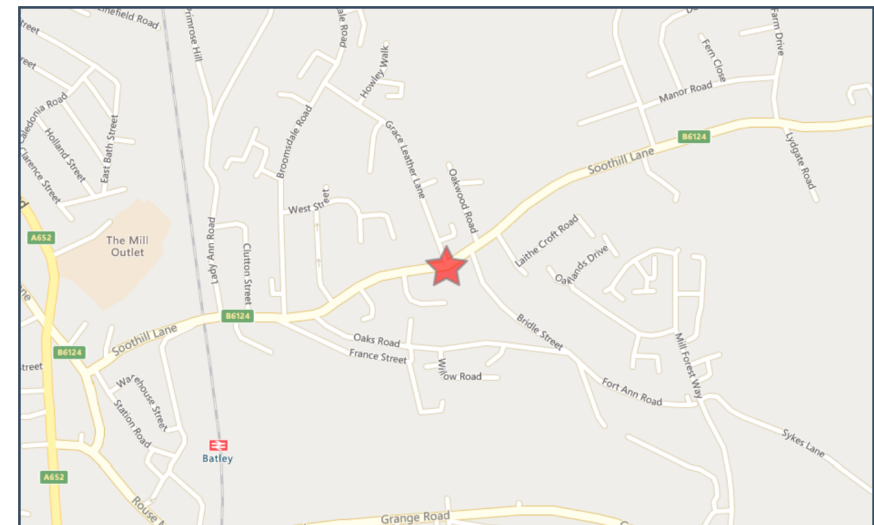
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



Validated Data

Crash Date: Saturday, February 29, 2020 **Time of Crash:** 10:52:00 PM **Crash Reference:** 20201372T1826

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	4
Highway Authority:	Kirklees			Number of Vehicles:	2
Local Authority:	Kirklees			OS Grid Reference:	425333 424080
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	11	Male	21 - 25	Vehicle is in the act of turning left	Offside	Unknown	None	None
2	Car (excluding private hire)	-1	Male	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

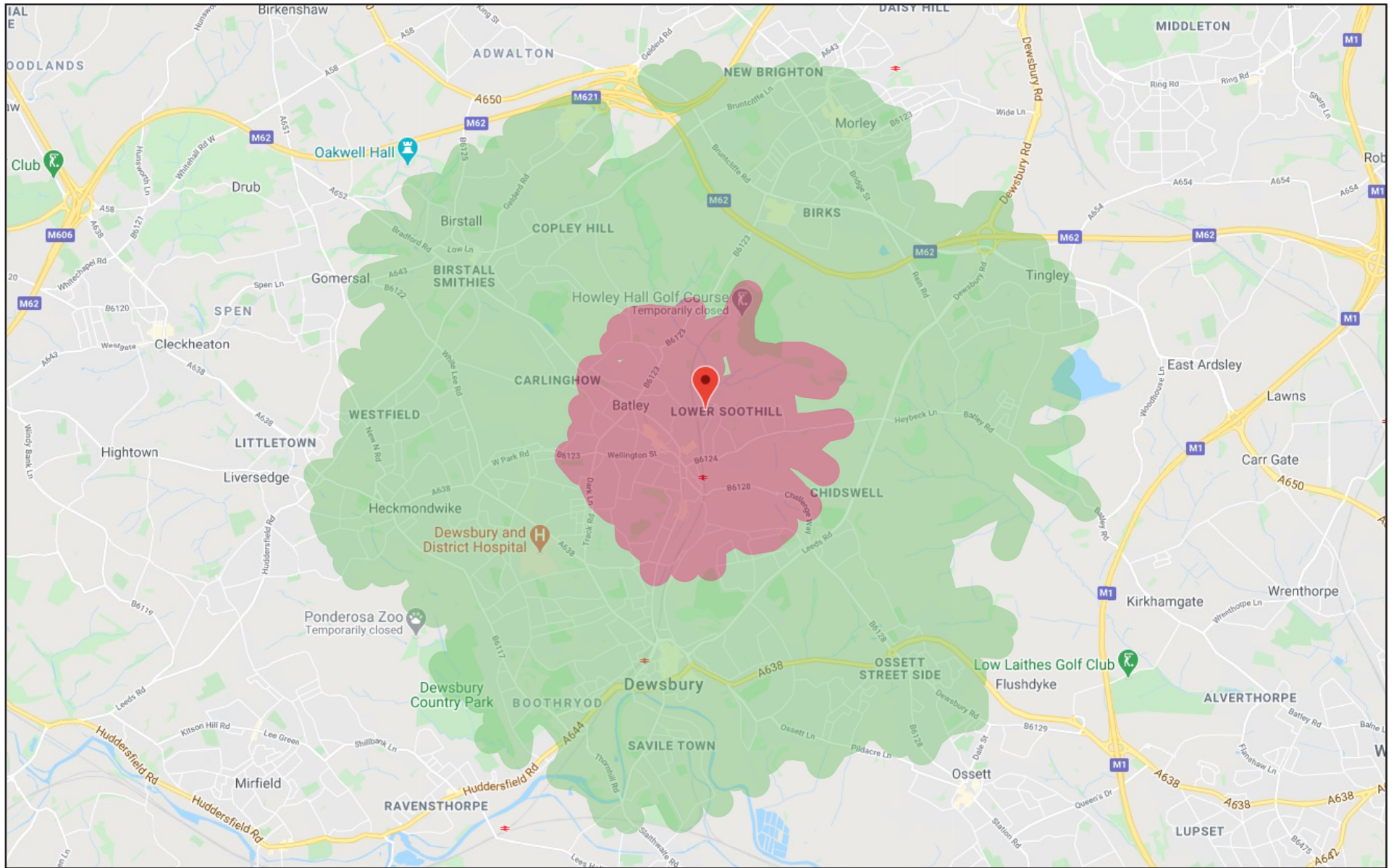
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Vehicle or pillion passenger	Male	21 - 25	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Male	16 - 20	Unknown or other	Unknown or other
1	3	Slight	Vehicle or pillion passenger	Male	21 - 25	Unknown or other	Unknown or other
1	4	Slight	Vehicle or pillion passenger	Male	21 - 25	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

Appendix C

Walking and Cycle Catchment Plan

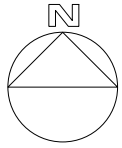


Legend:

- 5km Cycle Catchment
- 2km Walking Catchment
- Site Location

Appendix D

Proposed Access



GENERAL NOTES
 This drawing shows the provisional design only and is subject to Local Authority approval. This drawing should not be scaled for setting out purposes unless specified.

This drawing is based on a topographical/ordnance survey provided by others.



A 12.12.2022 AMENDED LAYOUT RECEIVED

PROJECT
 LADY ANN ROAD, BATLEY

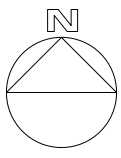
TITLE
 VEHICLE TRACKING & VISIBILITY
 - REFUSE VEHICLE

SCALE
 1:1000 @ A3

DRAWING
 1247-101A

DATE
 12.12.2022

PARAGON HIGHWAYS
 PARAGON HIGHWAYS
 OFFICE 20/21 THE REAR WALLED GARDEN,
 THE NOSTELL ESTATE,
 WAKEFIELD WF4 1AB
 01924 291536 /
 MAIL@PARAGONHIGHWAYS.COM



Existing fences to houses on Primrose Hill retained



GENERAL NOTES
This drawing shows the provisional design only and is subject to Local Authority approval. This drawing should not be scaled for setting out purposes unless specified.
This drawing is based on a topographical/ordnance survey provided by others.

PROJECT
LADY ANN ROAD, BATLEY

TITLE
FORWARD VISIBILITY

SCALE
1:500 @ A3

DRAWING
1247-102A

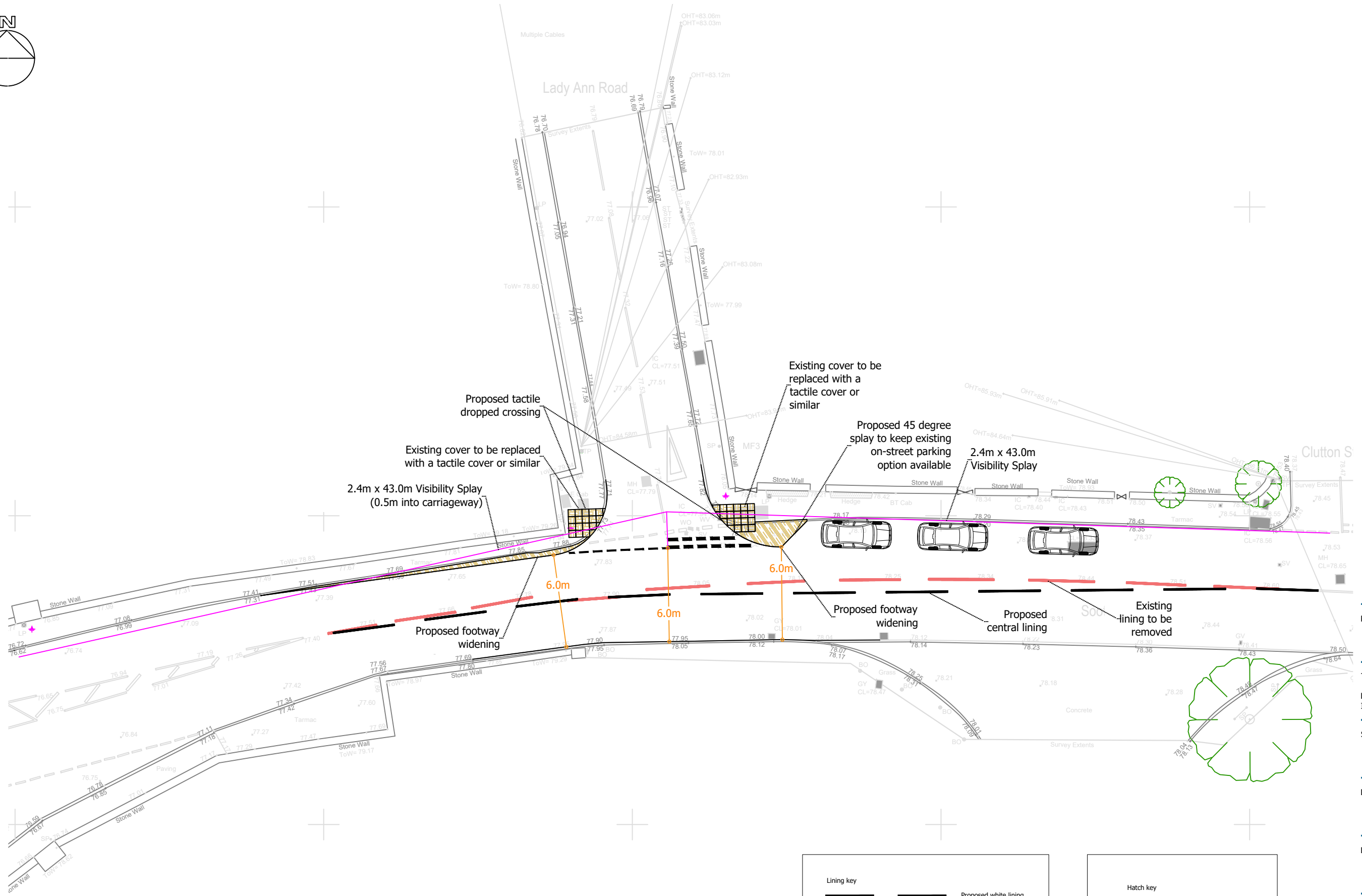
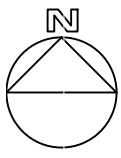
DATE
16.12.2022

NATURAL & SEMI-NATURAL
GREENSPACE INCLUDING
HOWLEY BECK
9716m2

Wetland Habitat

Lady Ann Road

PARAGON HIGHWAYS
PARAGON HIGHWAYS
OFFICE 20/21 THE REAR WALLED GARDEN,
THE NOSTELL ESTATE,
WAKEFIELD WF4 1AB
01924 291536 /
MAIL@PARAGONHIGHWAYS.COM



GENERAL NOTES
 This drawing shows the provisional design only and is subject to Local Authority approval. This drawing should not be scaled for setting out purposes unless specified.
 This drawing is based on a topographical/ordnance survey provided by others.

C 21.12.2022 AMENDED FOLLOWING RSA
 PROJECT
 LADY ANN ROAD, BATLEY
 TITLE
 LADY ANN ROAD / SOOTHILL ROAD JUNCTION IMPROVEMENT SCHEME
 SCALE
 1:250 @ A3
 DRAWING
 1247-201C
 DATE
 21.12.2022

Lining key	
	Proposed white lining
	Existing white lining to be removed
	Existing white lining to remain

Hatch key	
	Footway construction
	Tactile paving construction

Appendix E

TRICS Data

Calculation Reference: AUDIT-742101-221221-1210

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	2 days
	EX ESSEX	1 days
	HC HAMPSHIRE	2 days
	KC KENT	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	1 days
04	EAST ANGLIA	
	NF NORFOLK	5 days
	SF SUFFOLK	1 days
09	NORTH	
	DH DURHAM	2 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 50 to 99 (units:)
 Range Selected by User: 50 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 29/09/22

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

Selected survey days:

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

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

Selected survey types:

Manual count	16 days
Directional ATC Count	2 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
Edge of Town	13

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

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	7 days - Selected
Servicing vehicles Excluded	14 days - Selected

Secondary Filtering selection:

Use Class:

C3	18 days
----	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	7 days
10,001 to 15,000	4 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	3 days
50,001 to 75,000	2 days
75,001 to 100,000	4 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	15 days

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

Travel Plan:

Yes	10 days
No	8 days

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

PTAL Rating:

No PTAL Present	17 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1	DC-03-A-09 A350 SHAFTESBURY	MIXED HOUSES	DORSET
	Edge of Town No Sub Category Total No of Dwellings: 50 <i>Survey date: FRIDAY 19/11/21</i>		<i>Survey Type: MANUAL</i>
2	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED	DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 50 <i>Survey date: TUESDAY 28/03/17</i>		<i>Survey Type: MANUAL</i>
3	DH-03-A-03 PILGRIMS WAY DURHAM	SEMI -DETACHED & TERRACED	DURHAM
	Edge of Town Residential Zone Total No of Dwellings: 57 <i>Survey date: FRIDAY 19/10/18</i>		<i>Survey Type: MANUAL</i>
4	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 70 <i>Survey date: MONDAY 28/09/15</i>		<i>Survey Type: MANUAL</i>
5	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 99 <i>Survey date: WEDNESDAY 05/06/19</i>		<i>Survey Type: MANUAL</i>
6	ES-03-A-07 NEW ROAD HAILSHAM HELLINGLY	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 91 <i>Survey date: THURSDAY 07/11/19</i>		<i>Survey Type: MANUAL</i>
7	EX-03-A-02 MANOR ROAD CHIGWELL GRANGE HILL	DETACHED & SEMI -DETACHED	ESSEX
	Edge of Town Residential Zone Total No of Dwellings: 97 <i>Survey date: MONDAY 27/11/17</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	HC-03-A-23 CANADA WAY LIPHOOK	HOUSES & FLATS		HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 <i>Survey date: TUESDAY 19/11/19</i>			
9	HC-03-A-27 DAIRY ROAD ANDOVER	MIXED HOUSES		HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 73 <i>Survey date: TUESDAY 16/11/21</i>			
10	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH	MIXED HOUSES & FLATS		KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 <i>Survey date: THURSDAY 14/07/16</i>			
11	NF-03-A-25 WOODFARM LANE GORLESTON-ON-SEA	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 55 <i>Survey date: TUESDAY 21/09/21</i>			
12	NF-03-A-26 HEATH DRIVE HOLT	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 91 <i>Survey date: WEDNESDAY 22/09/21</i>			
13	NF-03-A-34 NORWICH ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Out of Town Total No of Dwellings: 80 <i>Survey date: TUESDAY 27/09/22</i>			
14	NF-03-A-36 LONDON ROAD WYMONDHAM	MIXED HOUSES		NORFOLK
	Edge of Town No Sub Category Total No of Dwellings: 75 <i>Survey date: THURSDAY 29/09/22</i>			
15	NF-03-A-50 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings: 75 <i>Survey date: FRIDAY 14/10/16</i>			

LIST OF SITES relevant to selection parameters (Cont.)

16	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED		SURREY
	Edge of Town Residential Zone Total No of Dwellings:		71	
	<i>Survey date: THURSDAY</i>		<i>23/01/14</i>	<i>Survey Type: MANUAL</i>
17	SF-03-A-07 FOXHALL ROAD IPSWICH	MIXED HOUSES		SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:		73	
	<i>Survey date: THURSDAY</i>		<i>09/05/19</i>	<i>Survey Type: MANUAL</i>
18	WS-03-A-10 TODDINGTON LANE LITTLEHAMPTON WICK	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		79	
	<i>Survey date: WEDNESDAY</i>		<i>07/11/18</i>	<i>Survey Type: MANUAL</i>

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

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	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	18	72	0.087	18	72	0.329	18	72	0.416
08:00 - 09:00	18	72	0.147	18	72	0.351	18	72	0.498
09:00 - 10:00	18	72	0.144	18	72	0.173	18	72	0.317
10:00 - 11:00	18	72	0.135	18	72	0.184	18	72	0.319
11:00 - 12:00	18	72	0.147	18	72	0.152	18	72	0.299
12:00 - 13:00	18	72	0.177	18	72	0.165	18	72	0.342
13:00 - 14:00	18	72	0.179	18	72	0.179	18	72	0.358
14:00 - 15:00	18	72	0.179	18	72	0.186	18	72	0.365
15:00 - 16:00	18	72	0.283	18	72	0.178	18	72	0.461
16:00 - 17:00	18	72	0.279	18	72	0.182	18	72	0.461
17:00 - 18:00	18	72	0.335	18	72	0.140	18	72	0.475
18:00 - 19:00	18	72	0.242	18	72	0.144	18	72	0.386
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.427			2.436			4.863

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:	50 - 99 (units:)
Survey date range:	01/01/14 - 29/09/22
Number of weekdays (Monday-Friday):	18
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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

Appendix F

Surveys

- A Soothill Lane B6124 East
- B Soothill Business Park
- C Soothill Lane B6124 West
- D Lady Ann Road



Time	A - B		A - C		A - D		B - A		B - C		C - A		C - B		C - D		D - A		D - C	
	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV
07:00	2		62	1	1						56	1	1		1	1	2		2	1
07:15	3		77	1			1		1		64	1	1		1		3		2	
07:30	5		85	1	1				1	1	68	2	3		1	1	6		2	1
07:45	3	1	137	4			1		3		108	3	10		7		9		8	
08:00	3		92	2	1		1		4		123	1	5		6		4		11	
08:15	1		96	2	4		1		2		128		4		10		6		13	1
08:30	4		100	3	1		3		2		103	2	13	1	5	1	3		16	
08:45	5		129	2	2		3		2	1	76	4	11	1	11		1		8	
09:00	4	1	107	1	1		2		2	1	64	2	8	1	5		1		7	
09:15	2		97	1	1		2		2		55	2	3		4		2		5	
AM	32	2	982	18	12	0	14	0	19	3	845	18	59	3	51	3	37	0	74	3
16:00	1		94	1	2		6		6		89	2	1		2		1		4	
16:15	1	1	96		2		6		9		98	8	1		8		1		13	
16:30	1		100				5		5		129	7	1		7				12	
16:45			59	1			5	1	3		105	5	2		5	1	1		18	
17:00		1	110	1			4		10		99	9	1		9		4		12	
17:15			91						3		109	7	2		7		5		13	
17:30			95	1	1		1	1	1		91	4	1		4		4		5	
17:45	1		92				1		2		87	3	1		3				4	1
18:00	1		93	1	1		1		2		85	3	1		3	1	1		5	
18:15	1		85	1	1		1		2		79	2	1		2		1		3	
PM	6	2	915	6	7	0	30	2	43	0	971	50	12	0	50	2	18	0	89	1
Total	38	4	1897	24	19	0	44	2	62	3	1816	68	71	3	101	5	55	0	163	4

- A Soothill Lane B6124 East
- B Soothill Lane B6124 West
- C Grace Leather Lane



Time	A - B		A - C		B - A		B - C		C - A		C - B	
	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV	Car	HGV
07:00	64	1	1	1	59	1			3			
07:15	73	1	1		67	1			4			
07:30	82	1	4		76	2	3		9	1	1	
07:45	119	3	7		99	4	5		10		4	
08:00	82	1		1	118	1	1		8		1	
08:15	92	2	5	2	125		1		6		1	
08:30	98	3	3	1	94	2	1		1	1	1	
08:45	127	2	3		69	3	1		7		1	
09:00	99	1	2		67	1	1		4		1	
09:15	92	1	2	1	59	2	1		3	1	1	
AM	928	16	28	6	833	17	14	0	55	3	11	0
16:00	87	2	3	2	97		1		1			
16:15	94		2		103		2		1			
16:30	96		5		131		1		3	1	1	
16:45	55	1	8		103	1	3		3		2	
17:00	99	2	5	1	111		2		1		1	
17:15	93		4		89		1		2		1	
17:30	88	1	9		102	1	1		2	1	1	
17:45	87	1	5		85		1		1			
18:00	89	1	2	1	81				1		1	
18:15	77		2		76		2		1	1	1	
PM	865	8	45	4	978	2	14	0	16	3	8	0
Total	1793	24	73	10	1811	19	28	0	71	6	19	0

Appendix G

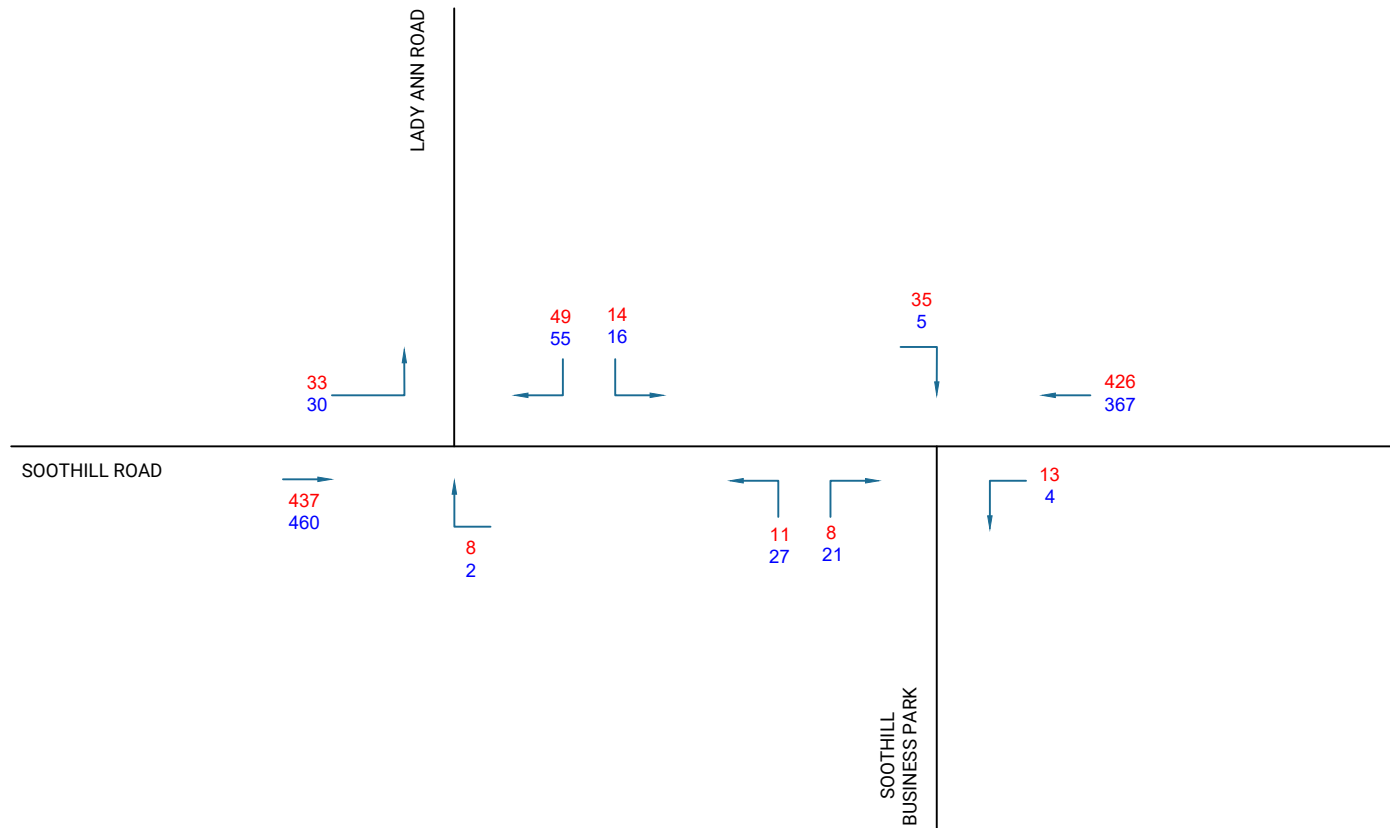
Traffic Flows & Distribution

WU01EW - Location of usual residence and place of work by sex (MSOA level)

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

population units date sex All usual residents aged 16 and over in employment the week before the census
Persons
2011
All persons

place of work	usual residence	Site Access/ Lady Ann Rd Junct		Lady Ann Rd/ Soothill Ln Junct		Soothill Ln/ Rouse Mill Ln Junct		Rouse Mill Ln/ Rouse Hill Ln Junct		Rouse Mill Ln/ Bradford Rd (South Junct)	Rouse Mill Ln/ Bradford Rd (North Junct)		Grace Leather Ln/ Soothill Ln Junct	
	E02002277 : Kirklees 007	Lady Ann Road (South)	Lady Ann Road (North)	Soothill Lane (West)	Soothill Lane (East)	Rouse Mill Lane (South)	Rouse Mill Lane (Northwest)	Rouse Mill Lane (West)	Rouse Mill Lane (Southeast)	Bradford Road (South)	Hick Lane	Bradford Road (North)	Soothill Lane (West)	Soothill Lane (East)
Barnsley	10	10		10		10			10					
Bradford	113	113		113			113					113		
Calderdale	54	54		54			54				54			
Craven	0													
Doncaster	6	3	3		3									3
East Riding of Yorkshire	4	2	2		2									2
Hambleton	2	1	1		1									1
Harrogate	7	4	3		4									3
Kingston upon Hull, City of	1	1			1									
Leeds	586	440	146	293	147		293					293		146
North East Lincolnshire	0													
North Lincolnshire	0													
Richmondshire	0													
Rotherham	4	4		4		4			4					
Ryedale	0													
Scarborough	0													
Selby	5	3	2		3									2
Sheffield	12	12		12		12			12					
Wakefield	194	146	48	97	49	97			97					48
York	5	3	2		3									2
E02002271 : Kirklees 001	6	6		6			6					6		
E02002272 : Kirklees 002	102	102		102			102					102		
E02002273 : Kirklees 003	11	11		11			11					11		
E02002274 : Kirklees 004	3	3		3			3					3		
E02002275 : Kirklees 005	26	26		26			26					26		
E02002276 : Kirklees 006	25	25		25			25					25		
E02002278 : Kirklees 008	4	4		4			4					4		
E02002279 : Kirklees 009	29	29		29			29				29			
E02002280 : Kirklees 010	211	211		211			211				211			
E02002281 : Kirklees 011	22	22		22			22				22			
E02002282 : Kirklees 012	14	14		14			14				14			
E02002283 : Kirklees 013	104	104		104		104		104		104				
E02002284 : Kirklees 014	50	25	25		25								25	
E02002285 : Kirklees 015	28	28		28			28				28			
E02002286 : Kirklees 016	38	38		38		38		38		38				
E02002287 : Kirklees 017	132	132		132		132		132		132				
E02002288 : Kirklees 018	25	25		25		25			25					
E02002289 : Kirklees 019	14	14		14		14		14		14				
E02002290 : Kirklees 020	1	1		1		1		1		1				
E02002291 : Kirklees 021	7	7		7		7		7		7				
E02002292 : Kirklees 022	4	4		4			4				4			
E02002293 : Kirklees 023	35	35		35		35		35		35				
E02002294 : Kirklees 024	78	78		78		78		78		78				
E02002295 : Kirklees 025	9	9		9			9				9			
E02002296 : Kirklees 026	11	11		11		11		11		11				
E02002297 : Kirklees 027	0													
E02002298 : Kirklees 028	6	6		6		6		6		6				
E02002299 : Kirklees 029	46	46		46			46				46			
E02002300 : Kirklees 030	0													
E02002301 : Kirklees 031	5	5		5			5				5			
E02002302 : Kirklees 032	2	2		2		2		2		2				
E02002303 : Kirklees 033	5	5		5			5				5			
E02002304 : Kirklees 034	2	2		2			2				2			
E02002305 : Kirklees 035	2	2		2		2		2		2				
E02002306 : Kirklees 036	0													
E02002307 : Kirklees 037	2	2		2		2		2		2				
E02002308 : Kirklees 038	0													
E02002309 : Kirklees 039	3	3		3		3		3		3				
E02002310 : Kirklees 040	0													
E02002311 : Kirklees 041	0													
E02002312 : Kirklees 042	12	12		12		12		12		12				
E02002313 : Kirklees 043	0													
E02002314 : Kirklees 044	3	3		3		3		3		3				
E02002315 : Kirklees 045	3	3		3			3				3			
E02002316 : Kirklees 046	11	11		11		11		11		11				
E02002317 : Kirklees 047	2	2		2		2		2		2				
E02002318 : Kirklees 048	3	3		3		3		3		3				
E02002319 : Kirklees 049	2	2		2		2		2		2				
E02002320 : Kirklees 050	2	2		2		2		2		2				
E02002321 : Kirklees 051	3	3		3		3		3		3				
E02002322 : Kirklees 052	1	1		1			1				1			
E02002323 : Kirklees 053	4	4		4		4		4		4				
E02002324 : Kirklees 054	6	6		6		6			6					
E02002325 : Kirklees 055	3	3		3		3		3		3				
E02002326 : Kirklees 056	0													
E02002327 : Kirklees 057	3	3		3		3			3					
E02002328 : Kirklees 058	0													
E02002329 : Kirklees 059	6	6		6		6		6		6				
Totals	2,129	1,897	232	1,659	238	643	1,016	486	157	486	433	583	25	207
Percentages	100	89.1	10.9	77.9	11.2	30.2	47.7	22.8	7.4	22.8	20.3	27.4	1.2	9.7



REV	DATE	DESCRIPTION
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PROJECT	LADY ANN ROAD, BATLEY	
---------	-----------------------	--

TITLE	LADY ANN ROAD / SOOTHILL ROAD JUNCTION - 2022 BASE	
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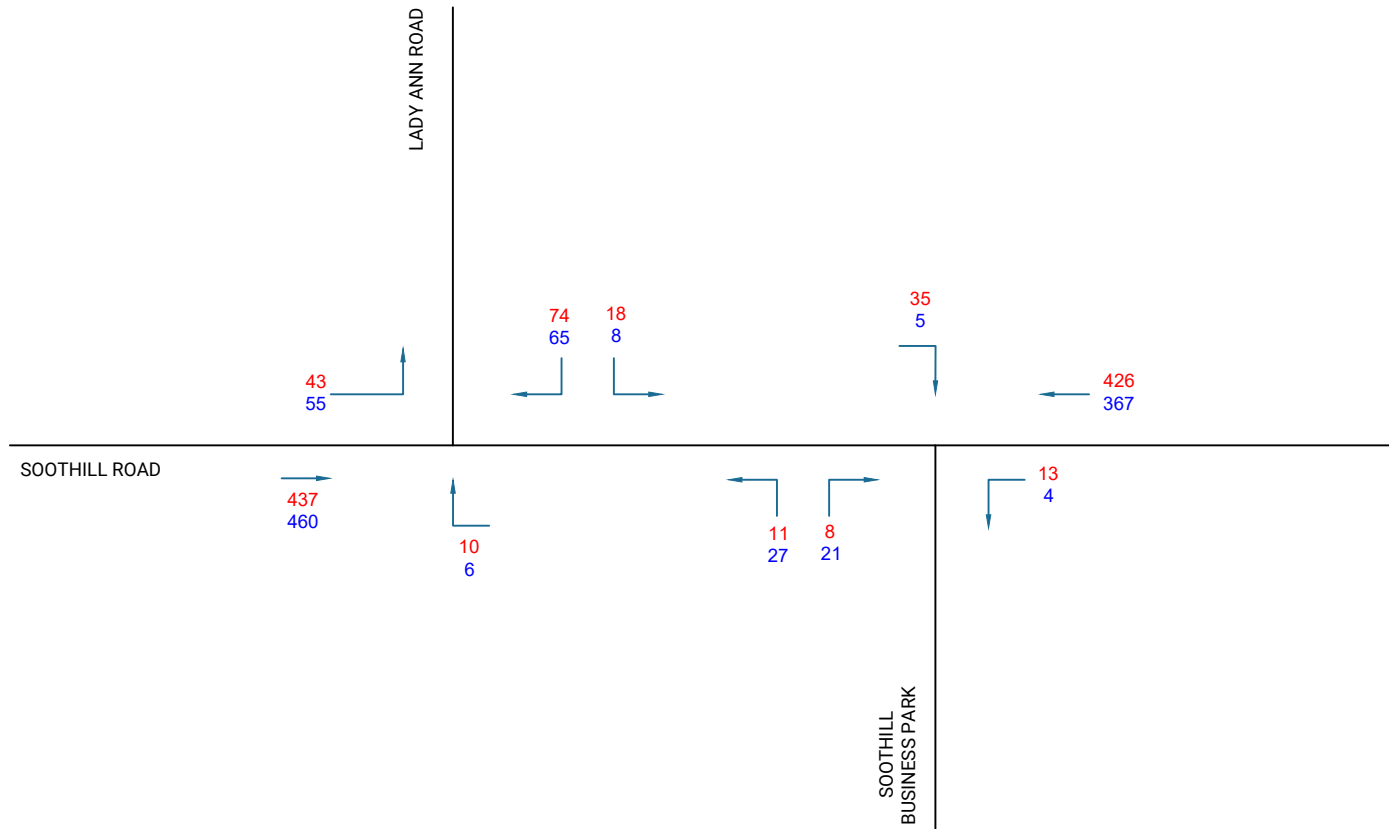
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DRAWING	1247 FLOWS -101	
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DATE	21.12.2022	
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REV	DATE	DESCRIPTION
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PROJECT	LADY ANN ROAD, BATLEY	
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TITLE	LADY ANN ROAD / SOOTHILL ROAD JUNCTION - 2022 WITH DEVELOPMENT	
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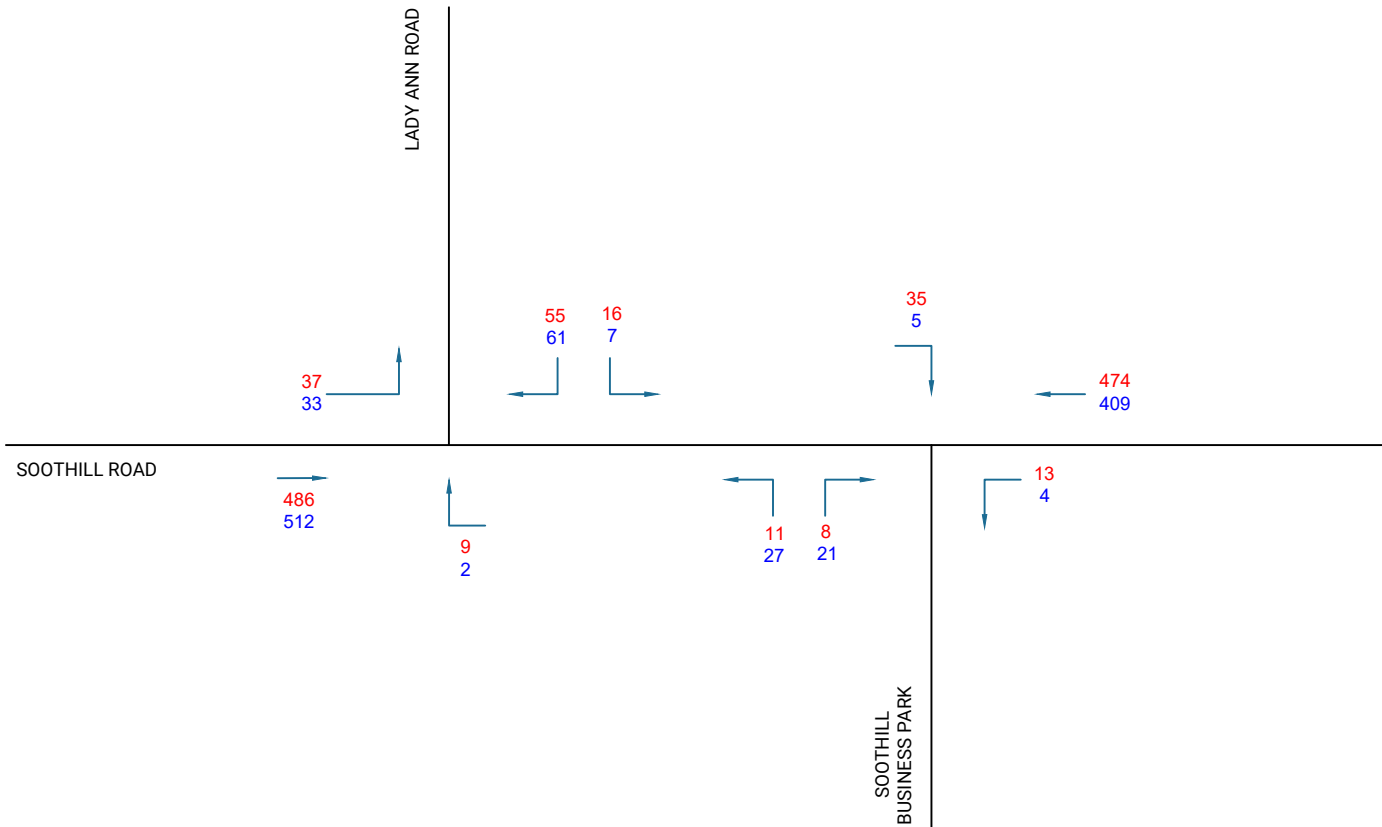
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DRAWING	1247 FLOWS -102	
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DATE	21.12.2022	
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REV	DATE	DESCRIPTION
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PROJECT	LADY ANN ROAD, BATLEY	
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TITLE	LADY ANN ROAD / SOOTHILL ROAD JUNCTION - 2032 NO DEVELOPMENT	
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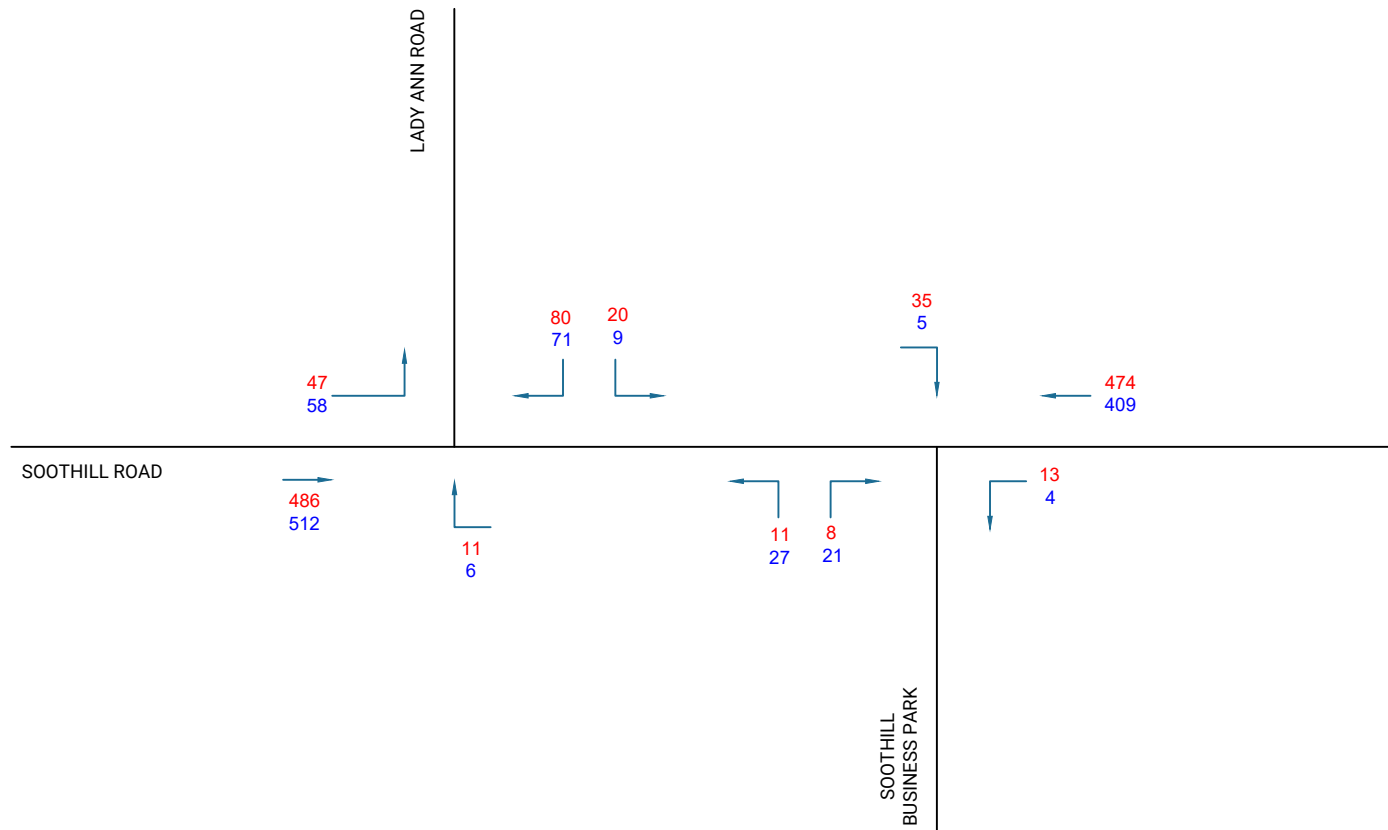
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DRAWING	1247 FLOWS -103	
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DATE	21.12.2022	
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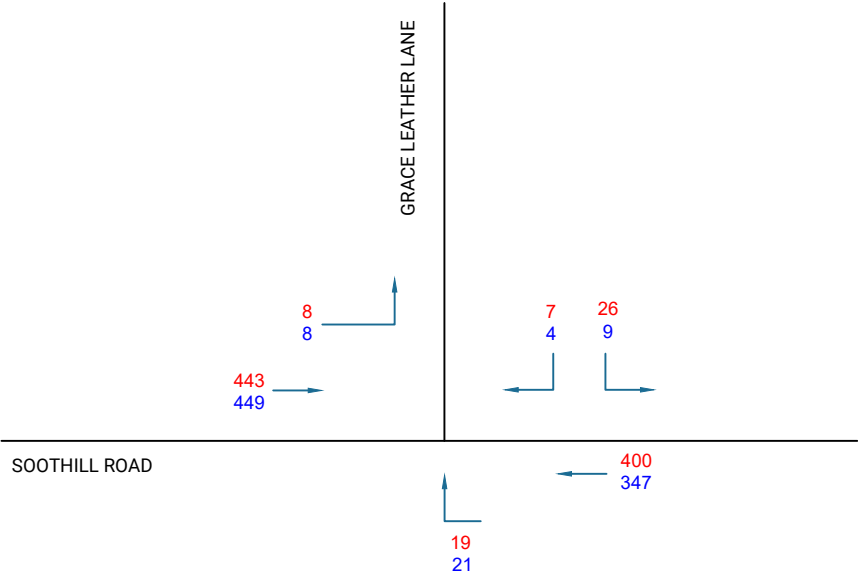
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REV	DATE	DESCRIPTION
PROJECT		
LADY ANN ROAD, BATLEY		
TITLE		
LADY ANN ROAD / SOOTHILL ROAD JUNCTION - 2032 WITH DEVELOPMENT		
SCALE		
NTS @ A4		
DRAWING		
1247 FLOWS -104		
DATE		
21.12.2022		



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REV	DATE	DESCRIPTION
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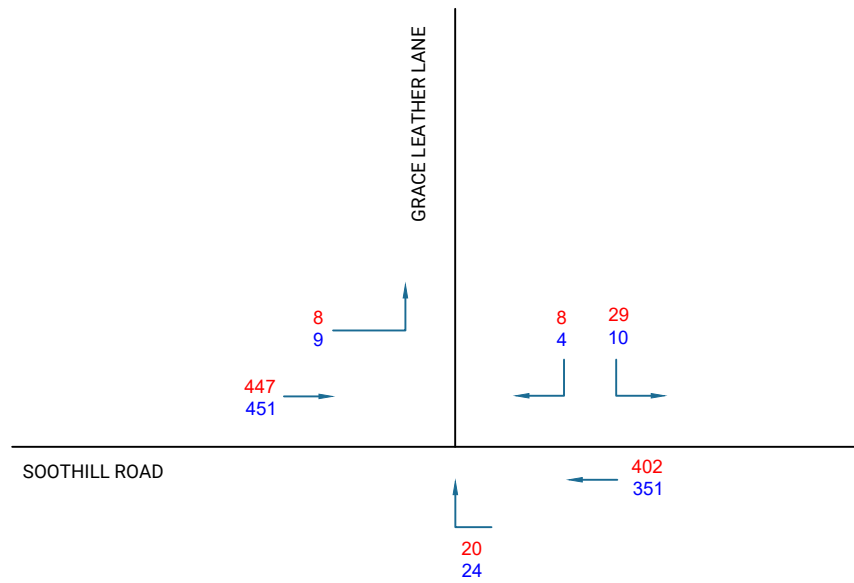
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TITLE		
GRACE LEATHER LANE / SOOTHILL ROAD JUNCTION		
- 2022 BASE		

SCALE		
NTS @ A4		

DRAWING		
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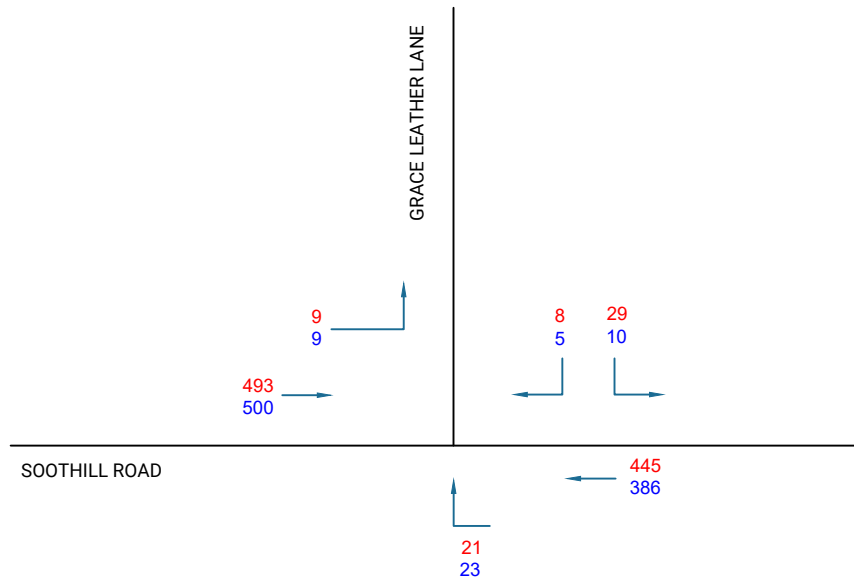
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TITLE		
GRACE LEATHER LANE / SOOTHILL ROAD JUNCTION		
- 2022 WITH DEVELOPMENT		
SCALE		
NTS @ A4		
DRAWING		
1247 FLOWS -106		
DATE		
21.12.2022		



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REV	DATE	DESCRIPTION
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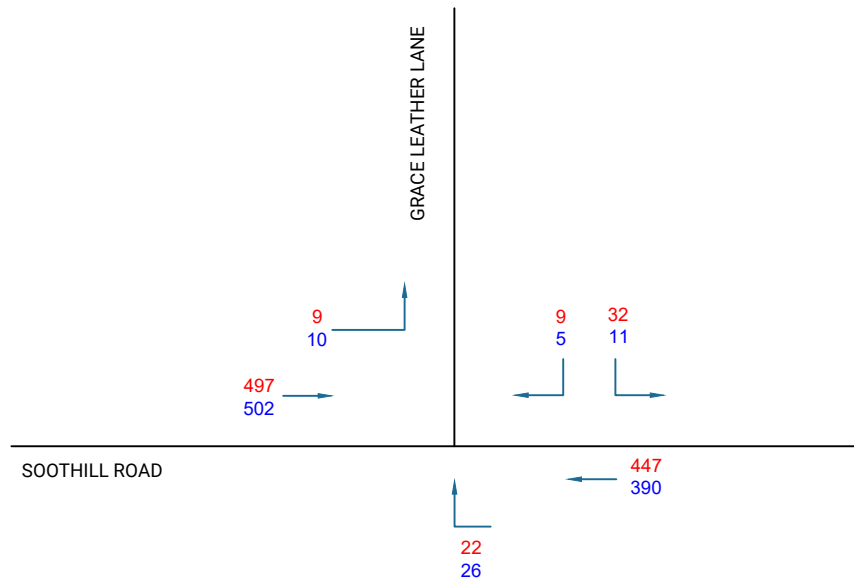
PROJECT		
LADY ANN ROAD, BATLEY		

TITLE		
GRACE LEATHER LANE / SOOTHILL ROAD JUNCTION		
- 2032 NO DEVELOPMENT		

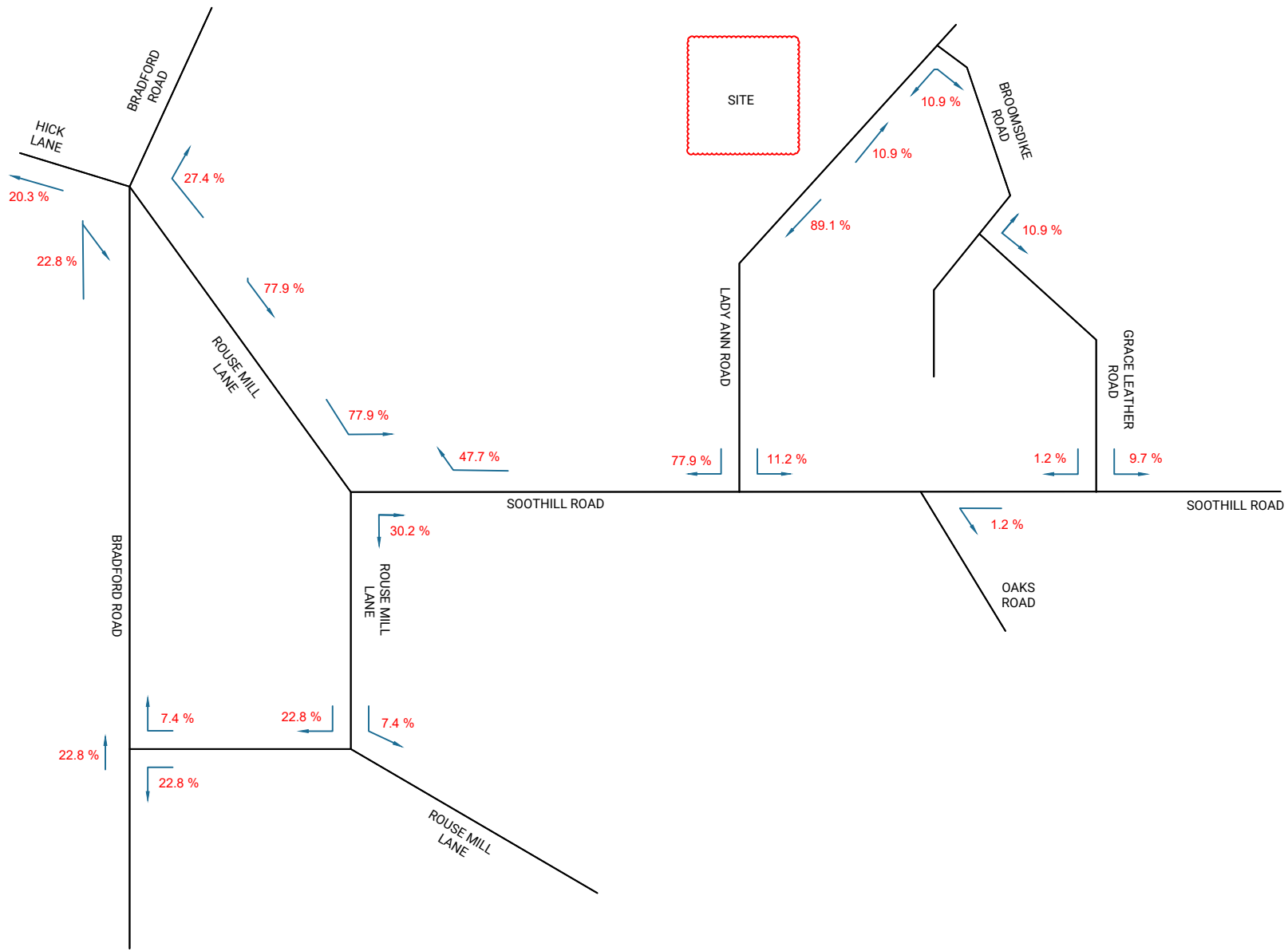
SCALE		
NTS @ A4		

DRAWING		
1247 FLOWS -107		

DATE		
21.12.2022		



REV	DATE	DESCRIPTION
PROJECT		
LADY ANN ROAD, BATLEY		
TITLE		
GRACE LEATHER LANE / SOOTHILL ROAD JUNCTION		
- 2032 WITH DEVELOPMENT		
SCALE		
NTS @ A4		
DRAWING		
1247 FLOWS -108		
DATE		
21.12.2022		



REV	DATE	DESCRIPTION
-----	------	-------------

PROJECT	LADY ANN ROAD, BATLEY	
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TITLE	DISTRIBUTION	
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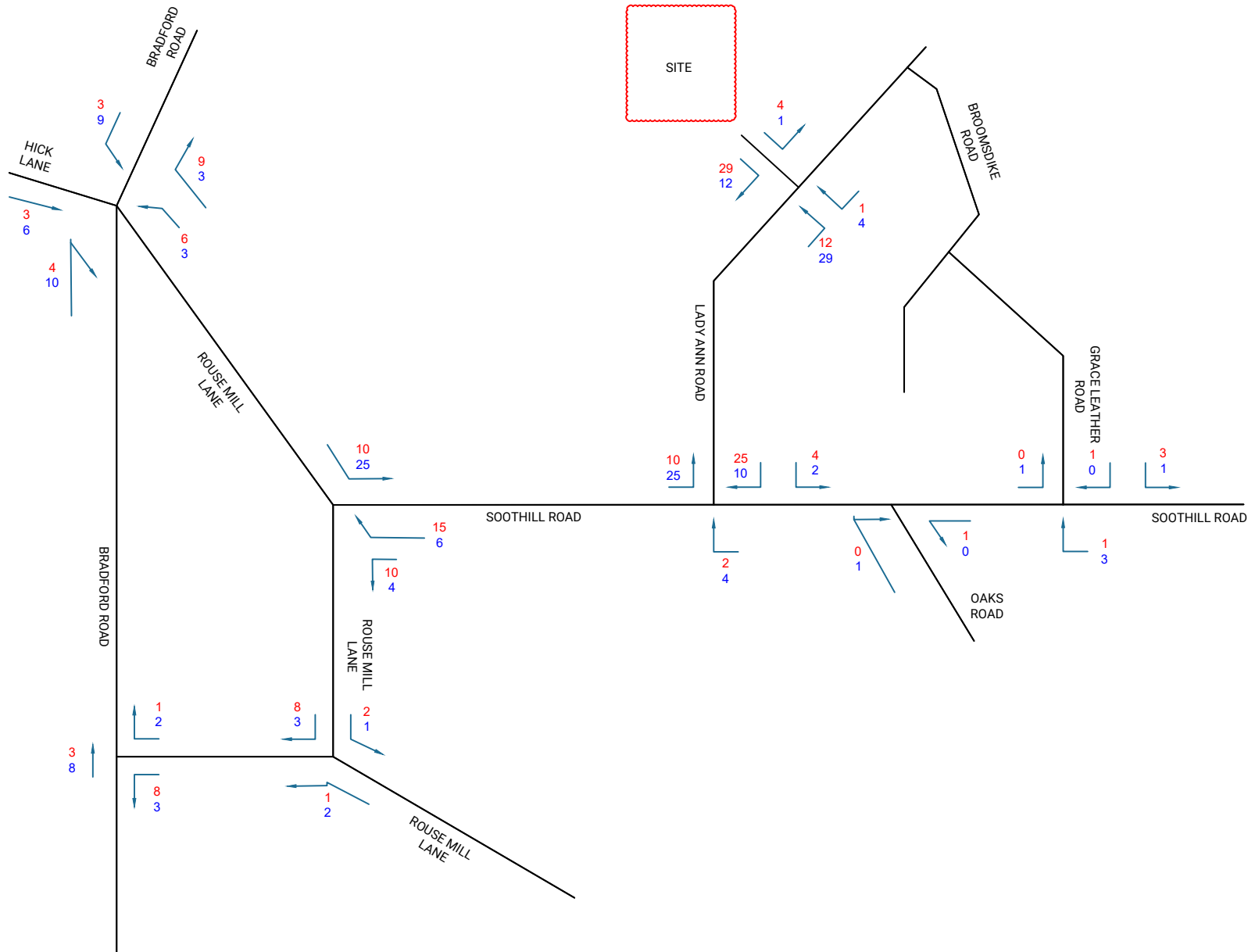
SCALE	NTS @ A4	
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DRAWING	1247 FLOWS -109	
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DATE	21.12.2022	
------	------------	--



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REV	DATE	DESCRIPTION
PROJECT		
LADY ANN ROAD, BATLEY		
TITLE		
GENERATIONS		
SCALE		
NTS @ A4		
DRAWING		
1247 FLOWS -110		
DATE		
21.12.2022		

Appendix H

PICADY Output

Lady Ann Road/ Soothill Lane

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 2022 No Development.j9
Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Lady Ann Road Soothill Lane Jct
Report generation date: 19/12/2022 17:07:57

- »2022, AM No Dev
- »2022, PM No Dev

Summary of junction performance

	AM No Dev				PM No Dev			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2022								
Stream B-CD	0.0	6.70	0.02	A	0.1	6.76	0.05	A
Stream B-A	0.0	11.77	0.03	B	0.1	11.25	0.06	B
Stream AB-CD	0.0	5.21	0.02	A	0.0	5.31	0.01	A
Stream D-ABC	0.3	13.14	0.19	B	0.2	13.39	0.19	B
Stream CD-AB	0.3	5.53	0.11	A	0.0	5.11	0.02	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	Lady Ann Road
Location	Lady Ann Road/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2022 No Development

Units

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

Analysis Options

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	2022	AM No Dev	ONE HOUR	08:00	09:30	15
D2	2022	PM No Dev	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, AM No Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Soothill Business Park		Minor
C	Soothill Lane (West)		Major
D	Lady Ann Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.50			90.0	✓	0.00
C	6.78			43.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare		10.00	7.40	4.35	3.60	3.60	✓	1.00	45	21
D	One lane	3.86								23	13

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	626	-	-	-	-	-	0.227	0.227	0.227	-	-
1	B-A	556	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	742	0.110	0.278	0.278	-	-	-	-	-	-	-
1	CD-B	599	0.224	0.224	0.224	-	-	-	-	-	-	-
1	D-AB	687	-	-	-	-	-	0.249	0.249	0.098	-	-
1	D-C	534	-	0.145	0.328	0.145	0.328	0.230	0.230	0.091	-	-

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	2022	AM No Dev	ONE HOUR	08:00	09:30	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		✓	447	100.000
B		✓	19	100.000
C		✓	505	100.000
D		✓	63	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	13	426	8	
	B	8	0	11	0	
	C	437	35	0	33	
	D	14	0	49	0	

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.02	6.70	0.0	A
B-A	0.03	11.77	0.0	B
A-B				
A-C				
A-D				
AB-CD	0.02	5.21	0.0	A
AB-C				
D-ABC	0.19	13.14	0.3	B
C-D				
C-A				
C-B				
CD-AB	0.11	5.53	0.3	A
CD-A				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	648	0.013	8	0.0	6.192	A
B-A	6	412	0.015	6	0.0	9.754	A
A-B	10			10			
A-C	321			321			
A-D	6			6			
AB-CD	11	770	0.014	10	0.0	5.212	A
AB-C	324			324			
D-ABC	47	432	0.110	47	0.1	10.271	B
C-D	25			25			
C-A	329			329			
C-B	26			26			
CD-AB	47	764	0.062	47	0.1	5.519	A
CD-A	318			318			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	629	0.016	10	0.0	6.394	A
B-A	7	384	0.019	7	0.0	10.510	B
A-B	12			12			
A-C	383			383			
A-D	7			7			
AB-CD	14	802	0.018	14	0.0	5.026	A
AB-C	386			386			
D-ABC	57	406	0.139	56	0.2	11.314	B
C-D	30			30			
C-A	393			393			
C-B	31			31			
CD-AB	64	800	0.080	64	0.2	5.383	A
CD-A	373			373			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	604	0.020	12	0.0	6.694	A
B-A	9	345	0.026	9	0.0	11.768	B
A-B	14			14			
A-C	469			469			
A-D	9			9			
AB-CD	20	848	0.024	20	0.0	4.787	A
AB-C	469			469			
D-ABC	69	371	0.187	69	0.2	13.117	B
C-D	36			36			
C-A	481			481			
C-B	39			39			
CD-AB	93	851	0.109	93	0.3	5.231	A
CD-A	442			442			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	603	0.020	12	0.0	6.695	A
B-A	9	345	0.026	9	0.0	11.770	B
A-B	14			14			
A-C	469			469			
A-D	9			9			
AB-CD	20	848	0.024	20	0.0	4.787	A
AB-C	470			470			
D-ABC	69	371	0.187	69	0.3	13.143	B
C-D	36			36			
C-A	481			481			
C-B	39			39			
CD-AB	93	851	0.110	93	0.3	5.236	A
CD-A	442			442			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	629	0.016	10	0.0	6.396	A
B-A	7	384	0.019	7	0.0	10.513	B
A-B	12			12			
A-C	383			383			
A-D	7			7			
AB-CD	14	802	0.018	14	0.0	5.027	A
AB-C	386			386			
D-ABC	57	406	0.139	57	0.2	11.346	B
C-D	30			30			
C-A	393			393			
C-B	31			31			
CD-AB	64	800	0.080	65	0.2	5.393	A
CD-A	373			373			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	647	0.013	8	0.0	6.195	A
B-A	6	412	0.015	6	0.0	9.759	A
A-B	10			10			
A-C	321			321			
A-D	6			6			
AB-CD	11	770	0.014	11	0.0	5.214	A
AB-C	324			324			
D-ABC	47	432	0.110	48	0.1	10.312	B
C-D	25			25			
C-A	329			329			
C-B	26			26			
CD-AB	48	764	0.062	48	0.1	5.529	A
CD-A	318			318			

2022, PM No Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.71	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	2022	PM No Dev	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		✓	373	100.000
B		✓	48	100.000
C		✓	495	100.000
D		✓	61	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	4	367	2
	B	21	0	27	0
	C	460	5	0	30
	D	6	0	55	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.05	6.76	0.1	A
B-A	0.06	11.25	0.1	B
A-B				
A-C				
A-D				
AB-CD	0.01	5.31	0.0	A
AB-C				
D-ABC	0.19	13.39	0.2	B
C-D				
C-A				
C-B				
CD-AB	0.02	5.11	0.0	A
CD-A				

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)	LOS
B-CD	20	655	0.031	20	0.0	6.237	A
B-A	16	433	0.037	16	0.0	9.484	A
A-B	3			3			
A-C	276			276			
A-D	2			2			
AB-CD	2	749	0.003	2	0.0	5.305	A
AB-C	295			295			
D-ABC	46	421	0.109	45	0.1	10.526	B
C-D	23			23			
C-A	346			346			
C-B	4			4			
CD-AB	7	782	0.009	7	0.0	5.106	A
CD-A	348			348			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	638	0.038	24	0.0	6.449	A
B-A	19	409	0.046	19	0.1	10.150	B
A-B	4			4			
A-C	330			330			
A-D	2			2			
AB-CD	3	776	0.004	3	0.0	5.124	A
AB-C	353			353			
D-ABC	55	397	0.138	55	0.2	11.570	B
C-D	27			27			
C-A	414			414			
C-B	4			4			
CD-AB	9	821	0.011	9	0.0	4.879	A
CD-A	414			414			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	615	0.048	30	0.1	6.762	A
B-A	23	375	0.062	23	0.1	11.243	B
A-B	4			4			
A-C	404			404			
A-D	2			2			
AB-CD	5	815	0.006	5	0.0	4.885	A
AB-C	431			431			
D-ABC	67	363	0.185	67	0.2	13.359	B
C-D	33			33			
C-A	506			506			
C-B	6			6			
CD-AB	13	875	0.015	13	0.0	4.593	A
CD-A	505			505			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	615	0.048	30	0.1	6.763	A
B-A	23	375	0.062	23	0.1	11.246	B
A-B	4			4			
A-C	404			404			
A-D	2			2			
AB-CD	5	815	0.006	5	0.0	4.887	A
AB-C	431			431			
D-ABC	67	363	0.185	67	0.2	13.386	B
C-D	33			33			
C-A	506			506			
C-B	6			6			
CD-AB	13	875	0.015	13	0.0	4.594	A
CD-A	505			505			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	638	0.038	24	0.0	6.452	A
B-A	19	409	0.046	19	0.1	10.156	B
A-B	4			4			
A-C	330			330			
A-D	2			2			
AB-CD	3	776	0.004	3	0.0	5.124	A
AB-C	353			353			
D-ABC	55	397	0.138	55	0.2	11.601	B
C-D	27			27			
C-A	414			414			
C-B	4			4			
CD-AB	9	821	0.011	9	0.0	4.879	A
CD-A	414			414			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	20	655	0.031	20	0.0	6.246	A
B-A	16	433	0.036	16	0.0	9.487	A
A-B	3			3			
A-C	276			276			
A-D	2			2			
AB-CD	3	749	0.003	3	0.0	5.306	A
AB-C	296			296			
D-ABC	46	421	0.109	46	0.1	10.567	B
C-D	23			23			
C-A	346			346			
C-B	4			4			
CD-AB	7	782	0.009	7	0.0	5.108	A
CD-A	348			348			

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
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Filename: 2022 With Development.j9
 Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Lady Ann Road Soothill Lane Jct
 Report generation date: 19/12/2022 17:17:40

- »2022, AM With Dev
- »2022, PM With Dev

Summary of junction performance

	AM With Dev				PM With Dev			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2022								
Stream B-CD	0.0	6.70	0.02	A	0.1	6.78	0.05	A
Stream B-A	0.0	11.81	0.03	B	0.1	11.29	0.06	B
Stream AB-CD	0.0	5.24	0.03	A	0.0	5.37	0.02	A
Stream D-ABC	0.4	15.03	0.28	C	0.3	14.13	0.22	B
Stream CD-AB	0.3	5.52	0.11	A	0.0	5.10	0.02	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	Lady Ann Road
Location	Lady Ann Road/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2022 With Development

Units

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

Analysis Options

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	2022	AM With Dev	ONE HOUR	08:00	09:30	15
D2	2022	PM With Dev	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022, AM With Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	1.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Soothill Business Park		Minor
C	Soothill Lane (West)		Major
D	Lady Ann Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.50			90.0	✓	0.00
C	6.78			43.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare		10.00	7.40	4.35	3.60	3.60	✓	1.00	45	21
D	One lane	3.86								23	13

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	626	-	-	-	-	-	0.227	0.227	0.227	-	-
1	B-A	556	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	742	0.110	0.278	0.278	-	-	-	-	-	-	-
1	CD-B	599	0.224	0.224	0.224	-	-	-	-	-	-	-
1	D-AB	687	-	-	-	-	-	0.249	0.249	0.098	-	-
1	D-C	534	-	0.145	0.328	0.145	0.328	0.230	0.230	0.091	-	-

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	2022	AM With Dev	ONE HOUR	08:00	09:30	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		✓	449	100.000
B		✓	19	100.000
C		✓	515	100.000
D		✓	92	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	13	426	10
	B	8	0	11	0
	C	437	35	0	43
	D	18	0	74	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.02	6.70	0.0	A
B-A	0.03	11.81	0.0	B
A-B				
A-C				
A-D				
AB-CD	0.03	5.24	0.0	A
AB-C				
D-ABC	0.28	15.03	0.4	C
C-D				
C-A				
C-B				
CD-AB	0.11	5.52	0.3	A
CD-A				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	647	0.013	8	0.0	6.196	A
B-A	6	411	0.015	6	0.0	9.775	A
A-B	10			10			
A-C	321			321			
A-D	8			8			
AB-CD	13	769	0.017	13	0.0	5.240	A
AB-C	323			323			
D-ABC	69	427	0.162	68	0.2	11.029	B
C-D	32			32			
C-A	329			329			
C-B	26			26			
CD-AB	48	766	0.062	47	0.1	5.506	A
CD-A	321			321			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	629	0.016	10	0.0	6.399	A
B-A	7	383	0.019	7	0.0	10.539	B
A-B	12			12			
A-C	383			383			
A-D	9			9			
AB-CD	18	800	0.022	18	0.0	5.059	A
AB-C	384			384			
D-ABC	83	401	0.206	82	0.3	12.427	B
C-D	39			39			
C-A	393			393			
C-B	31			31			
CD-AB	64	802	0.080	64	0.2	5.369	A
CD-A	376			376			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	603	0.020	12	0.0	6.701	A
B-A	9	344	0.026	9	0.0	11.811	B
A-B	14			14			
A-C	469			469			
A-D	11			11			
AB-CD	26	846	0.030	26	0.0	4.828	A
AB-C	467			467			
D-ABC	101	365	0.278	101	0.4	14.969	B
C-D	47			47			
C-A	481			481			
C-B	39			39			
CD-AB	94	853	0.110	93	0.3	5.216	A
CD-A	446			446			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	603	0.020	12	0.0	6.703	A
B-A	9	344	0.026	9	0.0	11.813	B
A-B	14			14			
A-C	469			469			
A-D	11			11			
AB-CD	26	846	0.030	26	0.0	4.830	A
AB-C	467			467			
D-ABC	101	365	0.278	101	0.4	15.025	C
C-D	47			47			
C-A	481			481			
C-B	39			39			
CD-AB	94	854	0.110	94	0.3	5.221	A
CD-A	446			446			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	628	0.016	10	0.0	6.404	A
B-A	7	383	0.019	7	0.0	10.544	B
A-B	12			12			
A-C	383			383			
A-D	9			9			
AB-CD	18	800	0.022	18	0.0	5.060	A
AB-C	384			384			
D-ABC	83	401	0.206	83	0.3	12.492	B
C-D	39			39			
C-A	393			393			
C-B	31			31			
CD-AB	65	802	0.081	65	0.2	5.377	A
CD-A	376			376			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	647	0.013	8	0.0	6.202	A
B-A	6	411	0.015	6	0.0	9.778	A
A-B	10			10			
A-C	321			321			
A-D	8			8			
AB-CD	13	769	0.017	13	0.0	5.240	A
AB-C	323			323			
D-ABC	69	427	0.162	70	0.2	11.101	B
C-D	32			32			
C-A	329			329			
C-B	26			26			
CD-AB	48	766	0.063	48	0.1	5.519	A
CD-A	321			321			

2022, PM With Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.83	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	2022	PM With Dev	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		✓	377	100.000
B		✓	48	100.000
C		✓	520	100.000
D		✓	73	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	4	367	6	
	B	21	0	27	0	
	C	460	5	0	55	
	D	8	0	65	0	

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.05	6.78	0.1	A
B-A	0.06	11.29	0.1	B
A-B				
A-C				
A-D				
AB-CD	0.02	5.37	0.0	A
AB-C				
D-ABC	0.22	14.13	0.3	B
C-D				
C-A				
C-B				
CD-AB	0.02	5.10	0.0	A
CD-A				

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)	LOS
B-CD	20	654	0.031	20	0.0	6.245	A
B-A	16	432	0.037	16	0.0	9.499	A
A-B	3			3			
A-C	276			276			
A-D	5			5			
AB-CD	8	745	0.010	7	0.0	5.366	A
AB-C	293			293			
D-ABC	55	420	0.131	54	0.2	10.809	B
C-D	41			41			
C-A	346			346			
C-B	4			4			
CD-AB	7	783	0.009	7	0.0	5.103	A
CD-A	349			349			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	637	0.038	24	0.0	6.459	A
B-A	19	408	0.046	19	0.1	10.181	B
A-B	4			4			
A-C	330			330			
A-D	5			5			
AB-CD	10	772	0.013	10	0.0	5.196	A
AB-C	350			350			
D-ABC	66	395	0.166	65	0.2	12.005	B
C-D	49			49			
C-A	414			414			
C-B	4			4			
CD-AB	9	821	0.011	9	0.0	4.875	A
CD-A	416			416			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	614	0.048	30	0.1	6.776	A
B-A	23	374	0.062	23	0.1	11.289	B
A-B	4			4			
A-C	404			404			
A-D	7			7			
AB-CD	14	810	0.018	14	0.0	4.973	A
AB-C	426			426			
D-ABC	80	361	0.223	80	0.3	14.096	B
C-D	61			61			
C-A	506			506			
C-B	6			6			
CD-AB	13	876	0.015	13	0.0	4.588	A
CD-A	507			507			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	614	0.048	30	0.1	6.778	A
B-A	23	374	0.062	23	0.1	11.292	B
A-B	4			4			
A-C	404			404			
A-D	7			7			
AB-CD	14	810	0.018	14	0.0	4.973	A
AB-C	426			426			
D-ABC	80	361	0.223	80	0.3	14.131	B
C-D	61			61			
C-A	506			506			
C-B	6			6			
CD-AB	13	876	0.015	13	0.0	4.590	A
CD-A	507			507			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	637	0.038	24	0.0	6.462	A
B-A	19	408	0.046	19	0.1	10.185	B
A-B	4			4			
A-C	330			330			
A-D	5			5			
AB-CD	10	772	0.013	10	0.0	5.198	A
AB-C	350			350			
D-ABC	66	395	0.166	66	0.2	12.046	B
C-D	49			49			
C-A	414			414			
C-B	4			4			
CD-AB	9	821	0.011	9	0.0	4.875	A
CD-A	416			416			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	20	654	0.031	20	0.0	6.254	A
B-A	16	432	0.037	16	0.0	9.508	A
A-B	3			3			
A-C	276			276			
A-D	5			5			
AB-CD	8	745	0.010	8	0.0	5.368	A
AB-C	294			294			
D-ABC	55	420	0.131	55	0.2	10.863	B
C-D	41			41			
C-A	346			346			
C-B	4			4			
CD-AB	7	783	0.009	7	0.0	5.102	A
CD-A	349			349			

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: 2032 No Development.j9
Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Lady Ann Road Soothill Lane Jct
Report generation date: 19/12/2022 17:35:20

- »2032, AM No Dev
- »2032, PM No Dev

Summary of junction performance

	AM No Dev				PM No Dev			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2032								
Stream B-CD	0.0	6.87	0.02	A	0.1	6.92	0.05	A
Stream B-A	0.0	12.60	0.03	B	0.1	11.95	0.07	B
Stream AB-CD	0.0	5.11	0.03	A	0.0	5.21	0.01	A
Stream D-ABC	0.3	14.55	0.22	B	0.3	14.74	0.22	B
Stream CD-AB	0.3	5.40	0.12	A	0.0	4.97	0.02	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	Lady Ann Road
Location	Lady Ann Road/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2032 No Development

Units

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

Analysis Options

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	2032	AM No Dev	ONE HOUR	08:00	09:30	15
D2	2032	PM No Dev	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2032, AM No Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Soothill Business Park		Minor
C	Soothill Lane (West)		Major
D	Lady Ann Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.50			90.0	✓	0.00
C	6.78			43.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare		10.00	7.40	4.35	3.60	3.60	✓	1.00	45	21
D	One lane	3.86								23	13

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	626	-	-	-	-	-	0.227	0.227	0.227	-	-
1	B-A	556	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	742	0.110	0.278	0.278	-	-	-	-	-	-	-
1	CD-B	599	0.224	0.224	0.224	-	-	-	-	-	-	-
1	D-AB	687	-	-	-	-	-	0.249	0.249	0.098	-	-
1	D-C	534	-	0.145	0.328	0.145	0.328	0.230	0.230	0.091	-	-

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	2032	AM No Dev	ONE HOUR	08:00	09:30	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		✓	496	100.000
B		✓	19	100.000
C		✓	558	100.000
D		✓	71	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	13	474	9
	B	8	0	11	0
	C	486	35	0	37
	D	16	0	55	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.02	6.87	0.0	A
B-A	0.03	12.60	0.0	B
A-B				
A-C				
A-D				
AB-CD	0.03	5.11	0.0	A
AB-C				
D-ABC	0.22	14.55	0.3	B
C-D				
C-A				
C-B				
CD-AB	0.12	5.40	0.3	A
CD-A				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	637	0.013	8	0.0	6.293	A
B-A	6	397	0.015	6	0.0	10.131	B
A-B	10			10			
A-C	357			357			
A-D	7			7			
AB-CD	13	788	0.016	13	0.0	5.105	A
AB-C	359			359			
D-ABC	53	418	0.128	53	0.2	10.816	B
C-D	28			28			
C-A	366			366			
C-B	26			26			
CD-AB	51	785	0.065	50	0.1	5.390	A
CD-A	353			353			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	617	0.016	10	0.0	6.524	A
B-A	7	366	0.020	7	0.0	11.038	B
A-B	12			12			
A-C	426			426			
A-D	8			8			
AB-CD	17	824	0.021	17	0.0	4.906	A
AB-C	427			427			
D-ABC	64	390	0.164	64	0.2	12.128	B
C-D	33			33			
C-A	437			437			
C-B	31			31			
CD-AB	70	825	0.085	70	0.2	5.242	A
CD-A	413			413			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	588	0.021	12	0.0	6.870	A
B-A	9	323	0.027	9	0.0	12.592	B
A-B	14			14			
A-C	522			522			
A-D	10			10			
AB-CD	25	876	0.029	25	0.0	4.653	A
AB-C	518			518			
D-ABC	78	350	0.223	78	0.3	14.509	B
C-D	41			41			
C-A	535			535			
C-B	39			39			
CD-AB	104	883	0.117	103	0.3	5.083	A
CD-A	488			488			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	588	0.021	12	0.0	6.872	A
B-A	9	323	0.027	9	0.0	12.596	B
A-B	14			14			
A-C	522			522			
A-D	10			10			
AB-CD	25	876	0.029	25	0.0	4.653	A
AB-C	518			518			
D-ABC	78	350	0.223	78	0.3	14.550	B
C-D	41			41			
C-A	535			535			
C-B	39			39			
CD-AB	104	883	0.118	104	0.3	5.088	A
CD-A	487			487			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	617	0.016	10	0.0	6.526	A
B-A	7	366	0.020	7	0.0	11.044	B
A-B	12			12			
A-C	426			426			
A-D	8			8			
AB-CD	17	824	0.021	17	0.0	4.908	A
AB-C	427			427			
D-ABC	64	390	0.164	64	0.2	12.173	B
C-D	33			33			
C-A	437			437			
C-B	31			31			
CD-AB	70	826	0.085	70	0.2	5.252	A
CD-A	413			413			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	637	0.013	8	0.0	6.299	A
B-A	6	397	0.015	6	0.0	10.134	B
A-B	10			10			
A-C	357			357			
A-D	7			7			
AB-CD	13	788	0.016	13	0.0	5.107	A
AB-C	359			359			
D-ABC	53	418	0.128	54	0.2	10.868	B
C-D	28			28			
C-A	366			366			
C-B	26			26			
CD-AB	51	785	0.065	51	0.1	5.402	A
CD-A	353			353			

2032, PM No Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.74	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	2032	PM No Dev	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		✓	415	100.000
B		✓	48	100.000
C		✓	550	100.000
D		✓	68	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	4	409	2	
	B	21	0	27	0	
	C	512	5	0	33	
	D	7	0	61	0	

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.05	6.92	0.1	A
B-A	0.07	11.95	0.1	B
A-B				
A-C				
A-D				
AB-CD	0.01	5.21	0.0	A
AB-C				
D-ABC	0.22	14.74	0.3	B
C-D				
C-A				
C-B				
CD-AB	0.02	4.97	0.0	A
CD-A				

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)	LOS
B-CD	20	646	0.031	20	0.0	6.325	A
B-A	16	419	0.038	16	0.0	9.811	A
A-B	3			3			
A-C	308			308			
A-D	2			2			
AB-CD	3	763	0.003	3	0.0	5.205	A
AB-C	327			327			
D-ABC	51	408	0.125	51	0.2	11.061	B
C-D	25			25			
C-A	385			385			
C-B	4			4			
CD-AB	7	805	0.009	7	0.0	4.965	A
CD-A	387			387			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	628	0.039	24	0.0	6.562	A
B-A	19	392	0.048	19	0.1	10.608	B
A-B	4			4			
A-C	368			368			
A-D	2			2			
AB-CD	4	794	0.004	4	0.0	5.009	A
AB-C	390			390			
D-ABC	61	381	0.160	61	0.2	12.367	B
C-D	30			30			
C-A	460			460			
C-B	4			4			
CD-AB	10	848	0.012	10	0.0	4.723	A
CD-A	461			461			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	602	0.049	30	0.1	6.918	A
B-A	23	355	0.065	23	0.1	11.942	B
A-B	4			4			
A-C	450			450			
A-D	2			2			
AB-CD	5	838	0.006	5	0.0	4.751	A
AB-C	477			477			
D-ABC	75	343	0.218	74	0.3	14.703	B
C-D	36			36			
C-A	564			564			
C-B	6			6			
CD-AB	15	910	0.016	15	0.0	4.422	A
CD-A	562			562			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	602	0.049	30	0.1	6.919	A
B-A	23	355	0.065	23	0.1	11.945	B
A-B	4			4			
A-C	450			450			
A-D	2			2			
AB-CD	5	838	0.006	5	0.0	4.753	A
AB-C	477			477			
D-ABC	75	343	0.218	75	0.3	14.744	B
C-D	36			36			
C-A	564			564			
C-B	6			6			
CD-AB	15	910	0.016	15	0.0	4.423	A
CD-A	562			562			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	627	0.039	24	0.0	6.569	A
B-A	19	392	0.048	19	0.1	10.612	B
A-B	4			4			
A-C	368			368			
A-D	2			2			
AB-CD	4	794	0.004	4	0.0	5.011	A
AB-C	390			390			
D-ABC	61	381	0.160	61	0.2	12.412	B
C-D	30			30			
C-A	460			460			
C-B	4			4			
CD-AB	10	848	0.012	10	0.0	4.725	A
CD-A	461			461			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	20	646	0.031	20	0.0	6.335	A
B-A	16	419	0.038	16	0.0	9.819	A
A-B	3			3			
A-C	308			308			
A-D	2			2			
AB-CD	3	763	0.003	3	0.0	5.204	A
AB-C	327			327			
D-ABC	51	408	0.125	51	0.2	11.114	B
C-D	25			25			
C-A	385			385			
C-B	4			4			
CD-AB	7	805	0.009	7	0.0	4.967	A
CD-A	387			387			

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: 2032 With Development.j9
Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Lady Ann Road Soothill Lane Jct
Report generation date: 19/12/2022 17:33:54

- »2032, AM With Dev
- »2032, PM With Dev

Summary of junction performance

	AM With Dev				PM With Dev			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2032								
Stream B-CD	0.0	6.88	0.02	A	0.1	6.93	0.05	A
Stream B-A	0.0	12.65	0.03	B	0.1	12.00	0.07	B
Stream AB-CD	0.1	5.13	0.04	A	0.0	5.27	0.02	A
Stream D-ABC	0.5	16.88	0.32	C	0.4	15.67	0.26	C
Stream CD-AB	0.3	5.39	0.12	A	0.0	4.96	0.02	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	Lady Ann Road
Location	Lady Ann Road/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2032 With Development

Units

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

Analysis Options

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	2032	AM With Dev	ONE HOUR	08:00	09:30	15
D2	2032	PM With Dev	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2032, AM With Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	1.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Soothill Business Park		Minor
C	Soothill Lane (West)		Major
D	Lady Ann Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.50			90.0	✓	0.00
C	6.78			43.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare		10.00	7.40	4.35	3.60	3.60	✓	1.00	45	21
D	One lane	3.86								23	13

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	626	-	-	-	-	-	0.227	0.227	0.227	-	-
1	B-A	556	0.098	0.247	0.247	-	-	0.155	0.353	-	0.155	0.353
1	B-CD	742	0.110	0.278	0.278	-	-	-	-	-	-	-
1	CD-B	599	0.224	0.224	0.224	-	-	-	-	-	-	-
1	D-AB	687	-	-	-	-	-	0.249	0.249	0.098	-	-
1	D-C	534	-	0.145	0.328	0.145	0.328	0.230	0.230	0.091	-	-

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	2032	AM With Dev	ONE HOUR	08:00	09:30	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		✓	498	100.000
B		✓	19	100.000
C		✓	568	100.000
D		✓	100	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	13	474	11
	B	8	0	11	0
	C	486	35	0	47
	D	20	0	80	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.02	6.88	0.0	A
B-A	0.03	12.65	0.0	B
A-B				
A-C				
A-D				
AB-CD	0.04	5.13	0.1	A
AB-C				
D-ABC	0.32	16.88	0.5	C
C-D				
C-A				
C-B				
CD-AB	0.12	5.39	0.3	A
CD-A				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	637	0.013	8	0.0	6.297	A
B-A	6	396	0.015	6	0.0	10.153	B
A-B	10			10			
A-C	357			357			
A-D	8			8			
AB-CD	15	787	0.020	15	0.0	5.132	A
AB-C	358			358			
D-ABC	75	413	0.182	74	0.2	11.650	B
C-D	35			35			
C-A	366			366			
C-B	26			26			
CD-AB	51	787	0.065	51	0.1	5.378	A
CD-A	356			356			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	616	0.016	10	0.0	6.529	A
B-A	7	365	0.020	7	0.0	11.070	B
A-B	12			12			
A-C	426			426			
A-D	10			10			
AB-CD	21	823	0.026	21	0.0	4.939	A
AB-C	425			425			
D-ABC	90	385	0.234	90	0.3	13.405	B
C-D	42			42			
C-A	437			437			
C-B	31			31			
CD-AB	70	828	0.085	70	0.2	5.229	A
CD-A	416			416			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	588	0.021	12	0.0	6.878	A
B-A	9	322	0.027	9	0.0	12.642	B
A-B	14			14			
A-C	522			522			
A-D	12			12			
AB-CD	31	875	0.036	31	0.1	4.694	A
AB-C	515			515			
D-ABC	110	345	0.319	109	0.5	16.785	C
C-D	52			52			
C-A	535			535			
C-B	39			39			
CD-AB	104	886	0.118	104	0.3	5.069	A
CD-A	491			491			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	12	588	0.021	12	0.0	6.879	A
B-A	9	322	0.027	9	0.0	12.647	B
A-B	14			14			
A-C	522			522			
A-D	12			12			
AB-CD	31	875	0.036	31	0.1	4.695	A
AB-C	515			515			
D-ABC	110	345	0.320	110	0.5	16.880	C
C-D	52			52			
C-A	535			535			
C-B	39			39			
CD-AB	105	886	0.118	105	0.3	5.073	A
CD-A	491			491			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	10	616	0.016	10	0.0	6.532	A
B-A	7	365	0.020	7	0.0	11.074	B
A-B	12			12			
A-C	426			426			
A-D	10			10			
AB-CD	21	823	0.026	21	0.0	4.942	A
AB-C	425			425			
D-ABC	90	385	0.234	91	0.3	13.501	B
C-D	42			42			
C-A	437			437			
C-B	31			31			
CD-AB	70	828	0.085	71	0.2	5.237	A
CD-A	416			416			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	8	637	0.013	8	0.0	6.301	A
B-A	6	396	0.015	6	0.0	10.159	B
A-B	10			10			
A-C	357			357			
A-D	8			8			
AB-CD	16	787	0.020	16	0.0	5.133	A
AB-C	358			358			
D-ABC	75	413	0.182	76	0.2	11.742	B
C-D	35			35			
C-A	366			366			
C-B	26			26			
CD-AB	51	787	0.065	52	0.1	5.390	A
CD-A	356			356			

2032, PM With Dev

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Left-Right Stagger	Two-way	0.87	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	2032	PM With Dev	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		✓	419	100.000
B		✓	48	100.000
C		✓	575	100.000
D		✓	80	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	4	409	6	
	B	21	0	27	0	
	C	512	5	0	58	
	D	9	0	71	0	

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.05	6.93	0.1	A
B-A	0.07	12.00	0.1	B
A-B				
A-C				
A-D				
AB-CD	0.02	5.27	0.0	A
AB-C				
D-ABC	0.26	15.67	0.4	C
C-D				
C-A				
C-B				
CD-AB	0.02	4.96	0.0	A
CD-A				

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)	LOS
B-CD	20	645	0.032	20	0.0	6.334	A
B-A	16	418	0.038	16	0.0	9.835	A
A-B	3			3			
A-C	308			308			
A-D	5			5			
AB-CD	8	760	0.010	8	0.0	5.266	A
AB-C	325			325			
D-ABC	60	407	0.148	59	0.2	11.383	B
C-D	44			44			
C-A	385			385			
C-B	4			4			
CD-AB	7	805	0.009	7	0.0	4.962	A
CD-A	389			389			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	627	0.039	24	0.0	6.573	A
B-A	19	391	0.048	19	0.1	10.642	B
A-B	4			4			
A-C	368			368			
A-D	5			5			
AB-CD	11	790	0.014	11	0.0	5.081	A
AB-C	387			387			
D-ABC	72	379	0.190	72	0.3	12.872	B
C-D	52			52			
C-A	460			460			
C-B	4			4			
CD-AB	10	849	0.012	10	0.0	4.720	A
CD-A	463			463			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	601	0.049	30	0.1	6.933	A
B-A	23	353	0.065	23	0.1	11.994	B
A-B	4			4			
A-C	450			450			
A-D	7			7			
AB-CD	16	834	0.019	16	0.0	4.839	A
AB-C	471			471			
D-ABC	88	341	0.258	88	0.4	15.602	C
C-D	64			64			
C-A	564			564			
C-B	6			6			
CD-AB	15	911	0.016	15	0.0	4.417	A
CD-A	564			564			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	30	601	0.049	30	0.1	6.934	A
B-A	23	353	0.065	23	0.1	11.998	B
A-B	4			4			
A-C	450			450			
A-D	7			7			
AB-CD	16	834	0.019	16	0.0	4.838	A
AB-C	471			471			
D-ABC	88	341	0.258	88	0.4	15.666	C
C-D	64			64			
C-A	564			564			
C-B	6			6			
CD-AB	15	911	0.016	15	0.0	4.417	A
CD-A	564			564			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	24	626	0.039	24	0.0	6.577	A
B-A	19	391	0.048	19	0.1	10.646	B
A-B	4			4			
A-C	368			368			
A-D	5			5			
AB-CD	11	790	0.014	11	0.0	5.081	A
AB-C	387			387			
D-ABC	72	379	0.190	72	0.3	12.932	B
C-D	52			52			
C-A	460			460			
C-B	4			4			
CD-AB	10	849	0.012	10	0.0	4.721	A
CD-A	463			463			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-CD	20	645	0.032	20	0.0	6.343	A
B-A	16	418	0.038	16	0.0	9.841	A
A-B	3			3			
A-C	308			308			
A-D	5			5			
AB-CD	8	760	0.011	8	0.0	5.265	A
AB-C	325			325			
D-ABC	60	407	0.148	60	0.2	11.452	B
C-D	44			44			
C-A	385			385			
C-B	4			4			
CD-AB	7	805	0.009	7	0.0	4.962	A
CD-A	389			389			

Appendix I

PICADY Output

Grace Leather Lane/ Soothill Lane

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
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Filename: 2022 No Development.j9
Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Grace Leather Lane Soothill Lane Jct
Report generation date: 19/12/2022 15:54:04

- »2022 No Dev, AM
- »2022 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2022 No Dev								
Stream B-AC	0.1	8.26	0.07	A	0.0	8.26	0.03	A
Stream C-AB	0.1	5.26	0.05	A	0.1	5.47	0.06	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	Grace Leather Lane/ Soothill Lane Junct
Location	Grace Leather Lane/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2022 No Development

Units

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

Analysis Options

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	2022 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2022 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Grace Leather Lane		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.86			130.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.08	25	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	549	0.092	0.232	0.146	0.332
1	B-C	705	0.099	0.251	-	-
1	C-B	649	0.231	0.231	-	-

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	2022 No Dev	AM	ONE HOUR	08:00	09:30	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		✓	451	100.000
B		✓	33	100.000
C		✓	419	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	443
	B	7	0	26
	C	400	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-AC	0.07	8.26	0.1	A
C-AB	0.05	5.26	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	25	564	0.044	25	0.1	7.335	A
C-AB	23	776	0.030	23	0.0	5.258	A
C-A	292			292			
A-B	6			6			
A-C	334			334			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	30	544	0.055	30	0.1	7.693	A
C-AB	31	804	0.039	31	0.1	5.121	A
C-A	346			346			
A-B	7			7			
A-C	398			398			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	36	516	0.070	36	0.1	8.254	A
C-AB	44	844	0.052	44	0.1	4.947	A
C-A	417			417			
A-B	9			9			
A-C	488			488			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	36	516	0.070	36	0.1	8.256	A
C-AB	44	844	0.052	44	0.1	4.949	A
C-A	417			417			
A-B	9			9			
A-C	488			488			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	30	544	0.055	30	0.1	7.697	A
C-AB	31	804	0.039	31	0.1	5.123	A
C-A	346			346			
A-B	7			7			
A-C	398			398			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	25	564	0.044	25	0.1	7.343	A
C-AB	23	776	0.030	24	0.0	5.261	A
C-A	292			292			
A-B	6			6			
A-C	334			334			

2022 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	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)
D2	2022 No Dev	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		✓	457	100.000
B		✓	13	100.000
C		✓	368	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	449
	B	4	0	9
	C	347	21	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-AC	0.03	8.26	0.0	A
C-AB	0.06	5.47	0.1	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)	LOS
B-AC	10	544	0.018	10	0.0	7.414	A
C-AB	24	748	0.032	24	0.0	5.467	A
C-A	253			253			
A-B	6			6			
A-C	338			338			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	12	523	0.022	12	0.0	7.746	A
C-AB	32	770	0.041	32	0.1	5.362	A
C-A	299			299			
A-B	7			7			
A-C	404			404			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	14	494	0.029	14	0.0	8.261	A
C-AB	44	802	0.055	44	0.1	5.226	A
C-A	361			361			
A-B	9			9			
A-C	494			494			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	14	494	0.029	14	0.0	8.261	A
C-AB	44	802	0.055	44	0.1	5.228	A
C-A	361			361			
A-B	9			9			
A-C	494			494			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	12	523	0.022	12	0.0	7.747	A
C-AB	32	770	0.041	32	0.1	5.365	A
C-A	299			299			
A-B	7			7			
A-C	404			404			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	10	544	0.018	10	0.0	7.415	A
C-AB	24	748	0.033	24	0.0	5.473	A
C-A	253			253			
A-B	6			6			
A-C	338			338			

Junctions 9
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Filename: 2022 With Development.j9
Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Grace Leather Lane Soothill Lane Jct
Report generation date: 19/12/2022 16:04:25

- »2022 With Dev, AM
- »2022 With Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2022 With Dev								
Stream B-AC	0.1	8.38	0.08	A	0.0	8.22	0.03	A
Stream C-AB	0.1	5.27	0.05	A	0.1	5.49	0.06	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	Grace Leather Lane/ Soothill Lane Junct
Location	Grace Leather Lane/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2022 With Development

Units

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

Analysis Options

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	2022 With Dev	AM	ONE HOUR	08:00	09:30	15
D2	2022 With Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Grace Leather Lane		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.86			130.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.08	25	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	549	0.092	0.232	0.146	0.332
1	B-C	705	0.099	0.251	-	-
1	C-B	649	0.231	0.231	-	-

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	2022 With Dev	AM	ONE HOUR	08:00	09:30	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		✓	455	100.000
B		✓	37	100.000
C		✓	422	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	447
	B	8	0	29
	C	402	20	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-AC	0.08	8.38	0.1	A
C-AB	0.05	5.27	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28	562	0.050	28	0.1	7.400	A
C-AB	25	777	0.032	24	0.0	5.264	A
C-A	293			293			
A-B	6			6			
A-C	337			337			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33	542	0.061	33	0.1	7.781	A
C-AB	33	805	0.041	33	0.1	5.128	A
C-A	347			347			
A-B	7			7			
A-C	402			402			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	513	0.079	41	0.1	8.373	A
C-AB	46	845	0.055	46	0.1	4.958	A
C-A	418			418			
A-B	9			9			
A-C	492			492			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	513	0.079	41	0.1	8.377	A
C-AB	46	845	0.055	46	0.1	4.960	A
C-A	418			418			
A-B	9			9			
A-C	492			492			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33	542	0.061	33	0.1	7.785	A
C-AB	33	805	0.041	33	0.1	5.131	A
C-A	347			347			
A-B	7			7			
A-C	402			402			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28	562	0.050	28	0.1	7.411	A
C-AB	25	777	0.032	25	0.0	5.265	A
C-A	293			293			
A-B	6			6			
A-C	337			337			

2022 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.41	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	2022 With Dev	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		✓	460	100.000
B		✓	14	100.000
C		✓	375	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	451
	B	4	0	10
	C	351	24	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-AC	0.03	8.22	0.0	A
C-AB	0.06	5.49	0.1	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)	LOS
B-AC	11	548	0.019	10	0.0	7.373	A
C-AB	28	750	0.037	28	0.1	5.482	A
C-A	254			254			
A-B	7			7			
A-C	340			340			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	13	527	0.024	13	0.0	7.702	A
C-AB	37	772	0.047	37	0.1	5.383	A
C-A	301			301			
A-B	8			8			
A-C	405			405			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	15	497	0.031	15	0.0	8.216	A
C-AB	51	804	0.063	51	0.1	5.255	A
C-A	362			362			
A-B	10			10			
A-C	497			497			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	15	497	0.031	15	0.0	8.216	A
C-AB	51	804	0.064	51	0.1	5.259	A
C-A	362			362			
A-B	10			10			
A-C	497			497			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	13	527	0.024	13	0.0	7.704	A
C-AB	37	772	0.047	37	0.1	5.386	A
C-A	300			300			
A-B	8			8			
A-C	405			405			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11	548	0.019	11	0.0	7.374	A
C-AB	28	750	0.037	28	0.1	5.488	A
C-A	254			254			
A-B	7			7			
A-C	340			340			

Junctions 9
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Filename: 2032 No Development.j9
 Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Grace Leather Lane Soothill Lane Jct
 Report generation date: 19/12/2022 16:11:11

- »2032 No Dev, AM
- »2032 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2032 No Dev								
Stream B-AC	0.1	8.68	0.08	A	0.0	8.75	0.04	A
Stream C-AB	0.1	5.18	0.06	A	0.1	5.41	0.06	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	Grace Leather Lane/ Soothill Lane Junct
Location	Grace Leather Lane/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2032 No Development

Units

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

Analysis Options

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	2032 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2032 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2032 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Grace Leather Lane		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.86			130.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.08	25	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	549	0.092	0.232	0.146	0.332
1	B-C	705	0.099	0.251	-	-
1	C-B	649	0.231	0.231	-	-

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	2032 No Dev	AM	ONE HOUR	08:00	09:30	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		✓	502	100.000
B		✓	37	100.000
C		✓	466	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To		
	A	B	C
A	0	9	493
B	8	0	29
C	445	21	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A	B	C
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-AC	0.08	8.68	0.1	A
C-AB	0.06	5.18	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28	552	0.050	28	0.1	7.552	A
C-AB	27	792	0.035	27	0.1	5.174	A
C-A	323			323			
A-B	7			7			
A-C	371			371			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33	529	0.063	33	0.1	7.985	A
C-AB	37	824	0.045	37	0.1	5.030	A
C-A	382			382			
A-B	8			8			
A-C	443			443			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	497	0.082	41	0.1	8.673	A
C-AB	53	870	0.061	53	0.1	4.850	A
C-A	460			460			
A-B	10			10			
A-C	543			543			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	497	0.082	41	0.1	8.677	A
C-AB	53	870	0.061	53	0.1	4.851	A
C-A	460			460			
A-B	10			10			
A-C	543			543			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	33	529	0.063	33	0.1	7.990	A
C-AB	37	824	0.045	37	0.1	5.035	A
C-A	382			382			
A-B	8			8			
A-C	443			443			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	28	552	0.050	28	0.1	7.563	A
C-AB	28	792	0.035	28	0.1	5.180	A
C-A	323			323			
A-B	7			7			
A-C	371			371			

2032 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.39	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	2032 No Dev	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		✓	509	100.000
B		✓	15	100.000
C		✓	409	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	500
	B	5	0	10
	C	386	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-AC	0.04	8.75	0.0	A
C-AB	0.06	5.41	0.1	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)	LOS
B-AC	11	526	0.021	11	0.0	7.691	A
C-AB	28	761	0.037	28	0.1	5.401	A
C-A	280			280			
A-B	7			7			
A-C	376			376			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	13	502	0.027	13	0.0	8.099	A
C-AB	37	786	0.047	37	0.1	5.289	A
C-A	331			331			
A-B	8			8			
A-C	449			449			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	17	469	0.035	16	0.0	8.750	A
C-AB	53	822	0.064	52	0.1	5.146	A
C-A	398			398			
A-B	10			10			
A-C	551			551			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	17	469	0.035	17	0.0	8.750	A
C-AB	53	822	0.064	53	0.1	5.148	A
C-A	398			398			
A-B	10			10			
A-C	551			551			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	13	502	0.027	14	0.0	8.103	A
C-AB	37	786	0.047	37	0.1	5.292	A
C-A	330			330			
A-B	8			8			
A-C	449			449			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	11	526	0.021	11	0.0	7.695	A
C-AB	28	761	0.037	28	0.1	5.406	A
C-A	280			280			
A-B	7			7			
A-C	376			376			

Junctions 9
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Filename: 2032 With Development.j9
Path: P:\Projects\Lady Ann Road, Batley - 1247\PICADY\Dec 2022\Grace Leather Lane Soothill Lane Jct
Report generation date: 19/12/2022 16:19:22

- »2032 With Dev, AM
- »2032 With Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2032 With Dev								
Stream B-AC	0.1	8.81	0.09	A	0.0	8.71	0.04	A
Stream C-AB	0.1	5.18	0.06	A	0.1	5.42	0.07	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	Grace Leather Lane/ Soothill Lane Junct
Location	Grace Leather Lane/ Soothill Lane Junct
Site number	1247D
Date	19/12/2022
Version	
Status	
Identifier	
Client	Noble Homes
Jobnumber	1247
Enumerator	LO
Description	2032 With Development

Units

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

Analysis Options

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	2032 With Dev	AM	ONE HOUR	08:00	09:30	15
D2	2032 With Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2032 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Soothill Lane (east)		Major
B	Grace Leather Lane		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.86			130.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.08	25	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	549	0.092	0.232	0.146	0.332
1	B-C	705	0.099	0.251	-	-
1	C-B	649	0.231	0.231	-	-

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	2032 With Dev	AM	ONE HOUR	08:00	09:30	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		✓	506	100.000
B		✓	41	100.000
C		✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	497
	B	9	0	32
	C	447	22	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-AC	0.09	8.81	0.1	A
C-AB	0.06	5.18	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	31	550	0.056	31	0.1	7.621	A
C-AB	29	793	0.036	29	0.1	5.180	A
C-A	324			324			
A-B	7			7			
A-C	374			374			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	527	0.070	37	0.1	8.076	A
C-AB	39	825	0.047	39	0.1	5.040	A
C-A	383			383			
A-B	8			8			
A-C	447			447			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	45	495	0.091	45	0.1	8.804	A
C-AB	56	870	0.064	56	0.1	4.863	A
C-A	460			460			
A-B	10			10			
A-C	547			547			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	45	495	0.091	45	0.1	8.808	A
C-AB	56	870	0.064	56	0.1	4.865	A
C-A	460			460			
A-B	10			10			
A-C	547			547			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	527	0.070	37	0.1	8.082	A
C-AB	39	825	0.047	39	0.1	5.043	A
C-A	383			383			
A-B	8			8			
A-C	447			447			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	31	550	0.056	31	0.1	7.630	A
C-AB	29	793	0.036	29	0.1	5.184	A
C-A	324			324			
A-B	7			7			
A-C	374			374			

2032 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.43	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	2032 With Dev	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		✓	512	100.000
B		✓	16	100.000
C		✓	416	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	10	502
	B	5	0	11
	C	390	26	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-AC	0.04	8.71	0.0	A
C-AB	0.07	5.42	0.1	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)	LOS
B-AC	12	530	0.023	12	0.0	7.651	A
C-AB	32	762	0.042	32	0.1	5.418	A
C-A	281			281			
A-B	8			8			
A-C	378			378			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	14	506	0.028	14	0.0	8.057	A
C-AB	42	788	0.054	42	0.1	5.311	A
C-A	332			332			
A-B	9			9			
A-C	451			451			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	18	472	0.037	18	0.0	8.706	A
C-AB	60	825	0.073	60	0.1	5.180	A
C-A	398			398			
A-B	11			11			
A-C	553			553			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	18	472	0.037	18	0.0	8.706	A
C-AB	60	825	0.073	60	0.1	5.181	A
C-A	398			398			
A-B	11			11			
A-C	553			553			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	14	506	0.028	14	0.0	8.059	A
C-AB	42	788	0.054	43	0.1	5.315	A
C-A	332			332			
A-B	9			9			
A-C	451			451			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	12	529	0.023	12	0.0	7.652	A
C-AB	32	762	0.042	32	0.1	5.425	A
C-A	281			281			
A-B	8			8			
A-C	378			378			