

Paddock Road, Kirkburton

Transport Assessment

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Persimmon West Yorkshire

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1 INTRODUCTION

1.1 OVERVIEW

- 1.1.1 Andrew Moseley Associates (AMA) has been commissioned by Persimmon West Yorkshire to prepare a Transport Assessment (TA) and Residential Travel Plan (RTP) for consideration as part of an outline planning application, with all matters reserved except access, for a residential development of up to 160 dwellings on land to the south of Moor Lane, Kirkburton. The indicative masterplan is attached at [Appendix A](#).
- 1.1.2 The Local Planning Authority (LPA) and the Local Highway Authority (LHA) is Kirklees Council (KC).
- 1.1.3 This TA has been subject to pre-application scoping and KC have provided a pre-application response dated 22nd December 2025 which has informed this document. A copy of the pre-application corresponded is appended to this report.
- 1.1.4 This TA has also been prepared with reference to the Department for Communities and Local Government National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG).
- 1.1.5 This TA will demonstrate that the site is well served by existing transport provision and is accessible to a range of key services and facilities. The report will also demonstrate that the traffic generated by the proposals will not result in a detrimental impact on the surrounding road network.
- 1.1.6 A TP has also been prepared which sets out measures to encourage sustainable travel patterns and reduce the reliance on private car use.

1.2 REPORT STRUCTURE

- 1.2.1 The structure of the report is set out as follows:
 - ▶ [Section 2](#) – outlines the policy background at a national and local level.
 - ▶ [Section 3](#) – provides a description of the site location, highway network surrounding the site, and examines the accessibility of the site by sustainable modes of travel. This section also considers the accessibility of a range of key services and facilities as well as a review of personal injury collisions
 - ▶ [Section 4](#) – describes the development proposals with regard to the proposed quantum of development, the proposed means of access to the site, servicing, and parking provision.
 - ▶ [Section 5](#) – summarises the assessment parameters and trips rates that have been adopted within this TA.
 - ▶ [Section 6](#) – examines the impact of development traffic on the local highway network and presents the results of the future year junction assessments to determine the potential impact of the proposals.
 - ▶ [Section 7](#) – provides a summary of the TA.

2 POLICY BACKGROUND

2.1 NATIONAL POLICY

- 2.1.1 The National Planning Policy Framework (NPPF) came into effect in 2012. The document was designed to supersede and simplify previous national planning documents and their policies.
- 2.1.2 The NPPF was revised in response to the proposed reforms to the NPPF and other changes to the Planning system consultation in August 2026 and sets out the government's planning policies for England and how these are expected to be applied.
- 2.1.3 The National Planning Policy Framework was published on 17th August 2026 by the Ministry of Housing, Communities and Local Government, and sets out how the planning system contributes to achieving sustainable development through the following objectives:
- a) *An economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*
 - b) *A social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible community facilities, public service infrastructure and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*
 - c) *An environmental objective – to support efforts to mitigate and adapt to climate change, including moving to a low carbon economy; and to protect and enhance our natural, built and historic environment, including making effective use of land, improving biodiversity, using natural resources prudently, and minimising waste and pollution.*
- 2.1.4 The NPPF seeks to ensure that transport considerations are fully considered in the preparation and assessment of development proposals. Specifically in relation to promoting sustainable transport, under TR1, the NPPF states seeks a Vision-led approach to transport planning:
- 1. Sustainable transport should be considered from the earliest stages of plan-making, so that it is reflected in the vision for the plan area and its specific proposals, and forms an integral part of a plan's strategy for creating well-designed, sustainable, inclusive and popular places. This should be done by:*
 - a. Making sustainable transport considerations part of early engagement with local communities, highway and transport authorities, transport infrastructure providers, operators, land promoters and neighbouring councils. This is so that proposals reflect local views, evidence relating to accessibility, capacity and transport service provision, and take opportunities for prioritising and maximising sustainable movement across the area. Plans should align land use policies and allocations with wider strategies (such as Local Transport Plans, Local Cycling and Walking Infrastructure Plans and Rights of Way Improvement Plans) and investments in transport to ensure that the potential impacts of development on transport networks are understood and addressed;*
 - b. Locating proposed development where it can support sustainable patterns of movement and make effective use of existing or proposed transport infrastructure, reflecting the principles in policy TR3;*
 - c. Supporting an appropriate mix of uses across the plan area, and within strategic sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;*

d. Identifying and protecting sites and routes which will widen transport choice and are essential to facilitate sustainable development, including networks for walking, wheeling and cycling, and public transport infrastructure; and

e. Providing for any transport facilities that need to be located in the area, or for their necessary expansion or adaptation, and the infrastructure and wider development required to support them.

2.1.5 Under TR3, the NPPF seeks location of development in sustainable locations:

1. So that development is located where it can support sustainable patterns of movement, enable good accessibility for different users and make the most of existing and proposed transport infrastructure, development proposals should reflect the following principles, taking into account the vision for the site, the type of development and its location:

a. Development proposals which could generate a significant amount of movement, in the context of the area within which they would be situated, should be in locations that are sustainable (or which can be made so, taking into account planned improvements, including any provided for as part of the development itself). This means the location should limit the need to travel, particularly by private car, and offer a genuine choice of transport modes for residents and users, unless the nature of the development would make this impractical;

b. Opportunities should be taken to utilise existing or proposed transport infrastructure in optimising the amount or density of development which can be accommodated in 70 different locations, especially where this can support more walking, wheeling, cycling and public transport use;

c. Any significant adverse impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, should be mitigated to an acceptable degree using a vision-led approach;

d. The environmental impacts of traffic and transport infrastructure should be identified, assessed and taken into account – including taking opportunities to avoid or mitigate any adverse environmental effects, and to secure net environmental gains such as reductions in air pollution; and

e. In rural areas, opportunities to improve walking, wheeling, cycling and public transport and enhance the connectivity of an area should be taken where they exist and can be supported by the development proposed.

2.1.6 Under TR6, the NPPF sets out guidance in relation to assessing transport impacts of development proposals:

1. Development proposals that are likely to generate significant amounts of movement should be supported by:

a. A transport statement or transport assessment (depending on the extent and significance of the transport issues involved), which is proportionate to the nature and scale of the development, so that the likely impacts of the proposal for transport can be assessed and monitored; and

b. A travel plan, which indicates how sustainable transport objectives will be delivered, monitored and managed over time.

2. Transport assessments and statements, and travel plans, should reflect the transport vision for the development and the transport strategy for the area in which it is located, and how these are intended to be achieved (including, in the case of travel plans, identifying fallback options if initial measures do not deliver the expected outcomes).

3. In assessing movement patterns and potential impacts, including whether they are considered to be severe, reasonable future scenarios should be considered, taking into account impacts at relevant times of the day, potential cumulative impacts, multimodal trip generation and the promotion of sustainable modes of travel, and realising the transport vision for the development itself. Development proposals should be considered having regard to these potential impacts and the other policies in this Framework which are relevant (including TR3, TR4 and DP3(2)(d)).

4. Development proposals should be refused if they would have a severe adverse impact on the transport network (in terms of capacity and congestion, including cumulative impacts), or an unacceptable impact on highway safety; taking into account any mitigation measures proposed as well as any wider network improvements, including measures to support sustainable patterns of movement. This applies both during the construction phase and following completion.

- 2.1.7 Consequently, this TA is consistent with the NPPF. Specifically, Section 3 of this report highlights the existing sustainable travel modes within the vicinity of the site and demonstrates that the development is sustainably located in line with Policy TR3, and Section 6 of this report assesses the impact of the development on the surrounding road network.

2.2 LOCAL POLICY

West Yorkshire Transport Strategy 2040

- 2.2.1 The West Yorkshire Transport Strategy 2040 was adopted in August 2017 and was produced by the West Yorkshire Combined Authority and the West Yorkshire district councils of Bradford, Calderdale, Kirklees, Leeds and Wakefield.
- 2.2.2 The Transport Strategy 2040 sets out the partners ambitions for the region and although focused on the West Yorkshire it is recognising the importance and impact of links with the wider Leeds City Region and states the following vision;

“To enhance business success and people’s live by providing modern, world-class, well connected transport that makes travel around West Yorkshire easy and reliable.”

- 2.2.3 To achieve this vision the document states that the following objectives must be achieved;
- ▶ Economy: Create a more reliable, less congested, better connected transport network;
 - ▶ Environment: Have a positive impact on our built and natural environment; and
 - ▶ People and place: Put people first to create a strong sense of place.
- 2.2.4 With regard to the borough of Kirklees, the specific aim of the Transport Strategy is;
- ▶ “To achieve a balanced and integrated transport network that makes the most efficient and effective use of the road, rail and public transport.”

West Yorkshire Local Transport Plan (LTP)

- 2.2.5 The LTP3 replaced the LTP2 at the end of April 2011. LTP3 is a 15 year plan with three year Implementation Plans produced through this period.
- 2.2.6 Entitled “MyJourney”, the LTP for West Yorkshire sets out a strategy for improving local bus, road, rail, walking and cycling networks for the next 15 years up to 2026. MyJourney’s vision is for a people-focused, low-carbon transport system that supports economic activity and growth and enhances people’s quality of life, and has been designed to put the needs of all transport users at its heart.
- 2.2.7 The Plan sets out to tackle congestion and a lack of transport investment which are key contributory factors to lower than average economic performance in West Yorkshire. It also aims to prepare for the predicted, post-recession growth in employment, population and housing and their impact on the reliability of the transport network.

2.2.8 Four themes run through the Plan to help ensure it achieves its aims:

- ▶ Transport Assets focusing on the existing components of the transport network such as roads, bus stations / stops and traffic lights to ensure we are getting the most value out of them;
- ▶ Travel Choices enabling customers to make the most sustainable choices about when and how they travel;
- ▶ Connectivity ensuring people can make integrated and safe journeys using transport networks on which they can rely; and
- ▶ Enhancements improving the overall network to make it more fit for journeys in the future.

2.2.9 Priorities include schemes suggested by local communities, as well as the provision of bus priority schemes on main roads into town and city centres, major maintenance of roads across West Yorkshire, cycling and walking schemes, and the development larger schemes such as new rail stations and the New Generation Transport (NGT) trolleybus network.

2.2.10 The proposed development will contribute to the LTP objectives given the proximity to existing public transport services. Travel planning will be implemented at the development, ensuring that people can make an informed choice for all their journeys and can travel in a responsible manner. As such, the development proposals will encourage behavioural change to maximise use of more sustainable modes of transport to access the development.

Kirklees Local Plan

2.2.11 The Kirklees Local Plan was adopted in 2019 and is the statutory development plan setting out the policies necessary to achieve the development goals and strategy of the area. The plan covers:

- ▶ A vision and strategic objectives for the development of Kirklees up to 2031;
- ▶ A spatial strategy setting out how development will be accommodated across the district reflecting the distinctiveness of different parts of the district;
- ▶ Objectively assessed development needs particularly for housing and employment specifying the number of new homes and jobs to be provided during the plan period;
- ▶ Clear policies to guide decisions on planning applications;
- ▶ Site allocations showing land to be developed for housing, employment, retail, minerals and waste and other uses, identified on a Policies Map;
- ▶ Designations showing land to be protected from development and land subject to other policies in the plan;
- ▶ Infrastructure provision to support the delivery of the proposed development;
- ▶ An indication of how the policies will be delivered and implemented; and
- ▶ A monitoring framework setting out the performance measures that will show how successfully the plan's objectives and proposals are being delivered over time.

Kirklees Transport Vision

2.2.12 The 2025 Kirklees Transport Vision sets out the importance of sustainable travel and its role in alleviating congestion, poor air quality and environmental damage. The Vision aims to allow sustainable transport systems to flourish to benefit the wellbeing of citizens and build a thriving local economy. The vision provides:

- ▶ A top-class public transport system for everyone providing a first choice for travel for many more new customers and a real alternative to using the car;
- ▶ A sustainable transport system that encourages healthy citizens, promotes social inclusion and preserves and enhances the local environment; and
- ▶ A transport network that promotes a sustainable thriving economy for businesses to invest in.

3 EXISTING CONDITIONS AND SUSTAINABLE TRANSPORT

3.1 SITE LOCATION

- 3.1.1 The site currently consists of agricultural land, and is bound to the north by Moor Lane Road, to the east by a number of dwellings and Paddock Road, to the south by Burton Acres Lane and a number of dwellings and to the west by dwellings and playground.
- 3.1.2 The site is located in the northern extent of Kirkburton village. The location of the site is illustrated in Figure 3-1.

Figure 3-1 Site Location Plan



3.2 LOCAL HIGHWAY NETWORK

- 3.2.1 The site would be accessed from Moor Lane, along the northern site boundary, via a new priority-controlled T-junction featuring a right-turn ghost island.
- 3.2.2 Moor Lane is an adopted single carriageway road providing access to residential dwellings to the west. Moor lane runs in general east/west alignment and changes to Town Gate and then Far Dene to the west before connecting to the A629 Penistone Road via a signalised T junction approximately 1.3km west of the site. To the east, Moor Lane forms a crossroad junction with Linfit Lane to the north, Paddock Road to the south and Burton Royd Lane to the east. Moor Lane is subject to 30mph speed limit, with a street lit footway on the northern side of the carriageway for approximately 550m west beyond which the route continues with footways on both sides of the carriageway.
- 3.2.3 A629 Penistone Road runs in general north/south alignment and is an adopted single carriageway road subjected to 40mph speed limit with the street lit footway on eastern side of the carriageway. A short section of footway, approximately 50m in length is present on the western side of the carriageway.
- 3.2.4 The A629 Penistone Road forms a key route through the western extent of Kirkburton which provides access to Shepley and Shepley train station to the south.
- 3.2.5 A629 continues to the north as Penistone Road and connects to Wakefield Road as a priority-controlled T-junction and is considered a key route to Huddersfield town to the northwest.

- 3.2.6 Paddock Lane is an adopted single carriageway road providing access to residential dwellings to the south. Paddock Lane is subject to 30mph speed limit, and it has street lighting and footways on both sides of the carriageway for approximately 30m south from the junction of Moor Lane, Linfit Lane and Burton Royd Lane, after which the footway continues on the eastern side only for approximately 250m before returning to footways on both sides of the carriageway.
- 3.2.7 Paddock lane runs in general north/south alignment connects to Turnshaw Road/Laneside approximately 300m south of the site via a priority-controlled T-junction, and to Moor Lane, Linfit Lane, and Burton Royd Lane to the north via a crossroads junction.
- 3.2.8 Turnshaw Road is an adopted single carriageway road subject to a 30mph speed limit. Street lit footways are provided on both sides of the carriageway to the west for approximately 65m, after which the footway continues on the northern side only up to its junction with the B6116 North Road /George Street via a priority-controlled T-junction, providing access to the centre of Kirkburton village.

3.3 WALKING ACCESSIBILITY

- 3.3.1 The Government's objectives set out in the NPPF are to ensure that new developments are provided in sustainable locations, where the need to travel is minimised and the use of sustainable modes can be maximised. Whilst superseded by the NPPF, the transport policies in the former PPG13 set out specific guidance related to walking:

“Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres” (Para 74)

- 3.3.2 **Figure 3-2** shows a 2km walking catchment area from the centre of the site.

Figure 3-2 2km Walking Catchment Plan



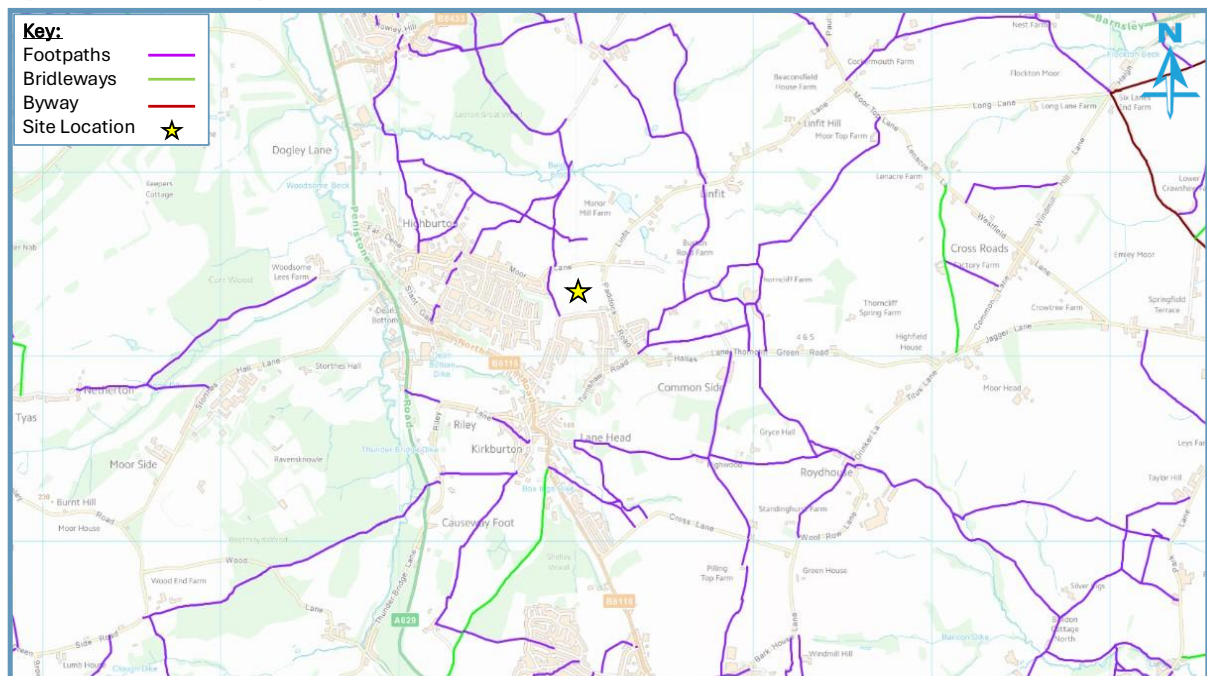
- 3.3.3 As shown, the site is located within a 2km suitable walking distance of Kirkburton and Highburton to the west. Within a 2km walking catchment from the centre of the site, a range of facilities and amenities can be accessed on foot using proposed new pedestrian access points, including:

- ▶ The Junction Inn Pub (500m)
- ▶ Gregory Playing Fields Skatepark and Playground (500m)
- ▶ Kirkburton Pre-School (500m)
- ▶ Kirkburton Middle School (600m)
- ▶ Gregory Fields Tennis Club (600m)
- ▶ Highburton Playground (650m)
- ▶ Highburton Church (Primary School) (700m)
- ▶ Joys Coffee House (700m)
- ▶ Co-op Food Kirkburton (700m)
- ▶ The Secret Garden Bar (700m)
- ▶ The Bakery (700m)
- ▶ Morrisons Daily Highburton (750m)
- ▶ Kirkburton Library (800km)
- ▶ The Kirkburton Hub Community Centre (1.15km)
- ▶ Kirkburton Health Centre (1.35km)
- ▶ Rowlands Pharmacy Kirkburton (1.35km)
- ▶ Daisy Chain Nursery School (1.6km)
- ▶ The Foxglove Pub (1.8km)

3.3.4 The pedestrian routes surrounding the site are considered to be of good quality with street lit footways available on both sides of the carriageway for the majority of routes. It is considered that the residential roads surrounding the site are conducive to walking and that residents at the site would not be dependent on the private car and are likely to walk to the large number of amenities available within walking distance.

3.3.5 There are also a number of Public Rights of Way (PRoW) within the vicinity of the site that provide traffic-free walking facilities, details of which are provided in [Figure 3-3](#).

Figure 3-3 *Public Rights of Way Map*



3.3.6 The map shows that there is a network of PRoW routes to provide pedestrian walking facilities within the vicinity of the site to the west, north and southeast of the site.

- 3.3.7 A public footpath is available to the south of the site approximately 350m from Paddock Road which provides access to the south-east of the site. This route provides access to Thorncliffe and Thorncliffe Green Road approximately 1km from the site. In addition, a public footpath is available to the north of the site, identified by the route code (KIR/91/10), which provides access to the north-west of the site. This route provides access to Lepton Lane 600m from the site and Green Balk Lane approximately 1km from the site, both located to the north of site. A further public footpath identified by the route code (KIR/70/10) is located adjacent to the west of the site which connects to Moor Lane to the north and Burton Acres Lane to the south.
- 3.3.8 It has been demonstrated that the site is accessible by sustainable transport modes. There are a range of local amenities within the recommended walking distance of 800m from the site, meaning residents will not be reliant on the private car for everyday journeys in particular for access to schools and shops.

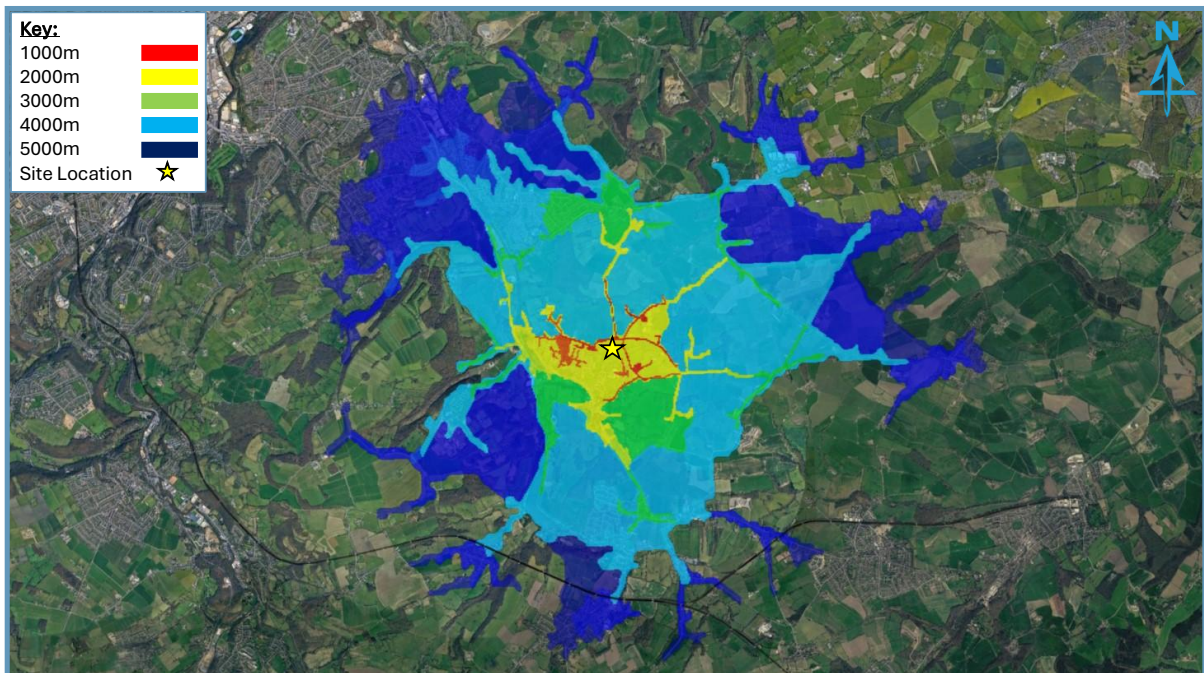
3.4 CYCLING ACCESSIBILITY

- 3.4.1 Whilst superseded by the NPPF, the transport policies in the former PPG13 set out specific guidance related to cycling:

“Cycling also has potential to substitute for short car trips, particularly those under 5 kilometres, and to form part of a longer journey by public transport” (Para 77)

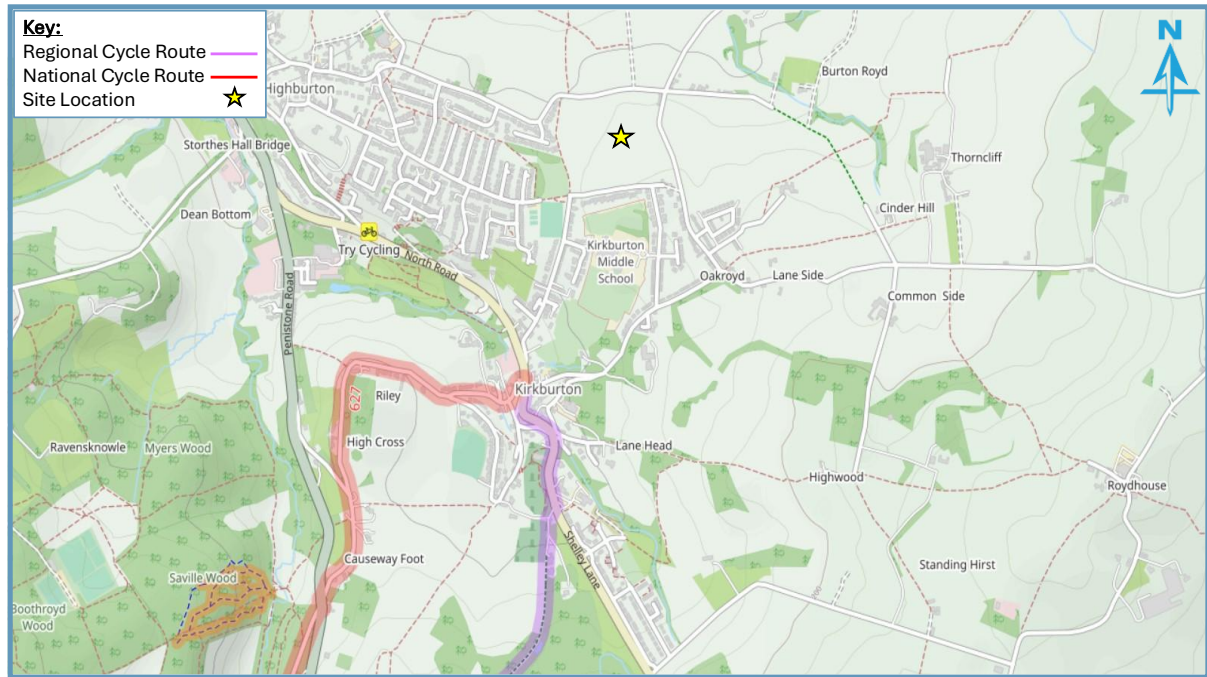
- 3.4.2 As such, all areas and facilities within a reasonable walking distance can also be considered to be within a reasonable cycling distance.
- 3.4.3 **Figure 3-4** shows a 5km cycling catchment area from the centre of the site. In addition to the areas accessible within the 2km walking catchment, the catchment area includes the southeastern extent of Huddersfield, Grange Moor, Lepton, Flockton, Emley, Farnley Tyas, Almondbury, Shelley and Shepley.

Figure 3-4 5km Cycling Catchment Plan



- 3.4.4 Within the vicinity of the site, there are a number of cycle routes, including the national cycle route number 627 and a regional cycle route. The cycle network is detailed on the plan attached at **Figure 3-5**.

Figure 3-5 *Cycle Network Map*



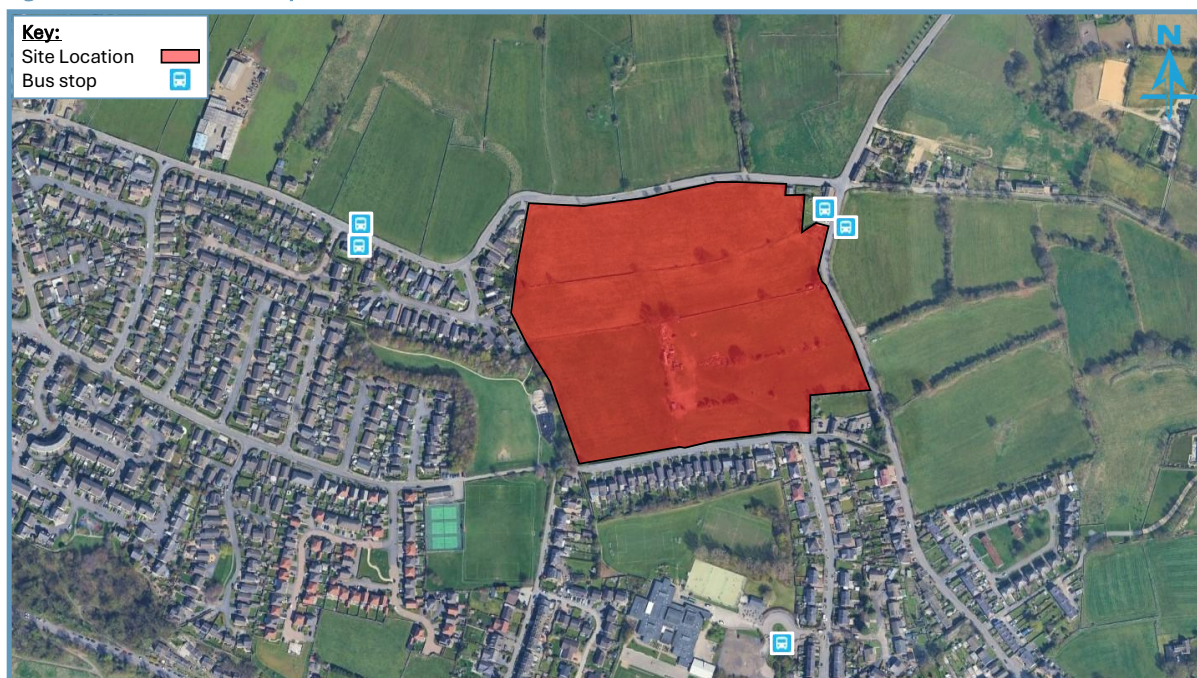
- 3.4.5 As detailed in [Figure 3-5](#) the National Cycle Route 627 is available from Riley Lane which facilitates access from the site to the south-west towards Thunder Bridge and to the south towards Shepley. In addition, a Regional Cycle Route which can be accessed from the B6116 George Street which provides access to the south-west of the site and facilitates access to Shepley to the south.

3.5 PUBLIC TRANSPORT

Bus Services

- 3.5.1 Public transport has a major role to play in encouraging modal shift away from the private car and increasing accessibility through sustainable travel in line with current local and national transport objectives. The IHT's 'Guidelines for Planning for Public Transport in Developments' (IHT 1999) recommend that the maximum walking distance to bus routes should not exceed 400 metres. Measures to facilitate the use of public transport are therefore an integral part of good land use and transport planning. Further guidance set out in the CIHT Planning for Walking report (March 2015) states for bus stops in residential areas, 400m has traditionally been regarded as the cut off point for walking. Active Travel England guidance states bus stops should be easily accessible, and buildings should be located within 400m of a bus stop.
- 3.5.2 The closest bus stop is located east of the site on Moor Lane. The westbound bus stop features flag and timetable information and is c.370m walking distance from the centre of the site via Woodland Meadows. The eastbound stop does not currently feature any existing bus stop features. The stops detailed are set out on the attached plan at [Figure 3-6](#).
- 3.5.3 Additional bus stops are provided on Paddock Road to the north-east of the site and would be c.380m walking distance from the centre of the site via the existing footway on Paddock Road.

Figure 3-6 Public Transport Location Plan



- 3.5.4 Details of the services calling at the mentioned bus stops have been obtained from recent timetables produced by various bus operators. [Table 3-1](#) summarises local bus service details and route information.

Table 3-1 Local Bus Services

Service	Route	Weekday	Saturday	Sunday
D1	Huddersfield-Highburton- Kirkburton-Skelmanthorpe- Scissett-Clayton West- Denby Dale	30 mins	30 mins	60 mins

- 3.5.5 [Table 3-1](#) sets out that the local bus stop provides access to service D1 which provides a minimum frequency of up to two buses every hour towards Huddersfield and Denby Dale between 06:00 and 19:00.

Rail Services

- 3.5.6 Stocksmoor railway station is located approximately 4.3km cycling distance from the site. The platforms are accessible on foot from Station Road.
- 3.5.7 Cycle parking is available at the station, located within a sheltered area. The facility is monitored by CCTV.
- 3.5.8 The station provides regular services operated by Northern Rail with one service per hour towards Sheffield and Huddersfield.

3.6 PERSONAL INJURY COLLISION RECORDS

- 3.6.1 STATS19 Personal Injury Collision (PIC) data was reviewed for the most recently available 5-year time period covering 2021 to 2025 inclusive, using data provided by KC for the highway network within the wider vicinity of the site. The collision study area covered Paddock Lane, Moor Lane, Town Gate and Far Dene up to and including the junction with the A692 Penistone Road.
- 3.6.2 The collision plot is set out in [Figure 3-7](#).

Figure 3-7 Personal Injury Collision Plot



3.6.3 Table 3-2 provides a summary of the collisions that have occurred within the study area.

Table 3-2 Personal Injury Collision Data Summary

Study Area	Severity	Number of Collisions per Year					Total
		2021	2022	2023	2024	2025	
Town Gate / Hall Lane Junction	Slight	1	0	0	0	0	1
Moor Lane	Slight	1	0	0	0	0	1
A629 Penistone Road / Far Dene Junction	Slight	0	0	0	0	1	1
A629 Penistone Road / Far Dene Junction	Serious	0	0	1	0	0	1
Paddock Road	Fatal	0	0	1	0	0	1
Overall	Slight	2	0	0	0	1	3
	Serious	0	0	1	0	0	1
	Fatal	0	0	1	0	0	1

3.6.4 As detailed above, there were three 'slight' collisions, one 'serious' collision, and one 'fatal' collision recorded within the study period.

3.6.5 The serious and fatal collisions are detailed further below:

- ▶ A serious collision occurred at Penistone Road/Far Dene Junction on 13/05/2023 at 14:00 in fine, dry and daylight conditions. The incident involved a car and a motorcycle and occurred when the car was travelling along Far Den and turning right on to Penistone Road. The motorcycle was travelling southbound along Penistone Road towards Thunder Bridge and the two vehicles collided. The collision resulted in serious injury to one casualty.
- ▶ The fatal collision occurred along Paddock Road approximately 21m from Moor Lane/Burton Royd Lane/Linfitt Lane/ Paddock Road junction on 24/05/2023 at 17:55 in fine, dry and daylight conditions. The incident involved two cars and occurred when vehicle one was travelling southbound along Linfitt Lane towards Paddock Road and went through the junction at speed, colliding with vehicle two travelling northbound on Paddock Road. The collision resulted in fatal injuries to the driver of vehicle one and slight injury to the driver and passenger of vehicle

two. It is concluded that this collision was due to individual driver error in driving through the junction at high speed as opposed to deficiencies in the local highway network. This collision is a result of individual driver error which is evidenced by there being no further collisions in this location.

Summary

- 3.6.6 Given the low frequency and severity of the collisions recorded over the most recent five-year period, it is considered there are no pre-existing highways safety concerns which the development would exacerbate. It is considered that the serious and fatal collisions set out above are due to individual driver error and no deficiencies in the local highway network. There are no clusters or hotspots identified that require more in-depth analysis.

4 DEVELOPMENT PROPOSALS

4.1 DEVELOPMENT PROPOSALS AND SITE LAYOUT

- 4.1.1 The application is for outline planning permission with all matters reserved apart from access, for a residential development of up to 160 dwellings. A copy of the indicative masterplan is included in [Appendix A](#) but will be refined and subject to a separate reserved matters application.

4.2 SITE ACCESS DESIGN AND VISIBILITY SPLAYS

Proposed Site Access Design

- 4.2.1 The proposed development would be accessed from the northern site boundary via a new priority junction onto Moor Lane. The access has been designed in accordance with DMRB and the Kirklees Council Highway Design Guide SPD for a Local Residential Street. It was also informed from consultation with Kirklees Highways following pre-application feedback received.
- 4.2.2 The access arrangement proposes a ghost island right turn arrangement as follows:
- ▶ A right-turn ghost island of 3.25m turning lane;
 - ▶ 3.65m through lanes;
 - ▶ Access road width of 5.5m;
 - ▶ Radii of 10m; and
 - ▶ 2m footways;
- 4.2.3 A 2m wide footway is proposed on either side of the access to provide pedestrian connectivity to the wider local area. In addition, a new pedestrian refuge island crossing, featuring dropped kerbs and tactile paving, is proposed to the east of the site access, connecting the development with the existing footway on the opposite side of Moor Lane.

Junction Visibility

- 4.2.4 A seven-day speed survey was undertaken on Moor Lane between Tuesday 30th September and Monday 6th October 2025 in order to inform the proposed access design and associated visibility requirements. This was a neutral period outside of school holidays under normal traffic conditions. Weather conditions were mild with temperatures between 10 to 18 degrees across the survey period with occasional rain.
- 4.2.5 The surveys recorded 85th percentile vehicle speeds of 36.3mph eastbound and 36.2mph westbound. Based on the recorded vehicle speeds, and in accordance with an interpolated Design Manual for Roads and Bridges (DMRB) standard, visibility splays of 2.4m x 56.35m to the east and 2.4m x 56.58m to the west are required at the proposed access.
- 4.2.6 The required visibility splays are achievable within the adopted highway boundary and land under the control of the applicant, as can be seen in the drawing AMA-23440-SK-001-P02 attached in [Appendix B](#).

Pedestrian Access

- 4.2.7 Additional pedestrian access points will be provided onto Paddock Road to the east of the site, to Burton Acres Lane to the south and towards an existing Public Right of Way (ProW) and paths on the western side of the site. These will enable permeability through the site and enable access on foot and by bike to Gregory Playing Fields, park, skatepark and onward connection to the eastern end of Woodland Meadows for access to bus stops on Moor Lane.

Summary

- 4.2.8 The proposed access arrangement is therefore considered to provide a safe and suitable means of access for all users, in accordance with national and local highway design guidance.

4.3 SERVICING ARRANGEMENTS

- 4.3.1 The proposed development would be serviced by a KC standard refuse vehicle, consistent with servicing arrangements within the surrounding area. Swept path analysis was undertaken for the proposed site access based on a Kirklees Council refuse vehicle of 11.85m length. Tracking attached in AMA drawing AMA-23440-ATR-001-P01 demonstrates that the refuse vehicle can safely access and egress the site via the proposed junction off Moor Lane.
- 4.3.2 Vehicle tracking of the internal layout will be undertaken as part of any reserved matters application.

4.4 PARKING

- 4.4.1 Parking is to be provided in line with the required KC standards set out within the '*Kirklees Council - Highway Design Guide - October 2018*'. Parking for the residential units will be provided in line with Kirklees Council Parking Standards minimum parking requirements as outlined below:
 - ▶ 2-Bedrooms – 2 spaces per dwelling;
 - ▶ 3-Bedrooms – 2 spaces per dwelling;
 - ▶ 4-Bedrooms – 3 spaces per dwelling; and
 - ▶ 5-Bedrooms – 3 spaces per dwelling.
- 4.4.2 Where garages are provided as the spaces detailed above, these will have minimal internal dimensions of 3m x 6m, in line with KC requirements.
- 4.4.3 On-street visitor parking will be provided at a ratio of 1 space per 4 dwellings.
- 4.4.4 Secure covered cycle storage will be provided for all dwellings without a garage.
- 4.4.5 Each dwelling will be provided with facilities for electric car charging.

5 ASSESSMENT PARAMETERS

5.1 INTRODUCTION

- 5.1.1 This section sets out the methodology and assessment parameters used in assessing the proposed development and its potential impact on the highway network.

5.2 BASE TRAFFIC SURVEYS

- 5.2.1 Traffic surveys were undertaken at the junctions that are predicted to experience an increase of more than 30 two-way trips as a result of the development proposals. These are as follows:

- ▶ Proposed site access;
- ▶ A629 Penistone Road / Far Dene signal-controlled junction;
- ▶ A629 Penistone Road / Woodsome Road priority junction;
- ▶ A629 Penistone Road / Fenay Lane priority junction;
- ▶ A629 Penistone Road / Station Road priority junction; and
- ▶ A629 Penistone Road / Southfield Road priority junction.

- 5.2.2 The turning counts were undertaken on Wednesday the 20th May, between the hours of 06:00 – 19:00, considering the AM and PM network peak periods. This was a neutral weekday outside of school holidays. The resultant network peak periods were concluded to occur between:

- ▶ AM Peak: 07:30 – 08:30
- ▶ PM Peak: 16:15 – 17:15

- 5.2.3 For the purposes of the junction capacity modelling, the above surveys were converted to Passenger Car Units (PCUs). The resultant 2026 surveyed flows along with all traffic flow diagrams are illustrated in [Appendix C](#).

5.3 ASSESSMENT YEARS

- 5.3.1 As agreed with KC a base year of 2026 was assessed as the year of submission. In line with national guidance, a horizon period five years to 2031 has been assessed within this TA.

5.4 TRAFFIC GROWTH

- 5.4.1 As agreed with KC the National Traffic Model (NTM) within the TEMPRO software package was interrogated to provide local growth factors for the Middle Super Output Area (MSOA) area Kirklees 051 in which the site and the settlements of Kirkburton and Highburton are located.

- 5.4.2 The resultant growth factors are set out in [Table 5-1](#).

Table 5-1 TEMPro Growth Factors – Kirklees 051

Period	MSOA	AM Peak	PM Peak
2026 - 2031	Kirklees 051	1.0498	1.0498

- 5.4.3 Details of the resultant 2026 and 2031 base traffic flows are set out at [Appendix C](#) which sets out all traffic flow diagrams associated with the proposals.

5.5 COMMITTED DEVELOPMENT TRAFFIC

- 5.5.1 Following pre-application discussions with Kirklees Council, a review of local committed developments was undertaken to identify consented schemes which may have an impact on the junctions considered within this TA, particularly along the A629 corridor. The following committed residential developments were identified by the Council as requiring consideration within the assessment:
- ▶ Planning Ref. 22/91735 – Residential development of 80 dwellings at Lepton;
 - ▶ Planning Ref. 22/93154 – Residential development of 68 dwellings at Fenay Bridge; and
 - ▶ Planning Ref. 24/90058 – Residential development of 67 dwellings at Fenay Bridge.
- 5.5.2 In accordance with the KC pre-application recommendations, traffic associated with the above committed developments will be accounted for within the future year assessment scenarios, alongside TEMPro background traffic growth, to ensure a robust assessment of the operational performance of the local highway network.
- 5.5.3 The traffic flows associated with the committed developments are set out in [Appendix C](#) and have been added to the 2031 Base traffic flows to form the 2031 Base + Committed scenario.

5.6 DEVELOPMENT TRAFFIC GENERATION

- 5.6.1 The TRICS database (v.8.25.6) was interrogated according to the following criteria, to obtain the vehicle-based trip rates of the proposed development. The TRICS selection criteria comprised:
- ▶ Land Use: 03 – Residential, A – Houses Privately Owned;
 - ▶ Calculation Options: Vehicular Trip Rates;
 - ▶ Regions: Greater London and Northern / Ireland sites excluded;
 - ▶ Locations: Edge of Town, Out of Town, Residential Zone; and
 - ▶ Units: 50 – 250 (dwellings).
- 5.6.2 Sites that were not considered reflective of the proposed developments location were removed from the survey selection as well as surveys carried out during COVID-19.
- 5.6.3 The time period of 08:00 – 09:00 has been selected for the AM peak period, whilst the time period of 17:00 – 18:00 has been selected for the PM peak period which is in line with the observed network peak periods.
- 5.6.4 The vehicle trip rates derived are summarised in [Table 5-2](#) and have been factored against 160 dwellings. The full TRICS output is available in [Appendix D](#).

Table 5-2 Peak Hour Trip Rates and Trip Generation

	AM Peak			PM Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Trip Rate	0.131	0.333	0.464	0.335	0.170	0.505
Trip Generation	21	53	74	54	27	81

- 5.6.5 The impact of these trips at the site access is set out in [Section 6.2](#).

5.7 DEVELOPMENT TRAFFIC DISTRIBUTION AND ASSIGNMENT

- 5.7.1 As agreed with KC development traffic distribution has been undertaken based upon existing (2011) Nomis 'Journey to Work Data' for the Kirklees 051 MSOA, which best represents the location of the site. This method uses Office of National Statistics data and is considered a robust approach.

- 5.7.2 The traffic distribution has been applied to the forecast trip generations to estimate the change in traffic flows on the highway network as a result of the development at the site. Consideration of the traffic distribution exercise shows the total change in traffic flows that is forecast on the road network as a result of the development proposals.
- 5.7.3 The distribution exercise is summarised in [Table 5-3](#). A copy of the 2011 journey to work census data and a plan detailing the location of each MSOA is available upon request.

Table 5-3 *Development Traffic Distribution*

Route	Distribution
West of Moor Lane	72%
South of A629 Penistone Rd	5%
North of A629 Penistone Rd	67%
Woodsome Road	12%
Fenay Lane	3%
Southfield Road	37%
A629 Penistone Road towards Huddersfield	14%
East of Moor Lane	28%
Linfit Lane	10%
Paddock Road	18%

- 5.7.4 The AM and PM peak traffic distributions have been applied to the total development traffic generation set out in [Table 5-2](#). The traffic flow diagrams for both the traffic distribution and generation are set out in [Appendix C](#).

5.8 SUMMARY

- 5.8.1 As detailed in the above section, the following scenarios have been modelled as part of this TA:
- ▶ 2026 Base
 - ▶ 2031 + Committed
 - ▶ 2031 + Committed + Development
- 5.8.2 The traffic flow diagrams are attached at [Appendix C](#), and the modelling exercise is detailed in [Section 6](#) overleaf.

6 TRAFFIC MODELLING AND DEVELOPMENT IMPACTS

6.1 INTRODUCTION

6.1.1 To determine the impact of the proposed development traffic on the local highway network, the following junctions have been assessed:

- ▶ Proposed site access;
- ▶ A629 Penistone Road / Far Dene signal-controlled junction;
- ▶ A629 Penistone Road / Woodsome Road priority junction;
- ▶ A629 Penistone Road / Fenay Lane priority junction;
- ▶ A629 Penistone Road / Station Road priority junction; and
- ▶ A629 Penistone Road / Southfield Road priority junction.

6.1.2 Junctions9 software has been used to prepare models for the priority-controlled junctions. Junctions9 software analyses the traffic movements on each arm of the junction and assesses the junctions Ratio Flow to Capacity (RFC) and queue lengths in PCU's.

6.1.3 LinSig software has been used to prepare models for the signal-controlled junctions. LinSig software analyses the traffic movements on each arm of the junction and assesses the Degree of Saturation (DoS) and the Mean Maximum Queues (MMQ). LinSig also considers the overall junctions Practical Reserve Capacity (PRC) and Total Traffic Delay (TTD) in PCU's per hour (pcuHr).

6.1.4 Signalised junction models have been informed from signal plans provided by Kirklees Highways.

6.1.5 The detailed modelling outputs are in [Appendix E](#).

6.2 JUNCTION MODELLING RESULTS

Proposed Site Access / Moor Lane T-junction

6.2.1 [Table 6-1](#) sets out the operational capacity at the Proposed Site Access / Moor Lane priority-controlled T-junction, for the with development scenario.

Table 6-1 Proposed Site Access / Moor Lane T-junction Modelling Summary

Arms	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
2031 Base + Committed + Development				
Site Access – All Movements	0.09	0	0.05	0
Moor Lane (W) – All Movements	0.03	0	0.07	0

6.2.2 [Table 6-1](#) identifies that all arms at the proposed Site Access / Moor Lane priority-controlled T-junction are predicted to operate well within their theoretical and operational capacity in the 2031 Base + Committed + Development scenarios.

A629 Penistone Road / Far Dene

- 6.2.3 **Table 6-2** sets out the operational capacity at the A629 Penistone Road / Far Dene signal-controlled junction.

Table 6-2 A629 Penistone Road / Far Dene Signal Junction Modelling Summary

Arms	AM Peak		PM Peak	
	DoS	MMQ	DoS	MMQ
2026 Base Flows				
Far Dene – All Movements	72.8%	7	77.2%	7
A629 Penistone Road (S) – All Movements	73.0%	17	57.4%	11
A629 Penistone Road (N) – All Movements	59.0%	12	79.5%	21
Junction Total	PRC	Delay	PRC	Delay
	23.4%	11.09	13.1%	11.62
2031 Base + Committed Flows				
Far Dene – All Movements	76.4%	8	81.1%	7
A629 Penistone Road (S) – All Movements	76.7%	18	60.7%	13
A629 Penistone Road (N) – All Movements	62.6%	13	83.6%	24
Junction Total	PRC	Delay	PRC	Delay
	17.4%	12.37	7.6%	13.40
2031 Base + Committed + Development Flows				
Far Dene – All Movements	78.4%	9	85.1%	8
A629 Penistone Road (S) – All Movements	79.8%	20	61.4%	13
A629 Penistone Road (N) – All Movements	66.6%	14	88.0%	28
Junction Total	PRC	Delay	PRC	Delay
	12.7%	14.06	2.3%	15.72

- 6.2.4 **Table 6-2** shows that the A629 Penistone Road / Far Dene signal-controlled junction is forecast to experience an increase in demand between the 2026 Base and 2031 assessment years as a result of background traffic growth and committed development.
- 6.2.5 In the 2031 Base + Committed + Development scenario the junction will continue to operate within its capacity. The highest DoS occurs on the A629 Penistone Road (N) arm in the PM peak at 88.0% with the level of queuing increasing by four vehicles compared to the 2031 Base + Committed scenario. The addition of development traffic results in a modest increase in junction demand and therefore the proposed development would result in only a limited impact on the operation of the junction.

A629 Penistone Road / Woodsome Road

- 6.2.7 **Table 6-3** sets out the operational capacity at the A629 Penistone Road / Woodsome Road priority-controlled T-junction.

Table 6-3 A629 Penistone Road / Woodsome Road T-junction Modelling Summary

Arms	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
2026 Base				
Woodsome Road – All Movements	0.49	1	0.59	1
A629 Penistone Road (N) – All Movements	0.47	1	0.40	1
2031 Base + Committed				
Woodsome Road – All Movements	0.55	1	0.68	2
A629 Penistone Road (N) – All Movements	0.53	1	0.43	1
2031 Base + Committed + Development				
Woodsome Road – All Movements	0.59	1	0.76	3
A629 Penistone Road (N) – All Movements	0.54	1	0.44	1

- 6.2.8 **Table 6-3** indicate that the A629 Penistone Road / Woodsome Road priority-controlled T-junction would continue to operate within theoretical and operational capacity in the 2031 Base + Committed + Development scenario.
- 6.2.9 Whilst traffic growth associated with committed and proposed development results in a modest increase in RFC values compared to the 2026 Base scenario, all arms retain spare capacity.
- 6.2.10 The highest RFC of 0.76 is forecast on the Woodsome Road arm during the PM peak, with queue lengths remaining low, demonstrating that the proposed development would not increase any material operational impacts at the junction.

A629 Penistone Road / Fenay Lane

- 6.2.11 **Table 6-4** sets out the operational capacity at the A629 Penistone Road / Fenay Lane Road priority-controlled T-junction.

Table 6-4 A629 Penistone Road / Fenay Lane T-junction Modelling Summary

Arms	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
2026 Base				
Fenay Lane – A629 Penistone Road (N)	0.16	0	0.15	0
Fenay Lane – A629 Penistone Road (S)	0.63	2	0.62	2
A629 Penistone Road (N) – All Movements	0.10	0	0.10	0
2031 Base + Committed				
Fenay Lane – A629 Penistone Road (N)	0.25	0	0.21	0
Fenay Lane – A629 Penistone Road (S)	0.76	3	0.73	3
A629 Penistone Road (N) – All Movements	0.11	0	0.10	0
2031 Base + Committed + Development				
Fenay Lane – A629 Penistone Road (N)	0.28	0	0.24	0
Fenay Lane – A629 Penistone Road (S)	0.79	3	0.76	3
A629 Penistone Road (N) – All Movements	0.12	0	0.10	0

- 6.2.12 **Table 6-4** indicates that the A629 Penistone Road / Fenay Lane priority-controlled T-junction would continue to operate within theoretical and operational capacity in the 2031 Base + Committed + Development scenario.
- 6.2.13 Whilst RFC values increase compared to the 2026 Base scenario, all movements retain spare capacity.
- 6.2.14 The highest RFC of 0.79 is forecast for the Fenay Lane to A629 Penistone Road (S) movement during the AM peak, with queue lengths remaining low. The proposed development would therefore not result in any material operational impact at the junction.

A629 Penistone Road / Station Road

- 6.2.15 **Table 6-5** sets out the operational capacity at the A629 Penistone Road / Station Road priority-controlled T-junction.

Table 6-5 A629 Penistone Road / Station Road T-junction Modelling Summary

Arms	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
2026 Base				
Station Road – A629 Penistone Road (S)	0.26	0	0.22	0
Station Road – A629 Penistone Road (N)	0.79	3	0.63	2
A629 Penistone Road (S) – All Movements	0.12	0	0.13	0
2031 Base + Committed				
Station Road – A629 Penistone Road (S)	0.96	4	0.34	1
Station Road – A629 Penistone Road (N)	0.94	8	0.78	3
A629 Penistone Road (S) – All Movements	0.13	0	0.15	0
2031 Base + Committed + Development				
Station Road – A629 Penistone Road (S)	0.96	4	0.40	1
Station Road – A629 Penistone Road (N)	0.96	9	0.81	4
A629 Penistone Road (S) – All Movements	0.13	0	0.15	0

- 6.2.16 **Table 6-5** indicates that the A629 Penistone Road / Station Road priority-controlled T-junction is forecast to operate over theoretical capacity on the Station Road arm in the 2031 Base + Committed scenario, and the 2031 + Committed + Development scenario.
- 6.2.17 Whilst the addition of development traffic results in a modest increase in RFC values compared to the 2031 Base + Committed scenario, the junction is forecast to experience capacity constraints irrespective of the proposed development.
- 6.2.18 The highest RFC of 0.96 is forecast for the Station Road to A629 Penistone Road north and south movement during the AM peak, with a corresponding queue of four vehicles for the left turn movement and eight vehicles for the right turn movement. Compared to the 2031 Base + Committed scenario the level of queuing has remained the same for left turning vehicles and has increased by one vehicle for right turning vehicles. The proposed development would therefore result in only a limited impact on the operation of the junction.

A629 Penistone Road / Southfield Road

- 6.2.19 **Table 6-6** sets out the operational capacity at the A629 Penistone Road / Southfield Road priority-controlled T-junction.

Table 6-6 A629 Penistone Road / Southfield Road T-junction Modelling Summary

Arms	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
2026 Base				
Southfield Road – All Movements	0.43	1	0.64	2
A629 Penistone Road (N) – All Movements	0.10	0	0.10	0
2031 Base + Committed				
Southfield Road – All Movements	0.48	1	0.71	2
A629 Penistone Road (N) – All Movements	0.11	0	0.11	0
2031 Base + Committed + Development				
Southfield Road – All Movements	0.51	1	0.78	3
A629 Penistone Road (N) – All Movements	0.11	0	0.11	0

- 6.2.20 **Table 6-6** indicates that the A629 Penistone Road / Southfield Road priority-controlled T-junction would continue to operate within theoretical and operational capacity in the 2031 Base + Committed + Development scenario.
- 6.2.21 Whilst traffic growth associated with committed and proposed development results in an increase in RFC values compared to the 2026 Base scenario, all movements retain spare capacity.
- 6.2.22 The highest RFC of 0.78 is forecast on the Southfield Road arm during the PM peak, with queue lengths remaining low at 3 vehicles. The proposed development would therefore not result in any material operational impact at the junction.

6.3 SUMMARY

- 6.3.1 The junction modelling demonstrates that the proposed development would not result in any severe impacts on the operation of the local highway network.
- 6.3.2 The proposed site access, together with the A629 Penistone Road junctions at Woodsome Road, Fenay Lane and Southfield Road, are all forecast to operate within theoretical and operational capacity in the 2031 Base + Committed + Development scenario, with RFC values remaining below capacity and queue lengths remaining low.
- 6.3.3 The A629 Penistone Road / Far Dene signal-controlled junction is forecast to operate close to capacity during the future year PM peak period. Whilst development traffic results in a modest increase in demand, the junction is already forecast to be approaching capacity in the 2031 Base + Committed scenario and the proposed development does not materially alter its operation.
- 6.3.4 The A629 Penistone Road / Station Road junction is forecast to experience capacity constraints on the Station Road arm in both the baseline and future year scenarios. However, the modelling demonstrates that these constraints are primarily associated with the existing traffic conditions, background growth and committed development, with the proposed development resulting in only a limited increase in RFC values and queue lengths.

- 6.3.5 Overall, the modelling indicates that the local highway network would continue to operate satisfactorily following the addition of development traffic, with no junction predicted to experience a severe impact as a result of the proposed development.

7 SUMMARY

- 7.1.1 AMA has prepared this Transport Assessment to accompany the outline planning application for a proposed residential development with up to 160 dwellings, on land to the south of Moor Lane, Kirkburton, with all matters reserved except access. The following summarises the key points:
- ▶ The proposed development has been assessed for residential development. The site fully accords with both national policy including policies TR3 and TR6 and local transport policy;
 - ▶ Future residents of the development would have the opportunity to travel for all key journey purposes by modes other than the private car, including walking, cycling and public transport;
 - ▶ The proposed site access has been designed in accordance with relevant DMRB standards and Kirklees guidance and would provide a safe and suitable means of access to the development;
 - ▶ Operational assessments of the local highway network have been undertaken using 2026 survey data, with future year assessments undertaken for 2031 using TEMPro growth factors;
 - ▶ Junction capacity assessments have been undertaken at the proposed site access and key junctions along the A629 Penistone Road corridor.
 - ▶ The modelling demonstrates that the proposed site access and the majority of assessed junctions would continue to operate within theoretical and operational capacity in the 2031 Base + Committed + Development scenario.
 - ▶ Whilst the A629 Penistone Road / Far Dene and A629 Penistone Road / Station Road junctions are forecast to experience capacity constraints in the future year scenarios, these conditions are largely associated with existing traffic demands, background growth and committed development. The proposed development results in only a modest increase in demand and does not materially alter the operation of either junction.
 - ▶ The operational assessments demonstrate that the local highway network would continue to operate satisfactorily and that the proposed development would not result in a severe residual cumulative impact on the highway network.
 - ▶ Refuse and emergency vehicles would be able to safely access the site, with further swept path analysis to be undertaken at the Reserved Matters stage following confirmation of the internal layout;
 - ▶ A Residential Travel Plan has been prepared alongside this Transport Assessment which sets out a package of measures designed to encourage sustainable travel patterns and reduce reliance on the private car.
- 7.1.2 This TA has demonstrated that the traffic associated with the development proposals can be accommodated on surrounding highway network without having a severe impact in accordance with the NPPF.
- 7.1.3 The internal layout of the site and matters relating to parking, refuse collection and internal geometry will be addressed as part of a separate reserved matters application at a later stage.
- 7.1.4 Therefore, there are no overriding traffic and transportation reasons preventing the local highway authority from recognising that the proposals are acceptable nor why planning permission could not be granted.

APPENDICES

Appendix A Site Layout

Appendix B Site Access Design

Appendix C Traffic Flow Diagrams

Appendix D TRICS Output

Appendix E Junction Model Outputs

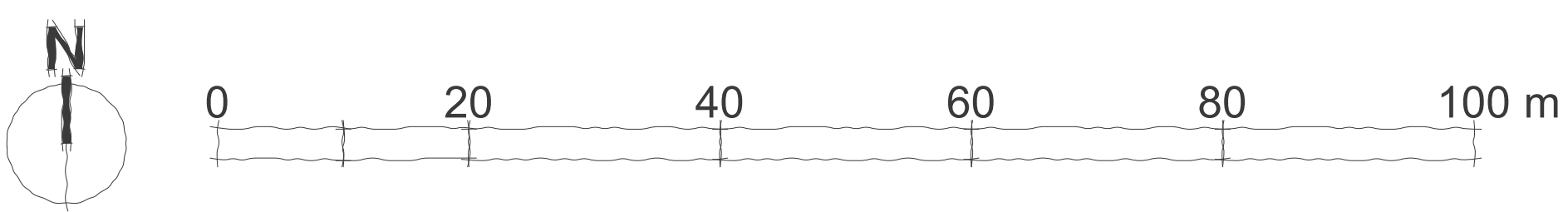
Appendix F Kirklees Council Pre-Application Correspondence

Appendix A
Site Layout

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- KEY**
- RED LINE BOUNDARY: 7.5HA
 - EXISTING TREES
 - PROPOSED TREES
 - VEHICULAR & PEDESTRIAN ACCESS
 - PUBLIC RIGHT OF WAY
 - INDICATIVE DWELLING FRONTAGE
 - INDICATIVE GARDENS
 - INDICATIVE PUBLIC GREEN SPACE
 - EXISTING DRY STONE WALL
 - PROPOSED DRY STONE WALL
 - GRADE II LISTED BUILDING



MOOR LANE, KIRKBURTON, HUDDERSFIELD – ILLUSTRATIVE MASTERPLAN

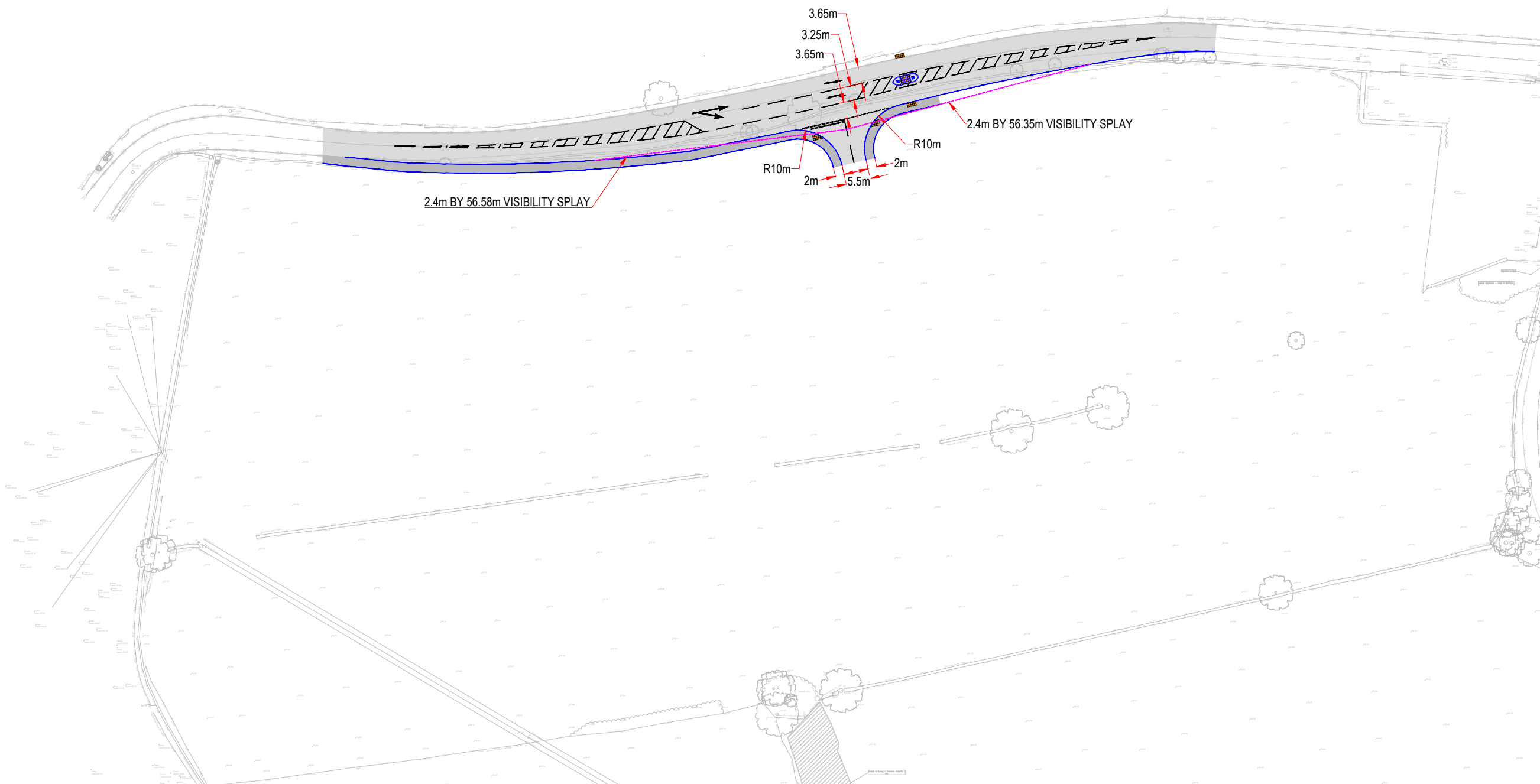
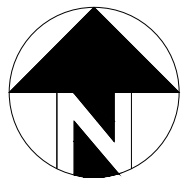
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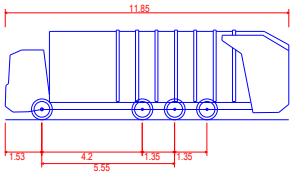
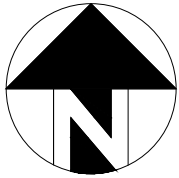




Appendix B
Site Access Design

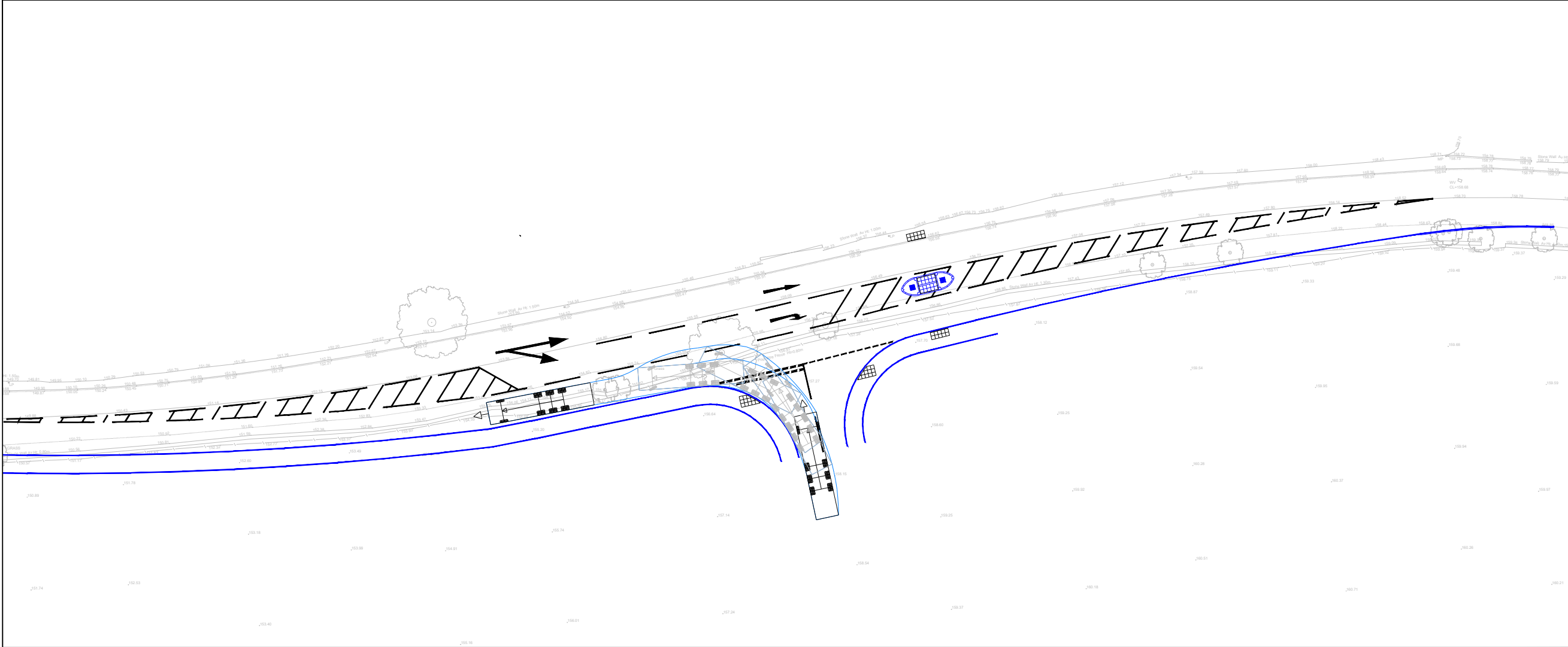
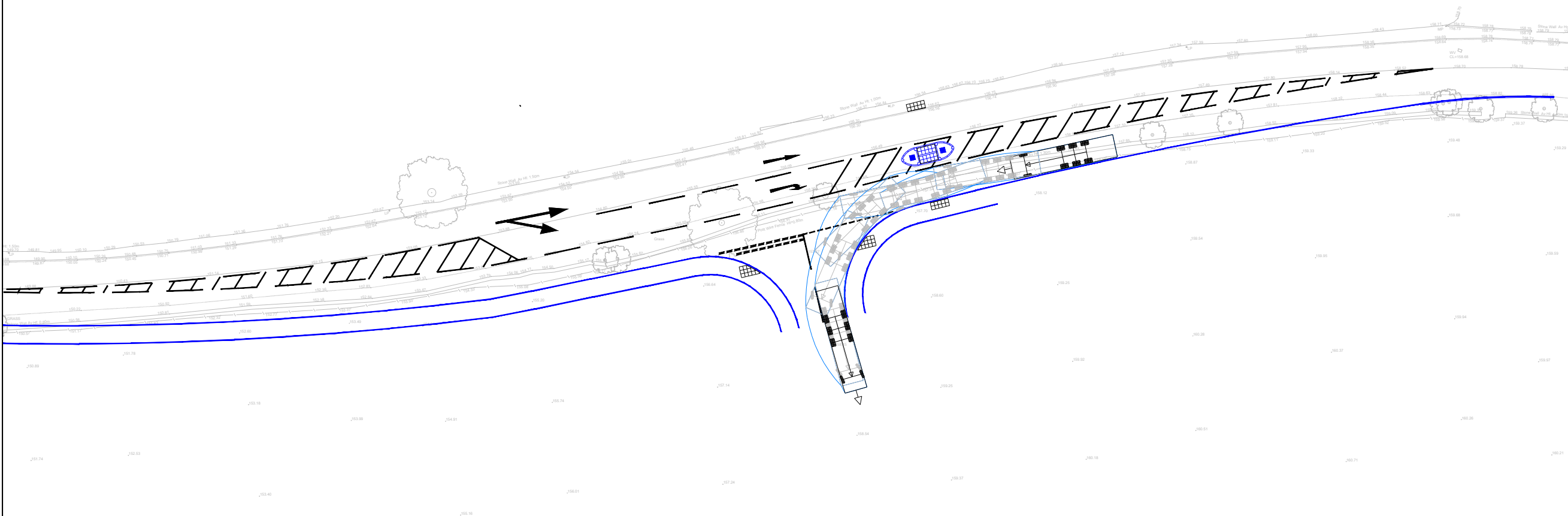


P02	Revised in accordance with KC comments received 22.12.25	16.03.26	MSF
P01	Preliminary Issue	23.10.25	JH
AMA ANDREW MOSELEY ASSOCIATES Transport & Infrastructure Consultants 15 St Paul's Street Second Floor Leeds LS1 2JG www.amatp.co.uk			
Project: PADDOCK LANE, KIRKBURTON			
Client: PERSIMMON HOMES WEST YORKSHIRE			
Drawing: MOOR LANE - PROPOSED ACCESS ARRANGEMENTS			
Drawn By: SA	Date: 15.10.2025		
Checked: JH	Scale: 1:1000	Paper: A3	
Drawing No. AMA-23440-SK-001			Rev. P02



Kirklees Refuse Vehicle 2018
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock to lock time
Wall to Wall Turning Radius

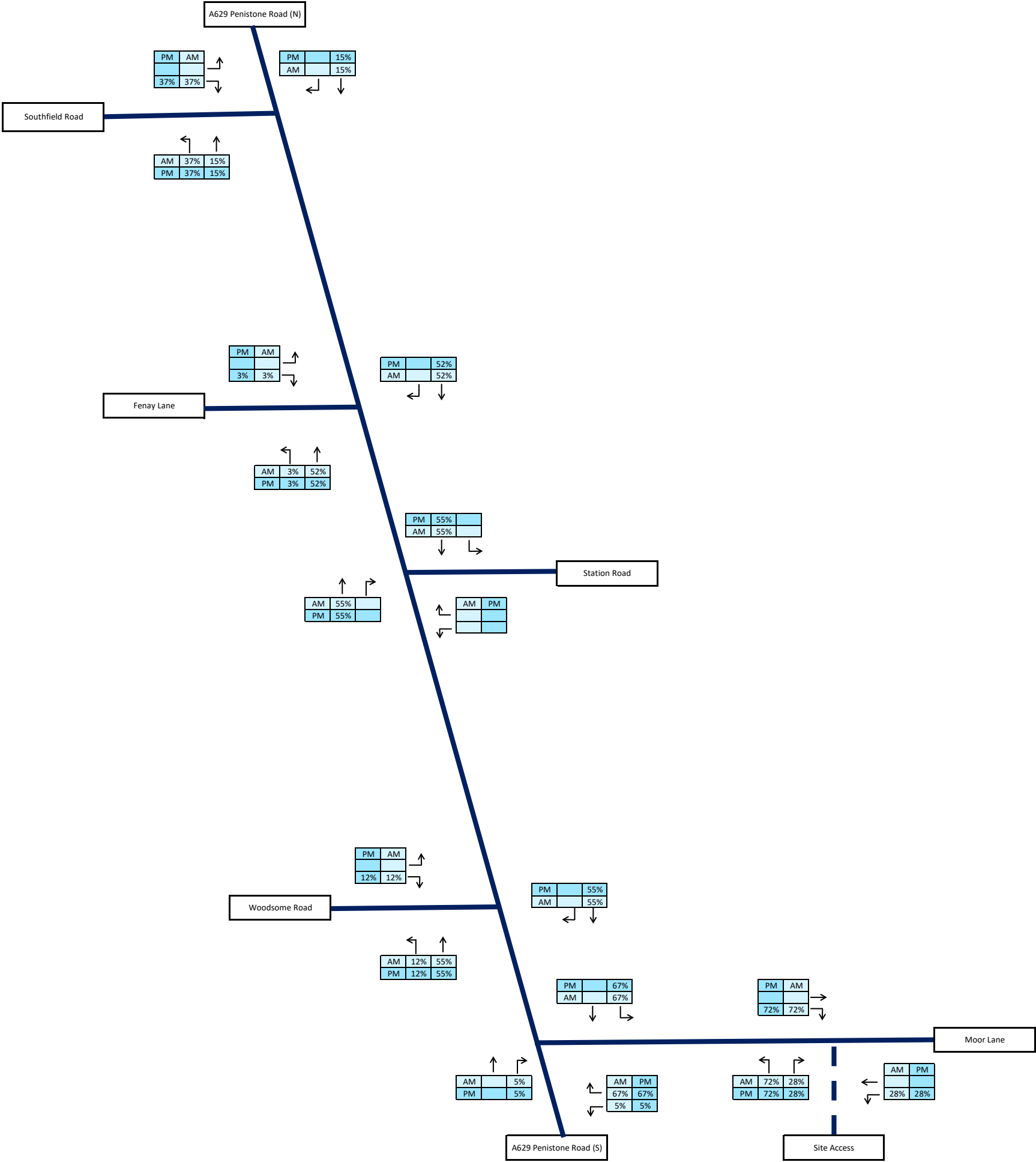
11.850m
2.500m
3.749m
0.302m
2.490m
6.00s
11.000m

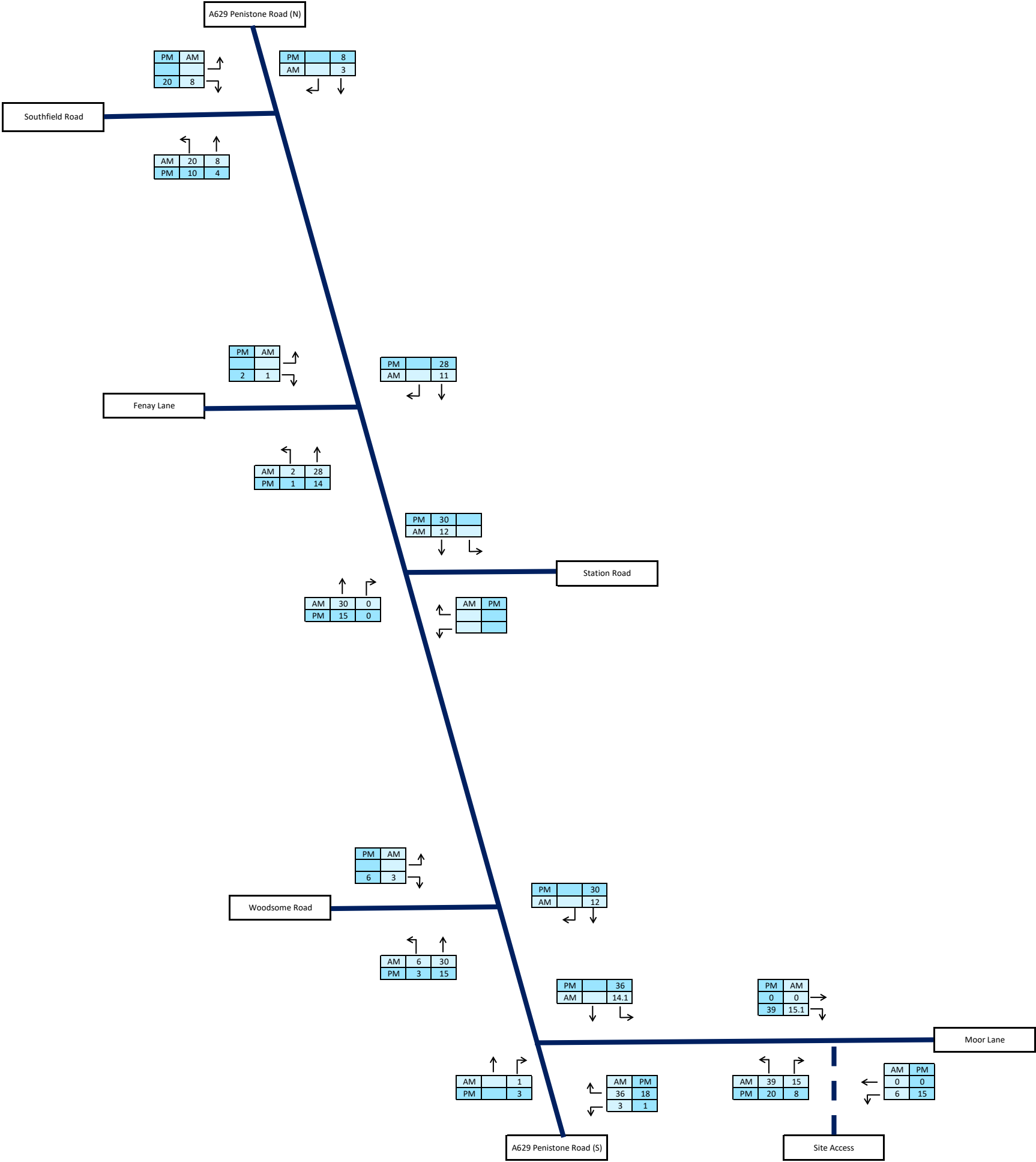


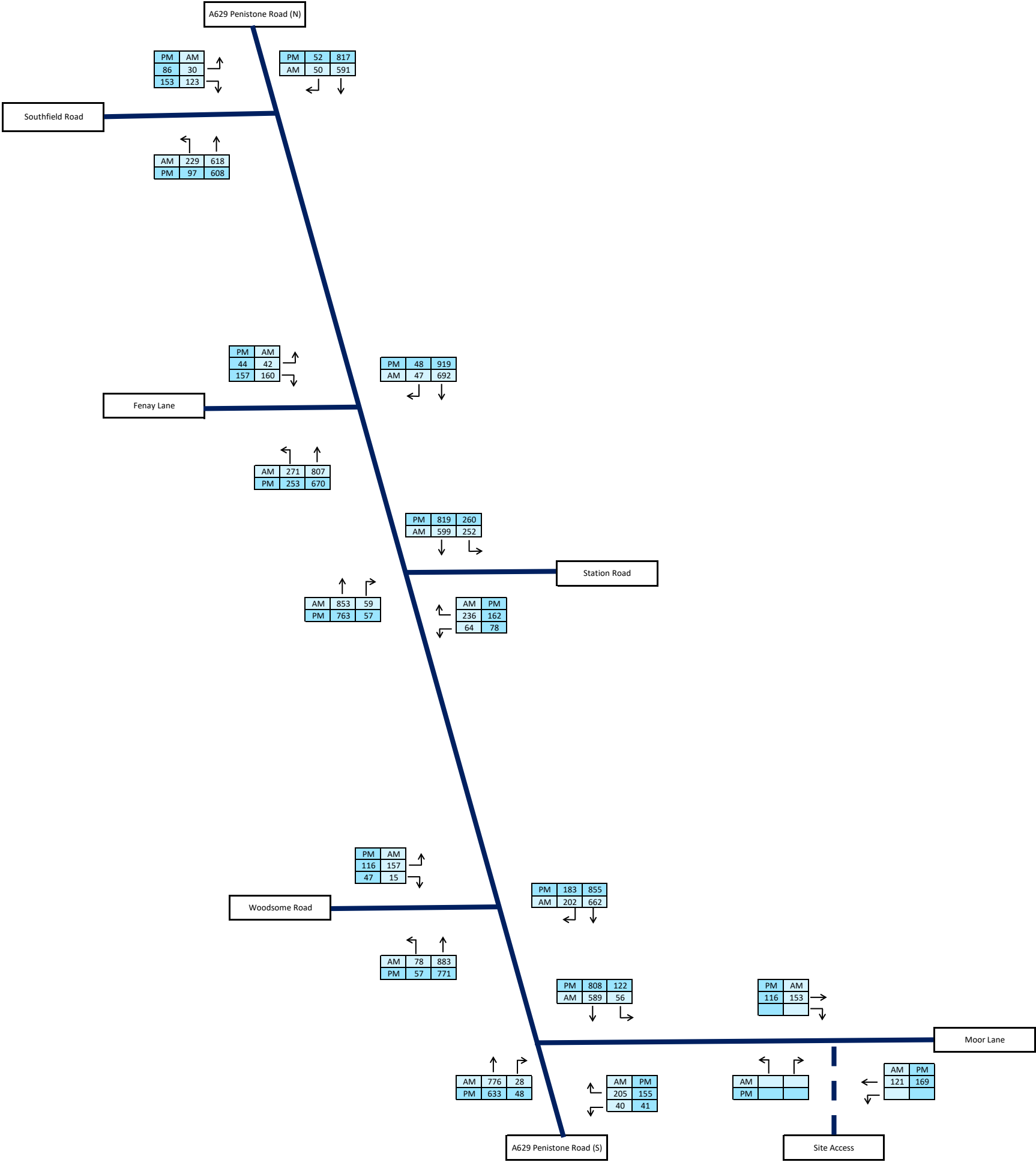
P01	Preliminary Issue	17.03.26	JH
 ANDREW MOSELEY ASSOCIATES			
Project: PADDOCK LANE, KIRKBURTON			
Client: PERSIMMON HOMES WEST YORKSHIRE			
Drawing: MOOR LANE - KIRKLEES REFUSE VEHICLE SWEEP PATH ANALYSIS			
Drawn By: MSF	Date: 16.03.2026		
Checked: JH	Scale: 1:500	Paper: A3	
Drawing No. AMA-23440-ATR-001			Rev. P01

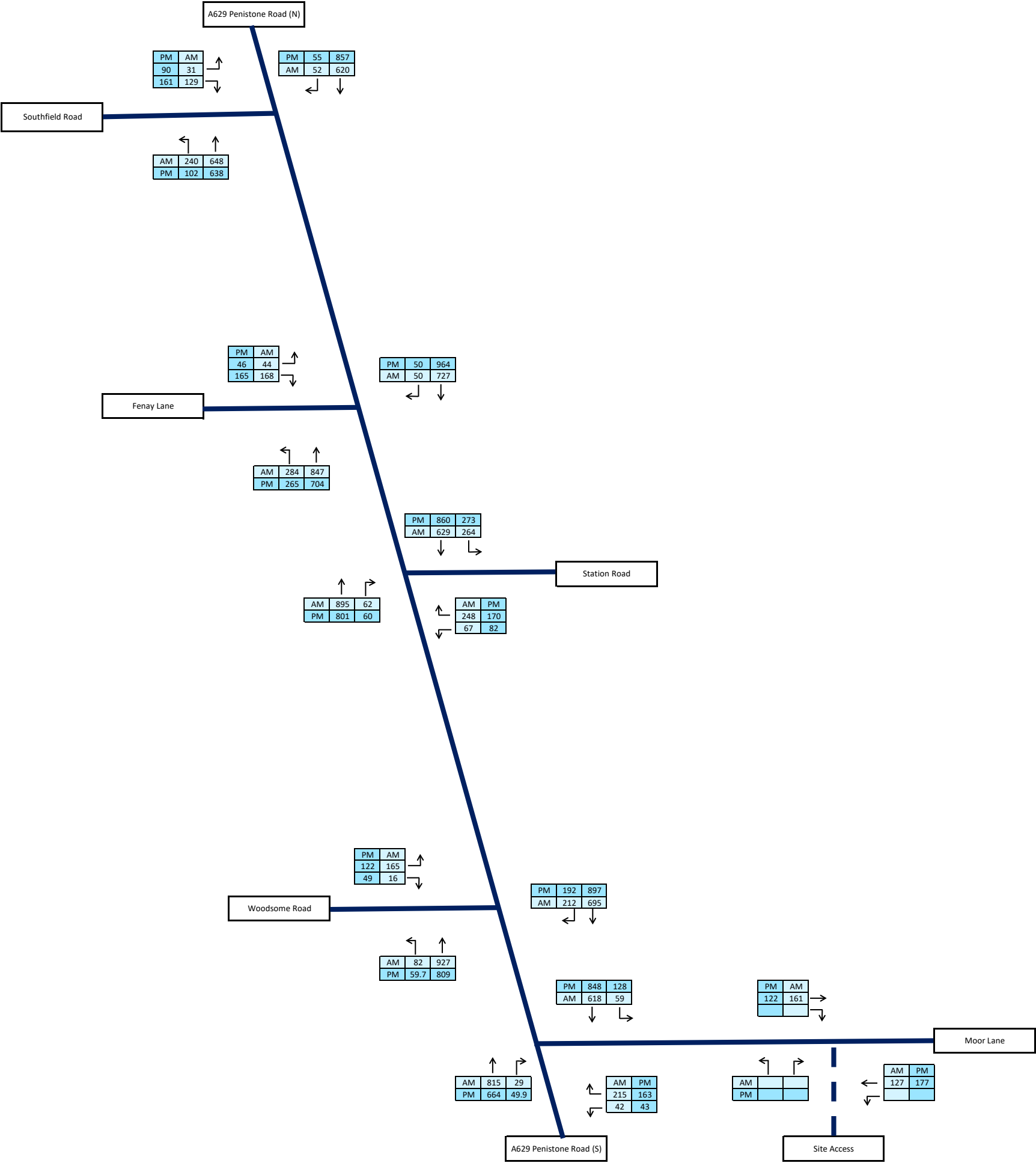


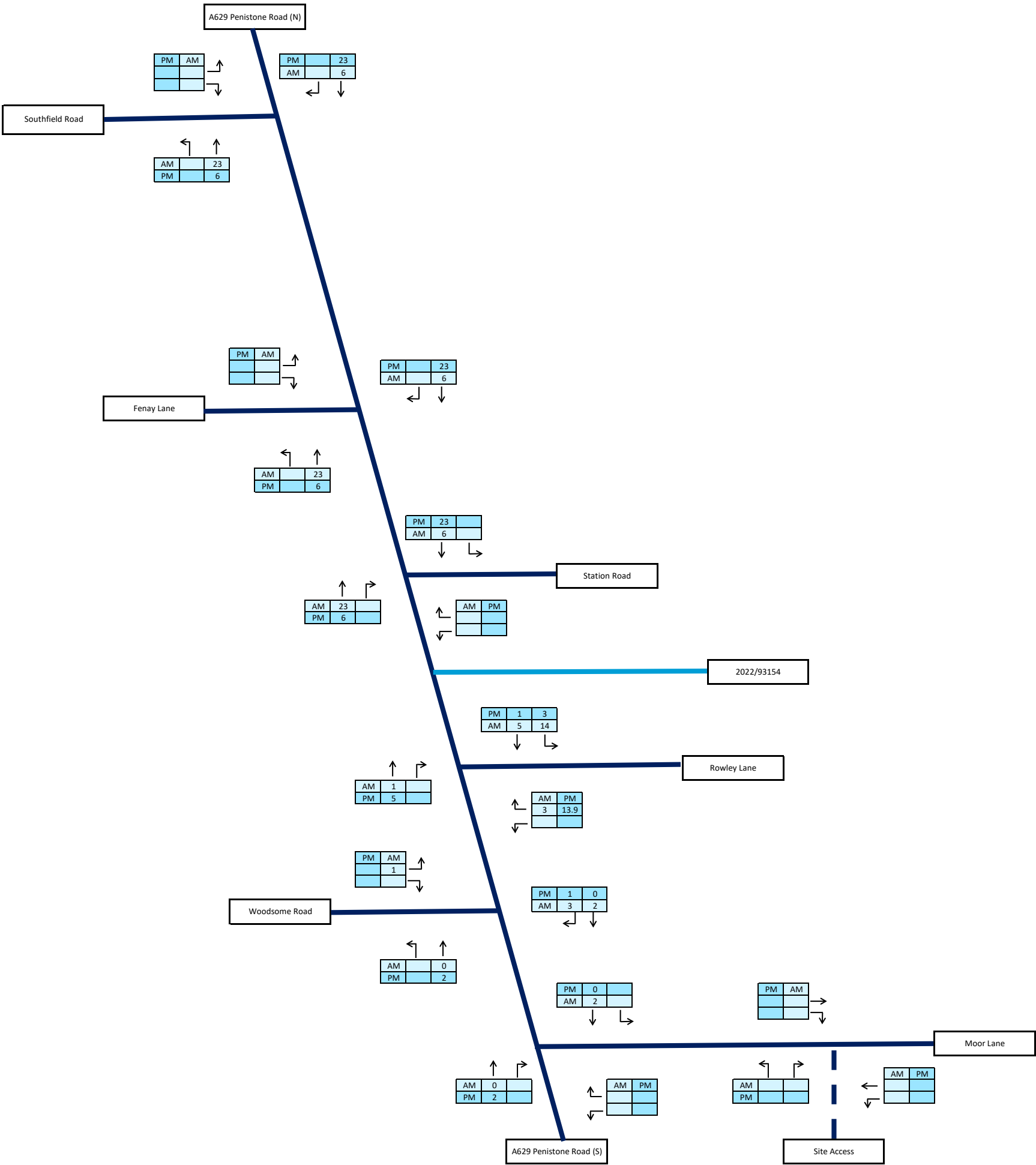
Appendix C
Traffic Flow Diagrams

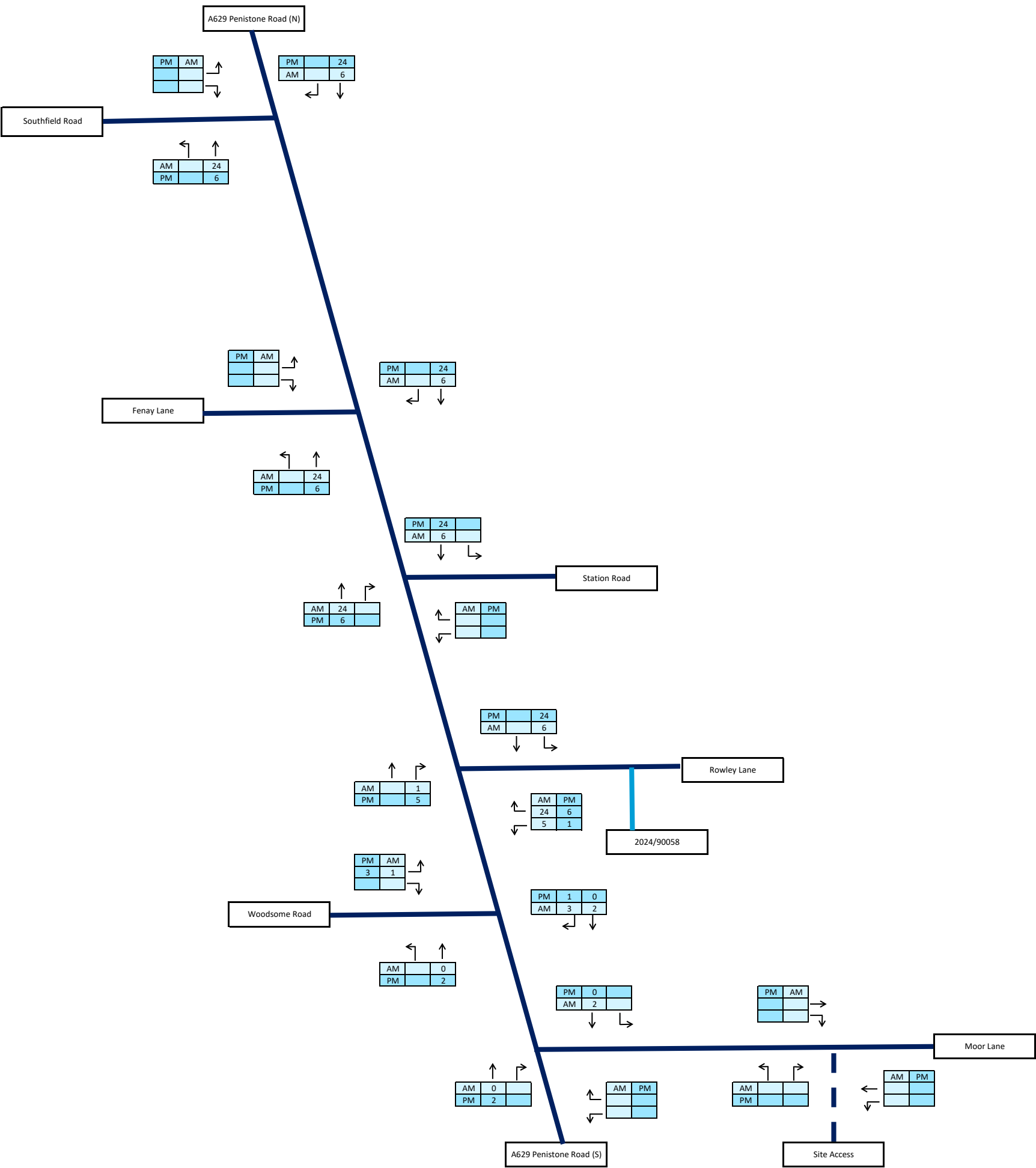


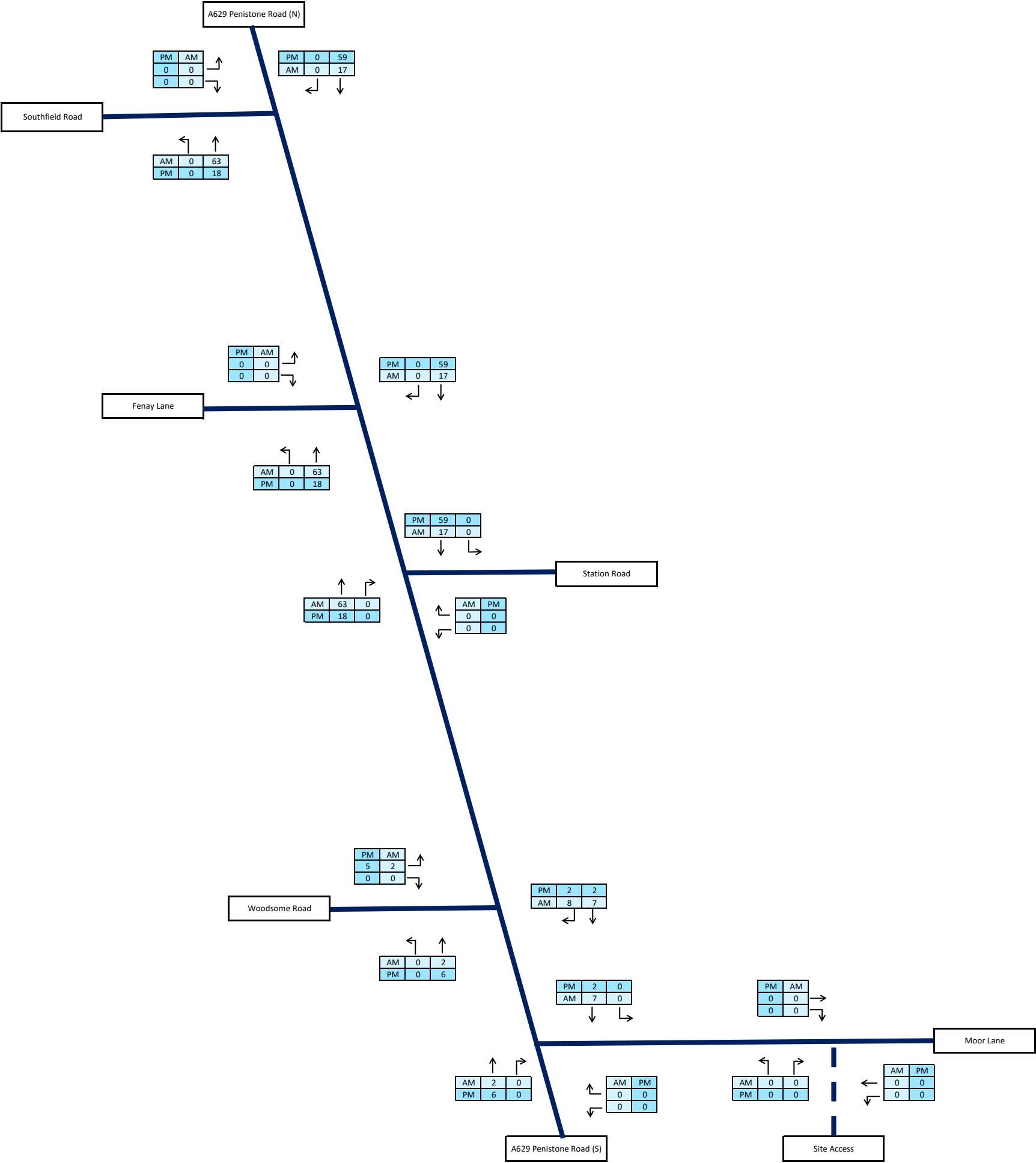


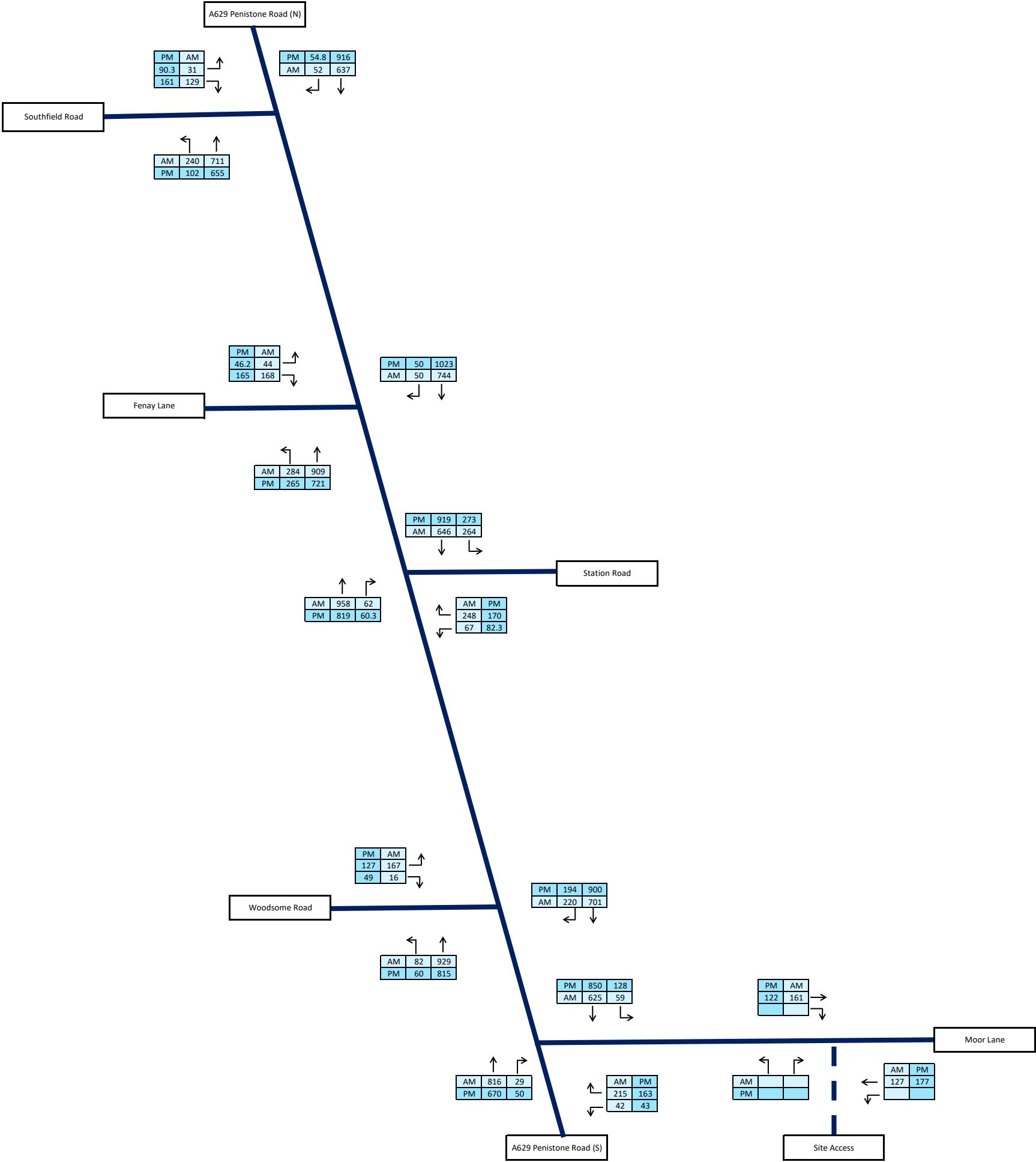


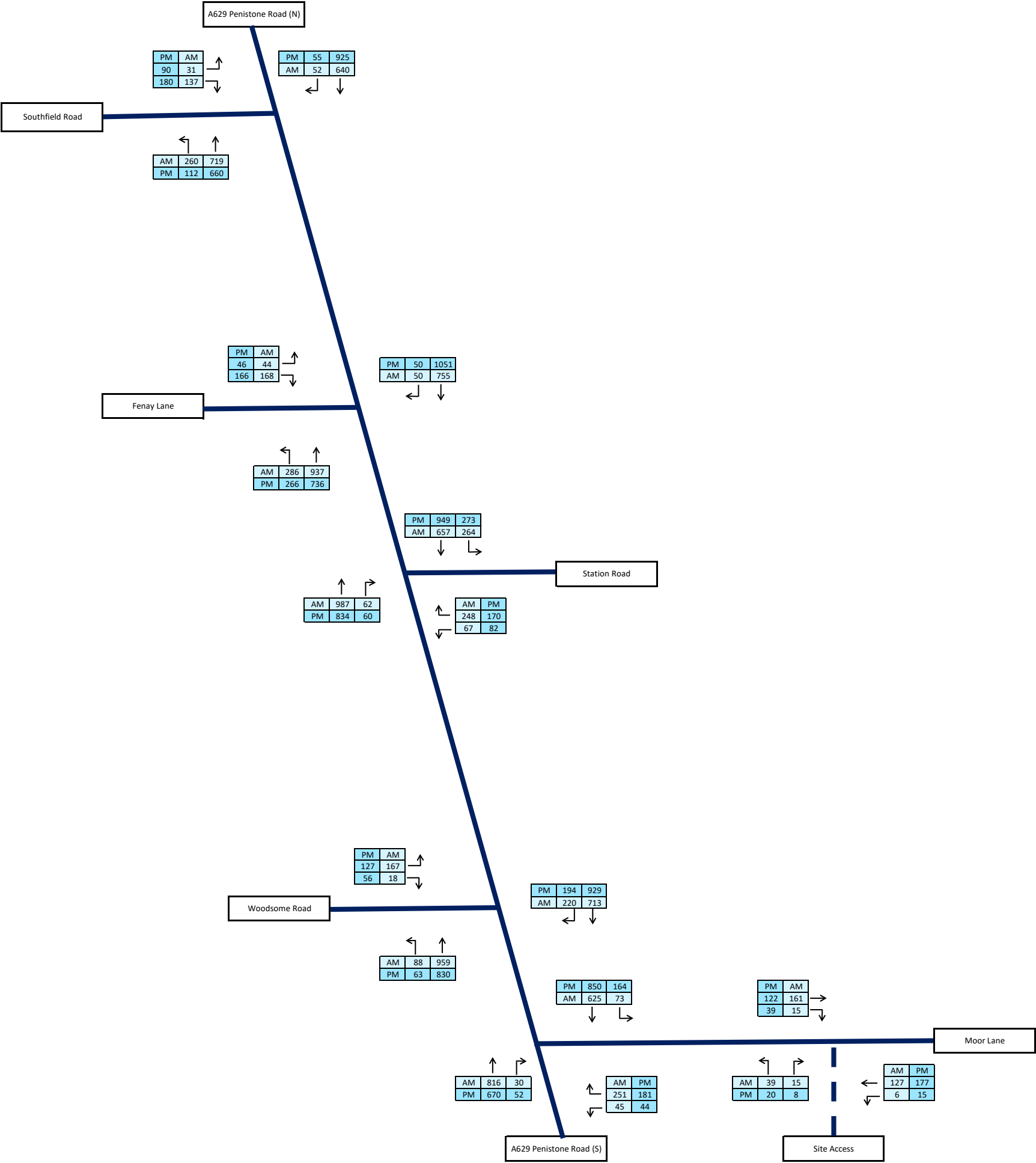












Appendix D
TRICS Output

Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	1 day
	WS	WEST SUSSEX	1 day
04	EAST ANGLIA		
	NF	NORFOLK	7 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 day
09	NORTH		
	IM	ISLE OF MAN	1 day
11	SCOTLAND		
	AS	ABERDEENSHIRE	1 day

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



Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

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:	DWELLS
Actual Range:	50 to 250 (units:DWELLS)
Range Selected by User:	50 to 250 (units:DWELLS)
Parking Spaces Range:	6 - 2824

Public Transport Provision:	
Selection by:	All Surveys Included
Date Range:	01/01/15 to 26/11/25

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

Selected survey days:	
Monday	1 days
Tuesday	3 days
Wednesday	2 days
Thursday	5 days
Friday	1 days

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

Selected survey types:	
Manual count	8
Direction ATC Count	4

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

Selected Locations:	
Edge of Town	12 days

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

Selected Location Sub Categories:	
Out of Town	2 days
Residential Zone	10 days

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 Vehicle Counts:	
Servicing vehicles Excluded	2 days
Servicing vehicles Included	1 days
Servicing vehicles Unknown	9 days

Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

Secondary Filtering Selection:

Use Class:

C3	12 surveys
----	------------

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:

313 - 8961

Population within 1 mile:

1,001 to 5,000	6 surveys
5,001 to 10,000	6 surveys

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

Population within 5 miles:

5,001 to 25,000	8 surveys
25,001 to 50,000	3 surveys
75,001 to 100,000	1 surveys

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

Car ownership within 5 miles:

1.1 to 1.5	11 surveys
1.6 to 2.0	1 surveys

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.

Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

Petrol filling station:

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	2 surveys
Yes	10 surveys

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

PTAL Rating:

No PTAL Present	12 surveys
-----------------	------------

This data displays the number of surveys within the selected set by PTAL rating category.

COVID-19 Restrictions:

No

Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

1	AS-03-A-02	MIXED HOUSES	ABERDEENSHIRE
FARROCHIE ROAD STONEHAVEN Edge of Town Residential Zone Number of dwellings: 131.00 DWELLS Survey date: Wednesday 20/04/2022			
			Survey Type: Manual
2	HF-03-A-03	MIXED HOUSES	HERTFORDSHIRE
HARE STREET ROAD BUNTINGFORD Edge of Town Residential Zone Number of dwellings: 160.00 DWELLS Survey date:			
			Survey Type: Manual
3	IM-03-A-06	MIXED HOUSES	ISLE OF MAN
MOORAGH PROMENADE RAMSEY Edge of Town Residential Zone Number of dwellings: 129.00 DWELLS Survey date: Thursday 23/05/2024			
			Survey Type: Manual
4	NF-03-A-15	MIXED HOUSES & FLATS	NORFOLK
SILFIELD ROAD WYMONDHAM Edge of Town Out of Town Number of dwellings: 235.00 DWELLS Survey date: Thursday 20/09/2018			
			Survey Type: Manual
5	NF-03-A-16	MIXED HOUSES & FLATS	NORFOLK
NORWICH COMMON WYMONDHAM Edge of Town Residential Zone Number of dwellings: 138.00 DWELLS Survey date: Tuesday 20/10/2015			
			Survey Type: Manual
6	NF-03-A-32	MIXED HOUSES & FLATS	NORFOLK
HUNSTANTON ROAD HUNSTANTON Edge of Town Residential Zone Number of dwellings: 164.00 DWELLS Survey date: Wednesday 21/09/2022			
			Survey Type: Manual
7	NF-03-A-33	MIXED HOUSES	NORFOLK
LONDON ROAD ATTLEBOROUGH Edge of Town Residential Zone Number of dwellings: 143.00 DWELLS Survey date: Thursday 29/09/2022			
			Survey Type: Manual
8	NF-03-A-34	MIXED HOUSES	NORFOLK
NORWICH ROAD SWAFFHAM Edge of Town Out of Town Number of dwellings: 80.00 DWELLS			

Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

Survey date: Tuesday 27/09/2022

Survey Type: Manual

9	NF-03-A-39	MIXED HOUSES	NORFOLK
HEATH DRIVE HOLT Edge of Town Residential Zone Number of dwellings: 212.00 DWELLS Survey date: Tuesday 27/09/2022			
			Survey Type: Manual
10	NF-03-A-48	MIXED HOUSES	NORFOLK
BRANDON ROAD SWAFFHAM Edge of Town Residential Zone Number of dwellings: 181.00 DWELLS Survey date: Tuesday 17/09/2019			
			Survey Type: Manual
11	NY-03-A-15	DETACHED & SEMI-DETACHED	NORTH YORKSHIRE
MILBY ROAD BOROUGHBRIDGE MILBY Edge of Town Residential Zone Number of dwellings: 145.00 DWELLS Survey date: Thursday 19/09/2024			
			Survey Type: Manual
12	WS-03-A-27	MIXED HOUSES & FLATS	WEST SUSSEX
OCKLEY LANE HASOCKS Edge of Town Residential Zone Number of dwellings: 160.00 DWELLS Survey date: Friday 20/09/2024			
			Survey Type: Manual

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
AN-03-A-10	07-06-2024	Excluding Northern Ireland
DC-03-A-13	10-06-2025	Not Reflective of Proposed Site
DH-03-A-01	28-03-2017	Not Reflective of Proposed Site
ES-03-A-07	07-11-2019	Not Reflective of Proposed Site
HC-03-A-18	29-11-2016	Removed: Site re-surveyed by HC-03-A-19
HC-03-A-19	27-11-2017	Removed: Site re-surveyed by HC-03-A-20
HC-03-A-20	20-11-2018	Removed: Site re-surveyed by HC-03-A-23
HC-03-A-23	19-11-2019	Not Reflective of Proposed Site
HC-03-A-37	27-03-2024	Not Reflective of Proposed Site
HC-03-A-39	14-11-2024	Not Reflective of Proposed Site
KC-03-A-10	09-05-2023	Not Reflective of Proposed Site
KC-03-A-14	22-05-2025	Not Reflective of Proposed Site
LT-03-A-01	24-04-2015	Excluding Ireland
MA-03-A-03	03-10-2025	Excluding Ireland
NF-03-A-24	22-09-2021	Removed: Site re-surveyed by NF-03-A-32
NF-03-A-26	22-09-2021	Removed: Site re-surveyed by NF-03-A-39
NF-03-A-48	13-09-2019	Removed: Most Recent NF-03-A-48 19-09-2019

Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

Site Ref	Survey Date	Reason for Deselection
NF-03-A-48	16-09-2019	Removed: Most Recent NF-03-A-48 19-09-2019
NF-03-A-48	17-09-2019	Removed: Most Recent NF-03-A-48 19-09-2019
NF-03-A-48	18-09-2019	Removed: Most Recent NF-03-A-48 19-09-2019
NF-03-A-49	14-09-2018	Removed: Site re-surveyed by NF-03-A-48
NF-03-A-50	14-10-2016	Removed: Site re-surveyed by NF-03-A-49
SC-03-A-05	01-04-2019	Not Reflective of Proposed Site
SC-03-A-14	22-10-2024	Not Reflective of Proposed Site
TI-03-A-01	17-06-2021	Excluding COVID-19
WS-03-A-17	01-03-2023	Removed: Site re-surveyed by WS-03-A-22
WS-03-A-22	19-03-2024	Not Reflective of Proposed Site

Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

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

Total Vehicles

Calculation factor: 1 DWELLS

*BOLD print indicates peak (busiest) period

Period	Trips per 1 DWELLS DWELLS		
	Inbound	Outbound	Total
08:00-09:00	0.131	0.333	0.464
17:00-18:00	0.335	0.170	0.505

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	12	156	0.085	0.282	0.367
08:00-09:00	12	156	0.131	0.333	0.464
09:00-10:00	12	156	0.146	0.157	0.303
10:00-11:00	12	156	0.124	0.154	0.278
11:00-12:00	12	156	0.157	0.139	0.296
12:00-13:00	12	156	0.149	0.150	0.299
13:00-14:00	12	156	0.153	0.159	0.312
14:00-15:00	12	156	0.163	0.170	0.333
15:00-16:00	12	156	0.232	0.182	0.414
16:00-17:00	12	156	0.260	0.170	0.430
17:00-18:00	12	156	0.335	0.170	0.505
18:00-19:00	12	156	0.255	0.139	0.394
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			2.190	2.205	4.395

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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Audit Code: 05c850fc-e926-4147-8951-eb9de9a97e4f

Parameter Summary:

Trip rate parameter range selected:	50 - 250 (units: DWELLS)
Survey date date range:	20/10/2015 - 20/09/2024
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	27
Surveys manually removed from selection:	0

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

Appendix E
Junction Model Outputs

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462 © Copyright TRL Limited, 2019									
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk									
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: Proposed Site Access - Moor Lane 160 dwellings.j9

Path: C:\AMA\AMA\AMA - Documents\001 - Projects\23440 - Paddock Lane, Kirkburton\ID Models and Drawings\JUNCTION MODELLING

Report generation date: 06/07/2026 09:18:19

»2031 + Committed + Proposed, AM

»2031 + Committed + Proposed, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2031 + Committed + Proposed										
Stream B-AC	D5	0.1	6.00	0.09	A	D6	0.1	5.90	0.05	A
Stream C-AB		0.0	5.62	0.03	A		0.1	6.02	0.07	A

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

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

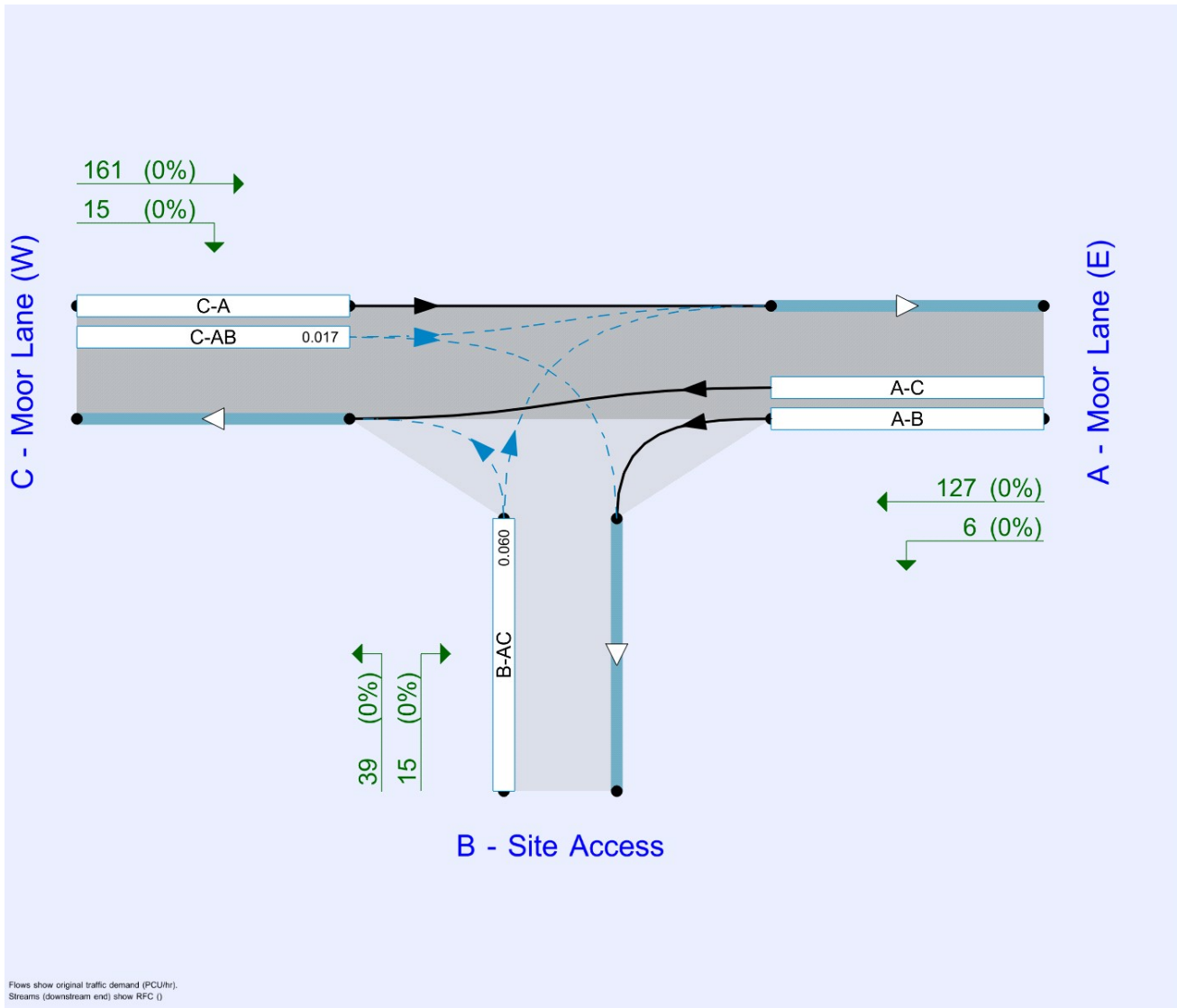
File summary

File Description

Title	
Location	
Site number	
Date	16/06/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Modellinglaptop
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 + Committed + Proposed	AM	ONE HOUR	07:15	08:45	15
D6	2031 + Committed + Proposed	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 + Committed + Proposed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

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

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Moor Lane (E)		Major
B	Site Access		Minor
C	Moor Lane (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Moor Lane (W)	7.32		✓	3.25	85.0	✓	6.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	4.85	75	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	612	0.105	0.266	0.167	0.380
B-C	762	0.110	0.278	-	-
C-B	694	0.254	0.254	-	-

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)
D5	2031 + Committed + Proposed	AM	ONE HOUR	07:15	08:45	15

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 - Moor Lane (E)		✓	133	100.000
B - Site Access		✓	54	100.000
C - Moor Lane (W)		✓	176	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Moor Lane (E)	B - Site Access	C - Moor Lane (W)
From	A - Moor Lane (E)	0	6	127
	B - Site Access	15	0	39
	C - Moor Lane (W)	161	15	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Moor Lane (E)	B - Site Access	C - Moor Lane (W)
From	A - Moor Lane (E)	0	0	0
	B - Site Access	0	0	0
	C - Moor Lane (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	6.00	0.1	A
C-AB	0.03	5.62	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	41	677	0.060	40	0.1	5.651	A
C-AB	11	669	0.017	11	0.0	5.472	A
C-A	121			121			
A-B	5			5			
A-C	96			96			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	670	0.072	48	0.1	5.794	A
C-AB	13	664	0.020	13	0.0	5.532	A
C-A	145			145			
A-B	5			5			
A-C	114			114			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	660	0.090	59	0.1	5.996	A
C-AB	17	657	0.025	16	0.0	5.617	A
C-A	177			177			
A-B	7			7			
A-C	140			140			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	59	660	0.090	59	0.1	5.996	A
C-AB	17	657	0.025	17	0.0	5.617	A
C-A	177			177			
A-B	7			7			
A-C	140			140			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	49	670	0.072	49	0.1	5.796	A
C-AB	13	664	0.020	14	0.0	5.533	A
C-A	145			145			
A-B	5			5			
A-C	114			114			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	41	677	0.060	41	0.1	5.658	A
C-AB	11	669	0.017	11	0.0	5.475	A
C-A	121			121			
A-B	5			5			
A-C	96			96			

2031 + Committed + Proposed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 + Committed + Proposed	PM	ONE HOUR	16:00	17:30	15

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 - Moor Lane (E)		✓	192	100.000
B - Site Access		✓	28	100.000
C - Moor Lane (W)		✓	161	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Moor Lane (E)	B - Site Access	C - Moor Lane (W)
From	A - Moor Lane (E)	0	15	177
	B - Site Access	8	0	20
	C - Moor Lane (W)	122	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Moor Lane (E)	B - Site Access	C - Moor Lane (W)
From	A - Moor Lane (E)	0	0	0
	B - Site Access	0	0	0
	C - Moor Lane (W)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.05	5.90	0.1	A
C-AB	0.07	6.02	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	663	0.032	21	0.0	5.601	A
C-AB	29	658	0.045	29	0.0	5.726	A
C-A	92			92			
A-B	11			11			
A-C	133			133			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	654	0.039	25	0.0	5.726	A
C-AB	35	651	0.054	35	0.1	5.847	A
C-A	110			110			
A-B	13			13			
A-C	159			159			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	640	0.048	31	0.1	5.904	A
C-AB	43	641	0.067	43	0.1	6.020	A
C-A	134			134			
A-B	17			17			
A-C	195			195			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	640	0.048	31	0.1	5.904	A
C-AB	43	641	0.067	43	0.1	6.020	A
C-A	134			134			
A-B	17			17			
A-C	195			195			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	654	0.039	25	0.0	5.727	A
C-AB	35	651	0.054	35	0.1	5.848	A
C-A	110			110			
A-B	13			13			
A-C	159			159			

17:15 - 17:30

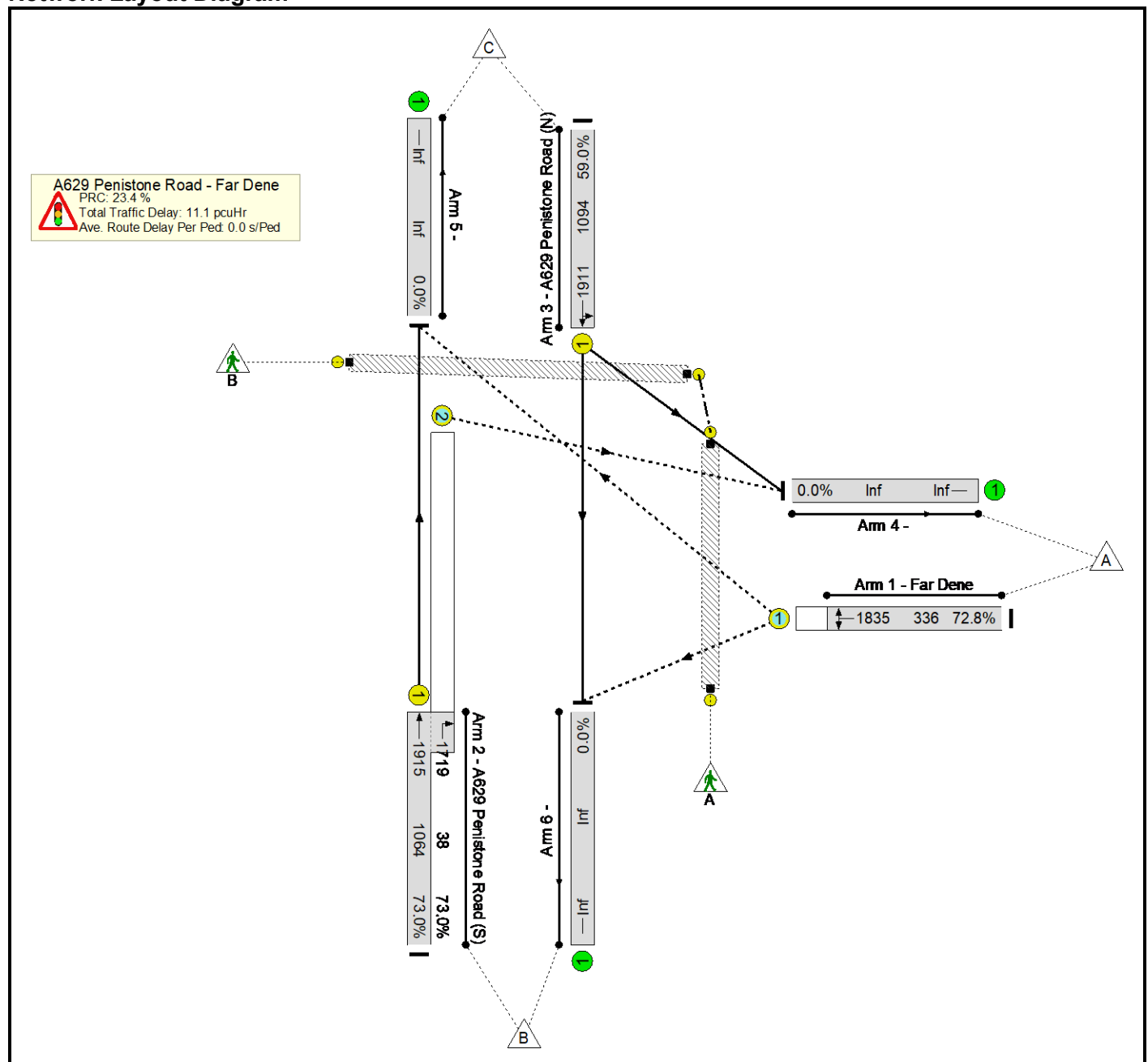
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	663	0.032	21	0.0	5.604	A
C-AB	29	658	0.045	29	0.0	5.729	A
C-A	92			92			
A-B	11			11			
A-C	133			133			

Basic Results Summary

User and Project Details

Project:	Paddock Road, Kirkburton
Title:	
Location:	
Additional detail:	
File name:	A629 Penistone Road - Far Dene - LINSIG 160 dwellings 11.08.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2026 Base AM' (FG1: '2026 Base AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

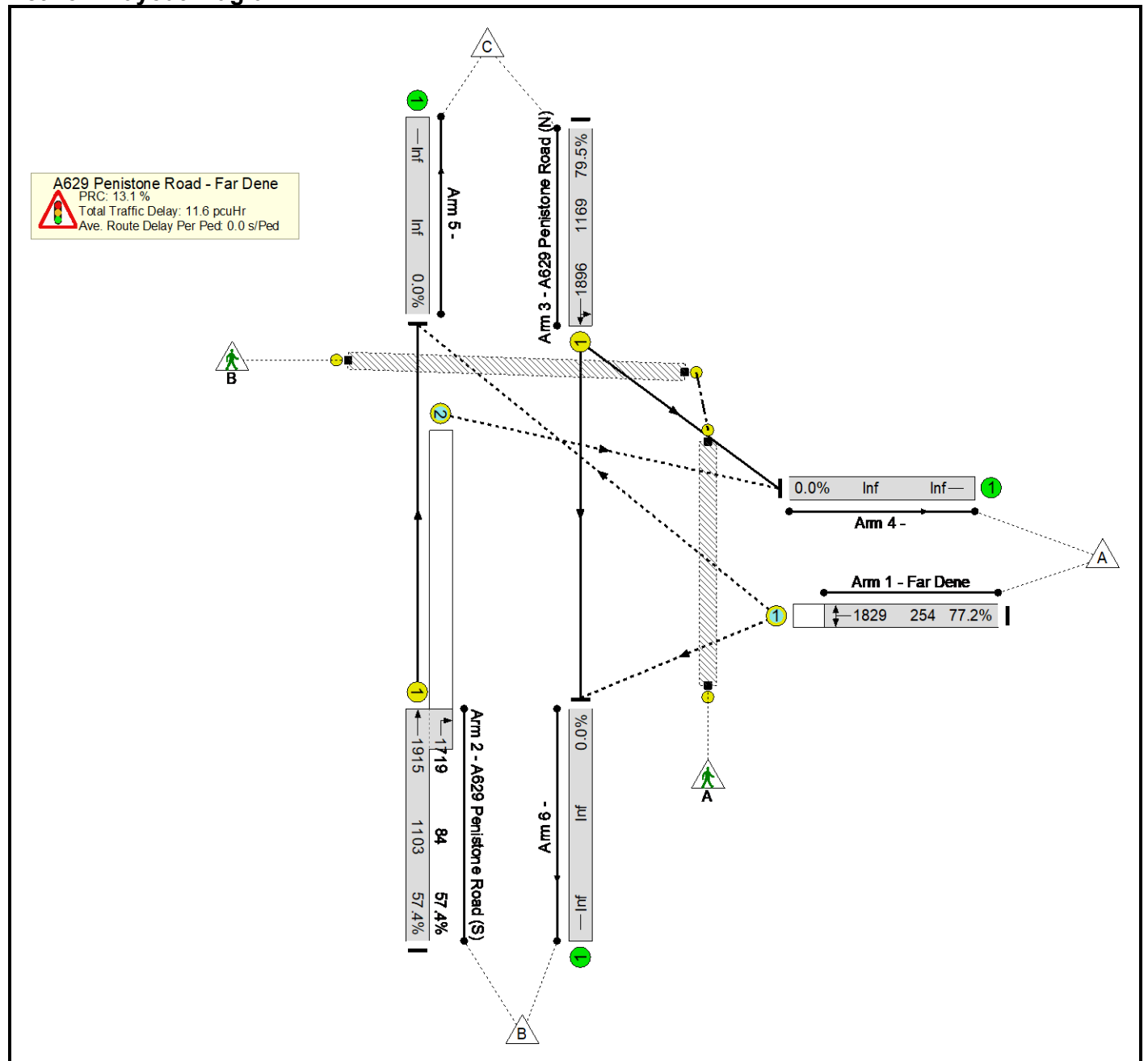
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	73.0%	22	224	26	11.1	-	-
A629 Penistone Road - Far Dene	-	-	-		-	-	-	-	-	-	73.0%	22	224	26	11.1	-	-
1/1	Far Dene Right Left	O	C		2	31	-	245	1835	336	72.8%	0	224	21	3.7	53.8	7.2
2/1+2/2	A629 Penistone Road (S) Right Ahead	U+O	B		2	101	-	804	1915:1719	1064+38	73.0 : 73.0%	22	0	6	4.5	20.0	16.9
3/1	A629 Penistone Road (N) Left Ahead	U	A		2	101	-	645	1911	1094	59.0%	-	-	-	3.0	16.5	11.6
Ped Link: P1	Far Dene	-	E		1	9	-	0	-	3600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	A629 Penistone Road (N)	-	D		1	6	-	0	-	2400	0.0%	-	-	-	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		23.4		Total Delay for Signalled Lanes (pcuHr):		11.09		Cycle Time (s):		180				
			PRC Over All Lanes (%):		23.4		Total Delay Over All Lanes(pcuHr):		11.09								

Basic Results Summary

Scenario 2: '2026 Base PM' (FG2: '2026 Base PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



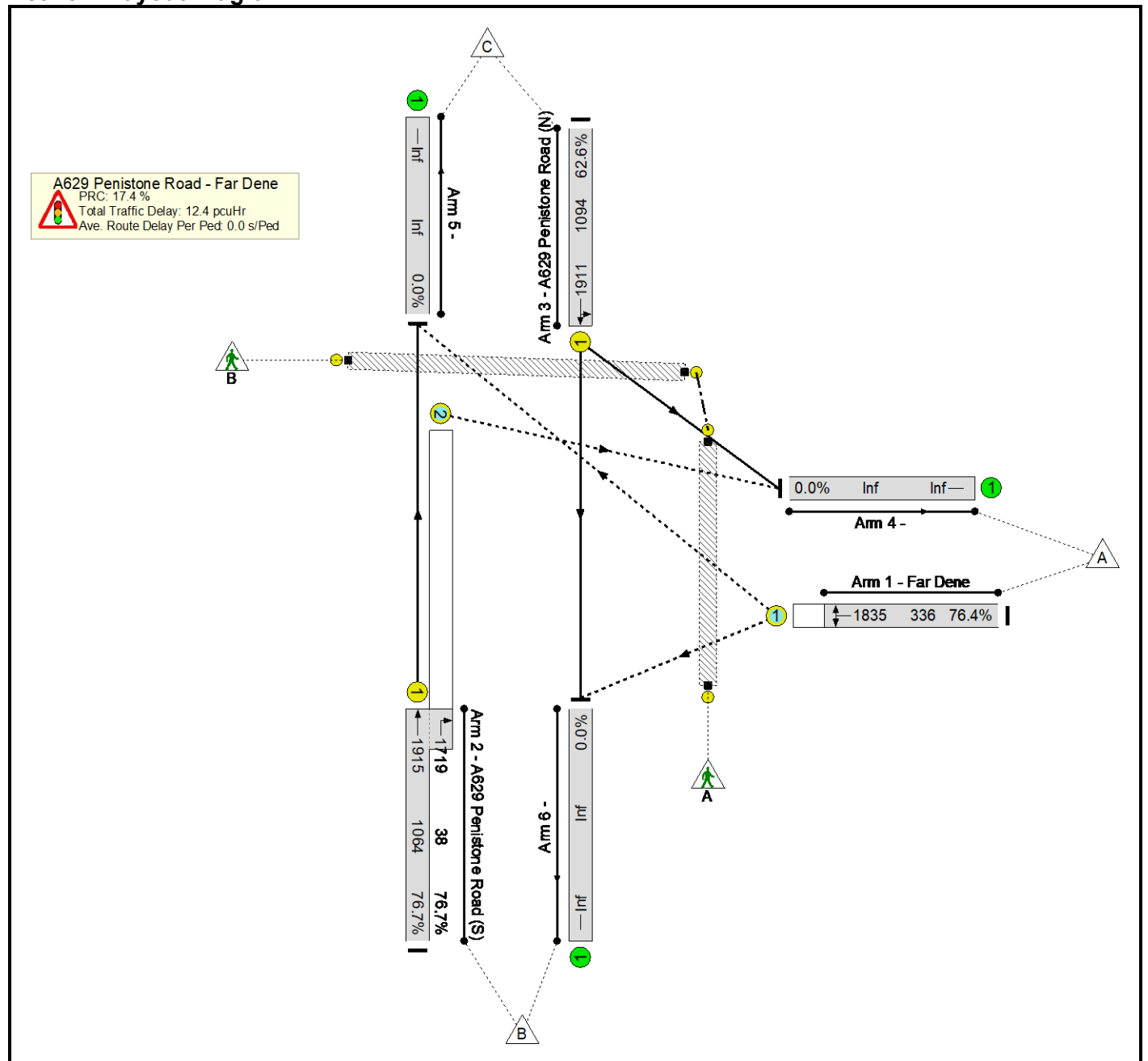
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	79.5%	39	175	30	11.6	-	-
A629 Penistone Road - Far Dene	-	-	-		-	-	-	-	-	-	79.5%	39	175	30	11.6	-	-
1/1	Far Dene Right Left	O	C		2	23	-	196	1829	254	77.2%	0	175	21	3.6	66.9	6.5
2/1+2/2	A629 Penistone Road (S) Right Ahead	U+O	B		2	109	-	681	1915:1719	1103+84	57.4 : 57.4%	39	0	9	2.7	14.1	11.4
3/1	A629 Penistone Road (N) Left Ahead	U	A		2	109	-	930	1896	1169	79.5%	-	-	-	5.3	20.5	21.0
Ped Link: P1	Far Dene	-	E		1	9	-	0	-	3600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	A629 Penistone Road (N)	-	D		1	6	-	0	-	2400	0.0%	-	-	-	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):				13.1	Total Delay for Signalled Lanes (pcuHr):				11.62	Cycle Time (s): 180				
			PRC Over All Lanes (%):				13.1	Total Delay Over All Lanes(pcuHr):				11.62					

Basic Results Summary

Scenario 3: '2031 + Committed AM' (FG3: '2031 + Committed AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

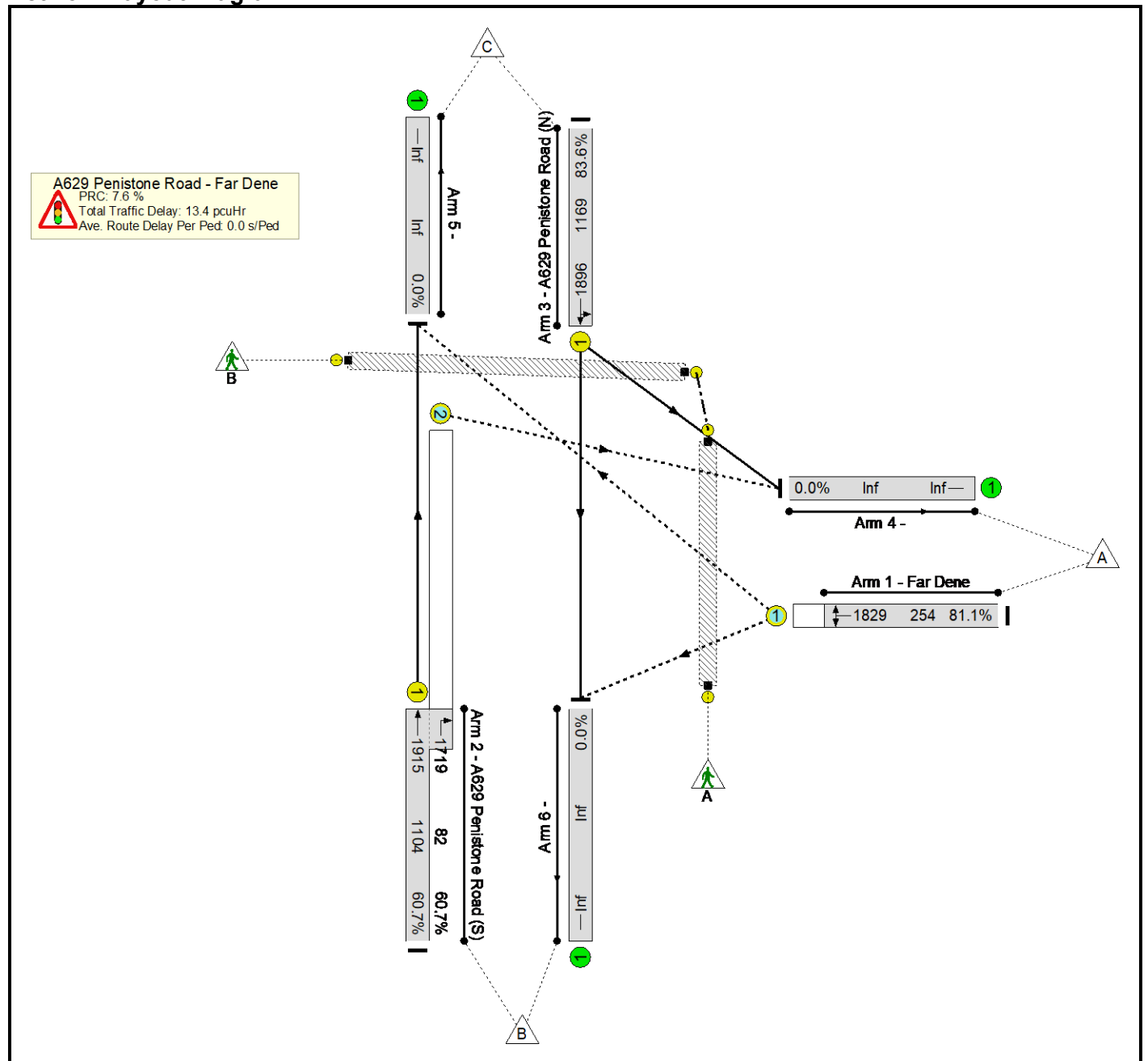
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	76.7%	23	235	28	12.4	-	-
A629 Penistone Road - Far Dene	-	-	-		-	-	-	-	-	-	76.7%	23	235	28	12.4	-	-
1/1	Far Dene Right Left	O	C		2	31	-	257	1835	336	76.4%	0	235	22	4.0	56.7	7.7
2/1+2/2	A629 Penistone Road (S) Right Ahead	U+O	B		2	101	-	845	1915:1719	1064+38	76.7 : 76.7%	23	0	6	5.0	21.5	18.4
3/1	A629 Penistone Road (N) Left Ahead	U	A		2	101	-	684	1911	1094	62.6%	-	-	-	3.3	17.3	12.8
Ped Link: P1	Far Dene	-	E		1	9	-	0	-	3600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	A629 Penistone Road (N)	-	D		1	6	-	0	-	2400	0.0%	-	-	-	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		17.4		17.4		Total Delay for Signalled Lanes (pcuHr):		12.37		Cycle Time (s):		180		
			PRC Over All Lanes (%):		17.4				Total Delay Over All Lanes(pcuHr):		12.37						

Basic Results Summary

Scenario 4: '2031 + Committed PM' (FG4: '2031 + Committed PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



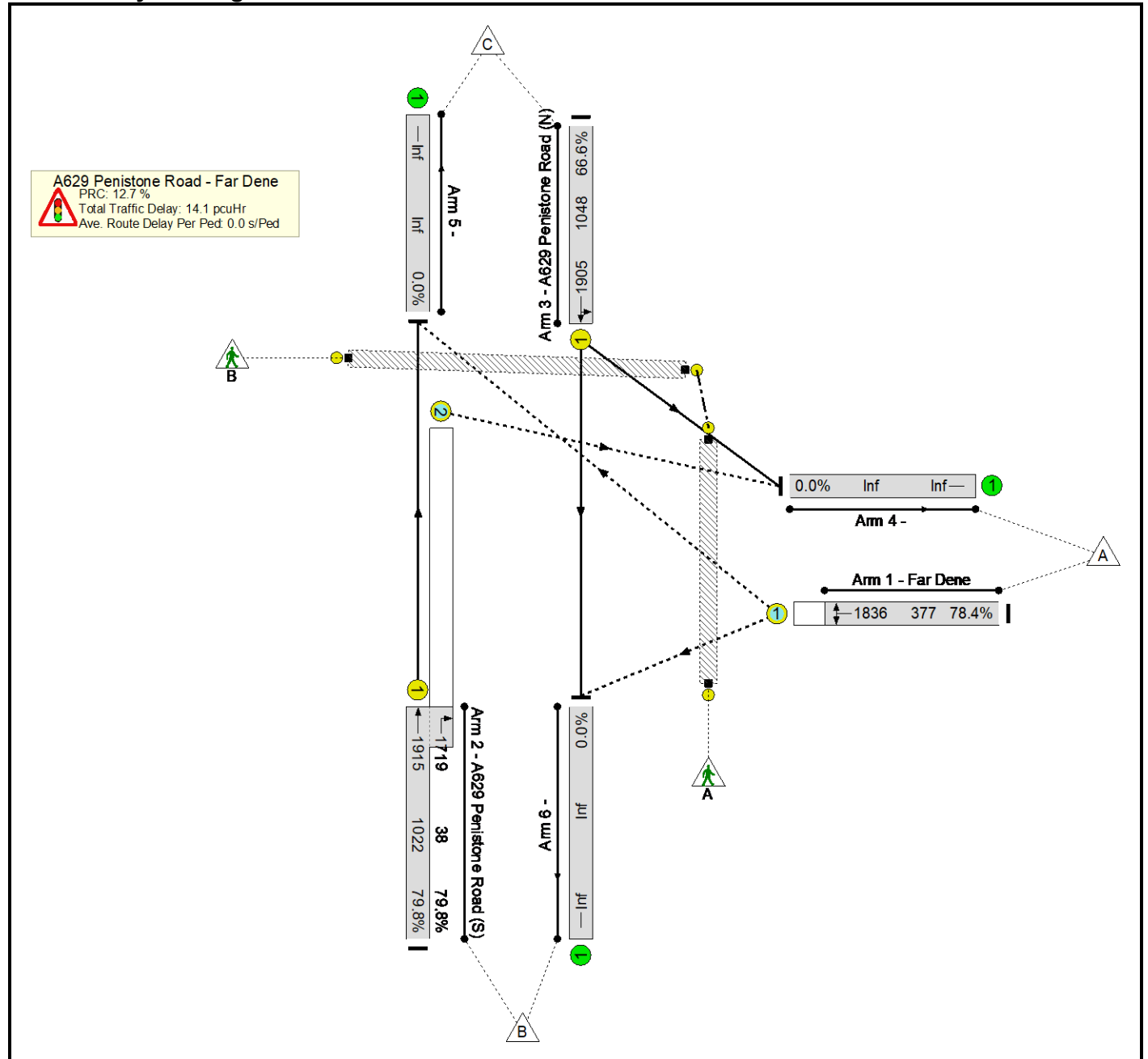
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	83.6%	34	184	38	13.4	-	-
A629 Penistone Road - Far Dene	-	-	-		-	-	-	-	-	-	83.6%	34	184	38	13.4	-	-
1/1	Far Dene Right Left	O	C		2	23	-	206	1829	254	81.1%	0	184	22	4.1	72.2	7.0
2/1+2/2	A629 Penistone Road (S) Right Ahead	U+O	B		2	109	-	720	1915:1719	1104+82	60.7 : 60.7%	34	0	16	3.0	15.0	12.8
3/1	A629 Penistone Road (N) Left Ahead	U	A		2	109	-	978	1896	1169	83.6%	-	-	-	6.3	23.1	24.2
Ped Link: P1	Far Dene	-	E		1	9	-	0	-	3600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	A629 Penistone Road (N)	-	D		1	6	-	0	-	2400	0.0%	-	-	-	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):				7.6	Total Delay for Signalled Lanes (pcuHr):				13.40	Cycle Time (s): 180				
			PRC Over All Lanes (%):				7.6	Total Delay Over All Lanes(pcuHr):				13.40					

Basic Results Summary

Scenario 5: '2031 + Committed + Development AM' (FG5: '2031 + Committed + Proposed AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

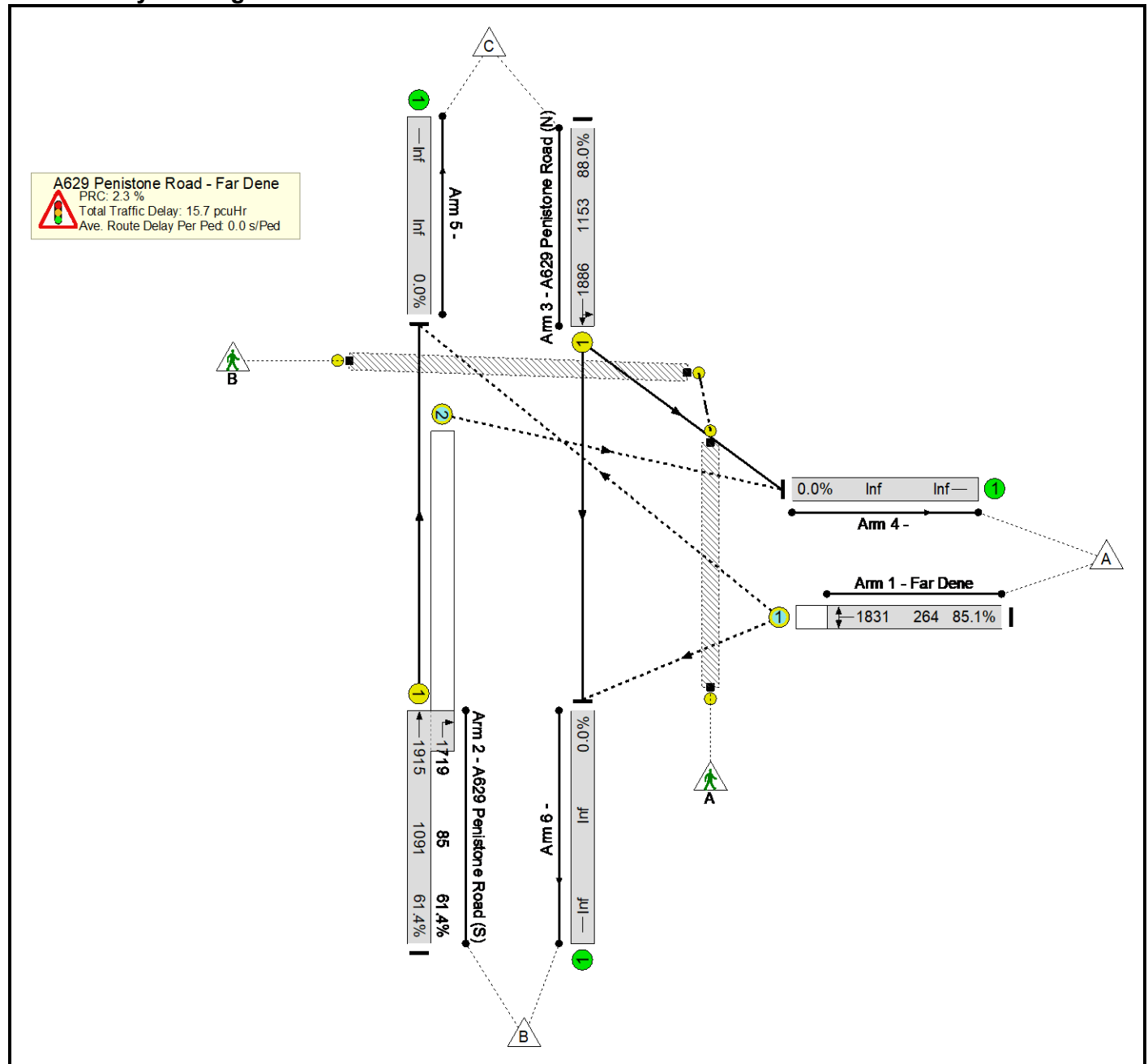


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	79.8%	23	274	29	14.1	-	-
A629 Penistone Road - Far Dene	-	-	-		-	-	-	-	-	-	79.8%	23	274	29	14.1	-	-
1/1	Far Dene Right Left	O	C		2	35	-	296	1836	377	78.4%	0	274	22	4.5	55.1	8.7
2/1+2/2	A629 Penistone Road (S) Right Ahead	U+O	B		2	97	-	846	1915:1719	1022+38	79.8 : 79.8%	23	0	7	5.7	24.4	19.7
3/1	A629 Penistone Road (N) Left Ahead	U	A		2	97	-	698	1905	1048	66.6%	-	-	-	3.8	19.6	14.0
Ped Link: P1	Far Dene	-	E		1	9	-	0	-	3600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	A629 Penistone Road (N)	-	D		1	6	-	0	-	2400	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	88.0%	22	203	52	15.7	-	-
A629 Penistone Road - Far Dene	-	-	-		-	-	-	-	-	-	88.0%	22	203	52	15.7	-	-
1/1	Far Dene Right Left	O	C		2	24	-	225	1831	264	85.1%	0	203	22	4.9	78.0	8.0
2/1+2/2	A629 Penistone Road (S) Right Ahead	U+O	B		2	108	-	722	1915:1719	1091+85	61.4 : 61.4%	22	0	30	3.1	15.6	13.2
3/1	A629 Penistone Road (N) Left Ahead	U	A		2	108	-	1014	1886	1153	88.0%	-	-	-	7.7	27.4	27.7
Ped Link: P1	Far Dene	-	E		1	9	-	0	-	3600	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	A629 Penistone Road (N)	-	D		1	6	-	0	-	2400	0.0%	-	-	-	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		2.3		2.3	Total Delay for Signalled Lanes (pcuHr):		15.72		Cycle Time (s):		180			
			PRC Over All Lanes (%):		2.3		2.3	Total Delay Over All Lanes(pcuHr):		15.72							

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462 © Copyright TRL Limited, 2019									
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Filename: A629 Penistone Road - Woodsome Road 160 dwellings.j9

Path: C:\AMA\AMA\AMA - Documents\001 - Projects\23440 - Paddock Lane, Kirkburton\D Models and Drawings\JUNCTION MODELLING

Report generation date: 06/07/2026 09:37:53

- »2026 Base, AM
- »2026 Base, PM
- »2026 Base + Committed, AM
- »2026 Base + Committed, PM
- »2026 Base + Committed + Proposed, AM
- »2026 Base + Committed + Proposed, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 Base									
Stream B-AC	D1	1.0	18.41	0.49	C	D2	1.4	28.47	0.59	D
Stream C-AB		0.9	14.55	0.47	B		0.7	11.88	0.40	B
	2026 Base + Committed									
Stream B-AC	D3	1.2	22.15	0.55	C	D4	2.0	39.20	0.68	E
Stream C-AB		1.1	16.75	0.53	C		0.8	12.91	0.43	B
	2026 Base + Committed + Proposed									
Stream B-AC	D5	1.4	25.27	0.59	D	D6	2.9	55.26	0.76	F
Stream C-AB		1.2	17.50	0.54	C		0.8	13.14	0.44	B

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

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

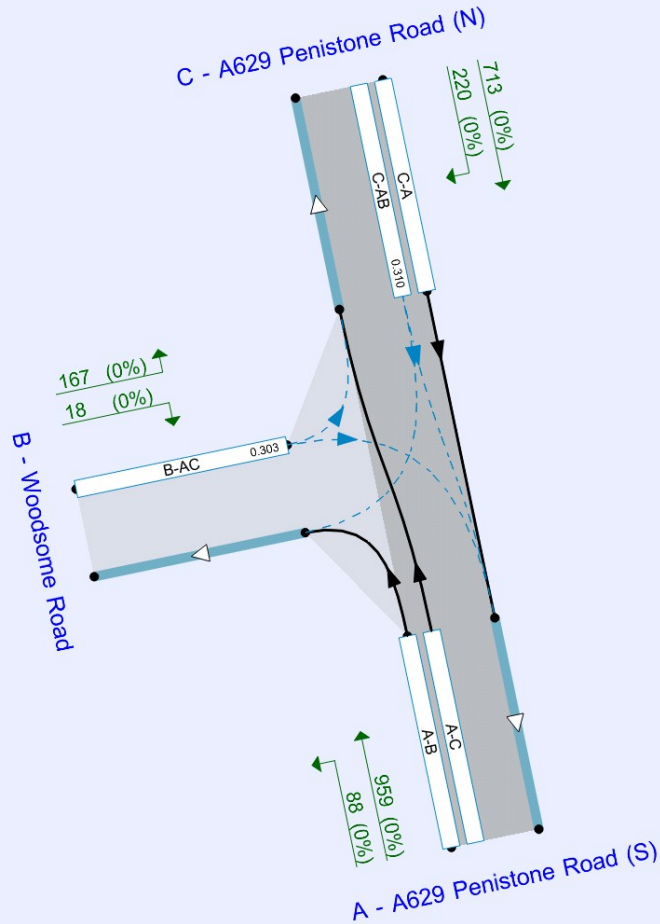
File summary

File Description

Title	
Location	
Site number	
Date	16/06/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Modellinglaptop
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC (t)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base	AM	ONE HOUR	07:15	08:45	15
D2	2026 Base	PM	ONE HOUR	16:00	17:30	15
D3	2026 Base + Committed	AM	ONE HOUR	07:15	08:45	15
D4	2026 Base + Committed	PM	ONE HOUR	16:00	17:30	15
D5	2026 Base + Committed + Proposed	AM	ONE HOUR	07:15	08:45	15
D6	2026 Base + Committed + Proposed	PM	ONE HOUR	16:00	17:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A629 Penistone Road (S)		Major
B	Woodsome Road		Minor
C	A629 Penistone Road (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A629 Penistone Road (N)	9.34		✓	2.25	250.0	✓	10.00

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 - Woodsome Road	One lane	3.60	28	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	524	0.082	0.206	0.130	0.294
B-C	671	0.088	0.222	-	-
C-B	723	0.239	0.239	-	-

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	2026 Base	AM	ONE HOUR	07:15	08:45	15

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 - A629 Penistone Road (S)		✓	961	100.000
B - Woodsome Road		✓	172	100.000
C - A629 Penistone Road (N)		✓	864	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
	From			
	A - A629 Penistone Road (S)	0	78	883
	B - Woodsome Road	15	0	157
	C - A629 Penistone Road (N)	662	202	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
	From			
	A - A629 Penistone Road (S)	0	0	0
	B - Woodsome Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.49	18.41	1.0	C
C-AB	0.47	14.55	0.9	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	481	0.269	128	0.4	10.169	B
C-AB	152	550	0.277	151	0.4	8.990	A
C-A	498			498			
A-B	59			59			
A-C	665			665			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	443	0.349	154	0.5	12.432	B
C-AB	182	516	0.352	181	0.5	10.727	B
C-A	595			595			
A-B	70			70			
A-C	794			794			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	385	0.492	188	0.9	18.115	C
C-AB	223	470	0.474	221	0.9	14.399	B
C-A	729			729			
A-B	86			86			
A-C	972			972			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	385	0.492	189	1.0	18.414	C
C-AB	223	470	0.474	223	0.9	14.550	B
C-A	729			729			
A-B	86			86			
A-C	972			972			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	443	0.349	156	0.5	12.639	B
C-AB	182	516	0.352	183	0.6	10.855	B
C-A	595			595			
A-B	70			70			
A-C	794			794			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	480	0.270	130	0.4	10.299	B
C-AB	152	550	0.277	153	0.4	9.089	A
C-A	498			498			
A-B	59			59			
A-C	665			665			

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.36	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	2026 Base	PM	ONE HOUR	16:00	17:30	15

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 - A629 Penistone Road (S)		✓	828	100.000
B - Woodsome Road		✓	163	100.000
C - A629 Penistone Road (N)		✓	1038	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	57	771
	B - Woodsome Road	47	0	116
	C - A629 Penistone Road (N)	855	183	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Woodsome Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.59	28.47	1.4	D
C-AB	0.40	11.88	0.7	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	423	0.290	121	0.4	11.861	B
C-AB	138	573	0.240	137	0.3	8.216	A
C-A	644			644			
A-B	43			43			
A-C	580			580			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	147	377	0.388	146	0.6	15.485	C
C-AB	165	545	0.302	164	0.4	9.450	A
C-A	769			769			
A-B	51			51			
A-C	693			693			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	179	305	0.587	177	1.3	27.348	D
C-AB	202	505	0.399	201	0.7	11.808	B
C-A	941			941			
A-B	63			63			
A-C	849			849			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	179	305	0.588	179	1.4	28.475	D
C-AB	202	505	0.399	201	0.7	11.875	B
C-A	941			941			
A-B	63			63			
A-C	849			849			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	147	377	0.389	149	0.7	16.016	C
C-AB	165	545	0.302	165	0.4	9.516	A
C-A	769			769			
A-B	51			51			
A-C	693			693			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	123	423	0.290	124	0.4	12.075	B
C-AB	138	573	0.240	138	0.3	8.280	A
C-A	644			644			
A-B	43			43			
A-C	580			580			

2026 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026 Base + Committed	AM	ONE HOUR	07:15	08:45	15

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 - A629 Penistone Road (S)		✓	1011	100.000
B - Woodsome Road		✓	183	100.000
C - A629 Penistone Road (N)		✓	921	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	82	929
	B - Woodsome Road	16	0	167
	C - A629 Penistone Road (N)	701	220	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Woodsome Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.55	22.15	1.2	C
C-AB	0.53	16.75	1.1	C
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	470	0.293	136	0.4	10.731	B
C-AB	166	541	0.306	164	0.4	9.516	A
C-A	528			528			
A-B	62			62			
A-C	699			699			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	429	0.383	164	0.6	13.521	B
C-AB	198	505	0.392	197	0.6	11.650	B
C-A	630			630			
A-B	74			74			
A-C	835			835			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	364	0.554	199	1.2	21.555	C
C-AB	243	458	0.531	241	1.1	16.483	C
C-A	771			771			
A-B	90			90			
A-C	1023			1023			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	364	0.554	201	1.2	22.149	C
C-AB	243	458	0.531	243	1.1	16.746	C
C-A	771			771			
A-B	90			90			
A-C	1023			1023			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	429	0.384	167	0.6	13.854	B
C-AB	198	505	0.392	200	0.7	11.851	B
C-A	630			630			
A-B	74			74			
A-C	835			835			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	470	0.293	139	0.4	10.898	B
C-AB	166	541	0.306	166	0.4	9.647	A
C-A	528			528			
A-B	62			62			
A-C	699			699			

2026 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Base + Committed	PM	ONE HOUR	16:00	17:30	15

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 - A629 Penistone Road (S)		✓	875	100.000
B - Woodsome Road		✓	176	100.000
C - A629 Penistone Road (N)		✓	1094	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	60	815
	B - Woodsome Road	49	0	127
	C - A629 Penistone Road (N)	900	194	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Woodsome Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.68	39.20	2.0	E
C-AB	0.43	12.91	0.8	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	413	0.320	131	0.5	12.648	B
C-AB	146	565	0.259	145	0.3	8.537	A
C-A	678			678			
A-B	45			45			
A-C	614			614			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	158	364	0.435	157	0.7	17.303	C
C-AB	174	534	0.326	174	0.5	9.969	A
C-A	809			809			
A-B	54			54			
A-C	733			733			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	194	284	0.681	189	1.9	36.158	E
C-AB	214	492	0.434	213	0.7	12.818	B
C-A	991			991			
A-B	66			66			
A-C	897			897			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	194	284	0.682	193	2.0	39.201	E
C-AB	214	492	0.434	214	0.8	12.914	B
C-A	991			991			
A-B	66			66			
A-C	897			897			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	158	364	0.435	163	0.8	18.358	C
C-AB	174	534	0.326	175	0.5	10.058	B
C-A	809			809			
A-B	54			54			
A-C	733			733			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	413	0.321	134	0.5	12.944	B
C-AB	146	565	0.259	147	0.4	8.615	A
C-A	678			678			
A-B	45			45			
A-C	614			614			

2026 Base + Committed + Proposed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 Base + Committed + Proposed	AM	ONE HOUR	07:15	08:45	15

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 - A629 Penistone Road (S)		✓	1047	100.000
B - Woodsome Road		✓	185	100.000
C - A629 Penistone Road (N)		✓	933	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	88	959
	B - Woodsome Road	18	0	167
	C - A629 Penistone Road (N)	713	220	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Woodsome Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.59	25.27	1.4	D
C-AB	0.54	17.50	1.2	C
C-A				
A-B				
A-C				

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	460	0.303	138	0.4	11.113	B
C-AB	166	534	0.310	164	0.4	9.665	A
C-A	537			537			
A-B	66			66			
A-C	722			722			

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	416	0.399	165	0.6	14.290	B
C-AB	198	497	0.398	197	0.6	11.946	B
C-A	641			641			
A-B	79			79			
A-C	862			862			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	204	346	0.589	201	1.3	24.359	C
C-AB	243	449	0.542	241	1.1	17.198	C
C-A	784			784			
A-B	97			97			
A-C	1056			1056			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	204	346	0.590	204	1.4	25.272	D
C-AB	243	449	0.542	243	1.2	17.505	C
C-A	784			784			
A-B	97			97			
A-C	1056			1056			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	166	416	0.400	169	0.7	14.736	B
C-AB	198	497	0.398	200	0.7	12.169	B
C-A	641			641			
A-B	79			79			
A-C	862			862			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	460	0.303	140	0.4	11.306	B
C-AB	166	534	0.310	167	0.5	9.819	A
C-A	537			537			
A-B	66			66			
A-C	722			722			

2026 Base + Committed + Proposed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 Base + Committed + Proposed	PM	ONE HOUR	16:00	17:30	15

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 - A629 Penistone Road (S)		✓	893	100.000
B - Woodsome Road		✓	183	100.000
C - A629 Penistone Road (N)		✓	1123	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	63	830
	B - Woodsome Road	56	0	127
	C - A629 Penistone Road (N)	929	194	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Woodsome Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Woodsome Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.76	55.26	2.9	F
C-AB	0.44	13.14	0.8	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	400	0.345	136	0.5	13.540	B
C-AB	146	562	0.260	145	0.3	8.603	A
C-A	699			699			
A-B	47			47			
A-C	625			625			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	348	0.473	163	0.9	19.362	C
C-AB	174	531	0.329	174	0.5	10.078	B
C-A	835			835			
A-B	57			57			
A-C	746			746			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	264	0.764	194	2.6	47.748	E
C-AB	214	488	0.438	213	0.8	13.034	B
C-A	1023			1023			
A-B	69			69			
A-C	914			914			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	201	263	0.765	200	2.9	55.259	F
C-AB	214	488	0.438	214	0.8	13.136	B
C-A	1023			1023			
A-B	69			69			
A-C	914			914			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	165	347	0.474	172	0.9	21.423	C
C-AB	174	531	0.329	175	0.5	10.171	B
C-A	835			835			
A-B	57			57			
A-C	746			746			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	399	0.345	139	0.5	13.940	B
C-AB	146	562	0.260	147	0.4	8.684	A
C-A	699			699			
A-B	47			47			
A-C	625			625			

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462 © Copyright TRL Limited, 2019									
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Filename: A629 Penistone Road-Station Road priority T junction 11.08.j9

Path: C:\AMA\AMA\AMA - Documents\001 - Projects\23440 - Paddock Lane, Kirkburton\ID Models and Drawings\JUNCTION MODELLING

Report generation date: 11/08/2026 10:00:17

- »2026 Base, AM
- »2026 Base, PM
- »2031 Base + Committed, AM
- »2031 Base + Committed, PM
- »2031 Base + Committed + Development, AM
- »2031 Base + Committed + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 Base									
Stream B-C	D1	0.3	17.54	0.26	C	D2	0.3	12.06	0.22	B
Stream B-A		3.4	50.47	0.79	F		1.6	33.75	0.63	D
Stream C-AB		0.1	7.61	0.12	A		0.2	8.66	0.13	A
	2031 Base + Committed									
Stream B-C	D3	3.8	169.94	0.96	F	D4	0.5	20.88	0.34	C
Stream B-A		7.7	108.05	0.94	F		3.0	62.80	0.78	F
Stream C-AB		0.1	7.93	0.13	A		0.2	9.40	0.15	A
	2031 Base + Committed + Development									
Stream B-C	D5	4.0	189.58	0.96	F	D6	0.6	26.29	0.40	D
Stream B-A		8.9	123.73	0.96	F		3.6	73.96	0.81	F
Stream C-AB		0.2	7.97	0.13	A		0.2	9.57	0.15	A

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

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

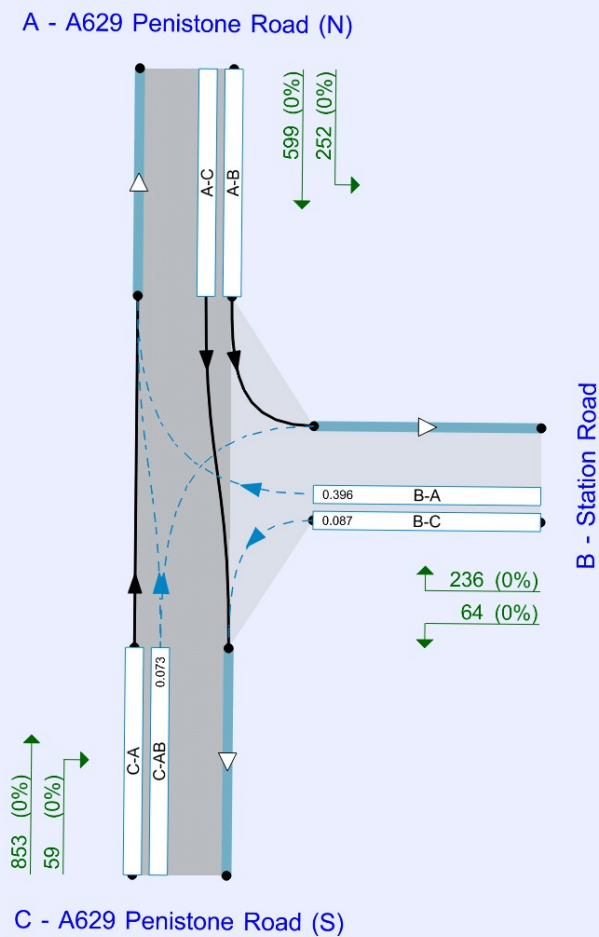
File summary

File Description

Title	
Location	
Site number	
Date	15/06/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Modellinglaptop
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC (t)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15
D3	2031 Base + Committed	AM	ONE HOUR	07:45	09:15	15
D4	2031 Base + Committed	PM	ONE HOUR	16:45	18:15	15
D5	2031 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D6	2031 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A629 Penistone Road (N)		Major
B	Station Road		Minor
C	A629 Penistone Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A629 Penistone Road (S)	10.50		✓	3.30	180.0	✓	7.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Station Road	One lane plus flare	10.00	6.90	4.70	3.60	3.30		2.00	103	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	711	0.104	0.263	0.166	0.376
B-C	753	0.093	0.235	-	-
C-B	759	0.237	0.237	-	-

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

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

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

Traffic 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	2026 Base	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (N)		✓	851	100.000
B - Station Road		✓	300	100.000
C - A629 Penistone Road (S)		✓	912	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
	From			
	A - A629 Penistone Road (N)	0	252	599
	B - Station Road	236	0	64
	C - A629 Penistone Road (S)	853	59	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
	From			
	A - A629 Penistone Road (N)	0	0	0
	B - Station Road	0	0	0
	C - A629 Penistone Road (S)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.26	17.54	0.3	C
B-A	0.79	50.47	3.4	F
C-AB	0.12	7.61	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	556	0.087	48	0.1	7.082	A
B-A	178	449	0.396	175	0.6	13.021	B
C-AB	44	608	0.073	44	0.1	6.384	A
C-A	642			642			
A-B	190			190			
A-C	451			451			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	488	0.118	57	0.1	8.365	A
B-A	212	398	0.533	210	1.1	18.976	C
C-AB	53	578	0.092	53	0.1	6.852	A
C-A	767			767			
A-B	227			227			
A-C	538			538			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	70	298	0.236	70	0.3	15.705	C
B-A	260	327	0.794	252	3.1	43.597	E
C-AB	65	538	0.121	65	0.1	7.611	A
C-A	939			939			
A-B	277			277			
A-C	660			660			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	70	275	0.256	70	0.3	17.541	C
B-A	260	327	0.794	259	3.4	50.468	F
C-AB	65	538	0.121	65	0.1	7.614	A
C-A	939			939			
A-B	277			277			
A-C	660			660			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	475	0.121	58	0.1	8.654	A
B-A	212	398	0.533	221	1.2	21.228	C
C-AB	53	578	0.092	53	0.1	6.858	A
C-A	767			767			
A-B	227			227			
A-C	538			538			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	553	0.087	48	0.1	7.142	A
B-A	178	449	0.396	180	0.7	13.468	B
C-AB	44	608	0.073	45	0.1	6.391	A
C-A	642			642			
A-B	190			190			
A-C	451			451			

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.23	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	2026 Base	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (N)		✓	1079	100.000
B - Station Road		✓	240	100.000
C - A629 Penistone Road (S)		✓	820	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	260	819
	B - Station Road	162	0	78
	C - A629 Penistone Road (S)	763	57	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	0	0
	B - Station Road	0	0	0
	C - A629 Penistone Road (S)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	12.06	0.3	B
B-A	0.63	33.75	1.6	D
C-AB	0.13	8.66	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	561	0.105	58	0.1	7.155	A
B-A	122	423	0.289	120	0.4	11.851	B
C-AB	43	567	0.076	43	0.1	6.857	A
C-A	574			574			
A-B	196			196			
A-C	617			617			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	70	507	0.138	70	0.2	8.239	A
B-A	146	365	0.399	145	0.6	16.290	C
C-AB	51	530	0.097	51	0.1	7.517	A
C-A	686			686			
A-B	234			234			
A-C	736			736			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	86	391	0.220	85	0.3	11.795	B
B-A	178	284	0.628	175	1.5	31.986	D
C-AB	63	478	0.131	63	0.1	8.656	A
C-A	840			840			
A-B	286			286			
A-C	902			902			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	86	384	0.223	86	0.3	12.059	B
B-A	178	284	0.628	178	1.6	33.755	D
C-AB	63	478	0.131	63	0.2	8.663	A
C-A	840			840			
A-B	286			286			
A-C	902			902			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	70	503	0.140	71	0.2	8.344	A
B-A	146	365	0.399	149	0.7	16.955	C
C-AB	51	530	0.097	51	0.1	7.528	A
C-A	686			686			
A-B	234			234			
A-C	736			736			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	559	0.105	59	0.1	7.200	A
B-A	122	423	0.288	123	0.4	12.051	B
C-AB	43	567	0.076	43	0.1	6.871	A
C-A	574			574			
A-B	196			196			
A-C	617			617			

2031 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		17.23	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2031 Base + Committed	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (N)		✓	910	100.000
B - Station Road		✓	315	100.000
C - A629 Penistone Road (S)		✓	1020	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	264	646
	B - Station Road	248	0	67
	C - A629 Penistone Road (S)	958	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	0	0
	B - Station Road	0	0	0
	C - A629 Penistone Road (S)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.96	169.94	3.8	F
B-A	0.94	108.05	7.7	F
C-AB	0.13	7.93	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	535	0.094	50	0.1	7.412	A
B-A	187	425	0.439	184	0.8	14.742	B
C-AB	47	597	0.078	46	0.1	6.529	A
C-A	721			721			
A-B	199			199			
A-C	486			486			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	445	0.135	60	0.2	9.336	A
B-A	223	369	0.604	220	1.4	23.735	C
C-AB	56	566	0.099	56	0.1	7.056	A
C-A	861			861			
A-B	237			237			
A-C	581			581			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	134	0.549	70	1.1	53.521	F
B-A	273	292	0.936	255	6.0	75.191	F
C-AB	68	522	0.131	68	0.1	7.923	A
C-A	1055			1055			
A-B	291			291			
A-C	711			711			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	77	0.964	63	3.8	169.939	F
B-A	273	291	0.937	266	7.7	108.047	F
C-AB	68	522	0.131	68	0.1	7.928	A
C-A	1055			1055			
A-B	291			291			
A-C	711			711			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	404	0.149	75	0.2	11.384	B
B-A	223	368	0.605	247	1.7	34.651	D
C-AB	56	566	0.099	56	0.1	7.061	A
C-A	861			861			
A-B	237			237			
A-C	581			581			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	530	0.095	51	0.1	7.513	A
B-A	187	425	0.439	190	0.8	15.539	C
C-AB	47	597	0.078	47	0.1	6.542	A
C-A	721			721			
A-B	199			199			
A-C	486			486			

2031 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2031 Base + Committed	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (N)		✓	1192	100.000
B - Station Road		✓	252	100.000
C - A629 Penistone Road (S)		✓	879	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	273	919
	B - Station Road	170	0	82
	C - A629 Penistone Road (S)	819	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	0	0
	B - Station Road	0	0	0
	C - A629 Penistone Road (S)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.34	20.88	0.5	C
B-A	0.78	62.80	3.0	F
C-AB	0.15	9.40	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	536	0.115	61	0.1	7.570	A
B-A	128	393	0.325	126	0.5	13.373	B
C-AB	45	547	0.083	45	0.1	7.163	A
C-A	617			617			
A-B	206			206			
A-C	692			692			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	470	0.157	73	0.2	9.080	A
B-A	153	330	0.463	151	0.8	20.021	C
C-AB	54	506	0.107	54	0.1	7.963	A
C-A	736			736			
A-B	245			245			
A-C	826			826			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	285	0.317	89	0.5	18.294	C
B-A	187	241	0.778	179	2.8	53.175	F
C-AB	66	449	0.147	66	0.2	9.395	A
C-A	902			902			
A-B	301			301			
A-C	1012			1012			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	262	0.344	90	0.5	20.881	C
B-A	187	241	0.777	186	3.0	62.796	F
C-AB	66	449	0.147	66	0.2	9.404	A
C-A	902			902			
A-B	301			301			
A-C	1012			1012			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	459	0.161	75	0.2	9.402	A
B-A	153	331	0.462	161	0.9	22.248	C
C-AB	54	506	0.107	54	0.1	7.973	A
C-A	736			736			
A-B	245			245			
A-C	826			826			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	534	0.116	62	0.1	7.636	A
B-A	128	394	0.325	130	0.5	13.712	B
C-AB	45	547	0.083	45	0.1	7.178	A
C-A	617			617			
A-B	206			206			
A-C	692			692			

2031 Base + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		19.25	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (N)		✓	919	100.000
B - Station Road		✓	315	100.000
C - A629 Penistone Road (S)		✓	1045	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	264	655
	B - Station Road	248	0	67
	C - A629 Penistone Road (S)	983	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	0	0
	B - Station Road	0	0	0
	C - A629 Penistone Road (S)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.96	189.58	4.0	F
B-A	0.96	123.73	8.9	F
C-AB	0.13	7.97	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	532	0.095	50	0.1	7.458	A
B-A	187	420	0.444	184	0.8	15.037	C
C-AB	47	596	0.078	46	0.1	6.548	A
C-A	740			740			
A-B	199			199			
A-C	493			493			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	439	0.137	60	0.2	9.501	A
B-A	223	363	0.614	220	1.5	24.637	C
C-AB	56	564	0.099	56	0.1	7.080	A
C-A	884			884			
A-B	237			237			
A-C	589			589			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	101	0.730	67	1.9	92.760	F
B-A	273	284	0.960	252	6.7	82.491	F
C-AB	68	520	0.131	68	0.1	7.964	A
C-A	1082			1082			
A-B	291			291			
A-C	721			721			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	77	0.957	65	4.0	189.585	F
B-A	273	284	0.961	264	8.9	123.729	F
C-AB	68	520	0.131	68	0.2	7.969	A
C-A	1082			1082			
A-B	291			291			
A-C	721			721			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	386	0.156	76	0.2	12.143	B
B-A	223	362	0.615	252	1.7	39.356	E
C-AB	56	564	0.099	56	0.1	7.087	A
C-A	884			884			
A-B	237			237			
A-C	589			589			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	527	0.096	51	0.1	7.567	A
B-A	187	420	0.445	190	0.8	15.907	C
C-AB	47	596	0.078	47	0.1	6.561	A
C-A	740			740			
A-B	199			199			
A-C	493			493			

2031 Base + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (N)		✓	1217	100.000
B - Station Road		✓	252	100.000
C - A629 Penistone Road (S)		✓	892	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	273	944
	B - Station Road	170	0	82
	C - A629 Penistone Road (S)	832	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (N)	B - Station Road	C - A629 Penistone Road (S)
From	A - A629 Penistone Road (N)	0	0	0
	B - Station Road	0	0	0
	C - A629 Penistone Road (S)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.40	26.29	0.6	D
B-A	0.81	73.96	3.6	F
C-AB	0.15	9.57	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	531	0.116	61	0.1	7.655	A
B-A	128	387	0.331	126	0.5	13.710	B
C-AB	45	543	0.083	45	0.1	7.227	A
C-A	626			626			
A-B	206			206			
A-C	711			711			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	462	0.160	73	0.2	9.266	A
B-A	153	322	0.475	151	0.9	20.927	C
C-AB	54	501	0.108	54	0.1	8.057	A
C-A	748			748			
A-B	245			245			
A-C	849			849			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	257	0.352	89	0.5	21.253	C
B-A	187	231	0.811	178	3.1	60.344	F
C-AB	66	442	0.149	66	0.2	9.558	A
C-A	916			916			
A-B	301			301			
A-C	1039			1039			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	90	226	0.399	90	0.6	26.290	D
B-A	187	231	0.810	186	3.6	73.962	F
C-AB	66	442	0.149	66	0.2	9.567	A
C-A	916			916			
A-B	301			301			
A-C	1039			1039			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	448	0.164	75	0.2	9.696	A
B-A	153	323	0.474	163	0.9	23.901	C
C-AB	54	501	0.108	54	0.1	8.068	A
C-A	748			748			
A-B	245			245			
A-C	849			849			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	528	0.117	62	0.1	7.723	A
B-A	128	387	0.331	130	0.5	14.079	B
C-AB	45	543	0.083	45	0.1	7.242	A
C-A	626			626			
A-B	206			206			
A-C	711			711			

Junctions 9				
PICADY 9 - Priority Intersection Module				
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Filename: A629 Penistone Road-Fenay Lane priority T junction 160 dwellings.j9

Path: C:\AMA\AMA\AMA - Documents\001 - Projects\23440 - Paddock Lane, Kirkburton\ID Models and Drawings\JUNCTION MODELLING

Report generation date: 06/07/2026 09:50:30

- »2026 Base, AM
- »2026 Base, PM
- »2031 Base + Committed, AM
- »2031 Base + Committed, PM
- »2031 Base + Committed + Development, AM
- »2031 Base + Committed + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 Base									
Stream B-C	D1	0.2	14.52	0.16	B	D2	0.2	13.22	0.15	B
Stream B-A		1.6	34.61	0.63	D		1.6	33.70	0.62	D
Stream C-AB		0.1	7.80	0.10	A		0.1	7.20	0.10	A
	2031 Base + Committed									
Stream B-C	D3	0.3	24.10	0.25	C	D4	0.3	19.18	0.21	C
Stream B-A		2.8	58.21	0.76	F		2.5	51.98	0.73	F
Stream C-AB		0.1	8.39	0.11	A		0.1	7.47	0.10	A
	2031 Base + Committed + Development									
Stream B-C	D5	0.4	28.88	0.28	D	D6	0.3	22.12	0.24	C
Stream B-A		3.2	66.68	0.79	F		2.8	59.13	0.76	F
Stream C-AB		0.1	8.55	0.12	A		0.1	7.53	0.10	A

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

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

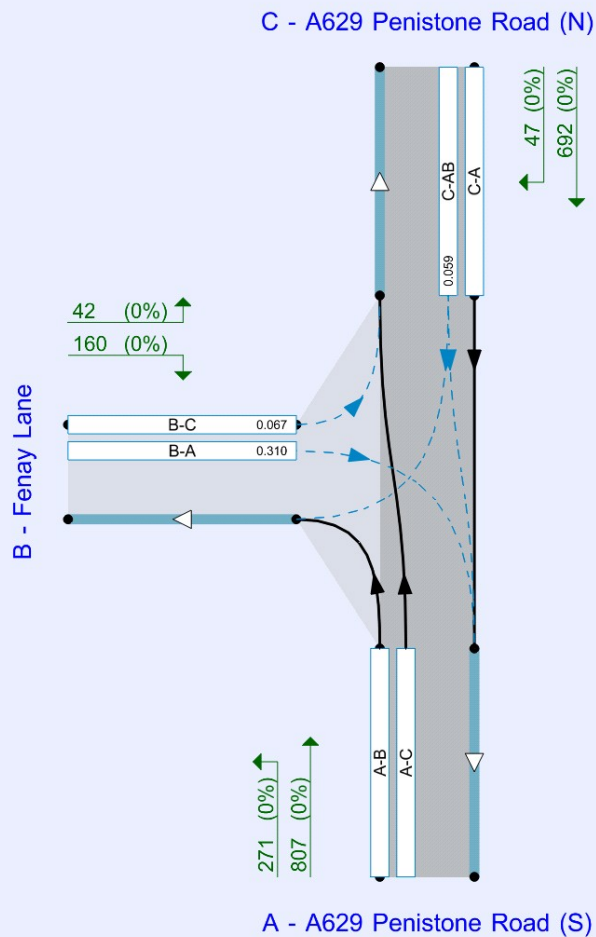
File summary

File Description

Title	
Location	
Site number	
Date	15/06/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Modellinglaptop
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15
D3	2031 Base + Committed	AM	ONE HOUR	07:45	09:15	15
D4	2031 Base + Committed	PM	ONE HOUR	16:45	18:15	15
D5	2031 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D6	2031 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A629 Penistone Road (S)		Major
B	Fenay Lane		Minor
C	A629 Penistone Road (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A629 Penistone Road (N)	11.50		✓	4.00	149.0	✓	6.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Fenay Lane	One lane plus flare	10.00	10.00	7.50	5.70	5.00		1.00	68	62

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	621	0.086	0.217	0.137	0.310
B-C	659	0.077	0.194	-	-
C-B	790	0.233	0.233	-	-

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	2026 Base	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (S)		✓	1078	100.000
B - Fenay Lane		✓	202	100.000
C - A629 Penistone Road (N)		✓	739	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
	From			
	A - A629 Penistone Road (S)	0	271	807
	B - Fenay Lane	160	0	42
	C - A629 Penistone Road (N)	692	47	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
	From			
	A - A629 Penistone Road (S)	0	0	0
	B - Fenay Lane	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.16	14.52	0.2	B
B-A	0.63	34.61	1.6	D
C-AB	0.10	7.80	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	472	0.067	31	0.1	8.163	A
B-A	120	388	0.310	119	0.4	13.269	B
C-AB	35	601	0.059	35	0.1	6.362	A
C-A	521			521			
A-B	204			204			
A-C	608			608			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	416	0.091	38	0.1	9.500	A
B-A	144	343	0.420	143	0.7	17.904	C
C-AB	42	564	0.075	42	0.1	6.898	A
C-A	622			622			
A-B	244			244			
A-C	725			725			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	301	0.154	46	0.2	14.124	B
B-A	176	279	0.631	173	1.6	32.783	D
C-AB	52	513	0.101	52	0.1	7.795	A
C-A	762			762			
A-B	298			298			
A-C	889			889			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	294	0.157	46	0.2	14.521	B
B-A	176	279	0.631	176	1.6	34.605	D
C-AB	52	513	0.101	52	0.1	7.798	A
C-A	762			762			
A-B	298			298			
A-C	889			889			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	412	0.092	38	0.1	9.649	A
B-A	144	343	0.420	147	0.7	18.724	C
C-AB	42	564	0.075	42	0.1	6.901	A
C-A	622			622			
A-B	244			244			
A-C	725			725			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	470	0.067	32	0.1	8.218	A
B-A	120	388	0.310	122	0.5	13.557	B
C-AB	35	601	0.059	35	0.1	6.371	A
C-A	521			521			
A-B	204			204			
A-C	608			608			

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.97	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	2026 Base	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (S)		✓	923	100.000
B - Fenay Lane		✓	201	100.000
C - A629 Penistone Road (N)		✓	967	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	253	670
	B - Fenay Lane	157	0	44
	C - A629 Penistone Road (N)	919	48	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Fenay Lane	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.15	13.22	0.2	B
B-A	0.62	33.70	1.6	D
C-AB	0.10	7.20	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	494	0.067	33	0.1	7.810	A
B-A	118	388	0.305	116	0.4	13.202	B
C-AB	36	628	0.058	36	0.1	6.078	A
C-A	692			692			
A-B	190			190			
A-C	504			504			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	441	0.090	39	0.1	8.965	A
B-A	141	342	0.413	140	0.7	17.731	C
C-AB	43	596	0.072	43	0.1	6.505	A
C-A	826			826			
A-B	227			227			
A-C	602			602			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	327	0.148	48	0.2	12.897	B
B-A	173	279	0.620	170	1.5	32.044	D
C-AB	53	553	0.096	53	0.1	7.192	A
C-A	1012			1012			
A-B	279			279			
A-C	738			738			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	321	0.151	48	0.2	13.223	B
B-A	173	279	0.620	173	1.6	33.698	D
C-AB	53	553	0.096	53	0.1	7.195	A
C-A	1012			1012			
A-B	279			279			
A-C	738			738			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	436	0.091	40	0.1	9.092	A
B-A	141	342	0.412	144	0.7	18.493	C
C-AB	43	596	0.072	43	0.1	6.510	A
C-A	826			826			
A-B	227			227			
A-C	602			602			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	491	0.067	33	0.1	7.861	A
B-A	118	388	0.305	119	0.4	13.478	B
C-AB	36	628	0.058	36	0.1	6.086	A
C-A	692			692			
A-B	190			190			
A-C	504			504			

2031 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2031 Base + Committed	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (S)		✓	1193	100.000
B - Fenay Lane		✓	212	100.000
C - A629 Penistone Road (N)		✓	794	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	284	909
	B - Fenay Lane	168	0	44
	C - A629 Penistone Road (N)	744	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Fenay Lane	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.25	24.10	0.3	C
B-A	0.76	58.21	2.8	F
C-AB	0.11	8.39	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	449	0.074	33	0.1	8.654	A
B-A	126	365	0.347	124	0.5	14.864	B
C-AB	38	581	0.065	37	0.1	6.624	A
C-A	560			560			
A-B	214			214			
A-C	684			684			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	379	0.104	39	0.1	10.582	B
B-A	151	314	0.480	150	0.9	21.644	C
C-AB	45	540	0.083	45	0.1	7.271	A
C-A	669			669			
A-B	255			255			
A-C	817			817			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	215	0.226	48	0.3	21.467	C
B-A	185	244	0.758	178	2.6	50.554	F
C-AB	55	484	0.114	55	0.1	8.389	A
C-A	819			819			
A-B	313			313			
A-C	1001			1001			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	198	0.245	48	0.3	24.095	C
B-A	185	244	0.759	184	2.8	58.212	F
C-AB	55	484	0.114	55	0.1	8.394	A
C-A	819			819			
A-B	313			313			
A-C	1001			1001			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	368	0.108	40	0.1	11.012	B
B-A	151	314	0.480	158	1.0	24.023	C
C-AB	45	540	0.083	45	0.1	7.275	A
C-A	669			669			
A-B	255			255			
A-C	817			817			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	445	0.074	33	0.1	8.741	A
B-A	126	365	0.347	128	0.5	15.327	C
C-AB	38	581	0.065	38	0.1	6.634	A
C-A	560			560			
A-B	214			214			
A-C	684			684			

2031 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2031 Base + Committed	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (S)		✓	986	100.000
B - Fenay Lane		✓	211	100.000
C - A629 Penistone Road (N)		✓	1073	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	265	721
	B - Fenay Lane	165	0	46
	C - A629 Penistone Road (N)	1023	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Fenay Lane	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	19.18	0.3	C
B-A	0.73	51.98	2.5	F
C-AB	0.10	7.47	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	477	0.073	34	0.1	8.123	A
B-A	124	367	0.338	122	0.5	14.582	B
C-AB	38	617	0.061	37	0.1	6.209	A
C-A	770			770			
A-B	200			200			
A-C	543			543			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	413	0.100	41	0.1	9.687	A
B-A	148	318	0.467	147	0.8	20.905	C
C-AB	45	583	0.077	45	0.1	6.686	A
C-A	920			920			
A-B	238			238			
A-C	648			648			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	254	0.200	50	0.2	17.649	C
B-A	182	249	0.731	176	2.3	46.295	E
C-AB	55	537	0.103	55	0.1	7.466	A
C-A	1126			1126			
A-B	292			292			
A-C	794			794			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	238	0.213	51	0.3	19.175	C
B-A	182	249	0.731	181	2.5	51.985	F
C-AB	55	537	0.103	55	0.1	7.469	A
C-A	1126			1126			
A-B	292			292			
A-C	794			794			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	402	0.103	42	0.1	10.002	B
B-A	148	318	0.467	155	0.9	22.793	C
C-AB	45	583	0.077	45	0.1	6.691	A
C-A	920			920			
A-B	238			238			
A-C	648			648			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	474	0.073	35	0.1	8.198	A
B-A	124	367	0.338	126	0.5	15.003	C
C-AB	38	617	0.061	38	0.1	6.216	A
C-A	770			770			
A-B	200			200			
A-C	543			543			

2031 Base + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (S)		✓	1223	100.000
B - Fenay Lane		✓	212	100.000
C - A629 Penistone Road (N)		✓	805	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	286	937
	B - Fenay Lane	168	0	44
	C - A629 Penistone Road (N)	755	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Fenay Lane	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.28	28.88	0.4	D
B-A	0.79	66.68	3.2	F
C-AB	0.12	8.55	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	443	0.075	33	0.1	8.765	A
B-A	126	359	0.353	124	0.5	15.226	C
C-AB	38	575	0.065	37	0.1	6.689	A
C-A	568			568			
A-B	215			215			
A-C	705			705			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	371	0.107	39	0.1	10.842	B
B-A	151	307	0.491	149	0.9	22.570	C
C-AB	45	534	0.084	45	0.1	7.364	A
C-A	679			679			
A-B	257			257			
A-C	842			842			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	194	0.250	48	0.3	24.453	C
B-A	185	235	0.787	177	2.9	56.121	F
C-AB	55	476	0.116	55	0.1	8.542	A
C-A	831			831			
A-B	315			315			
A-C	1032			1032			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	173	0.281	48	0.4	28.880	D
B-A	185	235	0.787	184	3.2	66.682	F
C-AB	55	476	0.116	55	0.1	8.547	A
C-A	831			831			
A-B	315			315			
A-C	1032			1032			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	357	0.111	41	0.1	11.400	B
B-A	151	307	0.491	160	1.0	25.627	D
C-AB	45	534	0.084	45	0.1	7.371	A
C-A	679			679			
A-B	257			257			
A-C	842			842			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	440	0.075	33	0.1	8.857	A
B-A	126	359	0.353	128	0.6	15.737	C
C-AB	38	575	0.065	38	0.1	6.699	A
C-A	568			568			
A-B	215			215			
A-C	705			705			

2031 Base + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (S)		✓	1002	100.000
B - Fenay Lane		✓	212	100.000
C - A629 Penistone Road (N)		✓	1101	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	266	736
	B - Fenay Lane	166	0	46
	C - A629 Penistone Road (N)	1051	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Fenay Lane	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Fenay Lane	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.24	22.12	0.3	C
B-A	0.76	59.13	2.8	F
C-AB	0.10	7.53	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	473	0.073	34	0.1	8.199	A
B-A	125	362	0.345	123	0.5	14.942	B
C-AB	38	614	0.061	37	0.1	6.240	A
C-A	791			791			
A-B	200			200			
A-C	554			554			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	405	0.102	41	0.1	9.880	A
B-A	149	311	0.479	148	0.9	21.803	C
C-AB	45	580	0.078	45	0.1	6.728	A
C-A	945			945			
A-B	239			239			
A-C	662			662			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	232	0.218	50	0.3	19.674	C
B-A	183	241	0.760	176	2.6	51.266	F
C-AB	55	533	0.103	55	0.1	7.530	A
C-A	1157			1157			
A-B	293			293			
A-C	810			810			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	51	213	0.238	51	0.3	22.120	C
B-A	183	241	0.760	182	2.8	59.128	F
C-AB	55	533	0.103	55	0.1	7.533	A
C-A	1157			1157			
A-B	293			293			
A-C	810			810			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	393	0.105	42	0.1	10.280	B
B-A	149	312	0.479	157	1.0	24.221	C
C-AB	45	580	0.078	45	0.1	6.733	A
C-A	945			945			
A-B	239			239			
A-C	662			662			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	35	470	0.074	35	0.1	8.281	A
B-A	125	362	0.345	127	0.5	15.407	C
C-AB	38	614	0.061	38	0.1	6.249	A
C-A	791			791			
A-B	200			200			
A-C	554			554			

Junctions 9									
PICADY 9 - Priority Intersection Module									
Version: 9.5.1.7462 © Copyright TRL Limited, 2019									
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Filename: A629 Penistone Road-Southfield Road priority T junction 160 dwellings.j9

Path: C:\AMA\AMA\AMA - Documents\001 - Projects\23440 - Paddock Lane, Kirkburton\ID Models and Drawings\JUNCTION MODELLING

Report generation date: 06/07/2026 09:59:43

- »2026 Base, AM
- »2026 Base, PM
- »2031 Base + Committed, AM
- »2031 Base + Committed, PM
- »2031 Base + Committed + Development, AM
- »2031 Base + Committed + Development, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 Base									
Stream B-AC	D1	0.7	15.89	0.43	C	D2	1.7	23.94	0.64	C
Stream C-AB		0.1	7.15	0.10	A		0.1	6.76	0.10	A
	2031 Base + Committed									
Stream B-AC	D3	0.9	18.64	0.48	C	D4	2.3	31.15	0.71	D
Stream C-AB		0.1	7.47	0.11	A		0.1	6.91	0.11	A
	2031 Base + Committed + Development									
Stream B-AC	D5	1.0	20.08	0.51	C	D6	3.2	40.98	0.78	E
Stream C-AB		0.1	7.55	0.11	A		0.1	6.95	0.11	A

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

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

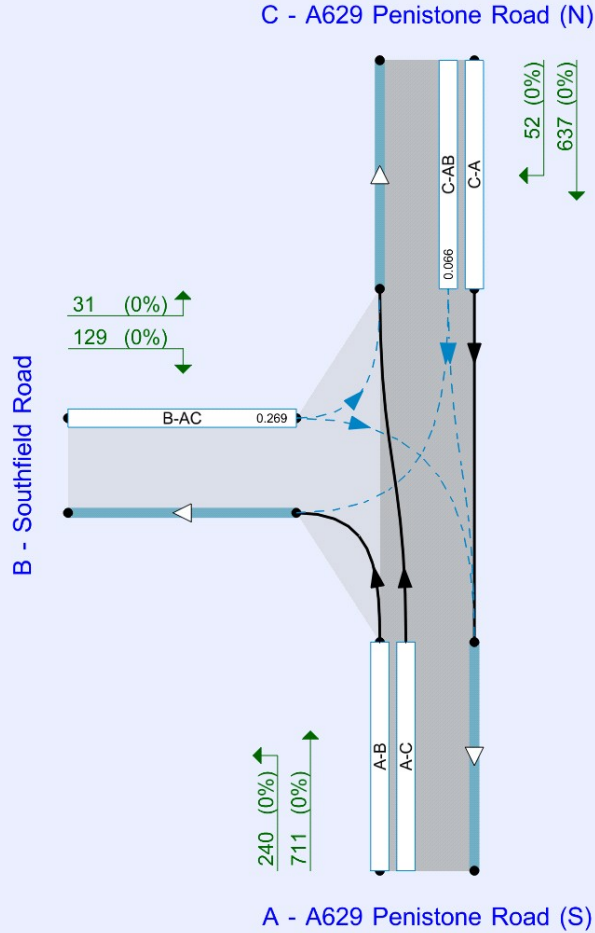
File summary

File Description

Title	
Location	
Site number	
Date	15/06/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Modellinglaptop
Description	

Units

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



Analysis Options

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	2026 Base	AM	ONE HOUR	07:45	09:15	15
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15
D3	2031 Base + Committed	AM	ONE HOUR	07:45	09:15	15
D4	2031 Base + Committed	PM	ONE HOUR	16:45	18:15	15
D5	2031 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15
D6	2031 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A629 Penistone Road (S)		Major
B	Southfield Road		Minor
C	A629 Penistone Road (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A629 Penistone Road (N)	14.00		✓	2.90	170.0	✓	2.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Southfield Road	One lane	4.80	34	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	588	0.070	0.177	0.111	0.252
B-C	751	0.075	0.190	-	-
C-B	724	0.183	0.183	-	-

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	2026 Base	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (S)		✓	847	100.000
B - Southfield Road		✓	153	100.000
C - A629 Penistone Road (N)		✓	641	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
	From			
	A - A629 Penistone Road (S)	0	229	618
	B - Southfield Road	123	0	30
	C - A629 Penistone Road (N)	591	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
	From			
	A - A629 Penistone Road (S)	0	0	0
	B - Southfield Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	15.89	0.7	C
C-AB	0.10	7.15	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	115	465	0.248	114	0.3	10.207	B
C-AB	38	609	0.062	37	0.1	6.298	A
C-A	445			445			
A-B	172			172			
A-C	465			465			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	436	0.316	137	0.5	12.023	B
C-AB	45	588	0.077	45	0.1	6.636	A
C-A	531			531			
A-B	206			206			
A-C	556			556			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	168	395	0.427	167	0.7	15.743	C
C-AB	56	560	0.100	56	0.1	7.140	A
C-A	650			650			
A-B	252			252			
A-C	680			680			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	168	395	0.427	168	0.7	15.886	C
C-AB	56	560	0.100	56	0.1	7.145	A
C-A	650			650			
A-B	252			252			
A-C	680			680			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	436	0.316	139	0.5	12.153	B
C-AB	45	588	0.077	45	0.1	6.641	A
C-A	531			531			
A-B	206			206			
A-C	556			556			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	115	465	0.248	116	0.3	10.318	B
C-AB	38	609	0.062	38	0.1	6.307	A
C-A	445			445			
A-B	172			172			
A-C	465			465			

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.35	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	2026 Base	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (S)		✓	705	100.000
B - Southfield Road		✓	239	100.000
C - A629 Penistone Road (N)		✓	869	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	97	608
	B - Southfield Road	153	0	86
	C - A629 Penistone Road (N)	817	52	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Southfield Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.64	23.94	1.7	C
C-AB	0.10	6.76	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	180	487	0.370	178	0.6	11.572	B
C-AB	39	629	0.062	39	0.1	6.099	A
C-A	615			615			
A-B	73			73			
A-C	458			458			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	215	456	0.471	214	0.9	14.789	B
C-AB	47	612	0.077	47	0.1	6.370	A
C-A	734			734			
A-B	87			87			
A-C	547			547			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	263	413	0.638	260	1.6	23.095	C
C-AB	58	590	0.098	58	0.1	6.761	A
C-A	899			899			
A-B	107			107			
A-C	669			669			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	263	413	0.638	263	1.7	23.942	C
C-AB	58	590	0.098	58	0.1	6.761	A
C-A	899			899			
A-B	107			107			
A-C	669			669			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	215	456	0.471	218	0.9	15.323	C
C-AB	47	612	0.077	47	0.1	6.372	A
C-A	734			734			
A-B	87			87			
A-C	547			547			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	180	486	0.370	181	0.6	11.843	B
C-AB	39	629	0.062	39	0.1	6.105	A
C-A	615			615			
A-B	73			73			
A-C	458			458			

2031 Base + Committed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.87	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)
D3	2031 Base + Committed	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (S)		✓	951	100.000
B - Southfield Road		✓	160	100.000
C - A629 Penistone Road (N)		✓	689	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	240	711
	B - Southfield Road	129	0	31
	C - A629 Penistone Road (N)	637	52	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Southfield Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.48	18.64	0.9	C
C-AB	0.11	7.47	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	448	0.269	119	0.4	10.905	B
C-AB	39	595	0.066	39	0.1	6.473	A
C-A	479			479			
A-B	181			181			
A-C	535			535			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	144	415	0.347	143	0.5	13.221	B
C-AB	47	571	0.082	47	0.1	6.866	A
C-A	572			572			
A-B	216			216			
A-C	639			639			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	369	0.477	175	0.9	18.387	C
C-AB	58	540	0.108	58	0.1	7.461	A
C-A	700			700			
A-B	264			264			
A-C	783			783			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	176	369	0.477	176	0.9	18.643	C
C-AB	58	540	0.108	58	0.1	7.467	A
C-A	700			700			
A-B	264			264			
A-C	783			783			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	144	415	0.347	145	0.5	13.424	B
C-AB	47	571	0.082	47	0.1	6.872	A
C-A	572			572			
A-B	216			216			
A-C	639			639			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	120	448	0.269	121	0.4	11.048	B
C-AB	39	595	0.066	39	0.1	6.483	A
C-A	479			479			
A-B	181			181			
A-C	535			535			

2031 Base + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2031 Base + Committed	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (S)		✓	757	100.000
B - Southfield Road		✓	251	100.000
C - A629 Penistone Road (N)		✓	971	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	102	655
	B - Southfield Road	161	0	90
	C - A629 Penistone Road (N)	916	55	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Southfield Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.71	31.15	2.3	D
C-AB	0.11	6.91	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	472	0.400	186	0.7	12.500	B
C-AB	42	623	0.067	41	0.1	6.191	A
C-A	689			689			
A-B	77			77			
A-C	493			493			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	226	438	0.515	224	1.0	16.704	C
C-AB	50	605	0.083	50	0.1	6.486	A
C-A	823			823			
A-B	92			92			
A-C	589			589			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	276	390	0.708	272	2.2	29.213	D
C-AB	62	583	0.106	62	0.1	6.908	A
C-A	1007			1007			
A-B	112			112			
A-C	721			721			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	276	390	0.708	276	2.3	31.151	D
C-AB	62	583	0.106	62	0.1	6.910	A
C-A	1007			1007			
A-B	112			112			
A-C	721			721			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	226	438	0.515	230	1.1	17.705	C
C-AB	50	605	0.083	50	0.1	6.491	A
C-A	823			823			
A-B	92			92			
A-C	589			589			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	189	472	0.401	191	0.7	12.880	B
C-AB	42	623	0.067	42	0.1	6.197	A
C-A	689			689			
A-B	77			77			
A-C	493			493			

2031 Base + Committed + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Base + Committed + Development	AM	ONE HOUR	07:45	09:15	15

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 - A629 Penistone Road (S)		✓	979	100.000
B - Southfield Road		✓	168	100.000
C - A629 Penistone Road (N)		✓	692	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	260	719
	B - Southfield Road	137	0	31
	C - A629 Penistone Road (N)	640	52	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Southfield Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.51	20.08	1.0	C
C-AB	0.11	7.55	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	444	0.285	125	0.4	11.235	B
C-AB	39	591	0.066	39	0.1	6.518	A
C-A	482			482			
A-B	196			196			
A-C	541			541			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	410	0.368	150	0.6	13.802	B
C-AB	47	567	0.083	47	0.1	6.926	A
C-A	575			575			
A-B	234			234			
A-C	646			646			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	185	364	0.508	183	1.0	19.739	C
C-AB	58	535	0.109	58	0.1	7.546	A
C-A	704			704			
A-B	286			286			
A-C	792			792			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	185	364	0.508	185	1.0	20.085	C
C-AB	58	535	0.109	58	0.1	7.552	A
C-A	704			704			
A-B	286			286			
A-C	792			792			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	410	0.368	153	0.6	14.058	B
C-AB	47	567	0.083	47	0.1	6.932	A
C-A	575			575			
A-B	234			234			
A-C	646			646			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	126	444	0.285	127	0.4	11.402	B
C-AB	39	591	0.066	39	0.1	6.525	A
C-A	482			482			
A-B	196			196			
A-C	541			541			

2031 Base + Committed + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Base + Committed + Development	PM	ONE HOUR	16:45	18:15	15

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 - A629 Penistone Road (S)		✓	772	100.000
B - Southfield Road		✓	270	100.000
C - A629 Penistone Road (N)		✓	980	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	112	660
	B - Southfield Road	180	0	90
	C - A629 Penistone Road (N)	925	55	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A629 Penistone Road (S)	B - Southfield Road	C - A629 Penistone Road (N)
From	A - A629 Penistone Road (S)	0	0	0
	B - Southfield Road	0	0	0
	C - A629 Penistone Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.78	40.98	3.2	E
C-AB	0.11	6.95	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	465	0.437	200	0.8	13.458	B
C-AB	42	621	0.067	41	0.1	6.212	A
C-A	696			696			
A-B	84			84			
A-C	497			497			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	243	431	0.564	241	1.2	18.774	C
C-AB	50	602	0.083	50	0.1	6.514	A
C-A	831			831			
A-B	101			101			
A-C	593			593			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	297	382	0.778	290	3.0	36.684	E
C-AB	62	580	0.107	62	0.1	6.945	A
C-A	1017			1017			
A-B	123			123			
A-C	727			727			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	297	382	0.778	296	3.2	40.983	E
C-AB	62	580	0.107	62	0.1	6.951	A
C-A	1017			1017			
A-B	123			123			
A-C	727			727			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	243	431	0.564	250	1.4	20.687	C
C-AB	50	602	0.083	50	0.1	6.519	A
C-A	831			831			
A-B	101			101			
A-C	593			593			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	465	0.437	205	0.8	13.996	B
C-AB	42	621	0.067	42	0.1	6.221	A
C-A	696			696			
A-B	84			84			
A-C	497			497			

Appendix F
Kirklees Pre-Application
Correspondence

Pre-Application Consultation Request

Town and Country Planning Act 1990

Observations By:	KC, Highways Development Management
Application No.	2025/21210
Proposed Development:	Pre application for residential development
Location:	land at, Paddock Road/Moor Lane, Kirkburton, Huddersfield, HD8 0TT
Applicant/Agent:	Jessica Knight DPP
Planning Officer	Ellie Thornhill

Your comments on the above proposal are requested. Please e-mail your comments to the DC Admin in either a Microsoft Word or PDF Document to DC.Admin@kirklees.gov.uk by **05-Jan-2026**.

The submitted plans and documents for the application can be viewed using Documents from Anite or Anite, please use the application number above.

If I do not receive your response by **05-Jan-2026** then the application may be decided without the benefit of your views.

Dated: 22-Dec-2025

Mathias Franklin
Head of Planning and Development

Consultation Response from KC, Highways Development Management		
2025/21210 at land at, Paddock Road/Moor Lane, Kirkburton, Huddersfield, HD8 0TT		
Pre application for residential development		
Date Responded: 13/02/25	Responding Officer: CNB	Responding Ref: K11-22/11
This is pre-application highways advice for a proposed residential development of approximately 134 dwellings on a site accessed from Moor Lane, a 30mph two-way single carriageway local access road of approximately 5.5m width at the proposed access with a narrow footway opposite and street lighting present. There is a medium frequency public transport route running along two sides of the site with a bus stop on Paddock Road approximately 200m from the centre of the site and another to the west on Moor Lane, approximately 415m from the centre of the site. There is a convenience store approximately 550m from the centre of the site with other shops and services within 850m of the centre of the site. The DfT Connectivity Tool shows an overall score of between 49 and 55 for the site with this extending to between 77 and 83 for driving. This indicates the site will be of relatively low sustainability and most trips are expected to be by private car. A full TA should address this and may require mitigation to improve sustainable and active modes. PROW footpath KIR/70/10 runs adjacent to the western boundary of the site and this should remain unaltered and unobstructed throughout the construction phase of the development and for the lifetime of the development. A PROW footnote is added below. It was noted within the pre-application request that it is expected that a following full application would be outline with access only and all other matters reserved. These Highways comments/guidance are provided for both the outline with access and reserved matters. We would expect a full application to be accompanied by a Transport Assessment and a Travel Plan, with the TA covering the issues below. Committed Development There are no committed developments in the immediate area of the site however there are notable committed development sites to the north at Lepton (22/91735 for 80 dwellings) and Fenay Bridge (22/93154 68 dwellings and 24/90058 67 dwellings). Trips generated by these developments may need to be accounted for in any junction assessments along A629. Highway Improvements We are unaware of any planned highway improvements to the highway network within the vicinity of the site. A consultation with Kirklees Highways Safety indicated that there was a known speeding issue and records of complaints from residents and ward councillors on Moor Lane in the vicinity of the site, between the bend and the junction with Paddock Road and they had no schemes planned but would appreciate a contribution to a safety scheme from the development to bring intervention works forward. Proposed changes to the highway to form a ghost island right turn lane may achieve this if		

designed correctly and we would ask that the access design considers this and possible further highway safety engineering interventions adjacent to the site. We wouldn't want to see the widening to form the right turn lane creating the impression of a more open road that would further encourage speeding.

Peak Hour Times

These should be identified by the use of an ATC survey, however a DfT survey was carried out on Paddock Road in 2018 and this identified the peak hours as 8am-9am and 5pm-6pm. It should also be noted that due to the secondary school located close to the site (Kirkburton Middle School) there is a second peak around 3pm-4pm due to school pick-up.

Traffic Growth

Traffic Growth figures were provided within the pre-application information submitted by the applicant using growth factors obtained from TEMPro using Kirklees 051 MSOA. The assessment year was given as 5 years from the time of application, this would only be acceptable if full build out was expected to have occurred within this 5 year period, otherwise we would expect a longer assessment time to be provided.

The TEMPro figures provided couldn't be recreated and so we would need to see all the inputs and scenarios used to generate these growth factors.

Trip Generation

This should be done either using the National TRICS database or from local surveys at similar sites. If TRICS data is used it should be generated using suitable existing sites that share a similar level of connectivity and public transport service level.

Trip Rate data was submitted with the pre-application information however we feel that the figures supplied would be unrepresentative of the proposed application site and that the actual trip rate would be higher. A quick investigation of TRICS indicated that two-way peak hour trip rates should be closer to 0.6 trips per dwelling (based on am arrivals of 0.2 and departures of 0.4, with the evening peak reversed). If the applicant wishes to retain their initial trip rates, then they would need to provide evidenced justification for the lower trip rates in this relatively unsustainable location.

All trips would be expected to be new ones on the highway network.

Distribution

The pre-application information included a trip distribution based on 2011 Census journey to work data. It is assumed that due to the timing of the 2021 Census the journey to work data was too corrupted by impacts of the pandemic and so we consider the 2011 data to be acceptable.

The distribution shows 28% of peak hour vehicles turning right out of the site and 28% turning left out of the site towards A629 Penistone Road with 67% heading north on A629 and 5% heading south. Of the 67% heading north, 12 % turn off on to Woodsome Road, 3% turn off on Fenay Lane and 37% turn

off on Southfield Road with the rest continuing on to A629 Wakefield Road towards Huddersfield. We have slight concerns with this latter figure, expecting the higher proportion of trips to continue on to A629 Wakefield Road rather than use Southfield Road and would like to see evidence to justify the proposed distribution.

Junction Capacity Tests

The information submitted by the applicant included 6 junctions to be assessed for capacity within the TA. These include the site access, and A629 junctions with Far Dene (TS junction), Woodsome Road, Fenay Lane, Station Road and Southfield Road (all priority junctions). These are all acceptable and should be carried out using LinSig and Picady junction modelling software.

Access Junction

This is a new junction on to Moor Lane and will need to be carried out within a s278 agreement with the local highway authority.

The junction will need to demonstrate that suitable visibility splays can be achieved and speed surveys were carried out on Moor Lane and these indicated that visibility splays of 56.58m to the left and 56.35m to the right should be demonstrated. The applicant has claimed that visibility splays of 2.4m x 88m can be achieved and this would be acceptable. The area within the splays would need to be included in any adoptable land and within a s38 agreement. All visibility splays should be over nothing higher than 0.9m.

The junction would need radii of 10m to allow for an 11.85m Kirklees refuse truck to access the site and we would also require swept path analysis to show that this can be achieved safely.

We would need dropped crossings for pedestrians at either side of the access junction with adequate tactile paving.

The main access road will need to be a Local Residential Street Type B (as shown in the Kirklees Design Guide) with a minimum width of 5.5m and 2m footways on both sides, and submitted access drawing (SK001 Rev P01 Proposed Access Arrangements on Moor Lane) indicates this, however Illustrative Masterplan drawing No C_002 indicates this may be a Type A road with grass verges and 2m footways to each side. The full details of the proposed access will need clarifying within the full application.

The access will require an independent Stage 1 Road Safety Audit carried out to GG119 standards and we would recommend that an approved access is agreed upon prior to carrying out the RSA process to avoid the need to repeat work.

The access drawing (SK001 Rev P01 Proposed Access Arrangements on Moor Lane) indicates a “ghost island” right turn lane on Moor Lane and this should conform to dimensions within Design Manual for Roads and Bridges (DMRB). This would require a widening of the highway to be able to fit in the right turn lane at the appropriate dimensions.

We would request that a 2m footway is included along all frontages of the site that border a road including Moor Lane, Paddock Road and Burton Acres Lane, this will assist with pedestrian access to and from the site and create safe routes to public transport stops and desire lines to Kirkburton Middle School.

The West Yorkshire Combined Authority Metro may require improvements to bus stops or new bus stops to serve the development and details will be provided at full application after consultation with Metro.

Travel Plan

We would request that an interim travel plan is submitted with the application to show how the site can promote sustainable and active travel and reduce the reliance on private car use at the site. This should be made up to a full travel plan prior to first occupation and should be administered by a Travel Plan Co-ordinator funded by the applicant and contain SMART targets, proposed methods to achieve these targets and an action plan indicating responsibilities and proposals for future mitigation if the targets are not met. Monitoring of the travel plan would be required for 5 years after occupation, and this would incur a charge of £2,000 pa for guidance and advice from the LPA. This will be conditioned and/or included within a s106 agreement.

We would expect the developer to fund the provision of bus passes for every dwelling as part of the WYCA Residential Metro Card scheme. A cost for these cards will be provided at full application and should be paid through a s106 agreement.

Construction Access Management Plan

We would like to see a construction access management plan providing for all phases of the development, this should indicate all access point/s to the site to be used during the construction of the site, routes to be taken by contractors vehicles, deliveries and large vehicles accessing the site, the numbers and types of vehicles expected to access the site, on site parking for contractors vehicles and deliveries with turning indicated where required, the location of materials storage and site welfare facilities, details of large deliveries including the use of a banksman where required, any traffic management that may be required and details of wheel washing facilities to ensure mud and debris is not deposited on the local highway network for highway safety reasons. This will be conditioned if required.

Guidance for Reserved Matters stage applications

The internal layout of the site will need to be designed to guidance provided in the |Kirklees Highways Design Guide.

All areas of the site to be included within a s38 adoption should be clearly indicated on a site adoption plan. This should include any highway, footway, visibility splays, turning heads and visitor parking to be adopted. Any areas to not be adopted will need to show a suitable maintenance regime is put in place. If any visitor parking spaces are designed so as to not be adoptable within a s38 agreement, then these

will need to be clearly identified and included within a s106 agreement to maintain them for the lifetime of the development.

Internal Layout

The indicative layout provided with the pre-application advice consists of a small circulatory road to the centre of the site with approximately 10 cul-de-sacs radiating off this. This is a very inefficient layout for waste collection, and we would prefer to see a larger circulatory route with less requirements for reversing and turning for a refuse collection vehicle.

We would also like to see pedestrian and cycle routes on predicted desire lines through the site, these would permeate the site to give the shortest routes for active modes to shops, public transport and schools.

There appear to be a number of private driveways shown on the indicative drawing and local guidance requests that no more than 5 dwellings are served by a private driveway. A refuse vehicle will not enter a private driveway and so bin collection presentation points should be included adjacent to the adopted highway at the end of the private driveways.

Parking

Parking should be to standards as set out in the Kirklees Highways Design Guide and provide for 2 off street parking spaces for 2 or 3 bedroom dwellings and 3 off street parking spaces for 4+ bedroom dwellings. The parking spaces should be a minimum of 2.4m x 4.8m unless up against a fence or wall where additional width will be required. Any garages should have internal measurements of 3m x 6m for a single garage. Visitor parking should be provided at 1 space per 4 dwellings, for 134 dwellings this would require 34 visitor spaces, and these should be laid out as shown in guidance in order to be adopted within a s38 agreement. Any visitor parking spaces that are not suitable for adoption due to location or design will need to be clearly marked on a drawing and will need to be retained and maintained for the full lifetime of the development as an inclusion within a s106 agreement.

Waste storage and collection

The internal layout of the site should be suitable for an 11.85m refuse truck to safely access all dwellings via adopted highway (non-adopted highway dwellings will require a bin collection point creating adjacent to the adopted highway). A swept path analysis will be required to show safe access/egress for a refuse truck.

A swept path analysis may be required for a West Yorkshire Fire and Rescue fire tender vehicle to show that it can reach all dwellings safely. Details of fire access requirements can be found in the WYFR guidance document FS-PAN010 Access for Fire Appliances.

S38 Guidance

The following notes were provided in consultation with the Kirklees s38 team.

I make the following comments based upon the applicant wishing to seek the internal roads being

adopted and to assist them with the development of their design as although when it comes to Outline planning this only relates to the entrance the Developers usually welcome advice as early as possible as changes as usually easier to absorb in terms of time and cost.

The application will need to comply with Kirklees Design Guide including some of the key issues below.

Table 1: Summary of Residential Street Types

Title	Residential Connector Street (Type A)	Local Residential Street (Type B)	Shared Surface Street (Type C)
Potential number of dwellings	300 - 700	200 - 300	An amount generating no more than 100 VPH
Alignment	Curvilinear	Curvilinear/angular	Angular with alignment shifts
Design speed	25 mph	20 mph	15 mph
Speed restraint feature separation (Maximum)	100m	60m	40m
Forward visibilities	33m	25m	23m
Centreline radius (Minimum)	35m	20m	Based on vehicle tracking
Typical Cross-section	2m footway - verge - carriageway - verge - 2m footway	2m footway - carriageway - 2m footway	hard margin - carriageway - hard margin
Carriageway width	6.75 metres	5.5m	5.5m

There are no visibility splays indicated. Junction and Forward Visibility Splays (circled red below) and dimensions must be in accordance with the Kirklees Design Guide (Table 1) and dedicated to Kirklees if they fall out of the existing highway boundary i.e. junction visibility 2.4m x 25m and forward visibility around the bends of 25 metres (circled red). Please remove obstructions from these areas i.e. street furniture, parking bays, landscaping etc. Please add junction visibility splays to the turning heads as well to the extents of the carriageway if these are less than 25 metres.



A minimum carriageway width of 5.5m will be required. Please add the dimensions.

The carriageways that have a straight alignment will require vertical or horizontal deflection traffic calming at regular intervals in accordance with Table 1 above. Where horizontal traffic calming is proposed please ensure build outs are provided on either side of the carriageway to create a chicane as due to low traffic volumes single build outs or ones spaced some distance apart are not effective in slowing vehicles. Where vertical traffic calming is provided please use a flat top road hump 4m wide at the top using our ramp from the standard details to ensure the vehicles do not ground out. Please note rumble strips are not accepted as they generate noise complaints from residents. We will require a ramp between the Residential Street (Type B) and the Shared Surface Carriageway (Type C) roads. Footways will be required on both sides of the Local Residential Street (Type B) carriageway to a minimum width of 2.0m as per Table 1. Please add the dimensions.

Table 1: Summary of Residential Street Types

Title	Residential Connector Street (Type A)	Local Residential Street (Type B)	Shared Surface Street (Type C)
Potential number of dwellings	300 - 700	200 - 300	An amount generating no more than 100 VPH
Alignment	Curvilinear	Curvilinear/angular	Angular with alignment shifts
Design speed	25 mph	20 mph	15 mph
Speed restraint feature separation (Maximum)	100m	60m	40m
Forward visibilities	33m	25m	23m
Centreline radius (Minimum)	35m	20m	Based on vehicle tracking
Typical Cross -section	2m footway - verge - carriageway - verge - 2m footway	2m footway - carriageway - 2m footway	hard margin - carriageway - hard margin
Carriageway width	6.75 metres	5.5m	5.5m

Where there is not a footway adjacent to the carriageway a minimum 5.5 metre wide shared surface (Type C) block paved carriageway with a minimum 600mm block paved margin on either side is required as per Table 1 and paragraph 3.14 of the Design Guide. Shared surface carriageway must not be steeper than 1:21 or 5% otherwise a Local Residential Street (Type B) with footways on both sides will be required. Please remove the footways from adjacent the shared surface carriageway if the gradients permit shared surface carriageway.

3.14 Street Type C (Shared Surface Streets):

This street type has shared surfaces (for pedestrians and motor vehicles) and is designed to accommodate slower speeds, which should be self-enforcing through good design. Pedestrians can safely share the whole street with vehicles; however, designated pedestrian routes may still be required for more vulnerable users within the context and nature of the development, for example older people, people with disabilities and those with children. It is more appropriate if shared surfaces have different surfacing to Type A and B streets (e.g. block paving) and incorporate different surface materials to delineate the different functions of the highway at different points. Street tree planting can also be incorporated within shared surfaces to break up large swathes of hard surfacing. Care should be taken to coordinate street lighting and street tree planting locations to ensure

A long section has not been provided and will be required to ensure compliance with the Equalities Act 2010 where necessary. This must include details of the vertical alignment to determine appropriate carriageway and footway gradients. Shared surface carriageways will need to be Equalities Act 2010 and Kirklees Design Guide compliant and be no steeper than a maximum of 1:21 or 5%. If the carriageway is steeper than 5% then a Local Residential Street (Type B) with footways both sides would be required as per Table 1. Gradients in excess of 8% will not be adopted.

Kirklees require a swept path analysis for an 11.85m in length refuse vehicle indicating how it can pass an on-coming or parked family car throughout the layout. The carriageway will require widening on the bends to enable this manoeuvre.

Bin collection points will be required where dwellings are located further than 25 metres from the adopted highway.

- 6.6 Waste collection points need careful consideration and planning so that they are accessible to a Refuse Collection Vehicle (RCV). Bin presentation points need to be hardstanding (preferably porous) and easily cleanable. The design of private land around each property should provide sufficient space to accommodate the secure storage of up to three 240l wheeled bins (one grey bin for residual waste, one green bin for recycling and one brown bin for garden waste). As a general rule, bin storage areas should be no further than 25m away from where an RCV can gain access. Special consideration

Cycling facilities must accord with LTN1/20.

One visitor parking bay is required for every four dwellings.

5.4

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KEY DESIGN DRIVER

Kirklees Council has not set local parking standards for residential and non-residential development. However, as an initial point of reference for residential developments (unless otherwise evidenced using the criteria in Para. 5.1), it is considered that new:

- 2 to 3 bedroom dwellings provide a minimum of two off-street car parking spaces
- 4+ bedroom dwellings provide three off-street spaces.
- 1-2 bedroom apartments provide one space (3+ bed two spaces)

In most circumstances, one visitor space per 4 dwellings is considered appropriate. One cycle space per unit is recommended. The council can advise on provision for other uses. Further guidance can be found [here](#):

Only visitor parking laybys parallel to the carriageway will be adopted. These must be a minimum of

2.4m x 6m. Any other bays (echelon or perpendicular) or private bays will not be considered for adoption. Parallel parking bays adjacent Public Open Space, walls/ boundaries or shared surface carriageway must be surrounded by a minimum 1-metre-wide hardstanding to enable safe entry and exit of the occupants.

Please ensure each gully drains a maximum of 180 sqm and gullies are located immediately upstream of all dropped kerb crossing points. Please ensure gully positions are located so that they avoid the tyre tracks of vehicles entering and exiting private driveways. Double gullies will be required at all low points and have separate gully connections to the carrier drain. Gully connections must be a maximum of 12 metres in length.

No property including balconies should be within 500mm to the proposed highway. No doors, gates, windows, garage doors or gas/electric cupboards must open over the proposed highway.

Provide a Stage 1 Road Safety Audit in accordance with GG119 (5.46.1). This will be required in advance of planning permission being granted as the findings may result in the red line boundary having to change due to road safety remedial measures being required.

GG 119 Revision 2

5. Undertaking the road safety audit

NOTE *The highway scheme can be designed by an organisation working for the third-party organisation rather than an organisation working for the Overseeing Organisation.*

5.46.1 A stage 1 RSA report should be undertaken before planning consent is applied for as this demonstrates that the potential for road user safety issues has been addressed.

NOTE *The third party organisation-led scheme is submitted for planning approval to the local planning authority and, where there are highway implications, the highway or Overseeing Organisation is consulted.*

No Highway materials, construction methods, and technical details have been approved at this stage. The detailed design and highway adoption approval will be subject to a full technical audit on application.

Footnotes

Public footpath KIR/70/10 is adjacent to the development site and must not be interfered with or obstructed, prior to, during or after development works

The Council's public rights of way unit may be contacted by telephone 01484 221000 and ask for Sharon Huddleston or via the email address publicrightsofway@kirklees.gov.uk

Any works within the adopted highway fronting the property will need to be constructed under the correct legal agreement of the 1980 Highways Act. You are required to consult the Design Engineer (Kirklees Street Scene: 01484 221000) with regard to obtaining this permission and approval of the construction specification. Interference with the highway without such permission is an offence which could lead to prosecution.

Any retaining features affecting the highway will require formal technical approval by the Council as the Highway Authority. It is the applicant's responsibility to find out whether the work approved by this planning permission requires written approval from the highways structures team for works near

or abutting highway and any retaining structures. We would recommend providing details of all proposed retaining features and underground storage facilities (including pipes) to Farhad Khatibi (structures team leader 01484 221000) at the earliest opportunity, who will be able to advise you of the necessary requirements in more detail.

The type and number of waste bins required should be in accordance with guidance supplied by the Kirklees Cleansing Department in the document "Waste Storage and Collection Guidance for New Developments" which is available from
<https://www.kirklees.gov.uk/beta/planning-applications/pdf/waste-management-design-guide-new-developments.pdf>



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