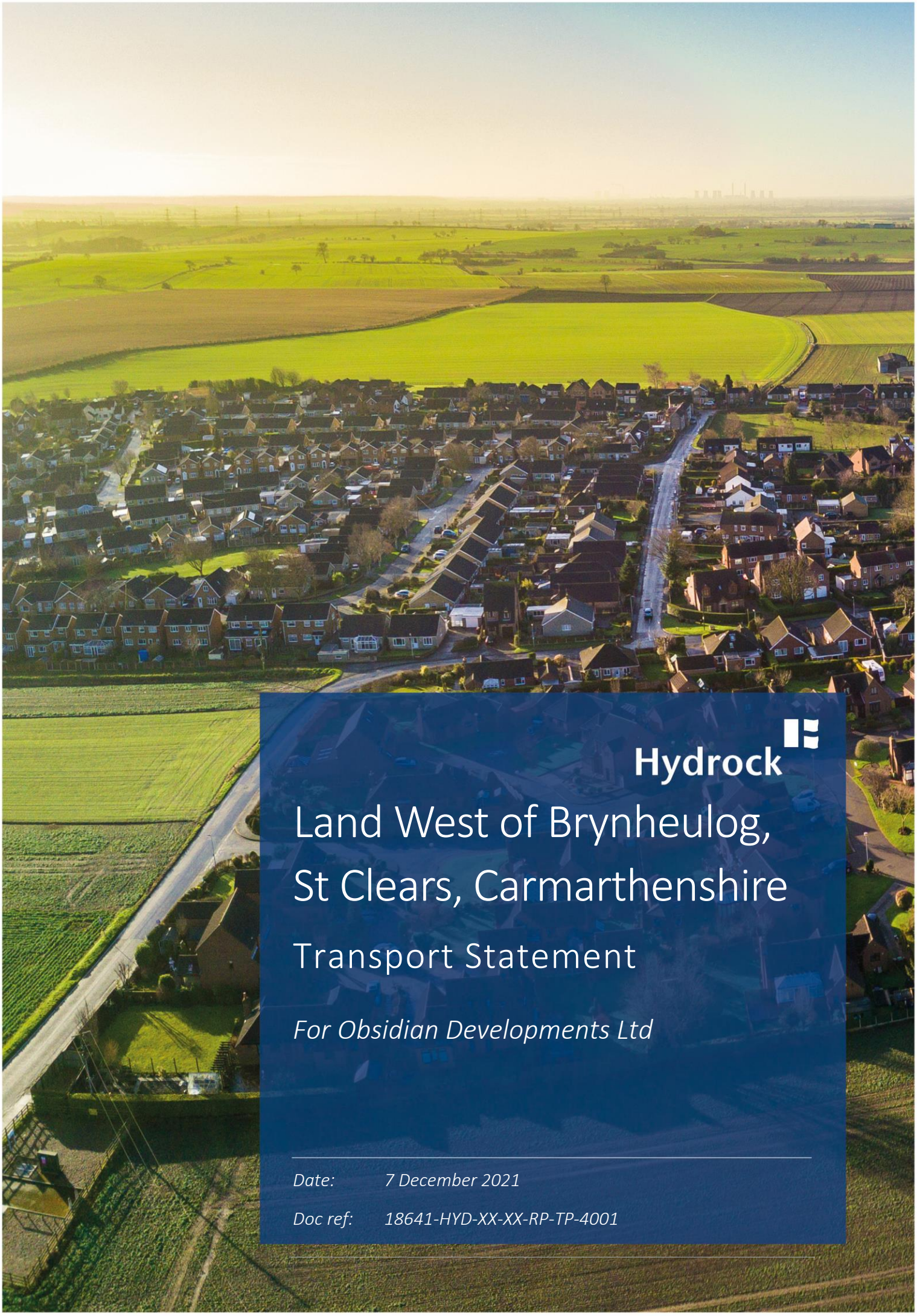

Hydrock

Land West of Brynheulog, St Clears, Carmarthenshire

Transport Statement

For Obsidian Developments Ltd

Date: *7 December 2021*

Doc ref: *18641-HYD-XX-XX-RP-TP-4001*

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Issued by	Hydrock Consultants Limited Castlebridge 5 5-19 Cowbridge Road East Cardiff CF11 9AB United Kingdom	T +44 (0)2920 023 665 E cardiff@hydrock.com www.hydrock.com
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1. INTRODUCTION

1.1 Overview

1.1.1 This Transport Statement (TS) has been produced by Hydrock Consultants Ltd to support an outline planning application for a proposed residential development on Land West of Brynheulog, St Clears, Carmarthenshire, Wales.

1.1.2 The proposals seek to incorporate circa 66 residential dwellings, comprising of a mixture of 2-, 3- and 4-bedroom open market houses, with 10% affordable housing (1 and 2-bed dwellings). The site is part of the current LDP housing allocation (T2/5/h5).

1.1.3 Access to the site is to be obtained from High Street (A4066) via a new simple priority T-junction.

1.1.4 This TS provides an assessment which sets out the details of the proposed internal layout, parking and access arrangements, as well as reviewing the sustainable connectivity of the site. It provides analysis of the potential transport impacts that may arise from the proposed development.

1.2 Scope of Report

1.2.1 The scope of work has been based on advice set out in Technical Advice Note 18: Transport (TAN18). The TS also includes reference to the Active Travel Act (Wales – 2013) with regards to walking and cycling movements.

1.2.2 This TS also considers the Carmarthenshire Local Development Plan, And CCC Highways Design Guide (2018), as well as considering the key principles set out in the Department for Transport's (DfT) Manual for Streets (MfS) and the Chartered Institution of Highways and Transportation (CIHT) Manual for Streets 2 (MfS 2).

1.2.3 The TS broadly includes the following:

- Description of the location of the site
- A review of the existing conditions of the surrounding local highway network including access, traffic flows, speeds and highway safety
- A review of walking and cycling routes in accordance with the Active Travel Act and a review of public transport provision and the proximity of the site to public transport networks
- Description of the development proposals, in particular demonstrating safe and appropriate access by all modes, parking and servicing and delivery arrangements
- Review of the vehicular trip generation which is likely to be associated with proposals
- Consideration of the impact of the proposals on the local highway network

2. EXISTING CONDITIONS

2.1 Site Location and Description

2.1.1 The site is located on Land West of Brynheulog, St Clears, Carmarthenshire, Wales. St Clears on the River Tâf in Carmarthenshire, Wales, is both a small town and a community. At the 2011 census, the population was 2,995. The community includes the small settlements of Bancyfelin and Pwlltrap.

2.1.2 The site currently benefits from an existing gated field access off High Street, located in the north eastern section of the site. High Street also forms the sites eastern boundary. To the north the site is bound by the A40 off-slip, and Heol Goi, Cae Glas and residential properties to the south and west.

2.1.3 The site comprises of undeveloped agricultural land. A location plan showing the site in its local context, is shown in Figure 2-1.

Figure 2-1: Site Location

2.2 Local Highway Network

High Street (A4066)

2.2.1 High Street provides direct access into the site via a gated field access located in the north eastern section of the site.

2.2.2 The A4066 is a two-way single carriageway located along the eastern boundary of the site and runs between the A40 roundabout junction to the west of the site and the B4314 to the south in Pendine. The A4066 is subject a 30mph speed limit within the small town of St Clears, notified on two signs posted approximately 40 metres north of the roundabout junction with the A40. Within the town of St

Clears (for approximately 1.8km along High Street) the road is subject to a 30mph speed limit, as indicated by the signs; this then continues as 40mph for sections and increases to 50mph further south.

2.2.3 As well as providing access to the site, within the vicinity of the site High Street provides access to numerous residential properties and to the centre of St Clears.

2.2.4 The carriageway width along the site frontage measures between approximately 6.1 – 8.5 metres, with a footway located along the site frontage on the western side of the carriageway with approximate widths of between 1 and 2 metres wide. Footways connect the site to the centre of St Clears with street lighting, dropped kerbs and tactile paving present.

A40

2.2.5 The A40 is a major road which runs between London and Goodwick (Fishguard) in Wales. The A40 retains its trunk road status within Wales.

2.2.6 The A40 is located just north of the site and is accessed via the A40 on-slip and off-slip, and the A4066 / A40 roundabout junction. The A40 westbound off-slip junction with High Street is located approximately 30m north of the proposed site access. Access to the eastbound A40 on-slip is approximately 200m north of the site.

A477

2.2.7 The A477 is a major road in South Pembrokeshire and Carmarthenshire connecting St Clears and Johnston. The A477 is accessed via The A40 / A477 roundabout junction west of the site.

2.3 Highway Safety

2.3.1 Personal Injury Accident (PIA) data has been obtained from recorded road safety data published annually by the Department for Transport (DfT). The statistics provide recorded PIA data reported in each local authority using the STATS19 accident reporting form.

2.3.2 The most recent five-year dataset covers between January 1st 2016 and 31st December 2020. The study area in which PIA's have been considered is shown in Figure 2-2.

Figure 2-2: PIA Locations

2.3.3 The purpose of examining PIA data is to ascertain if there are elements of the highway examined that may be causal factors in PIA events. It is unlikely that a single incident at a particular location will be of sufficient evidential value to implicate highway design or condition as a causal factor, unless the particular highways issues is in some way extreme, so particular attention is paid to accident clusters. Notwithstanding the foregoing, weather conditions can also affect the level of highway risk but mitigating hazardous weather conditions is not usually achieved through alterations to the highway.

2.3.4 The collision classification has been categorised into three types; Slight, Serious and Fatal. Within the study area across the five years covered by the data, a total of seven PIAs were recorded.

2.3.5 Of the seven PIAs, five were classified as slight in nature and two as serious. There were no accidents recorded as fatal within the study area during the five-year period.

2.3.6 The PIA recorded as serious in nature, located on the A40 / A477 roundabout junction, involved two vehicles and one casualty. Vehicle two was waiting to proceed normally but was held up and vehicle one collided with the rear of vehicle two.

2.3.7 The PIA recorded as serious, located on the A4066, north of the A40 off-slip junction, involved two vehicles and one casualty. Both vehicles were proceeding along the carriageway, not on a bend, and were involved in a head-on collision.

2.3.8 The PIAs recorded as slight in nature are summarised below:

- Located on A40 / A477 roundabout junction - involved two vehicles and one casualty. Both vehicles were proceeding along the carriageway, not on a bend, and were involved in a head-on collision. Vehicle two hit an unknown object that was located off the carriageway.

- Located on A40 / A477 roundabout junction - involved two vehicles and one casualty. Both vehicles were proceeding along the carriageway, not on a bend, and vehicle one collided with the nearside of vehicle two.
- Located on A40 / A477 roundabout junction - involved two vehicles and one casualty. Vehicle one was waiting to proceed normally but was held up and vehicle two collided with the rear of vehicle one.
- Located on High Street (A4066) - involved two vehicles and two casualties. Both vehicles were proceeding along the carriageway, not on a bend, and were involved in a head-on collision. Vehicle two hit an unknown object that was located off the carriageway.
- Located on High Street (A4066) - involved one vehicle and one pedestrian casualty. Pedestrian walked into the carriageway from the drivers offside.

2.3.9 Although all incidents are regrettable, the PIAs that occurred does not indicate a specific pattern or issue with the geometry of the highway that would be exacerbated by the proposals. Additionally, there were no PIAs within the vicinity of the proposed site access.

2.4 Existing Traffic Flows and Speeds

2.4.1 Automatic Traffic Count (ATC) surveys were commissioned by Hydrock to record existing vehicle flows and speeds along A4066 High Street. The two ATCs were positioned approximately 30 metres north of the A40 off-slip junction with the A4066 and 25 metres south of the junction.

2.4.2 The surveys were undertaken over a continuous 7-day period from the 11th to 17th June 2021 (inclusive). The resultant weekday traffic flows during an average 12-hour day (0700-1900) and peak hours on a weekday as well as 85th percentile speeds are shown in Table 2.1.

2.4.3 Vehicle flows and speed data recorded by the ATC is included as full within Appendix A.

Table 2.1: Traffic Flows and Speeds on A4066 - 11-17th June 2021

Period	Total Vehicle Flows					
	ATC 1 - North of Junction			ATC 2 - South of Junction		
	Northbound	Southbound	Two-Way	Northbound	Southbound	Two-Way
0800-0900	368	86	454	199	149	348
1700-1800	423	123	546	184	236	420
0700-1900	4,146	1,155	5,301	2,193	2,227	4,420
7-day 85th Percentile Speeds (mph)	30	32	31	31	28	29

2.4.4 Traffic flows on the A4066 range between 454 and 546 two-way movements in the AM and PM peak hours, with a total of 5,301 movements recorded over a 12-hour period (0700-1900) north of the A40 off-slip junction; south of the junction, the flows range between 348 and 420 two-way movements in the AM and PM peak hours, with a total of 4,420 movements recorded over a 12-hour period (0700-1900).

2.4.5 The existing traffic volumes are considered to be appropriate given the 'A' road classification, with approximately 8 vehicles every minute, on average, during the worst-case peak hour.

Vehicle Speeds

2.4.6 The A4066 is subject to a 30mph speed limit. As shown in Table 2.1 vehicle speeds along the A4066 are similar in both directions for both ATCs, with 31mph for ATC 1 and 29mph for ATC 2 (85th percentile) vehicle movements.

2.4.7 Given the recorded speeds are significantly less than 37mph, it is considered appropriate to use MfS to determine appropriate visibility splay distances (Stopping Sight Distance) required for the proposed site access (Section 4.2).

3. SUSTAINABLE CONNECTIVITY OF THE SITE

3.1 Introduction

3.1.1 The importance of walking and cycling in contributing towards sustainable travel patterns is detailed in the guidance contained within TAN18: Transport (March 2007). The guidance emphasises not only the role walking and cycling can have as main modes of transport for local journeys but also the considerable contribution they play in forming parts of longer journeys by public transport. Paragraph 6.2 of TAN18 states that Local Authorities should promote walking as the main mode of transport for shorter trips.

3.1.2 Paragraph 3.8 of TAN18 states "Locations that are highly accessible by a variety of travel modes offer significant opportunities to make travel patterns more sustainable." As such it is recognised by TAN18 that the sustainable location of a site can assist in facilitating sustainable travel habits.

3.1.3 This chapter sets out the connectivity of the site to the surrounding area by sustainable modes of travel and demonstrates the accessible location of the site.

3.1.4 The accessibility of the site has been considered in the context of the development proposals and the surrounding area. This chapter demonstrates the alternative modes available. However, the context of the site location in a rural setting should also be fully taken into account when considering the sustainable connectivity of the site.

3.2 Walking Infrastructure and Routes

3.2.1 The site is well served by an established network of pedestrian infrastructure serving the existing town of St Clears. The 2km walking isochrone, attached as Appendix B, demonstrates that St Clears is accessible by foot and all facilities and services within the town are within a 2km walking distance (25-minute walk).

3.2.2 The routes to key facilities are mainly flat and all streets surrounding the site have at least a footway on one side of the carriageway which provide suitable access to local facilities.

3.2.3 A footway is provided along the site frontage on the western side of the carriageway with approximate widths of between 1 and 2 metres wide. To the north, the footway continues and connects the site to the centre of St Clears. There is an informal crossing present at the A40 off-slip junction with High Street, just north of the proposed site access. The eastern footway on High Street commences north of Gardde Fields junction. To the north of the site, there are good quality footways present with street lighting, dropped kerbs and tactile paving present.

3.2.4 To the south, the footway continues along the western side of the carriageway; the eastern footway commences adjacent to Lon Fair junction. These footways provide access to bus stops and residential dwellings. The footways terminate upon exiting the small town, north of Manor Daf Gardens junction.

3.2.5 The footways and crossings provide continuous pedestrian links to the centre of the town including a convenience store, retail uses, a pharmacy, a primary school, doctors surgery, employment areas and the closest bus stops to the site.

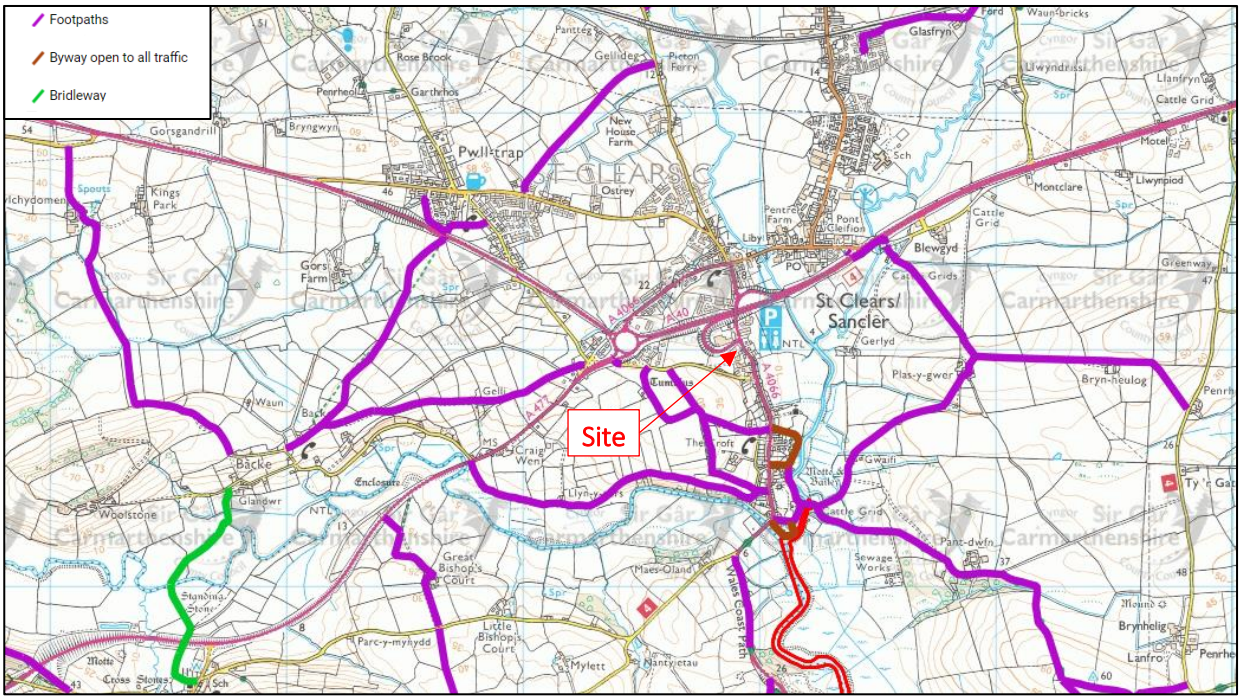
3.2.6 The combined footway provision and crossings provide good quality walking routes from the site to the surrounding services. Walking therefore offers a realistic and convenient choice of travel mode for users of the site, including as part of a linked trip by bus.

3.3 Public Rights of Way

3.3.1 There are a number of Public Rights of Way (PRoW) in close proximity to the site, as shown in Figure 3-1. Routes are accessible from High Street and Heol Goi. The one route provoides access to Pwll Trap neighbourhood of St Clears.

3.3.2 Given the rural nature of the site, it is likely that the PRoWs will be used for leisure purposes.

Figure 3-1: Public Rights of Way within Vicinity of Site



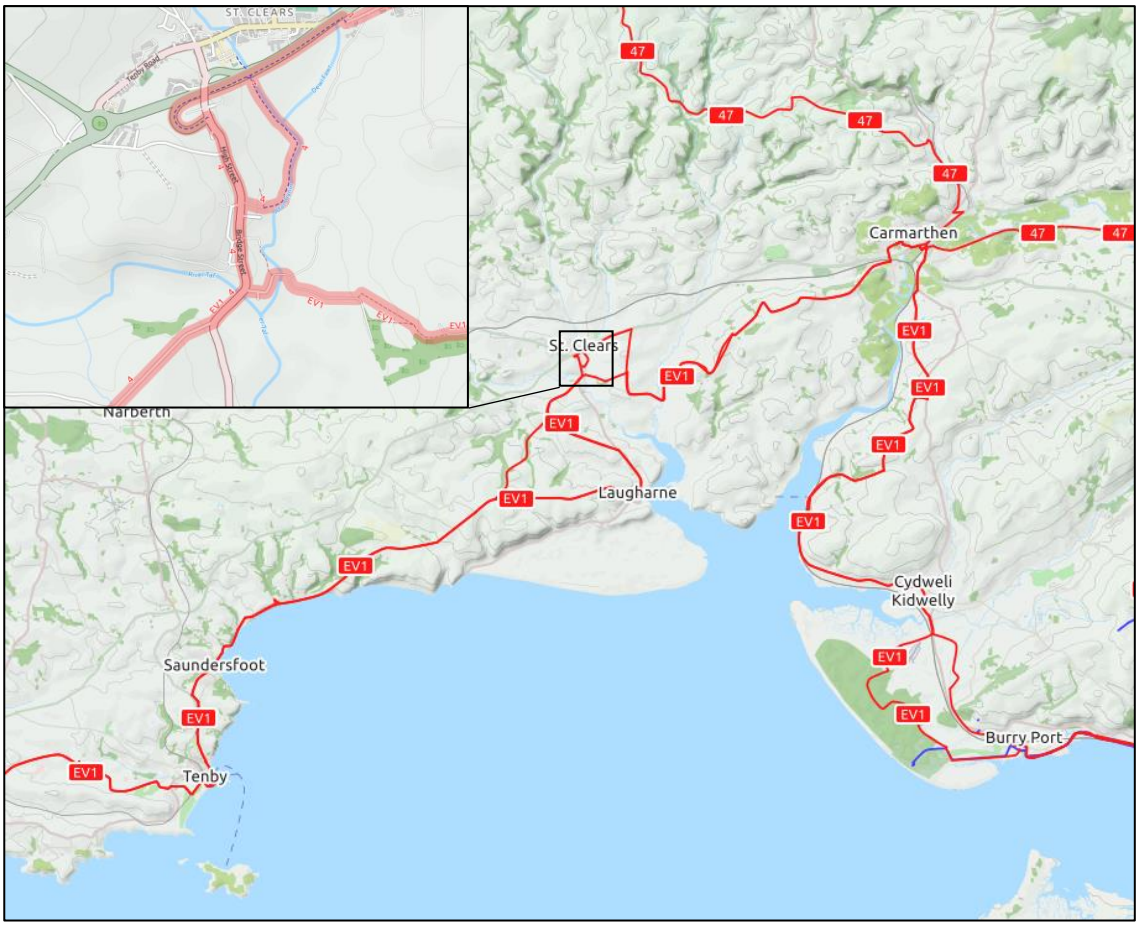
Source: Ordinance Survey Data 2021

3.4 Cycling Infrastructure and Routes

3.4.1 There is limited cycling infrastructure within the vicinity of the site. However, it is noted that the relatively flat, lightly trafficked and low speed roads within the vicinity of the site are suitable for cycling and thereby provides an opportunity for trips to be made to and from the site by bicycle.

3.4.2 The closest cycling routes to site can be seen in Figure 3-2.

Figure 3-2: Cycle Routes



3.4.3 The EuroVelo 1 Atlantic Coast route can be accessed within close proximity to the site, via High Street. Starting at Holyhead on the Isle of Anglesey, this route travels through the heart of Wales, taking in Snowdonia National Park and Breacon Beacons National Park. Passing the Welsh Capital Cardiff, it crosses the River Severn, where it visits Bristol and Bath. After that it joins the scenic Kennet and Avon Cycle Route, along the canal which links the Thames and the Bristol Channel, eventually connecting to Reading. The route then joins the Thames Valley Route, via London, passes through the famous docklands, and travels north to the ferry port at Harwich.

3.4.4 This route is not likely to attract significant use by potential future residents.

3.4.5 A 5km cycling isochrone map has been produced, attached as Appendix C, to identify the areas accessible within a short cycle (16-minute cycle). The limited accessibility of the site by bike is as expected for a rural town such as St Clears.

3.5 Walking and Cycling Distances

3.5.1 There are a number of publications which suggest guidance for appropriate walking and cycling distances to facilities. For reference, these have been summarised as follows:

- Welsh Government - Active Travel (Wales) Act 2013: Within the Active Travel Act Design Guidance (ATADG) it is stated within paragraph 4.1.4 that “walking as a mode of travel predominates for journeys of less than two miles whilst cycling is more convenient for longer journeys, typically of up

to five miles for regular journeys". This equates to walking distances of up to 3.2km and cycling distances of up to 8km.

- Paragraph 2.3 of TA91/05 Provision for Non-Motorised Users states that 'Walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles' (3.2km). Paragraph 2.2 of TA91/05 states that 2 miles is 'a distance that could easily be walked by the majority of people' and (at paragraph 2.3) that 'Walking and rambling can also be undertaken as a leisure activity, often over longer distances'. In relation to shorter trips in particular, the CIHT publication Planning for Walking (in section 2.1) states that across Britain about '80% of journeys shorter than 1 mile (1.6km) are made wholly on foot'.
- With regard to cycling, TA91/05 goes on to state (in paragraph 2.11) that 'Cycling is used for accessing a variety of different destinations, including educational facilities shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances.' At paragraph 2.9, TA91/05 states that 5 miles (8km) is a distance 'that could easily be cycled by the majority of people'.
- This is consistent with the statement in LTN01/20 (paragraph 2.2.2) that 'Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people, with many shorter journeys also suitable for walking.'
- Manual for Streets (paragraph 4.4.1) states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes (up to 800m) walking distance of residential areas which residents may access comfortably on foot, but that this is 'not an upper limit'.

3.5.2 As such, based on the guidance above, it is considered that journeys within 3.2km are appropriate to be made on foot and the majority of those within 1.6km are likely to be made on foot. A 3.2km distance equates to around a 40-minute walk travelling at 3mph or 4.8km/h (80 metres per minute).

3.5.3 Distances of up to 8km have been assumed as being reasonable for cycling journeys. A cycling distance of 8km would equate to a journey time of 25 minutes based on a cycling speed of 12mph or 19.2km/h (320 metres per minute).

3.5.4 Local facilities and amenities which may be required by potential residents on a daily basis are summarised in Table 3-1. The location of these facilities, are shown in Figure 3-3.

Table 3-1: Proximity of the site to local facilities and services

Facility / Amenity	Walking / Cycling Distance from site access (metres)	Walking Travel Time (minutes)	Cycling Travel Time (minutes)
Co-op Bus Stops	97	1	<1
St Mary Magdelene's Bus Stops	322	4	1
St Mary Magdelene Church	322	4	1
Market Hall Vets	322	4	1
Subway	322	4	1
Santa Clara Bus Stops	483	6	2
Cuddle Up Cookies	483	6	2
SPAR	483	6	2
Coach & Horses Surgery	483	6	2
County Stores Bakery	483	6	2
Elaichi Indian	483	6	2
Neil's Fish & Chips	483	6	2
Garage Bus Stops	645	8	2
The Original Factory Shop	645	8	2
Butchers	645	8	2
Ty Bara	645	8	2
Corvus Inn	805	11	3
Starbucks	965	12	3
Ysgol Griffifth Jones	1609	20	5
Co-op Food	1609	20	5
The White Lion Inn	1609	20	5

** Based on walking speeds of 80 metres per minute and Cycling Speeds of 320 metres per minute*

Figure 3-3: Local Facilities and Amenities Plan

3.5.5 Table 3-1 and Figure 3-3 show that all local facilities are within an acceptable walking and cycling distance to/from the site. The majority of facilities and services are within the walkable neighbourhood distance (800m) within St Clears which are accessible via the nearby footpaths.

3.5.6 In summary, the site has some accessibility to services and facilities within walking and cycling distance which may encourage future residents to travel by these modes and reduce reliance on car.

3.6 Public Transport

Bus

3.6.1 The nearest bus stops to site are located on High Street (Co-op Bus Stops). The 2km walking isochrone, attached as Appendix B, identifies all bus stops located within a 10-minute walk from the site.

3.6.2 The stops are served by bus services 221, 222, 223, 224 and 322. These services provide access to Tanerdy, Pendine, Haverfordwest and Carmarthen. Carmarthen 12km north east of the site and provides a wide range of facilities and services such as St Catherine's Walk Shopping Centre, St David's Hospital and many employment opportunities.

3.6.3 A summary of these bus services is provided in Table 3-2.

Table 3-2: Bus Service Provision

No.	Route	First / Last	Frequency of Services			
			Mon – Fri		Saturday	Sunday
			AM	PM		
221	Cwmmiles – Carmarthen	09:20	1 per day	-	1 per day	-
	Carmarthen – Cwmmiles	13:35	-	1 per day		
222	Carmarthen – Llwyn-y-brain	08:30 / 17:50	Every 2 hours	Every 2 hours	Every 2 hours	-
	Llwyn-y-brain - Carmarthen	06:55 / 16:40				
223	Cwmmiles – Carmarthen	08:10	1 per day	-	-	-
	Carmarthen – A478 at Efailwen	13:20	-	1 per day		
224	North Road before Lon Hywel – Carmarthen	07:20 / 17:02	Every 3 hours	Every 2-3 hours	Every 2-3 hours	-
	Carmarthen – North Road before Lon Hywel	08:50 / 17:40				
322	Riverside Quay at Bus Station 1 – Tanerdy	09:10 / 15:10	Every 3 hours	Every 3 hours	-	-
	Tanerdy – Riverside Quay at Bus Station 1	10:25 / 16:25				

3.6.4 Table 3-2 demonstrates that there are bus services nearby which provide frequent travel options on weekdays and weekends connecting to Carmarthen.

3.6.5 It is noted that services are operating to a revised timetable until further notice as a result of social distancing measures in response to COVID-19. Although some services may have been reduced, this is considered a temporary measure and when the services resume, they can provide an opportunity for alternative travel to an appropriate level considering the rural location and the wider range of facilities located in Carmarthen.

Rail

3.6.6 The nearest station to the site is Whitland Station, located approximately 8km (as the crow flies) to the west of the site. The station is approximately a 30-minute cycle or 10-minute drive.

3.6.7 Whitland station serves the town of Whitland in Carmarthenshire, Wales. It is located on the West Wales line from Swansea. To the west of the station, a branch line diverges towards Pembroke; the main line continues to Milford Haven and Fishguard Harbour. Trains connecting to Swansea are an hourly service and take approximately 1 hour 10 minutes.

3.6.8 The station provides 20 cycle storage spaces which enables access to and from the site via rail and cycle (approximately a 30-minute cycle). Additionally, the station provides 5 free car parking spaces; a linked trip via car and rail is therefore possible.

3.7 Summary

3.7.1 The site has accessibility to services and facilities within walking and cycling distance which may encourage future residents to travel by these modes and reduce their reliance upon car.

3.7.2 The site is situated in a rural location, although there are opportunities for access to the site to be made by walking, cycling and public transport. There are some facilities, services and employment areas situated within acceptable walking and cycling distances.

3.7.3 The accessibility credentials of the site, with consideration to its rural location, will encourage and promote some sustainable travel behaviour which is fully in accordance with the aims of TAN18 and the Active Travel Act.

4. DEVELOPMENT PROPOSALS

4.1 Overview and Layout

4.1.1 The outline planning application supported by this TS is seeking permission for circa 66 residential dwellings, comprising of 90% open market housing and 10% affordable housing.

4.1.2 The proposals comprise a mix of one-to-four-bedroom dwellings, including terraced, semi-detached and detached dwellings. Parking is a mixture of driveway parking and garages, and a parking court; the site would be accessed from High Street (A4066) which is discussed in more detail in Section 4.2.

4.1.3 The current indicative proposed development schedule is shown in Table 4-1.

Table 4-1: Proposed Accommodation Schedule

Accommodation Type	Number of Dwellings
Private	
2 Bedroom	14
3 Bedroom	25
4 Bedroom	20
Affordable	
1 Bedroom	4
2 Bedroom	3
Total	66

4.1.4 The indicative site masterplan is included in Appendix D.

4.2 Access

4.2.1 A new priority junction vehicular access is proposed via High Street (A4066). The access design has previously been agreed with Carmarthenshire County Council (CCC) Highways in 2016. The general arrangement design of this junction is included as Hydrock Drawing 18641-HYD-XX-XX-DR-TP-0201 at the rear of this report attached as Appendix E. This is designed fully in accordance with TA42/95 with a 5.5-metre access road and 8 metre corner radii. The access provides dropped kerbs at the bellmouth with tactile paving provided on each side. Visibility splays are provided in accordance with TAN18.

4.2.2 TAN18 in Annex B sets out recommended Stopping Sight Distances (SSDs) and suggests that where speeds are below 60 kph, Table B should be used for calculating the required SSD.

4.2.3 As shown in Section 2, the speed survey showed an 85th percentile speed of 31mph for ATC 1 traffic and 29mph for ATC 2 traffic on High Street. Based on the Manual for Streets formula, this would equate to a requirement of 43 metres visibility in each direction.

4.2.4 A 43-metre visibility from an x distance of 2.4 metres back from the High Street carriageway can be achieved in each direction.

4.2.5 Swept path analysis has been undertaken to demonstrate that a refuse vehicle can turn in and out of the site safely. This is shown in Hydrock Drawing 18641-HYD-XX-XX-DR-TP-0101 attached as Appendix F.

4.3 Pedestrian and Cycling Access

4.3.1 Pedestrian access is provided by a proposed two metre footway on both sides of the internal access road which links to the footways on High Street. These internal footways provide pedestrian access to each dwelling.

4.3.2 Cyclists will access the site on-carriageway via the proposed access.

4.3.3 The proposed access arrangements will provide a fully permeable site to the surrounding areas and local facilities and are consistent with TAN18 paragraph 3.6 which states "*the development will facilitate access by new residents to public transport stops, local shops and facilities by walking and cycling*".

4.4 Parking

Car Parking

4.4.1 Parking for new developments should be provided in accordance with CSS Parking Standards (2014), with reference to the appropriate development type and zone allocation. Carmarthenshire County Council have not developed a zoning plan, but instead expect the Developer to indicate the proposed zone allocation, which will be agreed on a site-by-site basis.

4.4.2 The CSS 2014 contains design guidance for parking layouts and sets out the recommended number of spaces for new developments.

4.4.3 For a residential development, this guidance states that a maximum provision of one space per bedroom should be provided. However, this should not exceed three spaces per dwelling. In addition, a total of one space per five units should be provided for visitors to the site.

4.4.4 Table 4-2 sets out the maximum parking standards for the development based on the site masterplan.

Table 4-2: Indicative Car Parking Provision

CSS Car parking standards per dwelling type (zone 2-6)		Optimum car parking spaces (zones 2-6)			
Dwelling type	Optimum spaces	Proposed quantum per dwelling type	Optimum spaces required	Visitor Requirements	Visitor Spaces required
1 bedroom	1	4	4	1 space per 5 units	**14**
2 bedroom	2	17	34		
3 bedroom	3	25	75		
4 bedroom	3	20	60		
Total Optimum Parking Requirement			173		

4.4.5 The development proposals will provide parking in line with the CSS guidance.

4.4.6 All garages and car ports within the development will measure 6m x 3m internally to allow for the parking of a family car and provide storage in accordance with CSS guidance. All properties with a garage must also have a 6m long driveway which has a width of no less than 3.6m.

4.4.7 The provision would be carefully considered and agreed with CCC as part of the detailed planning application. The provision will ensure there is no overspill impact on local streets whilst not overproviding which could encourage the use of vehicles.

Cycle Parking

4.4.8 Cycle parking will be provided for each residential unit with one cycle parking space accommodated within the curtilage of each individual dwellings. This is compliant with the guidelines.

Motorcycle Parking and Disabled Parking

4.4.9 No provision has been made for motorcycle or disabled parking provision on-site. It is considered that these users will be accommodated within the car parking allocated for the individual dwellings.

4.5 Internal Layout and Servicing Arrangements

4.5.1 The indicative site layout has been designed in accordance with the principles set out within Manual for Streets (MfS). The site is proposed to be accessed by a main access road running east to west with a width of 5.5 metres; turning heads have been provided.

4.5.2 The width enables two HGVs to pass each other (5.5 metres as set out in Figure 7.1 of MfS) and allows cars to manoeuvre into and out of driveways safely and appropriately. The cul-de-sac nature of the site will also facilitate low speeds within the site encouraging walking and cycling.

4.5.3 Carmarthenshire County Council typically operate 26t rigid three axle Refuse Collection Vehicles, with rear wheel steering. Swept path analysis has been undertaken using an 11.3 metre length refuse vehicle to ensure that a refuse vehicle can enter and exit the site in a forward gear, attached as Appendix F. Further detailed information regarding servicing will be provided at the reserved matters stage. Additionally, swept path analysis for a fire tender vehicle will be submitted as part of reserved matters.

4.6 Construction Movements

4.6.1 The details of the construction of the site are yet to be finalised. The impacts of construction would be short term and temporary in nature. It is proposed that all routes to the site are agreed with CCC prior to construction commencing. However, HGV's will however be advised to follow a primary access route to the site dependent on the direction of travel.

4.6.2 Measures would also be adopted during the construction of the site to minimise the impact of construction traffic movements with potential measures set out as follows:

- The production of a plan detailing measures to reduce the contract duration and the number of trips made
- Techniques and measures will be implemented, where practical, to assist in minimising construction freight trips on the local highway network, particularly during peak times (such as a vehicle booking system).
- As far as possible, all construction worker vehicles would be accommodated on the site to reduce the impact of overspill parking on the local highway network.
- Measures will be set out to encourage construction staff to reduce car use to the site, particularly through car sharing.
- Wheel washing and dust sheeting will be undertaken to reduce the impact of mud, dust and dirt on the local highway network.

5. TRIP GENERATION AND DISTRIBUTION

5.1 Introduction

5.1.1 The site is undeveloped land with minimal traffic generation. Therefore, for a robust assessment all trips associated with the proposals have been considered as net new trips onto the network. This section sets out the trip generation of the proposed development. It also provides details of the proposed methodology for distributing and assigning vehicle trips onto the local highway network

5.1.2 The Trip Rate Information Computer System (TRICS 2021 v 7.8.1) (TRICS) online database has been analysed for residential sites with similar characteristics to the proposed development. TRICS is an industry standard software, used to forecast trips likely to be generated by development sites. The TRICS database predicts the likely numbers of arrivals and departures by utilising surveys undertaken at existing developments of a similar size and characteristics across the UK. The analysis in this TS has included the filtering of the sites with regard to use, scale, location, accessibility, car parking availability and surrounding population numbers to establish sites with the most comparable trip characteristics.

5.1.3 Vehicle trip rates have been obtained from TRICS and applied to establish trip generation resulting from the proposals during peak network hours (AM – 08:00 – 09:00 and PM – 17:00 – 18:00) and over a 12-hour period (07:00 – 19:00) for the proposed residential use.

5.2 Proposed Development Vehicle Trip Generation

5.2.1 TRICS has been analysed to determine the trips associated with the indicative residential proposal of 66 dwellings.

5.2.2 The TRICS category 03-A, Houses Privately Owned, has been used to derive the trip rates for the proposed residential development. This has been used for all 66 dwellings to ensure a robust assessment and the presentation of the worst case in terms of vehicle trip generation (as affordable dwellings typically generate lower vehicle trips).

5.2.3 The database has been filtered in line with the TRICS Good Practice Guide in order to achieve the most representative sites. The following filters have been applied to the search criteria:

- Vehicle surveys
- Located within England and Wales (excluding Greater London)
- Up to 100 households
- All Surveys from 2010 (the most recent c.10 years)
- Population of up to 50,000 within 5 miles
- Surveys from Monday to Friday
- Located in a suburban area, edge of town locations and neighbourhood centre
- Manual removal of any sites in a location which is not comparable (major cities, near railway stations etc)

5.2.4 The application of these parameters resulted in a total of 5 surveys of similar sites which were appropriate for obtaining robust vehicle trip rates relating to the proposed development.

5.2.5 A summary of the forecast trip rates and trip generation associated with the proposed development of 66 units is shown in Table 5-1. The full outputs of the TRICS analysis including the filtering and sites used can be found in Appendix G.

Table 5-1: Forecast Proposed Development Vehicle Trips- 66 dwellings

Time Range	Trip rate per dwelling (private dwellings)			Total trips for 66 dwellings		
	ARRIVALS	DEPARTURES	TWO-WAY	ARRIVALS	DEPARTURES	TWO-WAY
08:00-09:00	0.108	0.299	0.407	7	20	27
17:00-18:00	0.34	0.149	0.489	22	10	32
Daily Trip Rates:	2.289	2.305	4.594	151	152	303

5.2.6 Table 5-1 indicates that the proposed development is forecast to generate approximately 27 two-way vehicular movements during the AM (08:00 – 09:00) peak and 32 in the PM (17:00 – 18:00) peak periods. This equates to approximately one vehicle every 2 minutes, on average, during the peak hour. Over a 12-hour period the proposed development is forecast to generate around 303 two-way vehicle movements. This level of trips represents a worst case for the site as the trip generation exercise shown in Table 5-1 has applied the private dwelling trip rates to the whole site which are higher than the affordable units.

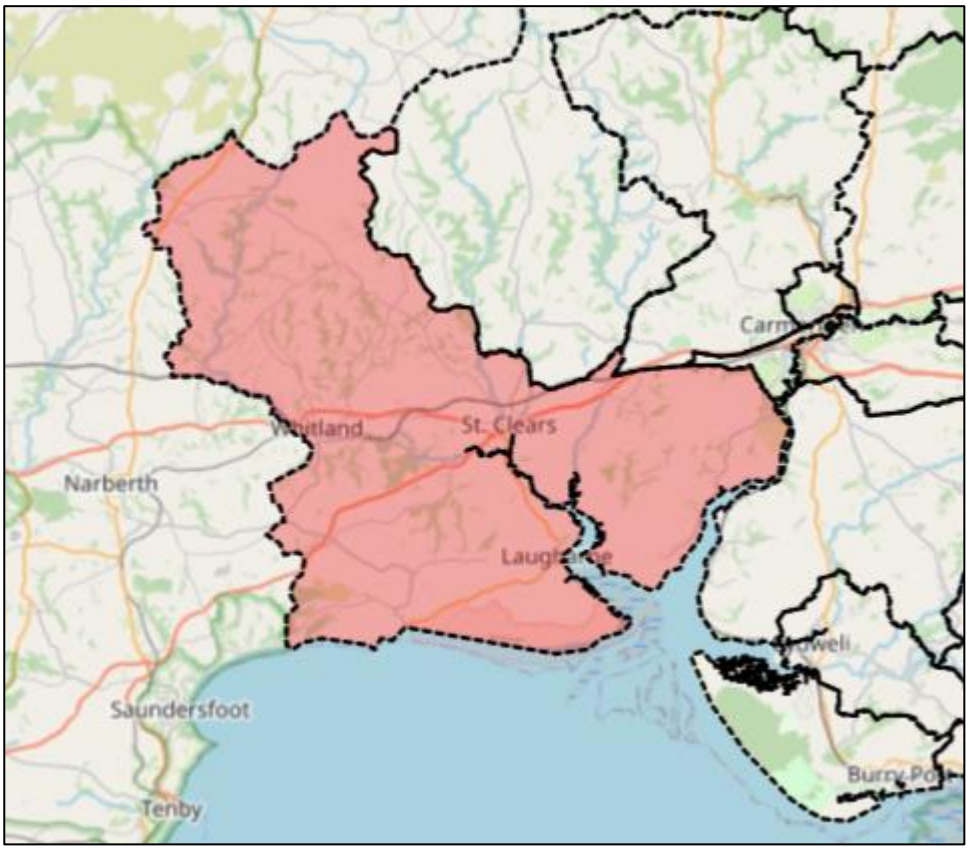
5.2.7 It is not considered that this level of vehicle movements on the network would have a material impact on road safety or a severe impact on the capacity of the highway network.

5.3 Trip Distribution and Assignment

5.3.1 Trip distribution analysis has been undertaken to identify the likely routes to and from the site for the proposed residential development traffic. The vehicle trips have been distributed based on Table WU03EW of the 2011 census data (Location of usual residence and place of work by method of travel to work - MSOA level). Although a residential site generates trips for all purposes, not just work purposes, the Census data is considered appropriate for use in distributing traffic associated with the development during the peak hours as a high proportion of vehicle trips would be for commuting purposes.

5.3.2 To capture an appropriate vehicular distribution, the Carmarthenshire 027 (W02000418) Middle Super Output Area (MSOA) has been used, within which the site is located. The location and extent of this MSOA is shown in Figure 5-1.

Figure 5-1: Output Area used within Distribution Analysis



** Taken from Nomis*

5.3.3 The most appropriate routes have been identified from the site based on distances and times between the site and destination, with the same distribution percentages used in the AM and PM peaks. This has been based on the residential peak hours of 0800-0900 and 1700-1800. The percentage turning movements at the proposed site access is summarised in the traffic flow diagrams attached as Appendix H. The forecast percentage distribution is summarised in Figure 5-2.

Figure 5-2: Trip Distribution

Link	Distribution %
A4066 North (Left)	92%
A4066 South (Right)	8%

6. FUTURE YEAR TRAFFIC FLOWS

6.1 Introduction

6.1.1 This section sets out the scope of the local highway network over which the impact of the proposed development has been assessed, the assessment scenarios and future year traffic flows.

6.2 Assessment Scenarios

6.2.1 The AM and PM peak hours of 08:00 to 09:00 and 17:00 to 18:00 have been assessed. In addition to a base year assessment, a future year of 2026 (five years post submission) has been assessed.

6.3 Future Year Baseline

Growth Factors

6.3.1 To take account of background traffic growth on the local highway network within the vicinity of the site between 2021 and 2026, growth factors have been applied to the obtained 2021 base flow data. These growth factors have been calculated using the TEMPro (v7.2) computer programme which considers projections in population, employment, car ownership and trip rates based on information derived from the National Trip Ends Model (NTEM) and the 2011 National Travel Survey.

6.3.2 The TEMPro projections are applied to MSOA's based on local development plans and growth is distributed across areas based on past trends in housing and development. Appropriate adjustments may be required when considering the impacts of individual applications.

6.3.3 As such, the application of TEMPro growth rates and the direct inclusion of committed or strategic development traffic could lead to double counting some of the growth in future year traffic flows. In As the site itself is allocated the application of growth rates and development trips would lead to an element of double counting in itself.

6.3.4 The TEMPRO growth factors for MSOA Carmarthenshire 027, within which the site is located, is summarised in Table 6-1.

Table 6-1: TEMPro Growth Rates

MSOA Area	Year From	Year To	Local Growth Figure
Carmarthenshire 027	2021	2026	1.0439

6.4 Future Year Traffic Flows and Assessment Scenarios

6.4.1 The base traffic flows shown in the traffic flow diagrams in Appendix H have been factored by the growth rates shown in Table 6-1 to obtain a future year baseline position. The development traffic flows have then been added to the future baseline. The resultant future year baseline and baseline plus development traffic flow diagrams in the AM and PM peak hours are also shown in Appendix H.

7. TRAFFIC IMPACTS AND OPERATIONAL ASSESSMENTS

7.1 Introduction

7.1.1 This section considers the impact of the proposed development on the highway network. Concerns have been raised by CCC and Welsh Government's (WG) Network Management Division regarding the proposed form of junction and potential implications to WG's A40 slip road exit located to the north. WG Network Management Division raised concerns associated with potentially short stack lengths for right turners into the site, which may lead to blocking back. As such, a junction assessment of the site access has been undertaken to demonstrate that the site access can operate within capacity and to respond to these concerns.

7.2 Operational Assessment

Model Inputs

7.2.1 The operational assessment of the proposed Site Access junction with the A4066 has been undertaken using the TRL software Junctions 9. Modelling has been undertaken using total traffic flows and HGV percentages.

7.2.2 The modelling has been based on geometric measurements using topographical survey information based on the proposed layouts which are being produced.

7.2.3 Background traffic flows have used the AM and PM peak network times (08:00-09:00 and 17:00-18:00).

Model Reporting Outputs

7.2.4 The results are presented in a base (2021) year for validation and a future year (2026) with and without development traffic to establish the impacts.

7.2.5 The key outputs of Junctions 9 which inform the analysis are:

- 'Ratio of Flow to Capacity' (RFC),
- Maximum queue length in vehicles,
- Delay in second per vehicle
- Level of service indicated by a letter between A (well within capacity) and F (at, or over, capacity).

7.2.6 The main indication of the performance of a junction is given by the RFC for each lane. The peak capacity is realised when the demand flow at the entry is great enough to cause a continuous queue of vehicles to wait on approach to the stop line. This is reached when the RFC attains a value of 1, albeit a junction is generally considered to be operating over capacity above an RFC of 0.85.

7.2.7 Queue lengths provide an indication of how the overall junction performance may affect adjacent junctions on the highway network and whether there would be blocking back from right turn lanes for through traffic. The queue lengths are presented as the maximum over an hourly period. Changes in queue lengths provide an indicator as to a development's impact on the operation of a junction.

7.2.8 When considering the change in the operation of a junction all of these factors will be considered to form a view as to whether the impact of the development generated traffic would be material and require mitigation.

7.3 Operational Assessment Results Summary

Site Access / A4066

7.3.1 This junction has been modelled with a synthesised peak using the 'one-hour' traffic profile type. The development access road arm has been modelled as a single lane. The junction capacity model outputs are included as Appendix I.

7.3.2 The results of the junction assessment are summarised in Table 7-1.

Table 7-1: PICADY Results – Site Access / A4066

Base 2021 + Development								
Arm	AM Peak (0800-0900)				PM Peak (1700-1800)			
	RFC	Max Delay (s)	Queue (veh)	LOS	RFC	Max Delay (s)	Queue (veh)	LOS
A4066 N (left turn)	0.04	6.77	0.00	A	0.02	6.62	0.00	A
A4066 S (right turn)	0.01	5.62	0.00	A	0.05	5.34	0.01	A
Base 2026 + Development								
Arm	AM Peak (0800-0900)				PM Peak (1700-1800)			
	RFC	Max Delay (s)	Queue (veh)	LOS	RFC	Max Delay (s)	Queue (veh)	LOS
A4066 N (left turn)	0.04	6.81	0.00	A	0.02	6.64	0.00	A
A4066 S (right turn)	0.01	5.61	0.00	A	0.05	5.31	0.01	A

7.3.3 The model indicates that the proposed junction will operate well within capacity with no queuing forecast. As such, the development would not have a material impact on the local highway network and the model demonstrates that right turners into site would not result in blocking back. Therefore, no mitigation is required.

8. SUMMARY AND CONCLUSION

8.1 Summary

8.1.1 This Transport Statement has been produced in support of an outline planning application for a proposed residential development comprising of circa 66 dwellings on Land West of Brynheulog, St Clears, Carmarthenshire, Wales.

8.1.2 This report has been prepared to provide the necessary information for the Local Highway and Planning Authorities to consider the merits of the development proposal in terms of its location, accessibility, highway safety and the impact of the development traffic on the local highway network.

8.1.3 The proposals are for 66 residential dwellings with a mix of one to four-bedroom dwellings. The site is proposed to be accessed from High Street (A4066).

8.1.4 Vehicles can enter and exit the site safely and in forward gear and visibility is provided in accordance with the relevant design guidance contained within Manual for Streets for the observed speeds. Pedestrians and cyclists will access the site using the proposed access point.

8.1.5 Given the rural location of St Clears, the site has accessibility to services and facilities within walking and cycling distance which may encourage future residents to travel by these modes and reduce reliance on car. These attributes are considered consistent with the Active Travel Act (Wales 2013) in relation to sustainable transport opportunities considering the rural setting of the site.

8.1.6 Road safety data demonstrates that there are no evidenced safety issues in the vicinity of the site that would be exacerbated by the proposed development.

8.1.7 The proposals are forecast to generate approximately 27 two-way vehicular movements during the AM (08:00 – 09:00) peak and 32 in the PM (17:00 – 18:00) peak periods. This equates to approximately one vehicle every 2 minutes, on average, during the peak hour.

8.1.8 A junction assessment has been undertaken of the Site access / A4066 Road junction and demonstrates that the junction operates well within its maximum capacity. As such, the junction is considered appropriate to accommodate the development site traffic and future year background flows and no improvements are required.

8.2 Conclusion

8.2.1 Based on the information contained within this TS it is considered that the development proposals will not have a material impact on road safety or a severe impact on the operation of the surrounding highway network. The site is also situated within a town and is accessible to facilities and services which complies with the objectives of TAN18 and the Active Travel Act and is likely to encourage travel by means other than the private car. Additionally, the site is part of the current LDP housing allocation (T2/5/h5).

8.2.2 Robust operational assessments demonstrate that the proposed development will not have a material impact on the capacity or operation of the highway network.

8.2.3 It is therefore considered that there are no reasons relating to transport or highways for objecting to the application.

Appendix A ATC Flows and Speed Data

A4066, High Street, St Clears, Carmarthen (ATC 1 North Site)

Site No. 548701 **Site Ref. 548701**
ATC 1 - North Site
Vehicle Count Report **Week Begin: 11 June 2021** **Channel: Northbound**

	Fri Jun 11	Sat Jun 12	Sun Jun 13	Mon Jun 14	Tue Jun 15	Wed Jun 16	Thu Jun 17	5-Day Ave.	7-Day Ave.
00:00	16	22	24	9	9	11	9	11	14
01:00	5	14	30	10	6	6	6	7	11
02:00	5	8	9	2	3	3	4	3	5
03:00	3	3	5	4	10	5	4	5	5
04:00	11	10	2	22	13	14	11	14	12
05:00	35	22	14	44	33	33	36	36	31
06:00	104	46	32	95	120	96	109	105	86
07:00	231	100	62	260	264	273	264	258	208
08:00	390	191	99	376	362	354	359	368	304
09:00	327	276	213	350	308	296	313	319	298
10:00	377	338	279	350	303	314	313	331	325
11:00	342	343	310	347	309	350	317	333	331
12:00	340	345	374	328	268	298	304	308	322
13:00	346	329	327	363	288	284	333	323	324
14:00	405	253	314	362	358	348	358	366	343
15:00	400	244	324	376	369	380	404	386	357
16:00	409	334	384	487	410	459	459	445	420
17:00	385	327	362	442	439	397	450	423	400
18:00	298	253	379	296	295	243	302	287	295
19:00	263	223	251	199	209	171	198	208	216
20:00	187	195	179	145	165	133	171	160	168
21:00	134	156	137	104	106	72	122	108	119
22:00	80	85	61	46	51	33	63	55	60
23:00	50	71	29	22	19	12	28	26	33
Total									
12H(7-19)	4250	3333	3427	4337	3973	3996	4176	4146	3927
16H(6-22)	4938	3953	4026	4880	4573	4468	4776	4727	4516
18H(6-24)	5068	4109	4116	4948	4643	4513	4867	4808	4609
24H(0-24)	5143	4188	4200	5039	4717	4585	4937	4884	4687
AM Peak	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00	11:00
	390	343	310	376	362	354	359	368	331
PM Peak	16:00	12:00	16:00	16:00	17:00	16:00	16:00	16:00	16:00
	409	345	384	487	439	459	459	445	420

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Site No. 548701 **Site Ref. 548701**
ATC 1 - North Site
Vehicle Count Report **Week Begin: 11 June 2021** **Channel: Southbound**

	Fri Jun 11	Sat Jun 12	Sun Jun 13	Mon Jun 14	Tue Jun 15	Wed Jun 16	Thu Jun 17	5-Day Ave.	7-Day Ave.
00:00	3	8	5	1	1	5	2	2	4
01:00	0	2	7	2	2	2	1	1	2
02:00	3	0	1	0	1	1	1	1	1
03:00	1	1	3	1	1	1	1	1	1
04:00	0	2	0	2	2	1	1	1	1
05:00	6	5	2	10	7	7	5	7	6
06:00	13	7	9	20	29	16	19	19	16
07:00	89	37	21	73	73	89	80	81	66
08:00	91	37	26	72	88	102	79	86	71
09:00	77	93	81	88	92	78	82	83	84
10:00	101	105	87	93	79	77	91	88	90
11:00	90	97	87	100	102	94	89	95	94
12:00	103	118	93	98	65	71	98	87	92
13:00	95	113	74	105	78	84	93	91	92
14:00	110	76	72	112	85	88	86	96	90
15:00	129	81	71	106	120	118	126	120	107
16:00	109	85	79	111	116	117	113	113	104
17:00	104	99	69	134	121	116	142	123	112
18:00	101	91	50	76	89	82	104	90	85
19:00	70	61	46	65	67	61	50	63	60
20:00	46	58	45	51	54	41	48	48	49
21:00	44	35	38	31	27	21	34	31	33
22:00	24	34	13	9	6	9	14	12	16
23:00	10	15	4	2	2	1	3	4	5
Total									
12H(7-19)	1199	1032	810	1168	1108	1116	1183	1155	1088
16H(6-22)	1372	1193	948	1335	1285	1255	1334	1316	1246
18H(6-24)	1406	1242	965	1346	1293	1265	1351	1332	1267
24H(0-24)	1419	1260	983	1362	1307	1282	1362	1346	1282
AM Peak	10:00	10:00	11:00	11:00	11:00	08:00	10:00	11:00	11:00
	101	105	87	100	102	102	91	95	94
PM Peak	15:00	12:00	12:00	17:00	17:00	15:00	17:00	17:00	17:00
	129	118	93	134	121	118	142	123	112

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Site No. 548701 Site Ref. 548701
ATC 1 - North Site
Vehicle Count Report Week Begin: 11 June 2021 Channel: Total Flow

	Fri Jun 11	Sat Jun 12	Sun Jun 13	Mon Jun 14	Tue Jun 15	Wed Jun 16	Thu Jun 17	5-Day Ave.	7-Day Ave.
00:00	19	30	29	10	10	16	11	13	18
01:00	5	16	37	12	8	8	7	8	13
02:00	8	8	10	2	4	4	5	5	6
03:00	4	4	8	5	11	6	5	6	6
04:00	11	12	2	24	15	15	12	15	13

05:00	41	27	16	54	40	40	41	43	37
06:00	117	53	41	115	149	112	128	124	102
07:00	320	137	83	333	337	362	344	339	274
08:00	481	228	125	448	450	456	438	455	375
09:00	404	369	294	438	400	374	395	402	382
10:00	478	443	366	443	382	391	404	420	415
11:00	432	440	397	447	411	444	406	428	425
12:00	443	463	467	426	333	369	402	395	415
13:00	441	442	401	468	366	368	426	414	416
14:00	515	329	386	474	443	436	444	462	432
15:00	529	325	395	482	489	498	530	506	464
16:00	518	419	463	598	526	576	572	558	525
17:00	489	426	431	576	560	513	592	546	512
18:00	399	344	429	372	384	325	406	377	380
19:00	333	284	297	264	276	232	248	271	276
20:00	233	253	224	196	219	174	219	208	217
21:00	178	191	175	135	133	93	156	139	152
22:00	104	119	74	55	57	42	77	67	75
23:00	60	86	33	24	21	13	31	30	38
Total									
12H(7-19)	5449	4365	4237	5505	5081	5112	5359	5301	5015
16H(6-22)	6310	5146	4974	6215	5858	5723	6110	6043	5762
18H(6-24)	6474	5351	5081	6294	5936	5778	6218	6140	5876
24H(0-24)	6562	5448	5183	6401	6024	5867	6299	6231	5969
AM Peak	08:00	10:00	11:00	08:00	08:00	08:00	08:00	08:00	11:00
	481	443	397	448	450	456	438	455	425
PM Peak	15:00	12:00	12:00	16:00	17:00	16:00	17:00	16:00	16:00
	529	463	467	598	560	576	592	558	525

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A4066, High Street, St Clears, Carmarthen (ATC 1 North Site)

Site No. 548701 Site Ref. 548701
ATC 1 - North Site
Classification Report Week Begin: 11 June 2021 Channel: Northbound

	Total Volume	Bin 1 M/Cycle	Bin 2 Car/IVan	Bin 3 LGV	Bin 4 HGV	Bin 5 Bus
Fri 11 Jun	5143	30	4416	521	166	10
Sat 12 Jun	4188	82	3732	268	104	2
Sun 13 Jun	4200	64	3798	279	59	0
Mon 14 Jun	5039	33	4283	553	165	5
Tue 15 Jun	4717	55	3995	523	142	2
Wed 16 Jun	4585	37	3869	551	113	15
Thu 17 Jun	4937	69	4129	572	158	9
5 Day Ave.	4884	45	4138	544	149	8
7 Day Ave.	4687	53	4032	467	130	6

PCC Traffic Information Consultancy Ltd.

Site No. 548701 Site Ref. 548701
ATC 1 - North Site
Classification Report Week Begin: 11 June 2021 Channel: Southbound

	Total Volume	Bin 1 M/Cycle	Bin 2 Car/IVan	Bin 3 LGV	Bin 4 HGV	Bin 5 Bus
Fri 11 Jun	1419	8	1220	122	68	1
Sat 12 Jun	1260	22	1102	98	37	1
Sun 13 Jun	983	11	885	60	27	0
Mon 14 Jun	1362	11	1147	155	47	2
Tue 15 Jun	1307	14	1134	121	38	0
Wed 16 Jun	1282	9	1112	116	38	7
Thu 17 Jun	1362	14	1157	151	39	1
5 Day Ave.	1346	11	1154	133	46	2
7 Day Ave.	1282	13	1108	118	42	2

PCC Traffic Information Consultancy Ltd.

Site No. 548701 Site Ref. 548701
ATC 1 - North Site
Classification Report Week Begin: 11 June 2021 Channel: Total Flow

	Total Volume	Bin 1 M/Cycle	Bin 2 Car/IVan	Bin 3 LGV	Bin 4 HGV	Bin 5 Bus
Fri 11 Jun	6562	38	5636	643	234	11
Sat 12 Jun	5448	104	4834	366	141	3
Sun 13 Jun	5183	75	4683	339	86	0
Mon 14 Jun	6401	44	5430	708	212	7
Tue 15 Jun	6024	69	5129	644	180	2
Wed 16 Jun	5867	46	4981	667	151	22
Thu 17 Jun	6299	83	5286	723	197	10
5 Day Ave.	6231	56	5292	677	195	10
7 Day Ave.	5969	66	5140	584	172	8

PCC Traffic Information Consultancy Ltd.

A4066, High Street, St Clears, Carmarthen (ATC 1 North Site)

Site No. 548701 **Site Ref.** 548701
ATC 1 - North Site
Speed Report (Speed Limit 30 Mph) **Week Begin: 11 June 2021** **Channel: Northbound**

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 >=65
Fri 11 Jun	5143	30	22	8	22	734	1631	732	1348	562	102	11	1	0	0	0	0
Sat 12 Jun	4187	31	23	8	17	585	1088	528	1254	592	101	15	7	0	0	0	0
Sun 13 Jun	4200	31	25	7	7	409	825	507	1612	728	103	9	0	0	0	0	0
Mon 14 Jun	5039	29	22	8	13	713	1649	787	1267	523	69	17	1	0	0	0	0
Tue 15 Jun	4717	31	23	8	12	612	1529	557	1217	657	107	22	2	2	0	0	0
Wed 16 Jun	4585	30	22	8	26	625	1424	640	1191	559	105	13	1	1	0	0	0
Thu 17 Jun	4937	31	22	8	31	669	1643	580	1199	681	117	14	3	0	0	0	0
5 Day Ave.	4884	30	22	8	21	671	1575	659	1244	596	100	15	2	1	0	0	0
7 Day Ave.	4687	30	23	8	18	621	1398	619	1298	615	101	14	2	0	0	0	0

PCC Traffic Information Consultancy Ltd.

Site No. 548701 **Site Ref.** 548701
ATC 1 - North Site
Speed Report (Speed Limit 30 Mph) **Week Begin: 11 June 2021** **Channel: Southbound**

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 >=65
Fri 11 Jun	1419	31	26	5	9	18	83	397	667	212	24	9	0	0	0	0	0
Sat 12 Jun	1259	32	27	5	2	21	57	324	549	259	41	3	3	0	0	0	0
Sun 13 Jun	983	33	27	5	2	11	27	222	467	203	46	5	0	0	0	0	0
Mon 14 Jun	1362	31	27	5	4	13	81	350	647	231	34	1	0	1	0	0	0
Tue 15 Jun	1307	32	27	5	4	24	53	278	605	292	45	4	2	0	0	0	0
Wed 16 Jun	1282	32	27	5	4	14	70	297	618	245	28	4	1	1	0	0	0
Thu 17 Jun	1362	32	27	5	7	17	63	305	628	293	42	7	0	0	0	0	0
5 Day Ave.	1346	32	27	5	6	17	70	325	633	255	35	5	1	0	0	0	0
7 Day Ave.	1282	32	27	5	5	17	62	310	597	248	37	5	1	0	0	0	0

PCC Traffic Information Consultancy Ltd.

Site No. 548701 **Site Ref.** 548701
ATC 1 - North Site
Speed Report (Speed Limit 30 Mph) **Week Begin: 11 June 2021** **Channel: Total Flow**

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 >=65
Fri 11 Jun	6562	30	23	7	31	752	1714	1129	2015	774	126	20	1	0	0	0	0
Sat 12 Jun	5446	31	24	7	19	606	1145	852	1803	851	142	18	10	0	0	0	0
Sun 13 Jun	5183	32	25	7	9	420	852	729	2079	931	149	14	0	0	0	0	0
Mon 14 Jun	6401	30	23	7	17	726	1730	1137	1914	754	103	18	1	1	0	0	0
Tue 15 Jun	6024	31	24	8	16	636	1582	835	1822	949	152	26	4	2	0	0	0
Wed 16 Jun	5867	30	23	7	30	639	1494	937	1809	804	133	17	2	2	0	0	0
Thu 17 Jun	6299	31	23	8	38	686	1706	885	1827	974	159	21	3	0	0	0	0
5 Day Ave.	6231	30	23	7	26	688	1645	985	1877	851	135	20	2	1	0	0	0
7 Day Ave.	5969	31	24	7	23	638	1460	929	1896	862	138	19	3	1	0	0	0

PCC Traffic Information Consultancy Ltd.

A4066, High Street, St Clears, Carmarthen (ATC 2 - South Site)

Site No. 548702 **Site Ref. 548702**
ATC 2 - South Site
Vehicle Count Report **Week Begin: 11 June 2021** **Channel: Northbound**

	Fri Jun 11	Sat Jun 12	Sun Jun 13	Mon Jun 14	Tue Jun 15	Wed Jun 16	Thu Jun 17	5-Day Ave.	7-Day Ave.
00:00	4	13	8	6	4	4	7	5	7
01:00	1	5	15	4	1	6	2	3	5
02:00	1	1	3	0	1	1	2	1	1
03:00	1	2	3	4	3	4	2	3	3
04:00	8	3	2	15	6	9	8	9	7
05:00	22	12	9	26	21	17	22	22	18
06:00	62	34	22	64	67	52	65	62	52
07:00	124	54	36	148	163	158	138	146	117
08:00	220	121	71	193	196	202	182	199	169
09:00	194	173	137	213	167	158	165	179	172
10:00	250	207	178	229	175	197	179	206	202
11:00	208	187	197	205	173	208	171	193	193
12:00	184	172	244	190	136	170	155	167	179
13:00	184	170	204	198	155	156	170	173	177
14:00	184	147	218	198	179	175	176	182	182
15:00	204	118	230	204	204	201	196	202	194
16:00	190	186	280	252	218	226	247	227	228
17:00	171	186	269	212	189	163	186	184	197
18:00	127	155	292	159	138	114	139	135	161
19:00	108	120	174	93	109	82	85	95	110
20:00	71	112	117	73	88	52	88	74	86
21:00	66	84	91	50	67	37	57	55	65
22:00	44	50	34	23	23	15	24	26	30
23:00	17	33	13	11	12	5	11	11	15
Total									
12H(7-19)	2240	1876	2356	2401	2093	2128	2104	2193	2171
16H(6-22)	2547	2226	2760	2681	2424	2351	2399	2480	2484
18H(6-24)	2608	2309	2807	2715	2459	2371	2434	2517	2529
24H(0-24)	2645	2345	2847	2770	2495	2412	2477	2560	2570
AM Peak	10:00	10:00	11:00	10:00	08:00	11:00	08:00	10:00	10:00
	250	207	197	229	196	208	182	206	202
PM Peak	15:00	17:00	18:00	16:00	16:00	16:00	16:00	16:00	16:00
	204	186	292	252	218	226	247	227	228

PCC Traffic Information Consultancy Ltd.

Site No. 548702 **Site Ref. 548702**
ATC 2 - South Site
Vehicle Count Report **Week Begin: 11 June 2021** **Channel: Southbound**

	Fri Jun 11	Sat Jun 12	Sun Jun 13	Mon Jun 14	Tue Jun 15	Wed Jun 16	Thu Jun 17	5-Day Ave.	7-Day Ave.
00:00	6	13	6	3	3	8	6	5	6
01:00	0	5	9	7	1	3	1	2	4
02:00	3	0	2	0	0	1	1	1	1
03:00	0	2	3	1	2	2	0	1	1
04:00	2	4	1	4	2	3	4	3	3
05:00	10	8	7	15	10	8	8	10	9
06:00	26	23	15	27	29	28	29	28	25
07:00	140	55	40	133	141	152	131	139	113
08:00	159	81	58	122	149	167	150	149	127
09:00	138	149	134	149	161	141	152	148	146
10:00	181	190	197	160	164	139	164	162	171
11:00	169	225	228	204	214	176	160	185	197
12:00	207	242	238	232	159	177	189	193	206
13:00	192	233	191	246	161	181	175	191	197
14:00	217	186	170	207	171	174	194	193	188
15:00	269	182	164	238	201	215	210	227	211
16:00	276	179	149	256	205	202	215	231	212
17:00	268	163	137	247	227	201	238	236	212
18:00	242	144	101	182	144	133	170	174	159
19:00	195	102	84	96	105	95	106	119	112
20:00	118	86	67	76	87	61	81	85	82
21:00	82	54	52	59	49	37	54	56	55
22:00	44	46	28	16	21	17	32	26	29
23:00	24	24	12	9	7	7	8	11	13
Total									
12H(7-19)	2458	2029	1807	2376	2097	2058	2148	2227	2139
16H(6-22)	2879	2294	2025	2634	2367	2279	2418	2515	2414
18H(6-24)	2947	2364	2065	2659	2395	2303	2458	2552	2456
24H(0-24)	2968	2396	2093	2689	2413	2328	2478	2575	2481
AM Peak	10:00	11:00	11:00	11:00	11:00	11:00	10:00	11:00	11:00
	181	225	228	204	214	176	164	185	197
PM Peak	16:00	12:00	12:00	16:00	17:00	15:00	17:00	17:00	16:00
	276	242	238	256	227	215	238	236	212

PCC Traffic Information Consultancy Ltd.

Site No. 548702 Site Ref. 548702
ATC 2 - South Site
Vehicle Count Report Week Begin: 11 June 2021 Channel: Total Flow

	Fri Jun 11	Sat Jun 12	Sun Jun 13	Mon Jun 14	Tue Jun 15	Wed Jun 16	Thu Jun 17	5-Day Ave.	7-Day Ave.
00:00	10	26	14	9	7	12	13	10	13
01:00	1	10	24	11	2	9	3	5	9
02:00	4	1	5	0	1	2	3	2	2
03:00	1	4	6	5	5	6	2	4	4
04:00	10	7	3	19	8	12	12	12	10

05:00	32	20	16	41	31	25	30	32	28
06:00	88	57	37	91	96	80	94	90	78
07:00	264	109	76	281	304	310	269	286	230
08:00	379	202	129	315	345	369	332	348	296
09:00	332	322	271	362	328	299	317	328	319
10:00	431	397	375	389	339	336	343	368	373
11:00	377	412	425	409	387	384	331	378	389
12:00	391	414	482	422	295	347	344	360	385
13:00	376	403	395	444	316	337	345	364	374
14:00	401	333	388	405	350	349	370	375	371
15:00	473	300	394	442	405	416	406	428	405
16:00	466	365	429	508	423	428	462	457	440
17:00	439	349	406	459	416	364	424	420	408
18:00	369	299	393	341	282	247	309	310	320
19:00	303	222	258	189	214	177	191	215	222
20:00	189	198	184	149	175	113	169	159	168
21:00	148	138	143	109	116	74	111	112	120
22:00	88	96	62	39	44	32	56	52	60
23:00	41	57	25	20	19	12	19	22	28
Total									
12H(7-19)	4698	3905	4163	4777	4190	4186	4252	4421	4310
16H(6-22)	5426	4520	4785	5315	4791	4630	4817	4996	4898
18H(6-24)	5555	4673	4872	5374	4854	4674	4892	5070	4985
24H(0-24)	5613	4741	4940	5459	4908	4740	4955	5135	5051
AM Peak	10:00	11:00	11:00	11:00	11:00	11:00	10:00	11:00	11:00
	431	412	425	409	387	384	343	378	389
PM Peak	15:00	12:00	12:00	16:00	16:00	16:00	16:00	16:00	16:00
	473	414	482	508	423	428	462	457	440

PCC Traffic Information Consultancy Ltd.

A4066, High Street, St Clears, Carmarthen (ATC 2 - South Site)

Site No. 548702 Site Ref. 548702
ATC 2 - South Site
Classification Report Week Begin: 11 June 2021 Channel: Northbound

	Total Volume	Bin 1 M/Cycle	Bin 2 Car/IVan	Bin 3 LGV	Bin 4 HGV	Bin 5 Bus
Fri 11 Jun	2645	17	2306	228	92	2
Sat 12 Jun	2345	35	2139	144	27	0
Sun 13 Jun	2847	43	2637	150	16	1
Mon 14 Jun	2770	15	2427	223	102	3
Tue 15 Jun	2495	24	2196	215	59	1
Wed 16 Jun	2412	16	2102	227	61	6
Thu 17 Jun	2477	28	2137	248	61	3
5 Day Ave.	2560	20	2234	228	75	3
7 Day Ave.	2570	25	2278	205	60	2

PCC Traffic Information Consultancy Ltd.

Site No. 548702 Site Ref. 548702
ATC 2 - South Site
Classification Report Week Begin: 11 June 2021 Channel: Southbound

	Total Volume	Bin 1 M/Cycle	Bin 2 Car/IVan	Bin 3 LGV	Bin 4 HGV	Bin 5 Bus
Fri 11 Jun	2968	22	2578	248	117	3
Sat 12 Jun	2396	48	2149	145	54	0
Sun 13 Jun	2093	58	1894	107	34	0
Mon 14 Jun	2689	40	2287	251	109	2
Tue 15 Jun	2413	28	2084	222	77	2
Wed 16 Jun	2328	20	1999	233	64	12
Thu 17 Jun	2478	36	2098	257	84	3
5 Day Ave.	2575	29	2209	242	90	4
7 Day Ave.	2481	36	2156	209	77	3

PCC Traffic Information Consultancy Ltd.

Site No. 548702 Site Ref. 548702
ATC 2 - South Site
Classification Report Week Begin: 11 June 2021 Channel: Total Flow

	Total Volume	Bin 1 M/Cycle	Bin 2 Car/IVan	Bin 3 LGV	Bin 4 HGV	Bin 5 Bus
Fri 11 Jun	5613	39	4884	476	209	5
Sat 12 Jun	4741	83	4288	289	81	0
Sun 13 Jun	4940	101	4531	257	50	1
Mon 14 Jun	5459	55	4714	474	211	5
Tue 15 Jun	4908	52	4280	437	136	3
Wed 16 Jun	4740	36	4101	460	125	18
Thu 17 Jun	4955	64	4235	505	145	6
5 Day Ave.	5135	49	4443	470	165	7
7 Day Ave.	5051	61	4433	414	137	5

PCC Traffic Information Consultancy Ltd.

A4066, High Street, St Clears, Carmarthen (ATC 2 - South Site)

Site No. 548702 **Site Ref.** 548702
ATC 2 - South Site
Speed Report (Speed Limit 30 Mph) **Week Begin: 11 June 2021** **Channel: Northbound**

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 =>65
Fri 11 Jun	2645	30	26	4	6	31	123	829	1230	359	58	8	1	0	0	0	0
Sat 12 Jun	2345	31	27	4	8	27	69	578	1217	372	63	10	1	0	0	0	0
Sun 13 Jun	2847	30	27	3	3	8	74	765	1585	359	50	3	0	0	0	0	0
Mon 14 Jun	2770	30	25	5	14	96	275	910	1122	304	42	6	1	0	0	0	0
Tue 15 Jun	2495	31	27	5	5	28	106	659	1230	404	53	7	3	0	0	0	0
Wed 16 Jun	2412	31	27	4	7	20	95	683	1186	356	56	8	1	0	0	0	0
Thu 17 Jun	2477	31	27	5	19	25	86	604	1255	430	52	5	1	0	0	0	0
5 Day Ave.	2560	31	26	5	10	40	137	737	1205	371	52	7	1	0	0	0	0
7 Day Ave.	2570	31	26	4	9	34	118	718	1261	369	53	7	1	0	0	0	0

PCC Traffic Information Consultancy Ltd.

Site No. 548702 **Site Ref.** 548702
ATC 2 - South Site
Speed Report (Speed Limit 30 Mph) **Week Begin: 11 June 2021** **Channel: Southbound**

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 =>65
Fri 11 Jun	2968	27	21	6	12	186	1223	922	514	100	11	0	0	0	0	0	0
Sat 12 Jun	2396	28	22	6	7	113	878	782	471	131	11	2	1	0	0	0	0
Sun 13 Jun	2093	28	22	6	3	85	823	661	409	98	13	1	0	0	0	0	0
Mon 14 Jun	2689	27	21	6	30	224	958	813	549	105	7	0	0	1	0	0	2
Tue 15 Jun	2413	28	22	6	8	143	809	765	557	119	11	1	0	0	0	0	0
Wed 16 Jun	2328	28	22	6	9	128	806	691	575	104	11	3	1	0	0	0	0
Thu 17 Jun	2478	28	22	6	29	128	857	752	548	149	12	2	0	0	0	0	1
5 Day Ave.	2575	28	22	6	18	162	931	789	549	115	10	1	0	0	0	0	1
7 Day Ave.	2481	28	22	6	14	144	908	769	518	115	11	1	0	0	0	0	0

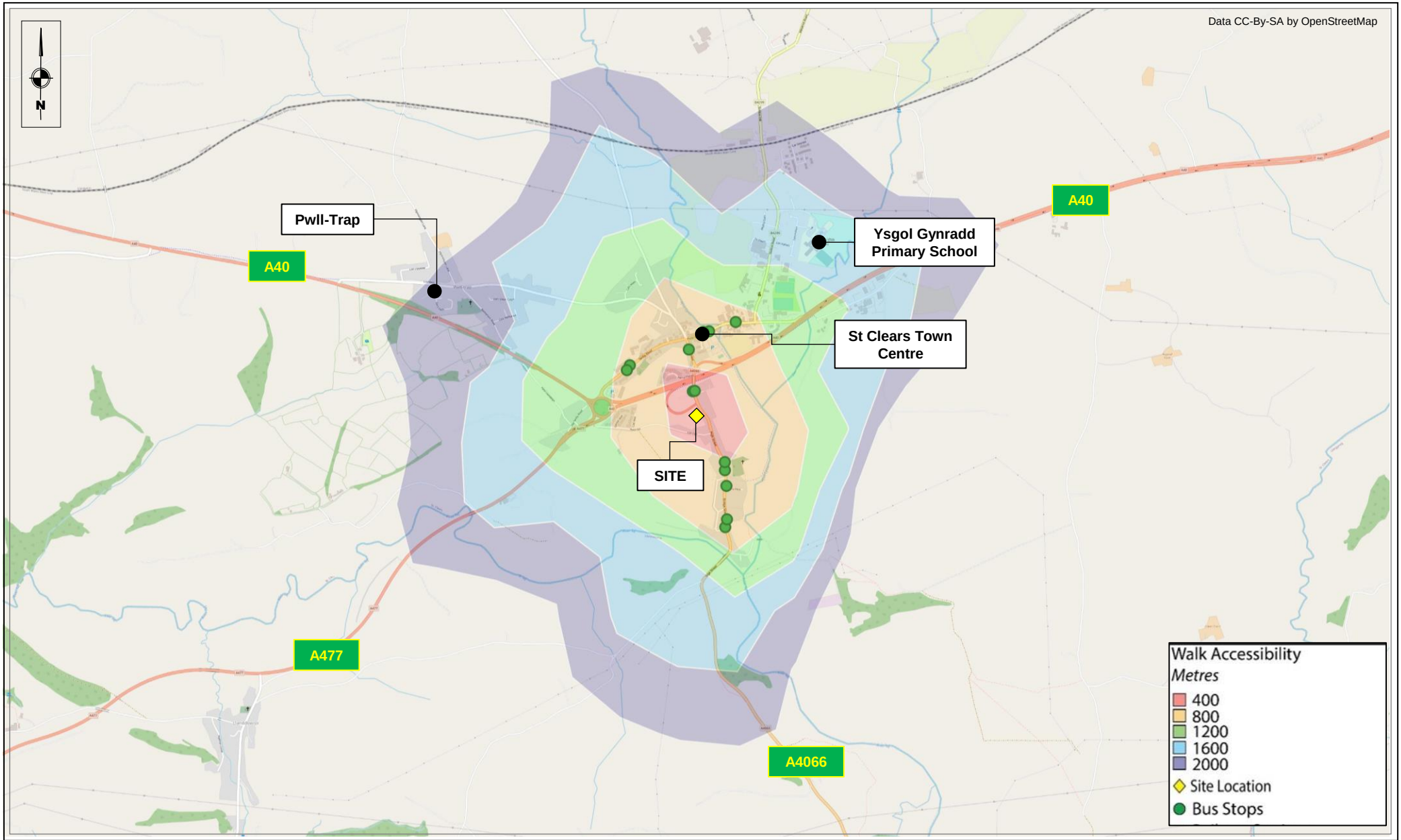
PCC Traffic Information Consultancy Ltd.

Site No. 548702 **Site Ref.** 548702
ATC 2 - South Site
Speed Report (Speed Limit 30 Mph) **Week Begin: 11 June 2021** **Channel: Total Flow**

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10Mph	Bin 2 10-<15	Bin 3 15-<20	Bin 4 20-<25	Bin 5 25-<30	Bin 6 30-<35	Bin 7 35-<40	Bin 8 40-<45	Bin 9 45-<50	Bin 10 50-<55	Bin 11 55-<60	Bin 12 60-<65	Bin 13 =>65
Fri 11 Jun	5613	29	23	6	18	217	1346	1751	1744	459	69	8	1	0	0	0	0
Sat 12 Jun	4741	30	24	5	15	140	947	1360	1688	503	74	12	2	0	0	0	0
Sun 13 Jun	4940	29	25	5	6	93	897	1426	1994	457	63	4	0	0	0	0	0
Mon 14 Jun	5459	29	23	6	44	320	1233	1723	1671	409	49	6	1	1	0	0	2
Tue 15 Jun	4908	30	24	5	13	171	915	1424	1787	523	64	8	3	0	0	0	0
Wed 16 Jun	4740	30	24	5	16	148	901	1374	1761	460	67	11	2	0	0	0	0

Thu 17 Jun	4955	30	24	5	48	153	943	1356	1803	579	64	7	1	0	0	0	1
5 Day Ave.	5135	30	24	5	28	202	1068	1526	1753	486	63	8	2	0	0	0	1
7 Day Ave.	5051	29	24	5	23	177	1026	1488	1778	484	64	8	1	0	0	0	0

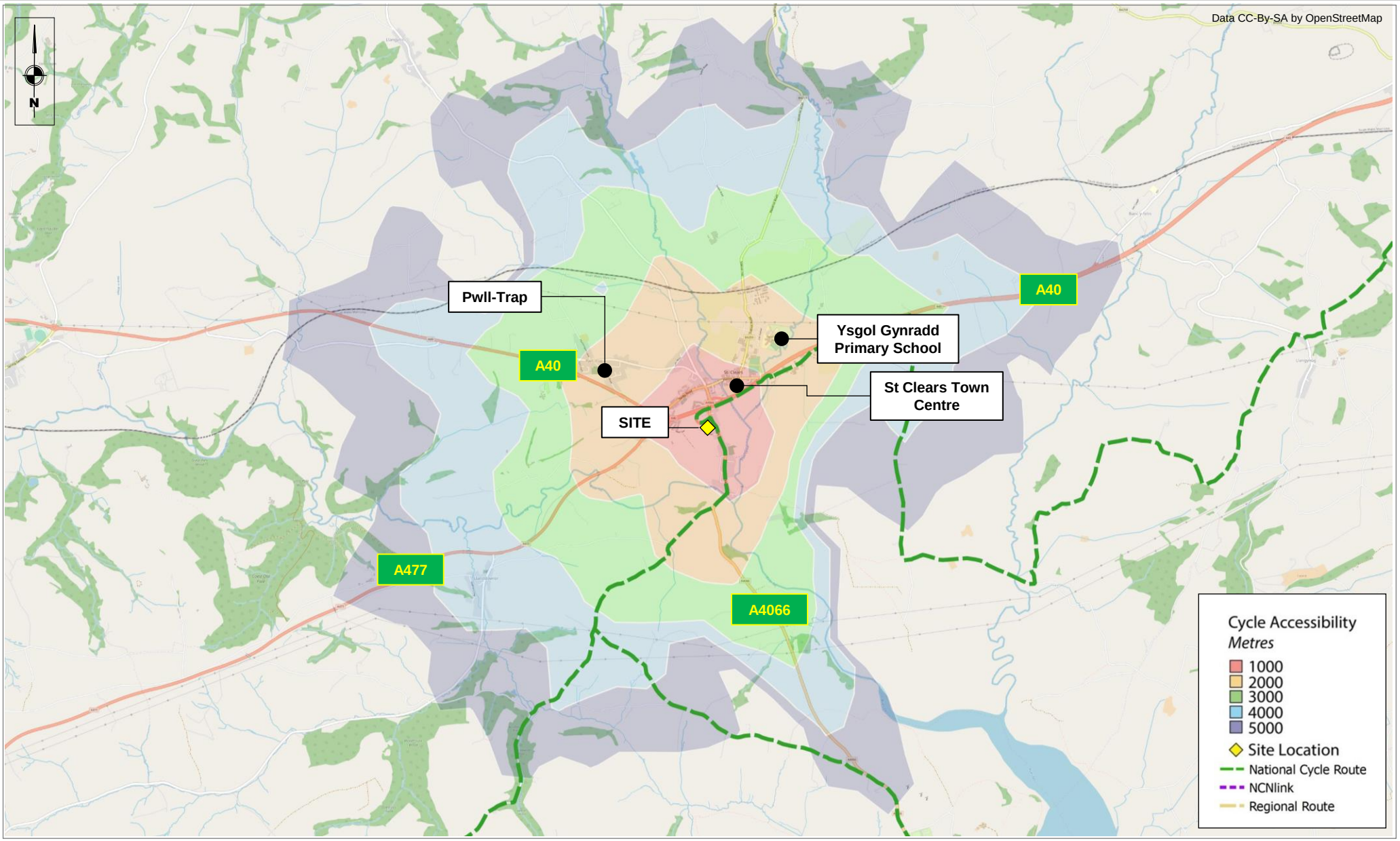
Appendix B 2km Walking Isochrone Map



Hydrock

Project Title: Land West of Brynheulog, St Clears	Drawing Title: Accessibility: 2km Walking Catchment	Job Number: C18641	By: AC	Rev	Description	Date	By	Drawing No.: APPENDIX B
		Date: 24/06/2021	Checked: NB	-	-	-	-	
		Scale: NTS	Status: S4	-	-	-	-	Figure: 1
				-	-	-	-	
				-	-	-	-	

Appendix C 5km Cycle Isochrone Map



Hydrock

Project Title: Land West of Brynheulog, St Clears	Drawing Title: Accessibility: 5km Cycling Catchment	Job Number: C18641	By: AC	Rev	Description	Date	By
		Date: 24/06/2021	Checked: NB	-	-	-	-
		Scale: NTS	Status: S4	-	-	-	-
				-	-	-	-
				-	-	-	-

Drawing No.: APPENDIX D

Figure: 1

Appendix D Indicative Site Masterplan

Open Market House Type Schedule					
Type	HT Code	No. of Bedrooms	HT Area [ft2]	Number of Units	Total Area [ft2]
TERRACED/SEMI	F	2	817	14	11438
SEMI DET	E	3	904	20	18080
DETACHED	D	3	1244	5	6220
DETACHED	B	4	1284	5	6420
DETACHED	BV	4	1312	3	3936
DETACHED	A	4	1376	6	8256
DETACHED	AV	4	1403	1	1403
DETACHED	C	4	1458	5	7290
TOTAL				59	63043

Affordable House Type Schedule					
Type	HT Code	No. of Bedrooms	HT Area [ft2]	Number of Units	Total Area [ft2]
TERRACED/SEMI	2B-4P	2	817	3	2451
SEMI DET [GF]	2.1.1	1	546	2	1092
SEMI DET [FF]	2.1.1	1	614	2	1228
TOTAL				7	4771
OVERALL TOTAL				66	67814
Total Housing Plot Areas [ft²]					67814
Total Net Development Area [Acres]					5.61
Total Gross Development Area [Acres]					5.70
Total Coverage [ft²]					12088

Attenuation Basin
Attenuation Basin
Attenuation Basin
L.A.P
Depot
Green Gables
Golwg-yr-Afon
Ty Gardde
GARDDE FIELDS
Bro Afon
Dolgarth
Gardde-yr-Rebecca House
A 4066
Meadow View
HIGH STREET
Brynheulog
Gothic Villa
The Old National School
HEOL GOI
LON FAIR
21.5

N

Scale 1:500
0 10 20 50

KEY

- Site Boundary *[5.64 Acres]*
- 1.8m High close board fence
- 1.8m High brick screen wall
- 1.8m High close board personnel gate
- 0.45m High Timber Knee Rail
- 0.60m High Ball Top Railing
- Parking Space
- Highway
- Highway Footpath
- Raised Table / Traffic Calming
- Block Paving
- Private Driveway
- Front Garden
- Rear Garden
- Amenity Space / Green Infrastructure / POS
- Swale / SUDs
- Local Area of Play
- Exclusion Zone
- Private Footpath - PCC slabs
- Hogging Footpath
- Proposed Hedgerow
- Proposed Tree Planting
- Patio - Concrete Pre-cast Slabs
- Bin Collection - Poured Concrete Slab *[for plots not directly accessed off adopted highway]*
- Rotary washing line
- Rear Garden Bin Storage - Concrete Pre-cast Slabs
- 2.45 x 1.85 Garden Shed - Set on Poured Concrete Slab
- 2.16 x 1.7 Bike Shelter - Set on Poured Concrete Slab
- Social Rented Symbol

REV.	DESCRIPTION	DATE
02.	Minor replan to Plots 28-35. Garages removed from Plots 10,13-19 Type E house types. Plot 1 garage changed from a double to a single. Turning area added near Plots 53,54. Bike shelter added for Plots 31,34. Updated Highways following engineering comments.	18.11.21

CLIENT
Obsidian Developments

JOB TITLE
St Clears, Camarthen.

DRAWING TITLE
Site Layout Plan

SCALE @ A1	DATE	DRAWN BY
1:500	October '21	KE
JOB NO.	DRAWING NO.	REVISION
2128	SP-01	02

hammond Architectural Ltd
10 Gold Tops
Newport
NP20 4PH
t. 01633 844970
e. info@hammond-ltd.co.uk
www.hammond-ltd.co.uk

Appendix E General Access Arrangement Design

Proposed tactile paving at existing A30 off slip crossing point.

New footway link to connect to existing footway.

Attenuation Basin

Dolgarth

Gardde-yr-Re

eniel Villa

A 4066

2.4m x 43m VISIBILITY

R8.0m

2.0m

5.5m

R8.0m

1.2m

2.0m

MH CL22.71 UTL

MH CL21.44 UTL

MH CL21.30 UTL

MH CL20.82 UTL

S2

KEY

PROPOSED KERB LINE

PROPOSED CARRIAGEWAY

PROPOSED ROAD MARKINGS

FOOTWAY

0m 5m 10m

SCALE BAR (1:250)

NOTES

THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND NOT FOR CONSTRUCTION.

NOTES *(CONTINUED)*

REVISIONS

Rev	Date	Description	By	Ckd	App
P03	07/12/2021	Third Issue	AC	NB	NB
P02	18/11/2021	Second Issue.	AC	NB	NB
P01	15/07/2021	First Issue.	AC	NB	NB

Hydrock
FIRST FLOOR,CASTLEBRIDGE 5
5-19 COWBRIDGE ROAD EAST
CARDIFF
CF11 9AB
t: +44 (0) 2920 023665
e: cardiff@hydrock.com

CLIENT
BEN EVANS & SON LTD

PROJECT
LAND WEST OF BRYNHEULOG, ST CLEARS

TITLE
GENERAL ACCESS ARRANGEMENT DESIGN

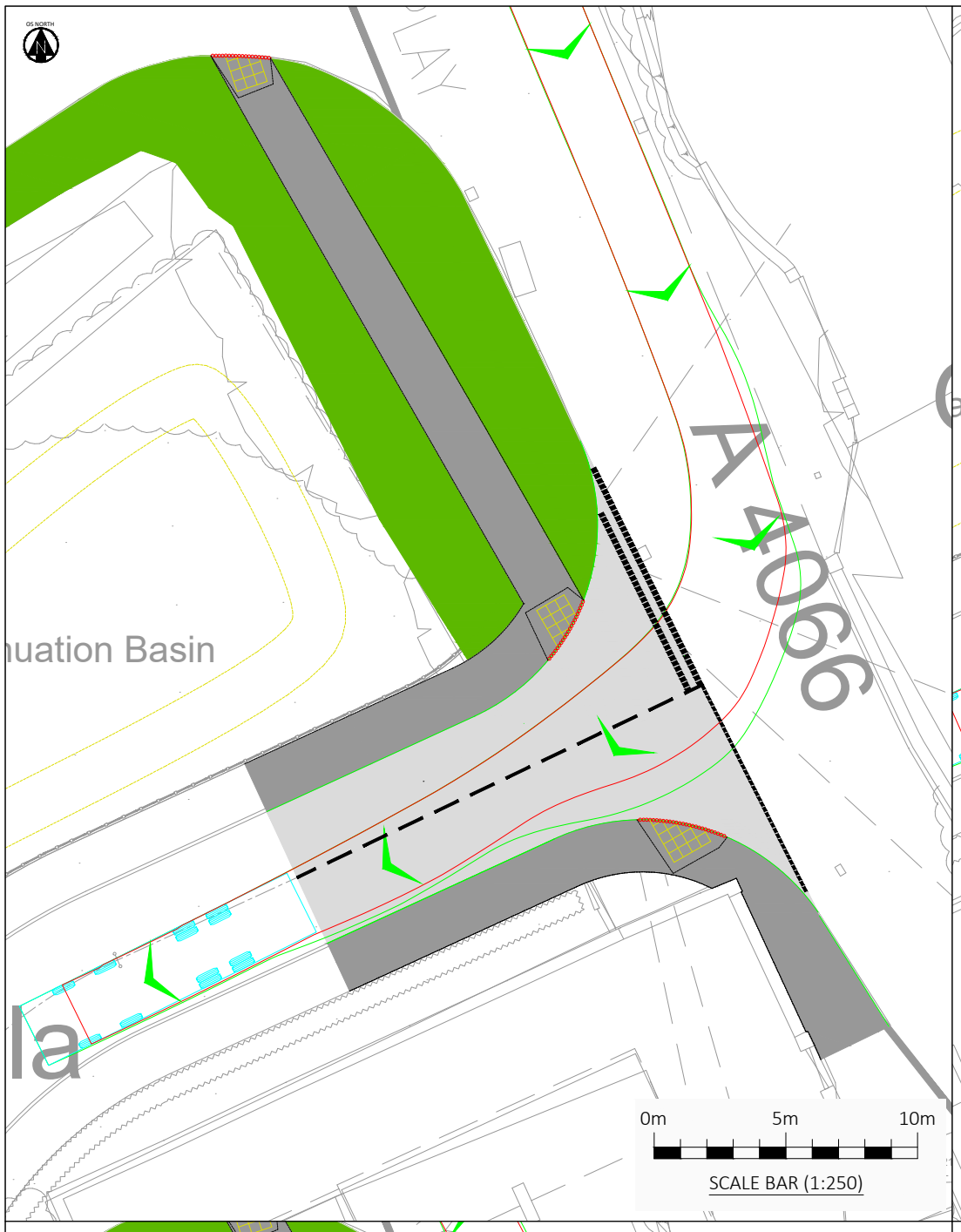
HYDROCK PROJECT NO.	SCALE @ A3
C-18641-C	1:250

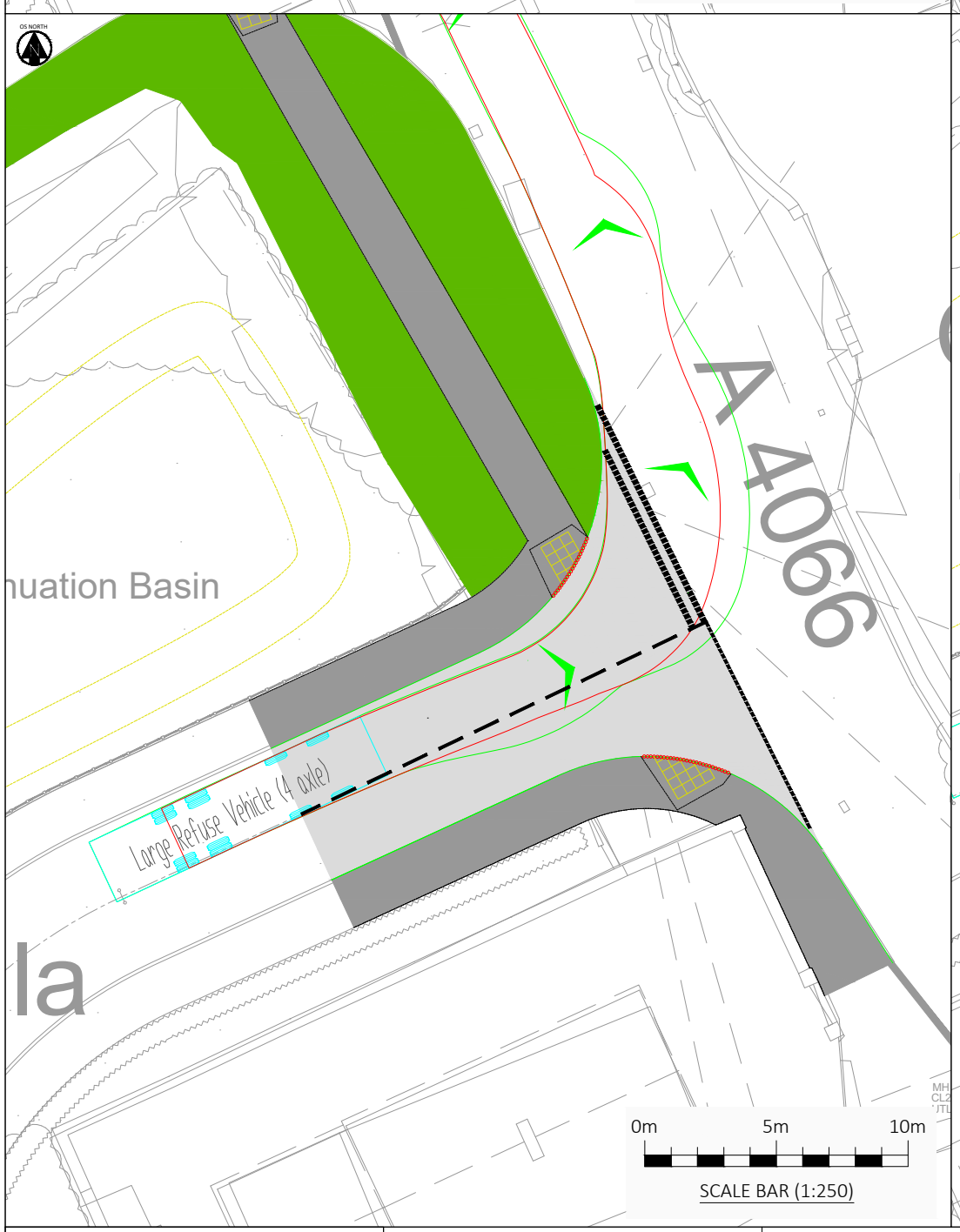
STATUS DESCRIPTION	STATUS
INFORMATION	S2

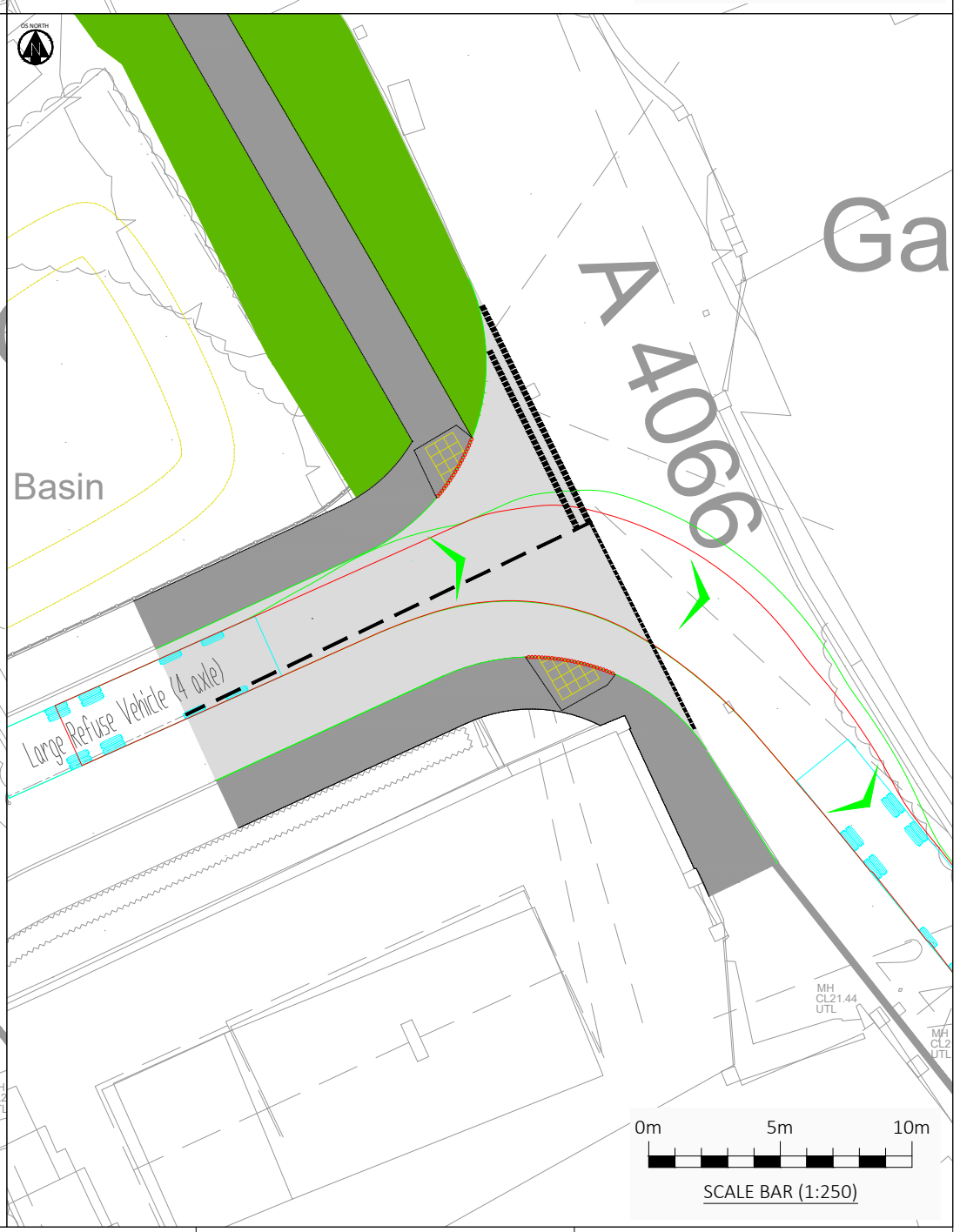
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)
18641-HYD-XX-XX-DR-TP-0201

REVISION
P03

Appendix F Swept Path Analysis

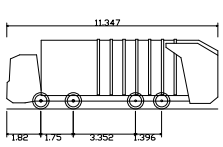






KEY

Large Refuse Vehicle (4 axle)



Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

NOTES

REVISIONS

Rev	Date	Description	By	Ckd	App
P03	07/12/2021	Third Issue	AC	NB	NB
P02	18/11/2021	Second Issue.	AC	NB	NB
P01	16/07/2021	First Issue.	AC	NB	NB

Hydrock
FIRST FLOOR,CASTLEBRIDGE 5
5-19 COWBRIDGE ROAD EAST
CARDIFF
CF11 9AB
t: +44 (0) 2920 023665
e: cardiff@hydrock.com

CLIENT
BEN EVANS & SON LTD

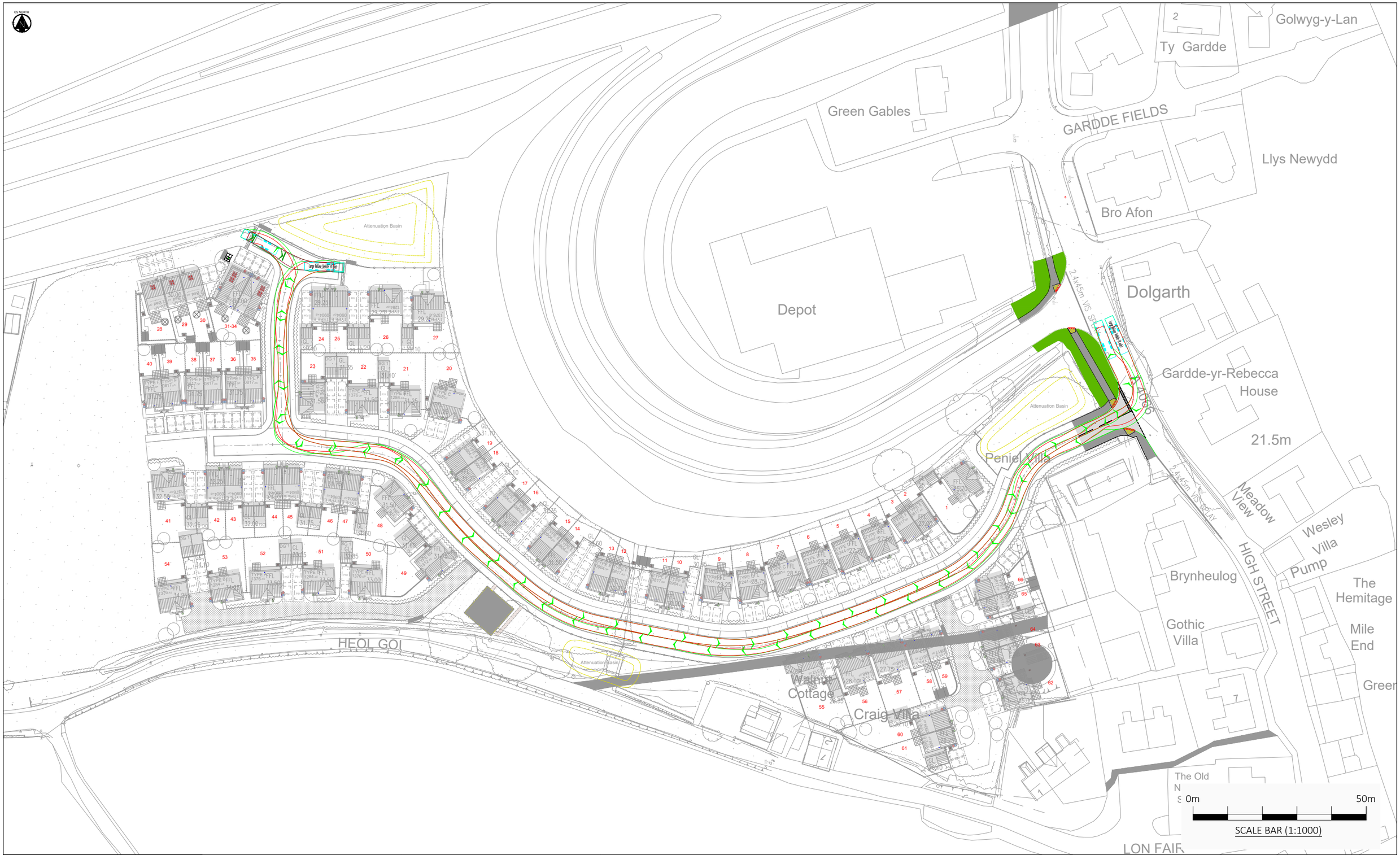
PROJECT
LAND WEST OF BRYNHEULOG, ST CLEARS

TITLE
SITE ACCESS SWEPT PATH ANALYSIS

HYDROCK PROJECT NO.	SCALE @ A3
C-18641-C	1:250

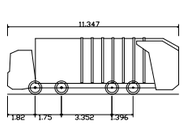
STATUS DESCRIPTION	STATUS
INFORMATION	S2

DRAWING NO. (PROJECT CODE-ORGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)	REVISION
18641-HYD-XX-XX-DR-TP-0101	P03



KEY PLAN

Large Refuse Vehicle (4 axle)



Overall Length	11.347m
Overall Width	2.500m
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Min Body Ground Clearance	0.304m
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NOTES

NOTES *(CONTINUED)*

REVISIONS *(CONTINUED)*

REVISIONS

Rev	Date	Description	By	Ckd	App
P02	07/12/2021	Second Issue	AC	NB	NB
P01	18/11/2021	Second Issue.	AC	NB	NB

Hydrock
FIRST FLOOR,CASTLEBRIDGE 5
5-19 COWBRIDGE ROAD EAST
CARDIFF
CF11 9AB
t: +44 (0) 2920 023665
e: cardiff@hydrock.com

CLIENT
BEN EVANS & SON LTD

PROJECT
LAND WEST OF BRYNHEULOG, ST CLEARS

TITLE
INTERNAL SITE SWEPT PATH ANALYSIS

HYDROCK PROJECT NO.	SCALE @ A3
C-18641-C	1:1000

STATUS DESCRIPTION	STATUS
INFORMATION	S2

DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)	REVISION
18641-HYD-XX-XX-DR-TP-0102	P02

Appendix G TRICS Outputs

Hydrock Consultants Ltd Tolvaddon Energy Park Camborne Licence No: 540501

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-100 DWELLS	
Actual Trip Rate Calculation Parameter Range	23-70 DWELLS	
Date Range	Minimum: 01/01/10	Maximum: 20/10/20
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	All Surveys Included	
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Tuesday	1
	Wednesday	2
	Thursday	1
	Friday	1
Main Location Types selected	Edge of Town	4
	Neighbourhood Centre (PPS6 Local Centre)	1
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,000 or Less	1
	1,001 to 5,000	3
	5,001 to 10,000	1
Population <5 Mile ranges selected	5,001 to 25,000	3
	25,001 to 50,000	2
Car Ownership <5 Mile ranges selected	1.1 to 1.5	5
PTAL Rating	No PTAL Present	5

Calculation Reference: AUDIT-540501-210610-0650

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

04	EAST ANGLIA		
	NF	NORFOLK	2 days
	SF	SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 23 to 70 (units:)
Range Selected by User: 6 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

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

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

Selected survey days:

Tuesday	1 days
Wednesday	2 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	4
Neighbourhood Centre (PPS6 Local Centre)	1

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

Selected Location Sub Categories:

Residential Zone	3
Village	1
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3	5 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	1 days

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

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	2 days

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	5 days

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

Travel Plan:

Yes	2 days
No	3 days

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

PTAL Rating:

No PTAL Present	5 days

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

LIST OF SITES relevant to selection parameters

Site(1):	NF-03-A-04	Site area:	1.98 hect
Development Name:	MIXED HOUSES	No of Dwellings:	70
Location:	NORTH WALSHAM	Housing density:	40
Postcode:	NR28 0FW	Total Bedrooms:	223
Main Location Type:	Edge of Town	Survey Date:	18/09/19
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	165
Site(2):	NF-03-A-05	Site area:	1.57 hect
Development Name:	MIXED HOUSES	No of Dwellings:	40
Location:	HOLT	Housing density:	26
Postcode:	NR25 6GA	Total Bedrooms:	116
Main Location Type:	Edge of Town	Survey Date:	19/09/19
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	100
Site(3):	NY-03-A-07	Site area:	0.77 hect
Development Name:	DETACHED & SEMI DET.	No of Dwellings:	23
Location:	BOROUGHBRIDGE	Housing density:	35
Postcode:	YO51 9US	Total Bedrooms:	67
Main Location Type:	Edge of Town	Survey Date:	18/10/11
Sub-Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	45
Site(4):	NY-03-A-11	Site area:	1.79 hect
Development Name:	PRIVATE HOUSING	No of Dwellings:	23
Location:	BOROUGHBRIDGE	Housing density:	15
Postcode:	YO51 9LQ	Total Bedrooms:	101
Main Location Type:	Edge of Town	Survey Date:	18/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	144
Site(5):	SF-03-A-06	Site area:	2.68 hect
Development Name:	DETACHED & SEMI-DETACHED	No of Dwellings:	38
Location:	KENTFORD	Housing density:	14
Postcode:	CB8 7UU	Total Bedrooms:	129
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	22/09/17
Sub-Location Type:	Village	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	35

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DV-03-A-03	not applicable
HC-03-A-23	not applicable
NF-03-A-03	not applicable
PS-03-A-02	not applicable
SH-03-A-05	not applicable
WS-03-A-07	not applicable

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	39	0.062	5	39	0.356	5	39	0.418
08:00 - 09:00	5	39	0.108	5	39	0.299	5	39	0.407
09:00 - 10:00	5	39	0.186	5	39	0.155	5	39	0.341
10:00 - 11:00	5	39	0.180	5	39	0.196	5	39	0.376
11:00 - 12:00	5	39	0.160	5	39	0.196	5	39	0.356
12:00 - 13:00	5	39	0.144	5	39	0.170	5	39	0.314
13:00 - 14:00	5	39	0.129	5	39	0.113	5	39	0.242
14:00 - 15:00	5	39	0.119	5	39	0.196	5	39	0.315
15:00 - 16:00	5	39	0.273	5	39	0.186	5	39	0.459
16:00 - 17:00	5	39	0.294	5	39	0.170	5	39	0.464
17:00 - 18:00	5	39	0.340	5	39	0.149	5	39	0.489
18:00 - 19:00	5	39	0.294	5	39	0.119	5	39	0.413
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.289			2.305			4.594

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.*

Parameter summary

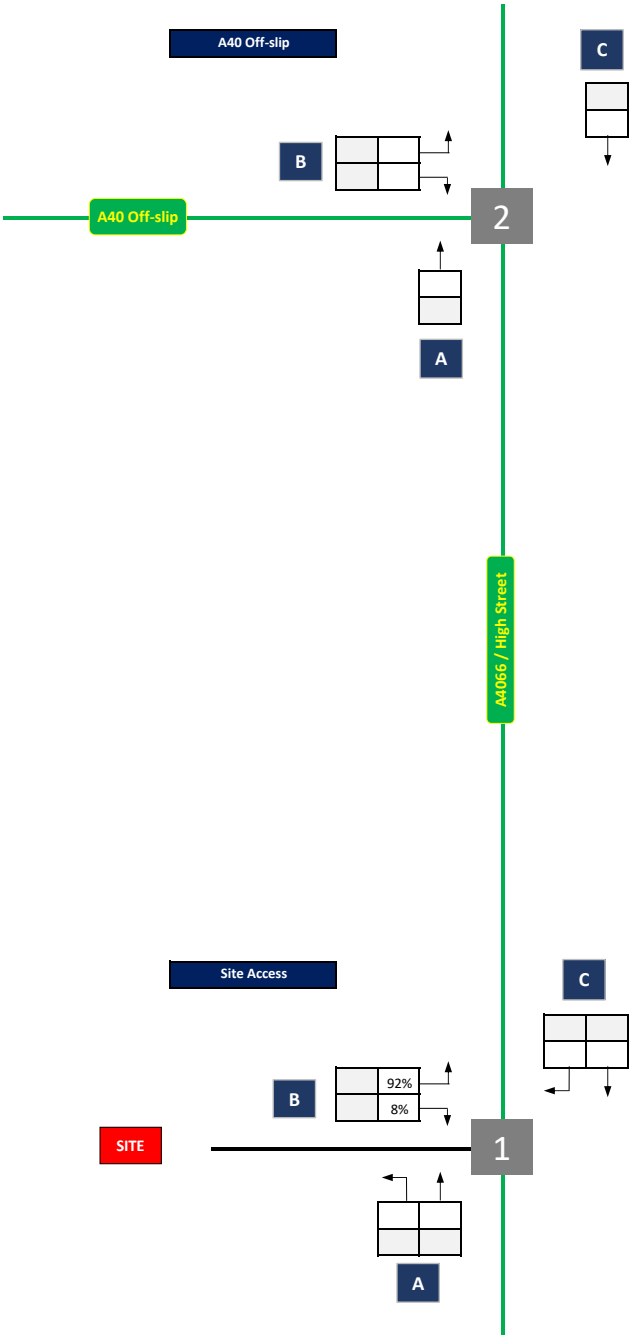
Trip rate parameter range selected:	23 - 70 (units:)
Survey date date range:	01/01/10 - 20/10/20
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	5
Surveys manually removed from selection:	6

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 H Traffic Flow Diagrams

KEY

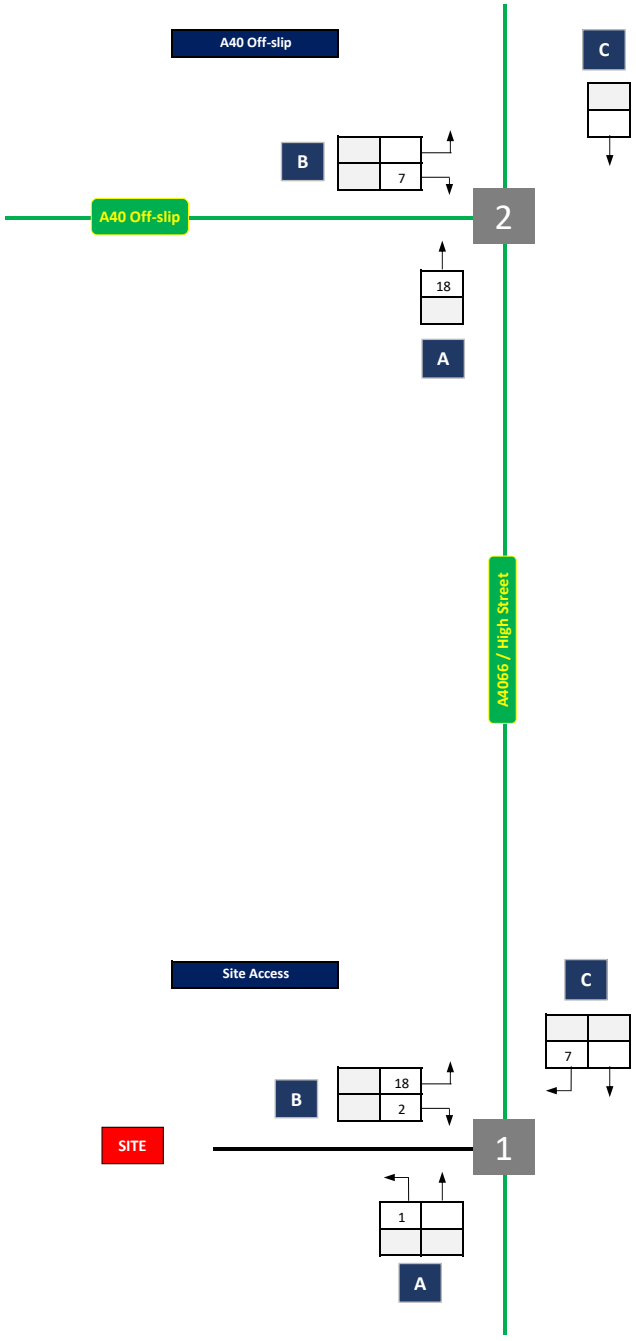
1	Total Vehicles
0	HGVs



PROJECT: Land West of Brynheulog, St Clears, Carmarthenshire		**PLAN TITLE:** Traffic Figure Diagrams	
TIME PERIOD:		Development Distribution	
DATE: June 2021	**JOB NUMBER:** C18641	**DRAWN BY:** AC	**FIGURE:** 001

KEY

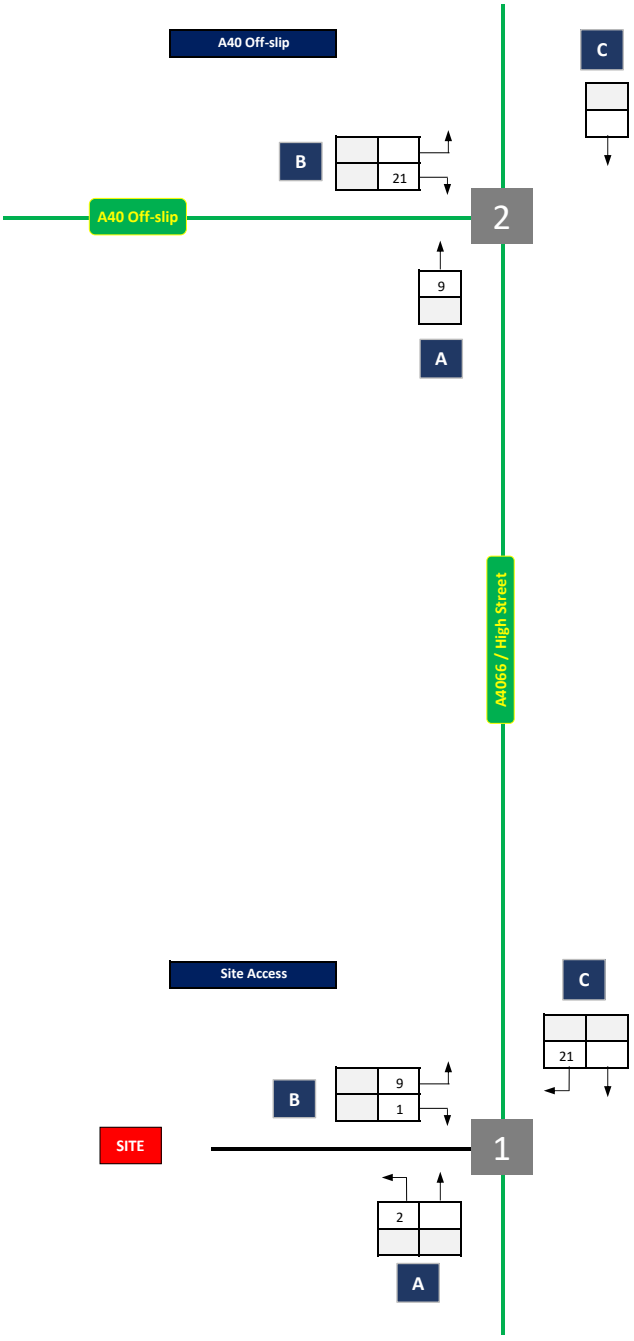
33.9	Total Vehicles
0	HGVs



PROJECT: Land West of Brynheulog, St Clears, Carmarthenshire		**PLAN TITLE:** Traffic Figure Diagrams	
TIME PERIOD: AM Peak Hour (08:00 - 09:00)		Proposed Development Traffic AM Peak Period	
DATE: June 2021	**JOB NUMBER:** C18641	**DRAWN BY:** AC	**FIGURE:** 002

KEY

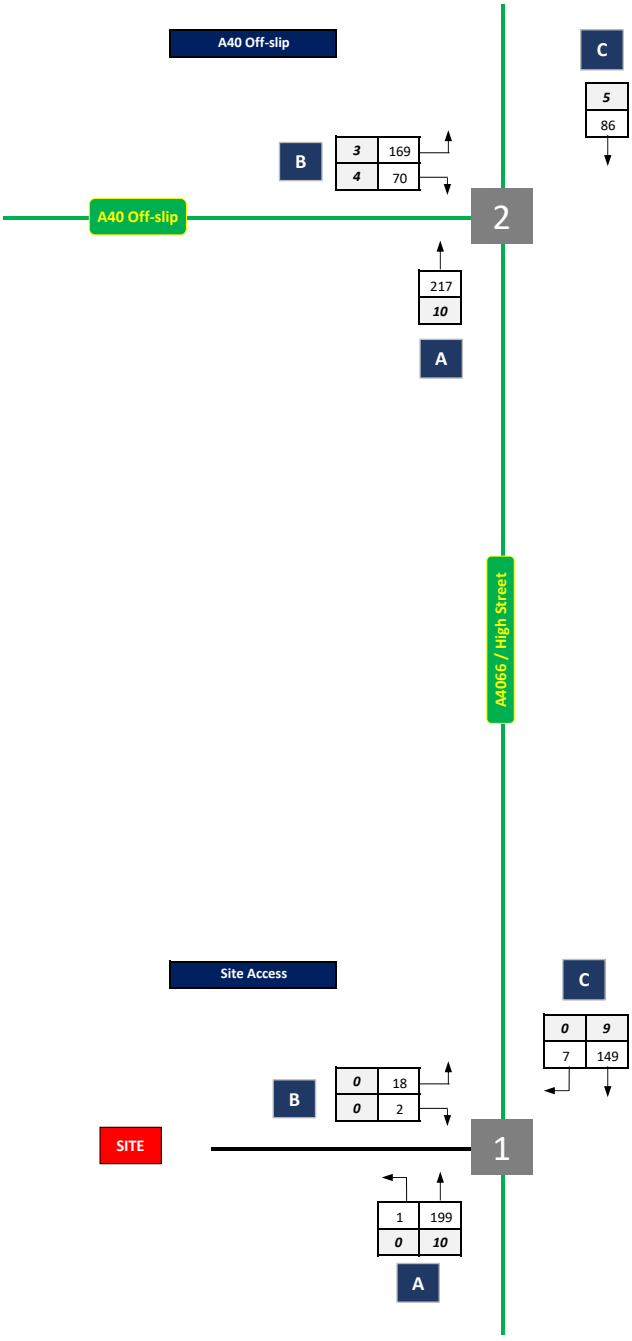
53.6	Total Vehicles
0	HGVs



PROJECT: Land West of Brynheulog, St Clears, Carmarthenshire		**PLAN TITLE:** Traffic Figure Diagrams	
TIME PERIOD: PM Peak Hour (17:00 - 18:00)		Proposed Development Traffic PM Peak Period	
DATE: June 2021	**JOB NUMBER:** C18641	**DRAWN BY:** AC	**FIGURE:** 003

KEY

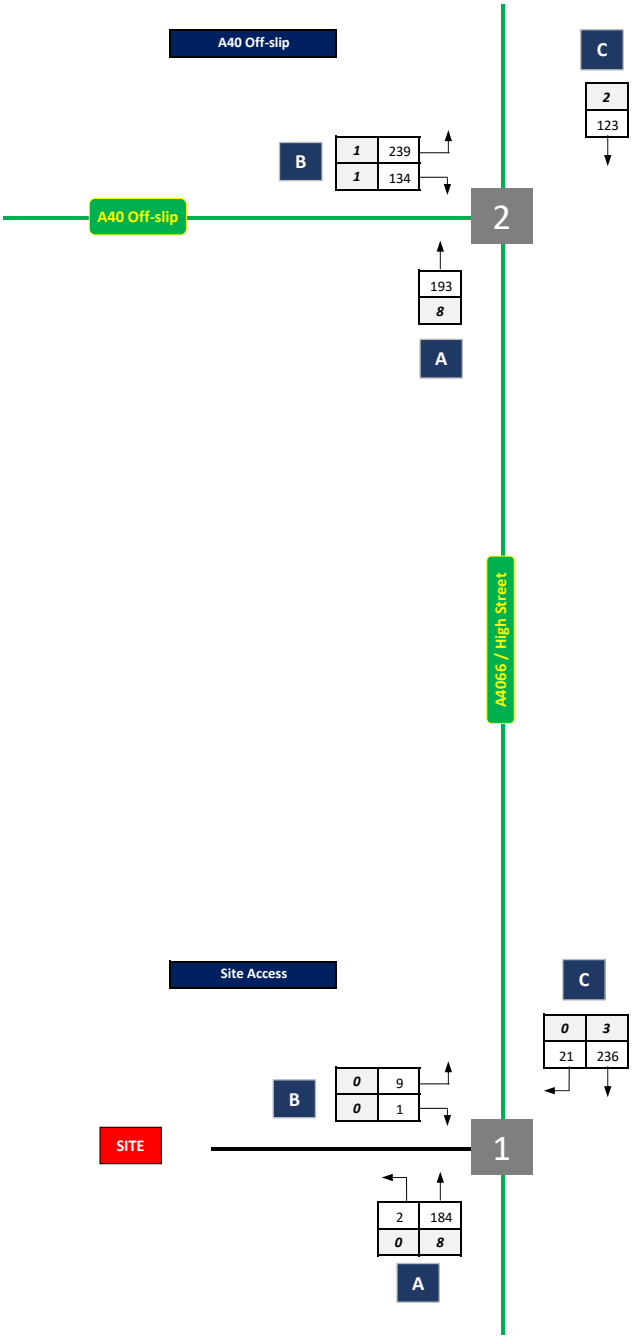
700	Total Vehicles
41	HGVs



PROJECT: Land West of Brynheulog, St Clears, Carmarthenshire		**PLAN TITLE:** Traffic Figure Diagrams	
TIME PERIOD: AM Peak Hour (08:00 - 09:00)		Base 2021 Traffic + Development AM	
DATE: June 2021	**JOB NUMBER:** C18641	**DRAWN BY:** AC	**FIGURE:** 004

KEY

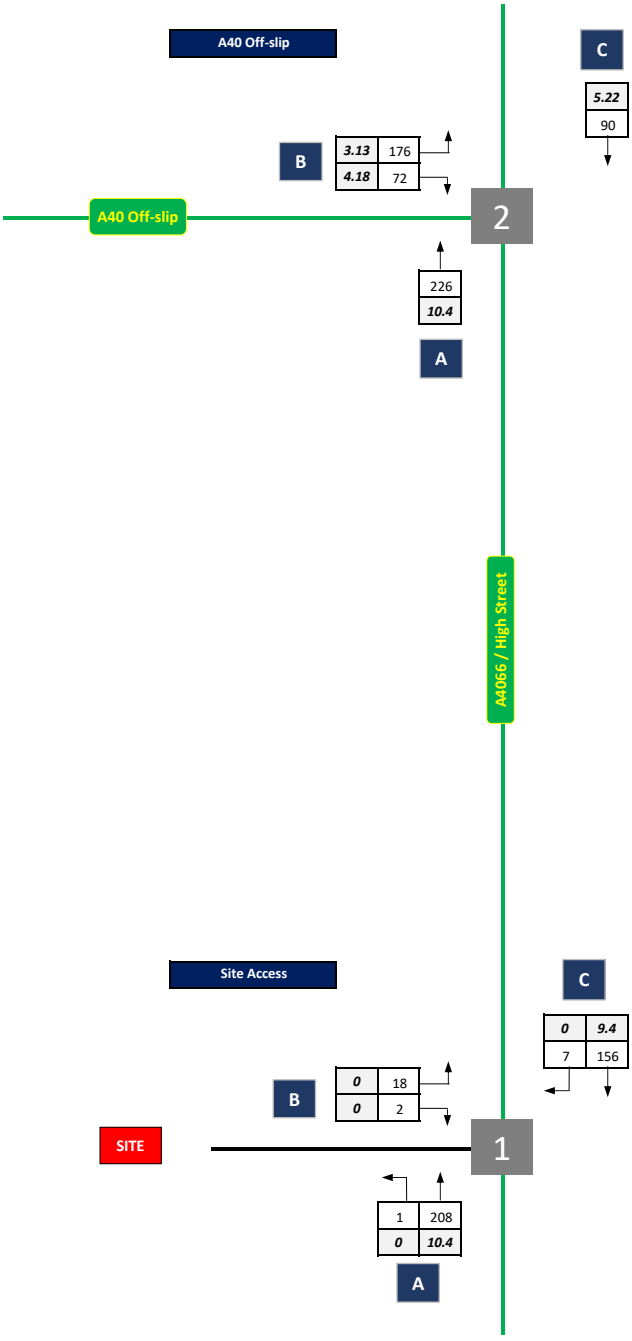
949	Total Vehicles
23	HGVs



PROJECT: Land West of Brynheulog, St Clears, Carmarthenshire		**PLAN TITLE:** Traffic Figure Diagrams	
TIME PERIOD: PM Peak Hour (17:00 - 18:00)		Base 2021 Traffic + Development PM	
DATE: June 2021	**JOB NUMBER:** C18641	**DRAWN BY:** AC	**FIGURE:** 005

KEY

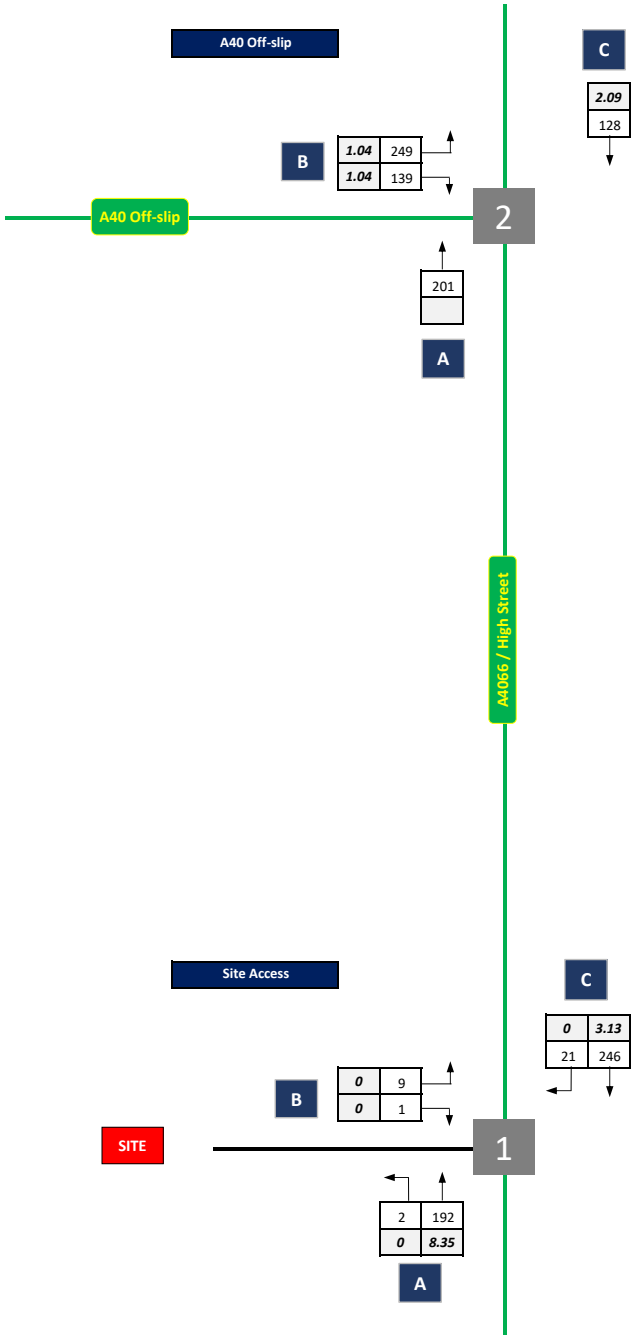
729	Total Vehicles
42.8	HGVs



PROJECT: Land West of Brynheulog, St Clears, Carmarthenshire		**PLAN TITLE:** Traffic Figure Diagrams	
TIME PERIOD: AM Peak Hour (08:00 - 09:00)		Future Base 2026 Traffic + Development AM	
DATE: June 2021	**JOB NUMBER:** C18641	**DRAWN BY:** AC	**FIGURE:** 006

KEY

988	Total Vehicles
15.7	HGVs



Hydrock	**PROJECT:** Land West of Brynheulog, St Clears, Carmarthenshire		**PLAN TITLE:** Traffic Figure Diagrams
	TIME PERIOD: PM Peak Hour (17:00 - 18:00)		Future Base 2026 Traffic + Development PM
	DATE: June 2021	**JOB NUMBER:** C18641	**DRAWN BY:** AC / **FIGURE:** 007

Appendix I Junctions 9 Outputs

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Proposed Site Access.j9
Path: F:\01 Contracts\C-0000-C\C-18641 - St. Clears\01_WIP\CA_Calculation\TP\Modelling
Report generation date: 08/07/2021 11:04:33

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	Base 2021							
Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	Base 2026							
Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	Dev							
Stream B-AC	0.0	6.11	0.04	A	0.0	6.01	0.02	A
Stream C-AB	0.0	5.98	0.01	A	0.0	6.15	0.04	A
	Base 2021 + Dev							
Stream B-AC	0.0	6.77	0.04	A	0.0	6.62	0.02	A
Stream C-AB	0.0	5.62	0.01	A	0.1	5.34	0.05	A
	Base 2026 + Dev							
Stream B-AC	0.0	6.81	0.04	A	0.0	6.64	0.02	A
Stream C-AB	0.0	5.61	0.01	A	0.1	5.31	0.05	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	06/07/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	HYDROCK\AnnieChapelton
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2021	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2021	PM	ONE HOUR	16:45	18:15	15	✓
D3	Base 2026	AM	ONE HOUR	07:45	09:15	15	✓
D4	Base 2026	PM	ONE HOUR	16:45	18:15	15	✓
D5	Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	Base 2021 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D8	Base 2021 + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	Base 2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	Base 2026 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Base 2021, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A4066 (N-bound)		Major
B	Site Access		Minor
C	A4066 (S-bound)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A4066 (S-bound)	6.60			60.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	2.50	100	50

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508	0.090	0.228	0.143	0.326
1	B-C	623	0.093	0.235	-	-
1	C-B	609	0.230	0.230	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2021	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	199	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - A4066 (S-bound)		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	199
	B - Site Access	0	0	0
	C - A4066 (S-bound)	149	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	5
	B - Site Access	0	0	0
	C - A4066 (S-bound)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						137	205
A-B						0	0
A-C						183	274

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	512	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	112	28			112				
A-B	0	0			0				
A-C	150	37			150				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	503	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
C-A	134	33			134				
A-B	0	0			0				
A-C	179	45			179				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	490	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	540	0.000	0	0.0	0.0	0.000	A
C-A	164	41			164				
A-B	0	0			0				
A-C	219	55			219				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	490	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	540	0.000	0	0.0	0.0	0.000	A
C-A	164	41			164				
A-B	0	0			0				
A-C	219	55			219				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	503	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
C-A	134	33			134				
A-B	0	0			0				
A-C	179	45			179				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	512	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	112	28			112				
A-B	0	0			0				
A-C	150	37			150				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base 2021, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	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)	Run automatically
D2	Base 2021	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	184	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - A4066 (S-bound)		ONE HOUR	✓	236	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	184
	B - Site Access	0	0	0
	C - A4066 (S-bound)	236	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	4
	B - Site Access	0	0	0
	C - A4066 (S-bound)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						217	325
A-B						0	0
A-C						169	253

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	510	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	178	44			178				
A-B	0	0			0				
A-C	139	35			139				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	500	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	212	53			212				
A-B	0	0			0				
A-C	165	41			165				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	486	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	0	0			0				
A-C	203	51			203				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	486	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	0	0			0				
A-C	203	51			203				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	500	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	212	53			212				
A-B	0	0			0				
A-C	165	41			165				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	510	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	178	44			178				
A-B	0	0			0				
A-C	139	35			139				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base 2026, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	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)	Run automatically
D3	Base 2026	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	208	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - A4066 (S-bound)		ONE HOUR	✓	156	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	208
	B - Site Access	0	0	0
	C - A4066 (S-bound)	156	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	5
	B - Site Access	0	0	0
	C - A4066 (S-bound)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						143	214
A-B						0	0
A-C						191	286

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	510	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	0	0			0				
A-C	156	39			156				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	501	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	547	0.000	0	0.0	0.0	0.000	A
C-A	140	35			140				
A-B	0	0			0				
A-C	187	47			187				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	487	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	229	57			229				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	487	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	229	57			229				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	501	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	547	0.000	0	0.0	0.0	0.000	A
C-A	140	35			140				
A-B	0	0			0				
A-C	187	47			187				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	510	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	0	0			0				
A-C	156	39			156				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base 2026, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.00	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)	Run automatically
D4	Base 2026	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	192	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - A4066 (S-bound)		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	192
	B - Site Access	0	0	0
	C - A4066 (S-bound)	246	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	4
	B - Site Access	0	0	0
	C - A4066 (S-bound)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						226	339
A-B						0	0
A-C						176	264

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	508	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	185	46			185				
A-B	0	0			0				
A-C	145	36			145				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	497	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	221	55			221				
A-B	0	0			0				
A-C	173	43			173				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	483	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	271	68			271				
A-B	0	0			0				
A-C	211	53			211				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	483	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	271	68			271				
A-B	0	0			0				
A-C	211	53			211				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	497	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	221	55			221				
A-B	0	0			0				
A-C	173	43			173				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	0	508	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	185	46			185				
A-B	0	0			0				
A-C	145	36			145				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Dev, 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.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.08	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)	Run automatically
D5	Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	0.60	100.000
B - Site Access		ONE HOUR	✓	20	100.000
C - A4066 (S-bound)		ONE HOUR	✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0.60	0
	B - Site Access	2	0	18
	C - A4066 (S-bound)	0	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	0
	B - Site Access	0	0	0
	C - A4066 (S-bound)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	6.11	0.0	0.5	A	18	28
C-AB	0.01	5.98	0.0	0.5	A	6	9
C-A						0	0
A-B						0	0
A-C						0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	611	0.025	15	0.0	0.0	6.041	A
C-AB	5	1	609	0.008	5	0.0	0.0	5.962	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	611	0.029	18	0.0	0.0	6.071	A
C-AB	6	1	609	0.010	6	0.0	0.0	5.971	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	611	0.036	22	0.0	0.0	6.113	A
C-AB	7	2	609	0.012	7	0.0	0.0	5.985	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	611	0.036	22	0.0	0.0	6.113	A
C-AB	7	2	609	0.012	7	0.0	0.0	5.985	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	611	0.029	18	0.0	0.0	6.071	A
C-AB	6	1	609	0.010	6	0.0	0.0	5.972	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	611	0.025	15	0.0	0.0	6.041	A
C-AB	5	1	609	0.008	5	0.0	0.0	5.964	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Dev, 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.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.10	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)	Run automatically
D6	Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	2	100.000
B - Site Access		ONE HOUR	✓	10	100.000
C - A4066 (S-bound)		ONE HOUR	✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	2	0
	B - Site Access	0.83	0	9
	C - A4066 (S-bound)	0	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	0
	B - Site Access	0	0	0
	C - A4066 (S-bound)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.02	6.01	0.0	0.5	A	9	14
C-AB	0.04	6.15	0.0	0.5	A	19	29
C-A						0	0
A-B						0	0
A-C						0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	611	0.012	7	0.0	0.0	5.969	A
C-AB	16	4	609	0.026	16	0.0	0.0	6.070	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	610	0.015	9	0.0	0.0	5.985	A
C-AB	19	5	609	0.031	19	0.0	0.0	6.101	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	610	0.018	11	0.0	0.0	6.007	A
C-AB	23	6	609	0.038	23	0.0	0.0	6.145	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	610	0.018	11	0.0	0.0	6.007	A
C-AB	23	6	609	0.038	23	0.0	0.0	6.145	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	610	0.015	9	0.0	0.0	5.987	A
C-AB	19	5	609	0.031	19	0.0	0.0	6.102	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	611	0.012	8	0.0	0.0	5.972	A
C-AB	16	4	609	0.026	16	0.0	0.0	6.070	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Base 2021 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.47	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)	Run automatically
D7	Base 2021 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	200	100.000
B - Site Access		ONE HOUR	✓	20	100.000
C - A4066 (S-bound)		ONE HOUR	✓	156	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0.60	199
	B - Site Access	2	0	18
	C - A4066 (S-bound)	149	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	5
	B - Site Access	0	0	0
	C - A4066 (S-bound)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	6.77	0.0	0.5	A	18	28
C-AB	0.01	5.62	0.0	0.5	A	8	12
C-A						135	203
A-B						0.55	0.83
A-C						183	274

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	572	0.026	15	0.0	0.0	6.466	A
C-AB	6	2	647	0.009	6	0.0	0.0	5.617	A
C-A	111	28			111				
A-B	0.45	0.11			0.45				
A-C	150	37			150				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	564	0.032	18	0.0	0.0	6.592	A
C-AB	8	2	655	0.011	7	0.0	0.0	5.556	A
C-A	132	33			132				
A-B	0.54	0.14			0.54				
A-C	179	45			179				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	553	0.040	22	0.0	0.0	6.774	A
C-AB	10	2	666	0.015	10	0.0	0.0	5.478	A
C-A	162	40			162				
A-B	0.66	0.17			0.66				
A-C	219	55			219				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	553	0.040	22	0.0	0.0	6.774	A
C-AB	10	2	666	0.015	10	0.0	0.0	5.486	A
C-A	162	40			162				
A-B	0.66	0.17			0.66				
A-C	219	55			219				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	564	0.032	18	0.0	0.0	6.592	A
C-AB	8	2	655	0.011	8	0.0	0.0	5.572	A
C-A	132	33			132				
A-B	0.54	0.14			0.54				
A-C	179	45			179				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	572	0.026	15	0.0	0.0	6.469	A
C-AB	6	2	647	0.009	6	0.0	0.0	5.624	A
C-A	111	28			111				
A-B	0.45	0.11			0.45				
A-C	150	37			150				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base 2021 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.49	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)	Run automatically
D8	Base 2021 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	186	100.000
B - Site Access		ONE HOUR	✓	10	100.000
C - A4066 (S-bound)		ONE HOUR	✓	257	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	2	184
	B - Site Access	0.83	0	9
	C - A4066 (S-bound)	236	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	4
	B - Site Access	0	0	0
	C - A4066 (S-bound)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.02	6.62	0.0	0.5	A	9	14
C-AB	0.05	5.34	0.1	0.5	A	28	42
C-A						208	312
A-B						2	3
A-C						169	253

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	573	0.013	7	0.0	0.0	6.365	A
C-AB	21	5	695	0.030	21	0.0	0.0	5.338	A
C-A	172	43			172				
A-B	1	0.36			1				
A-C	139	35			139				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	566	0.016	9	0.0	0.0	6.467	A
C-AB	27	7	713	0.038	27	0.0	0.1	5.244	A
C-A	204	51			204				
A-B	2	0.43			2				
A-C	165	41			165				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	555	0.020	11	0.0	0.0	6.615	A
C-AB	36	9	738	0.048	35	0.1	0.1	5.125	A
C-A	247	62			247				
A-B	2	0.52			2				
A-C	203	51			203				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	555	0.020	11	0.0	0.0	6.615	A
C-AB	36	9	738	0.048	36	0.1	0.1	5.127	A
C-A	247	62			247				
A-B	2	0.52			2				
A-C	203	51			203				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	565	0.016	9	0.0	0.0	6.468	A
C-AB	27	7	713	0.038	27	0.1	0.1	5.251	A
C-A	204	51			204				
A-B	2	0.43			2				
A-C	165	41			165				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	573	0.013	8	0.0	0.0	6.368	A
C-AB	21	5	695	0.030	21	0.1	0.0	5.344	A
C-A	172	43			172				
A-B	1	0.36			1				
A-C	139	35			139				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.07	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Base 2026 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.45	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)	Run automatically
D9	Base 2026 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	208	100.000
B - Site Access		ONE HOUR	✓	20	100.000
C - A4066 (S-bound)		ONE HOUR	✓	162	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0.60	208
	B - Site Access	2	0	18
	C - A4066 (S-bound)	156	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	5
	B - Site Access	0	0	0
	C - A4066 (S-bound)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	6.81	0.0	0.5	A	18	28
C-AB	0.01	5.61	0.0	0.5	A	8	12
C-A						141	211
A-B						0.55	0.83
A-C						191	286

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	570	0.026	15	0.0	0.0	6.486	A
C-AB	6	2	649	0.009	6	0.0	0.0	5.602	A
C-A	116	29			116				
A-B	0.45	0.11			0.45				
A-C	156	39			156				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	562	0.032	18	0.0	0.0	6.617	A
C-AB	8	2	657	0.012	8	0.0	0.0	5.538	A
C-A	138	35			138				
A-B	0.54	0.14			0.54				
A-C	187	47			187				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	551	0.040	22	0.0	0.0	6.807	A
C-AB	10	2	669	0.015	10	0.0	0.0	5.456	A
C-A	169	42			169				
A-B	0.66	0.17			0.66				
A-C	229	57			229				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	551	0.040	22	0.0	0.0	6.807	A
C-AB	10	2	669	0.015	10	0.0	0.0	5.462	A
C-A	169	42			169				
A-B	0.66	0.17			0.66				
A-C	229	57			229				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	5	562	0.032	18	0.0	0.0	6.620	A
C-AB	8	2	657	0.012	8	0.0	0.0	5.552	A
C-A	138	35			138				
A-B	0.54	0.14			0.54				
A-C	187	47			187				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	570	0.026	15	0.0	0.0	6.487	A
C-AB	6	2	649	0.009	6	0.0	0.0	5.611	A
C-A	116	29			116				
A-B	0.45	0.11			0.45				
A-C	156	39			156				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base 2026 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.48	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)	Run automatically
D10	Base 2026 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4066 (N-bound)		ONE HOUR	✓	194	100.000
B - Site Access		ONE HOUR	✓	10	100.000
C - A4066 (S-bound)		ONE HOUR	✓	267	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	2	192
	B - Site Access	0.83	0	9
	C - A4066 (S-bound)	246	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A4066 (N-bound)	B - Site Access	C - A4066 (S-bound)
From	A - A4066 (N-bound)	0	0	4
	B - Site Access	0	0	0
	C - A4066 (S-bound)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.02	6.64	0.0	0.5	A	9	14
C-AB	0.05	5.31	0.1	0.5	A	28	42
C-A						217	325
A-B						2	3
A-C						176	264

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	571	0.013	7	0.0	0.0	6.384	A
C-AB	21	5	699	0.031	21	0.0	0.0	5.309	A
C-A	180	45			180				
A-B	1	0.36			1				
A-C	145	36			145				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	564	0.016	9	0.0	0.0	6.491	A
C-AB	27	7	718	0.038	27	0.0	0.1	5.213	A
C-A	213	53			213				
A-B	2	0.43			2				
A-C	173	43			173				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	553	0.020	11	0.0	0.0	6.645	A
C-AB	36	9	744	0.049	36	0.1	0.1	5.088	A
C-A	258	64			258				
A-B	2	0.52			2				
A-C	211	53			211				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	553	0.020	11	0.0	0.0	6.645	A
C-AB	36	9	744	0.049	36	0.1	0.1	5.089	A
C-A	258	64			258				
A-B	2	0.52			2				
A-C	211	53			211				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	564	0.016	9	0.0	0.0	6.493	A
C-AB	27	7	718	0.038	27	0.1	0.1	5.218	A
C-A	213	53			213				
A-B	2	0.43			2				
A-C	173	43			173				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	571	0.013	8	0.0	0.0	6.387	A
C-AB	21	5	699	0.031	21	0.1	0.0	5.315	A
C-A	180	45			180				
A-B	1	0.36			1				
A-C	145	36			145				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.07	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A