

TRANSPORT ASSESSMENT

PROPOSED ROADSIDE SERVICES

LAND ADJACENT TO THE A4229 AND THE M4, PYLE, CF33 4PB

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1.0 INTRODUCTION

1.1 Purpose of Report

1.1.1 ADL Traffic and Highways Engineering have been appointed by McDonald's Restaurants Ltd to prepare this Transport Assessment (TA) in support of the planning application for the redevelopment of land off the A4229, Pyle, to provide a mixed-use roadside services development. The development comprises a McDonald's restaurant with side-by-side drive thru facilities, a Starbucks coffee shop with drive thru facilities, a Greggs bakery with drive thru facilities and an 8 pump petrol filling station with associated retail area and EV charging facilities.

1.2 Pre-Application Advice

1.2.1 Bridgend County Borough Council provided pre-application advice via a letter dated the 5th of November 2021. The comments are provided as Appendix 1.0 and the main comments regarding highways matters are summarised below:

- ***“The site is not in a very sustainable location as it is going to be dependent on the private car due to its very nature.”***
 - A new footway would be provided to the restaurant and there are also proposed active travel routes in the vicinity of the site. This is addressed in Chapters 3.0 and 4.0.

- ***“A transport assessment will be required to quantify the vehicle movements generated by the development and understand the impact of any new trips on the local highway network.”***
 - This TA outlines the levels of traffic generated and the trip distribution. This is addressed in Chapters 5 and 7.

- ***“The access to the site is considered to be too close to the M4 junction roundabout. This arm of the roundabout often suffers from queueing in the peak traffic hours and will most likely queue past the proposed site access creating a highway safety concern. To remove the concerns any access into site should be relocated as far west as possible.”***
 - The site access, and the M4 junction roundabout have been modelled using the industry standard junction modelling software and the results are provided in Chapter 8. We have also reviewed the existing queues at the roundabout in Chapter 7.
- ***“In order to improve the sustainability credentials of the site, as well as incorporating electric vehicle charging points (and as many as possible), the applicant is invited to contact the transportation policy team of BCBC to discuss the potential of a park and ride use serving Porthcawl. However, any P&R scheme would need to be funded privately as the Council’s preference is to support and use Government funding for an equivalent facility at Pyle Station as it would encourage linked public transport trips.”***
 - There are 10 EV charging spaces provided within the PFS car park.
- ***Finally, parking should be provided as per SPG17 – the Council’s adopted parking standards.***
 - Parking is provided in line with the Council’s standards as outlined in Section 4.4.

1.3 Scope of Study

1.3.1 Chapter 2.0 provides the baseline transport information including; a description of the site and surrounding area, highway safety situation and existing services facilities along the M4 corridor.

1.3.2 Chapter 3.0 assesses the accessibility of the site by non-car modes.

1.3.3 Chapter 4.0 presents the development proposals.

1.3.4 Chapter 5.0 calculates the proposed traffic generation and level of trips by type.

- 1.3.5 Chapter 6.0 provides an on-site assessment of the proposed parking and drive thru lane.
- 1.3.6 Chapter 7.0 presents the traffic surveys, base traffic flows and methodology for the distribution of the proposed traffic.
- 1.3.7 Chapter 8.0 assesses the traffic impact on the local road network.
- 1.3.8 Chapter 9.0 reviews the requirement for mitigation measures and other reports to support the planning application.
- 1.3.9 Chapter 10.0 evaluates the national and local planning policy.
- 1.3.10 Chapter 11.0 summarises and concludes the report.
- 1.3.11 The Appendices are included at the rear of the report.

2.0 BASELINE TRANSPORT INFORMATION

2.1 Site Location and Surrounding Area

- 2.1.1 The site is located adjacent to the southwest corner of Pyle Interchange, directly north of the A4229 and south of the M4. The site is located within Bridgend Borough in jurisdiction of Bridgend Borough Council. The location of the site is shown on a plan provided as Appendix 2.1.
- 2.1.2 The site is bordered by the M4 to the north and the A4229 to the south. The Pyle Interchange gyratory forms the site's eastern border. There is a strip of landscaping on the north, east and south borders of the site which separates the site from the highway. The site's western border is formed by green land used for agriculture.
- 2.1.3 The surrounding area can be categorised as a roadside site with the M4 motorway directly adjacent to the site. The area surrounding the site is mainly comprised of green, agricultural land. However, there are also residential areas located nearby to the site in Pyle and North Cornelly to the north, and South Cornelly to the south.
- 2.1.4 A site and surrounding area plan is provided as Appendix 2.2.

2.2 Existing Use of the Site and Access Arrangements

- 2.2.1 The site is currently vacant land used for agricultural purposes. Access to the site is currently taken via the farm track in the southwest corner of the site.

2.3 Road Network

- 2.3.1 The site would be accessed of the A4229 which runs along the site's southern frontage. The A4229 runs in a generally north to south direction from Pyle in the north towards Porthcawl in the south. The A4229 is dualled in the vicinity of the site and is subject to national speed limit restrictions.

- 2.3.2 Pyle Interchange is located approximately 120 metres east of the site access. Pyle Interchange forms Junction 37 of the M4 and is a large four arm gyratory. The A4229 forms the northern and southern arms of the gyratory, and the eastern and western arms are formed by the M4 slip roads.
- 2.3.3 The A4229 continues north of Pyle Interchange for a distance of 575 metres where it meets another gyratory with the A48. The M4 motorway runs in an east to west direction from London in the east to Swansea in the west. More locally, the M4 runs past Port Talbot to the northwest and Bridgend to the east.
- 2.3.4 The M4 and its slip roads at Pyle Interchange are maintained by the South Wales Trunk Road Agent on behalf of the Welsh Government. The A4229 and the Pyle Interchange gyratory are maintained by Bridgend Borough Council.
- 2.3.5 The A4229 runs for a distance of approximately 690 metres southwest of Pyle Interchange until it meets a four-arm roundabout with the B4283 and Porthcawl Road. The B4283 Porthcawl Road forms the northern arm of the roundabout, Porthcawl Road forms the southeast arm of the roundabout and the A4229 forms the eastern and southwest arms of the roundabout.
- 2.3.6 Porthcawl Road provides access to the residential area at South Cornelly, whereas the B4283 provides access to North Cornelly and Pyle.

2.4 Accident Analysis

- 2.4.1 ADL requested personal injury accident data from South Wales Police for an area covering Pyle Interchange, the B4283 Roundabout and the section of the A4229 between the two roundabouts. South Wales Police were unable to provide detailed accident reports. ADL therefore consulted Crashmap, a personal injury accident database available online.

2.4.2 ADL have analysed the personal injury accidents that occurred between 1st of March 2015 to the 1st of March 2020. The rationale for this date range was to avoid the lockdowns caused by the COVID-19 pandemic.

2.4.3 A location plot of the accidents is provided as Appendix 3.1 and the accident details are provided as Appendix 3.2. There were 14 collisions in total that occurred within the study area. There were two serious accidents and nine slight accidents that occurred at Pyle Interchange. There were two slight collisions recorded occurred on the M4 and one slight accident at the B4283 Roundabout.

2.4.4 A summary of the accidents are shown in Tables 2A, 2B and 2C below.

Table 2A Accident Summary: Pyle Interchange

ADL Ref:	Date	Time	Light Conditions	Severity	Summary of Details
1	07/03/2015	09:52	Daylight	Slight	Vehicle 1 (car) hit Vehicle 2 (pedal cycle) on the nearside while both vehicles were travelling on the carriageway.
2	30/07/2016	09:32	Daylight	Slight	Vehicle 2 (car) was in the act of turning left on the M4 on slip and hit Vehicle 1 (agricultural vehicle) which was proceeding normally on Pyle Interchange.
4	18/03/2017	07:35	Darkness, Street Lights Lit	Slight	Vehicle 1 (car) was slowing down and was struck in the rear by Vehicle 2 (car) which was also slowing down.
5	17/04/2017	12:27	Daylight	Slight	Vehicle 1 (motorcycle) attempted to slow down and hit a kerb, causing rider to fall.
6	29/04/2017	11:14	Darkness, Street Lights Lit	Serious	Vehicle 1 (car) was travelling normally and the Vehicle passenger suffered serious injuries. The accident report states there is no point of impact. Therefore, the nature of this accident is unclear.
7	30/04/2017	00:59	Darkness, Street Light Lit	Slight	Vehicle 1 (Goods under 3.5t) was travelling on Pyle Interchange and struck a crash barrier.
8	28/09/2017	13:28	Daylight	Slight	Vehicle 1 (car) was attempting to turn off the roundabout and hit a lamp post.
9	29/11/2017	13:43	Daylight	Slight	Vehicle 1 (car) was slowing down or stopping and was hit in the rear by Vehicle 2 (car).
10	10/08/2018	16:48	Daylight	Slight	Vehicle 1 (car) was in the act of turning left onto the M4 on slip when it struck the off side of Vehicle 2 (car) which was proceeding normally on the carriageway.
11	06/10/2018	07:52	Daylight	Serious	Vehicle 1 (car) was travelling on Pyle Interchange and hit a kerb, which caused the vehicle to then hit a road sign. The vehicle passenger suffered serious injuries.
14	05/02/2020	17:06	Darkness, Street Lights Lit	Slight	Vehicle 1 (Good under 3.5t) struck the rear of Vehicle 2 (car) which then struck the rear of Vehicle 3 (car) when the three vehicles were approaching the roundabout.

Table 2B Accident Summary: M4 Motorway

ADL Ref:	Date	Time	Light Conditions	Severity	Summary of Details
3	31/01/2017	10:49	Daylight	Slight	Vehicle 1 (Goods under 3.5t) struck the rear of Vehicle 2 (Goods over 7.5t). Both vehicles were travelling normally on the M4.
13	05/03/2019	19:35	Darkness, Street Lights Lit	Slight	Vehicle 1 (car) was travelling on the M4 and hit the central crash barrier.

Table 2C Accident Summary: B4283 Roundabout

ADL Ref:	Date	Time	Light Conditions	Severity	Summary of Details
12	09/11/2018	17:12	Darkness, Street	Slight	Vehicle 1 (car) and Vehicle 2 (car) were both travelling on the roundabout when they collided. Vehicle 1 also struck a road sign off the carriageway.

2.4.5 The tables above demonstrate that both serious injury accidents (accident refs 6 and 11) only involved one vehicle. There were also four slight accidents (accident refs 5, 7, 8 and 13) that only involved one vehicle. It is considered that these accidents may have been caused by driver error, such as driving too quickly for the conditions. Therefore, these do not indicate a highways safety issue with the road network.

2.4.6 The accident data analysis also shows that four of the slight accidents (accident refs 3, 4, 9 and 14) were rear end shunts. These are considered to be a result of driver error and do not represent any safety issue with the highway network.

2.4.7 There were four slight injury accidents (accident refs 1, 2, 10 and 12) that were likely caused by poor turning manoeuvres or poor lane changes. These can be attributed to driver error and do not indicate any highway safety issue with the network.

2.4.8 It is therefore concluded that the accident analysis does not indicate any highways safety issue with the highway network.

2.5 Existing Services Facilities on M4 Corridor

2.5.1 ADL have reviewed the existing services facilities in the vicinity of the site which serve the M4 motorway. A plan of the nearest service facilities to the site is provided as Appendix 4.0 and the details are outlined below. Table 2D provides the address of each services facility.

Table 2D Existing Services Facilities on M4 Corridor

No	Name	Address	Distance to Site
1	Welcome Break Sarn Services, M4	Welcome Break Sarn, Bridgend, CF32 9SY	8.7km
2	Pencoed Interchange	Pencoed Interchange, Bridgend, CF35 5HY	14.7km
3	Moto Swansea	M4 Junction 47, Penllergaer, Swansea SA4 9GT	31km

Welcome Break Sarn Park Services M4

2.5.2 The Welcome Break Sarn Park Services are located 8.7km east of the site at Junction 36 of the M4. The services are comprised of an 8 bay Welcome Break PFS with a shop and two HGV bays, HGV parking, and 10 EV charging bays. There are also 8 Tesla EV charging bays at the services.

2.5.3 The services is also comprised of a WHS Smith shop, a Starbucks coffee shop, a Subway restaurant and a Burger King restaurant.

Pencoed Interchange

2.5.4 There is a 12 pump Texaco PFS, drive thru Starbucks coffee shop and drive thru McDonald's restaurant located adjacent to Pencoed Interchange (Junction 35).

2.5.5 The facilities at Pencoed Interchange are located 14.7km east of the site.

Moto Swansea

2.5.6 The Moto Swansea services are comprised of a 12 pump BP PFS with 2 HGV bays, a McDonald's Restaurant, a Costa Coffee shop, WH Smiths Shop and Greggs bakery. There are also 17 EV charging spaces provided at the services.

- 2.5.7 The services is located 31km west of the site and is the closest services facility to the west of the proposed services.
- 2.5.8 The nearest service facility to the site to the east is Welcome Break Sarn which is 8.7km from the site. The nearest service facility to the west is Moto Swansea which is 31km from the site. The proposed services therefore provides a service facility for motorists on the A4229 and provides an additional facility for motorists on the M4 where there is currently a lack of a services facility between the Moto Swansea and Welcome Break Sarn services.

3.0 ACCESSIBILITY

3.1 Walking and Cycling

- 3.1.1 There is a footway that runs along the western side of the B4283 north of the B4283 Roundabout that runs towards North Cornelly. There is also a footway south of the B4283 Roundabout which provides a link to South Cornelly.
- 3.1.2 There is an existing pedestrian crossing at the B4283 Roundabout on the A4229 (west) arm. The crossing is equipped with drop kerbs and a central refuge.
- 3.1.3 As existing, there are no formal pedestrian or cycle routes which access the site. However, there are long term proposals to provide a footway on the B4283 between North and South Cornelly.
- 3.1.4 The proposals form a part of a wider Active Travel Improvement scheme throughout Bridgend Borough. A plan of the proposals located close to the site are shown as Appendix 5.1.
- 3.1.5 The site therefore benefits from a reasonable level of pedestrian accessibility given its roadside location. The proposed active travel improvements would also enhance the accessibility of the site.
- 3.1.6 The scheme includes proposals for a new footway link along the northern side of the A4229 as shown on the plan included as Appendix 6.3 and outlined in Section 4.2.

3.2 Public Transport

- 3.2.1 There are bus stops located on Porthcawl Road in South Cornelly, 1.2km walking distance from the site via the footway. A plan showing the location of the stops is provided as Appendix 5.2.

3.2.2 The bus stops are served by regular route 63 operated by First Cymru. A map of the local bus routes is provided as Appendix 5.3 and the bus services serving the site are summarised in Table 3A below.

Table 3A Bus Services Summary

No	Route	Daytime Frequency		
		Mon-Fri	Sat	Sun
63	Porthcawl – Bridgend – Talbot Green	3 per hour	3 per hour	1 per hour

3.2.3 There are three buses per hour Monday to Saturday and one bus per hour on Sundays which provide services to Porthcawl, Bridgend and Talbot Green.

3.2.4 The site is therefore reasonably served by public transport given that the site is in a roadside location.

4.0 DEVELOPMENT PROPOSALS

4.1 Site Layout

- 4.1.1 It is proposed to provide a McDonald's restaurant with side-by-side drive thru lane facilities, a Starbucks coffee shop with drive thru facilities, a Petrol Filling Station with a retail element (PFS) and a Greggs bakery with drive thru facilities.
- 4.1.2 The McDonald's restaurant would be a 377sqm (GEA), 356sqm (GIA), single storey building with side-by-side drive thru facilities. The dining area would be 92sqm with 76 seats.
- 4.1.3 The Starbucks would be a 273sqm (GEA) single storey building with a drive thru lane and a 91sqm dining area. The PFS would have 8 filling bays, 2 of which can be used by HGV's, and 10 Electric Vehicle Charging Points (EVCP's). The PFS would also comprise a 461sqm (GEA), 434sqm (GIA) shop. The Greggs would be a 170sqm (GEA) single storey building with a drive thru lane and a 57sqm dining area.
- 4.1.4 Based on data from McDonald's it is expected that up to 15 staff would be on site at any one time. It is expected there would be 2-4 staff at the PFS, 8 staff at the Starbucks on site and up to 6 staff at the Greggs on site at any one time.
- 4.1.5 The wider site layout is provided as Appendix 6.1.

4.2 Access Arrangements

Customer Vehicle Access

- 4.2.1 Access to the proposed restaurant would be via a left in left out access arrangement with slip lanes on the A4229. Internally there would be a roundabout which would provide access the different plots that comprise the scheme.

- 4.2.2 The site access would have visibility splays of 4.5m x 102m to the right which accords with the standards for the 49.4mph recorded speeds, although greater visibility is achievable down the carriageway to the west. Further details are provided in Section 7.2. A plan showing the access and visibility splays is provided as Appendix 6.2.
- 4.2.3 The delivery vehicles would also access the site via the site access and use the relevant car parking/delivery areas to unload. The tanker would deliver to the PFS at the indicated Offset Fill points. Further details are provided in Section 4.5.
- 4.2.4 It is proposed to provide pedestrian access via a new footway on the northern side of the A4229. The footway would link to the existing footway on the B4283. The footway would access the site adjacent to the site ingress.
- 4.2.5 A plan of the proposed footway is shown as Appendix 6.3.

4.3 Year of Opening

- 4.3.1 The proposed year of opening is 2025.

4.4 Parking Provision and Assessment of Standards

- 4.4.1 It is proposed to provide 113 car parking spaces (total) including 8 accessible spaces for disabled customers and 1 reserve bay for drive thru customers. There would be 46 parking spaces for the McDonald's including 2 accessible spaces and 1 reserve bay. There would be 25 spaces for the Starbucks, including 2 accessible bays and 1 reserve bay. There would be 17 spaces for the PFS and shop including 2 accessible bays. There would be 25 spaces including 2 accessible bays and 2 reserve bays provided for the Greggs bakery.
- 4.4.2 There would also be 10 EVCP's spaces provided within the PFS demise. There would also be 3 jet wash bays and 2 air and vacuum bays. These have not been included in the 113 total car parking spaces.

4.4.3 There would be a total of 8 motorcycle spaces provided. There would be two spaces provided for each use.

4.4.4 There would be 6 cycle parking spaces (3 Sheffield stands) provided for each use. There would therefore be a total of 24 spaces (12 Sheffield stands) provided for the development.

Parking Standards

4.4.5 Parking standards for the development are set out in Bridgend Borough Council's Parking Standards SPG17 (2011) document. The standards are based on Parking Zones. Based on the maps provided with SPG 17, the site falls within Zone 5 'countryside,' the definition of this zone is provided below.

4.4.6 Therefore, the standards for Zone 5 have been applied to this development. Table 4A is shown below and assesses the proposed car parking provision against the Council's standards. Table 4B is also shown below and assesses the proposed cycle parking provision against the Council's Standards.

Table 4A Assessment of Car Parking Standards

Use Class	Operational Parking Standard	Parking Standard	Proposal	Parking Requirement Based on Standards	Proposed Provision
Shop 201-1000sqm	2 commercial vehicle space	1 space per 20sqm	434sqm	22 spaces	17 + 10 EVCP's
McDonald's (Drive Thru Restaurant)	1 commercial vehicle space	1 space per 3 staff and 1 space per 14sqm dining area	15 staff, 92sqm dining area	10	46
Starbucks (Drive-thru Restaurant)	1 commercial vehicle space	1 space per 3 staff and 1 space per 14sqm dining area	8 Staff 91sqm dining area	7	25
Greggs (Drive-thru Restaurant)	1 commercial vehicle space	1 space per 3 staff and 1 space per 14sqm dining area	6 staff 57sqm dining area	6	25
Total				45	113
PFS	1 space for petrol tanker	4 spaces for ancillary use	-	-	5 ancillary bays 1 space for petrol tanker

4.4.7 Table 4A demonstrates that the number of standard spaces for the PFS is slightly lower than the Council's requirement. However, when the 10 EVCP's are taken into account the parking provision is considered sufficient. The parking provision for the other uses accords with the Councils requirements.

Table 4B Assessment of Cycle Parking Standards

Use Class	Long Stay Standard	Short Stay Standard	Proposal	Standard	Proposed Provision
PFS	No Standard				
McDonald's (Restaurant/Café)	1 stand per 10 staff	No requirement	15 staff	2 spaces	6 spaces
Starbucks (Restaurant/Café)	1 stand per 10 staff	No requirement	8 staff	1 space	6 spaces
Greggs (Restaurant/Café)	1 stand per 10 staff	No requirement	6 staff	1 space	6 spaces
PFS (Shop 201-1000sqm)	1 stand per 500qm	1 stand per 500sqm	434sqm Shop	1 space	6 spaces
Total				5 spaces	24 spaces

4.4.8 The guidance also sets out parking standards for disabled people. The guidance states that car parks associated with shopping areas, leisure, recreational and areas open to the general public should have a minimum of one space for every disabled member of staff plus and 6% of total car parking provision should be disabled parking. The guidance also states that 5% of the total parking provision should be motorcycle parking. The disabled and motorcycle standards have been assessed against the development in Table 4C below.

Table 4C Assessment of Disabled and Motorcycle Parking Standards

Parking Type	McDonald's		Starbucks		PFS		Greggs	
	Standard	Provision	Standard	Provision	Standard	Provision	Standard	Provision
Motorcycle	2	2	1	2	1	2	1	2
Disabled	3	3	2	2	1	2	2	2

4.4.9 The tables above demonstrate that the proposed level of cycle, disabled and motorcycle parking would accord with the Council's standards.

4.5 Servicing/Refuse Provision

McDonald's

- 4.5.1 McDonald's has been trading in the UK since 1974. The company operates over 1,348 fast service restaurants (+90 ROI) of which around 1,204 are restaurants with drive thru facilities.
- 4.5.2 With regard to the 1,204 restaurants with drive thru facilities, on the assumption that each restaurant is serviced 3 times per week. This is equivalent to 3,612 deliveries per week or 516 per day (7 day week).
- 4.5.3 Martin Brower are McDonald's sole distributor for all its products and have a fleet of 150 vehicles. Martin Brower utilise multi-temperature vehicles which allows all of the restaurant's requirements for; frozen, chilled and ambient products to be delivered in one visit. This therefore reduces the number of deliveries each restaurant received.
- 4.5.4 The McDonald's would be serviced three times per week. Deliveries would only occur during quiet trading periods.
- 4.5.5 Servicing McDonald's restaurants whilst they are open is a common practice and does not present any operational difficulties.
- 4.5.6 Martin Brower use a sophisticated computerised planning tool (Paragon), which enables requirements of delivery destinations to be set and ensures they are complied with on every occasion the delivery is planned. The restaurant is allocated a 4-hour delivery slot and the delivery will be planned within this. Notification of the planned delivery is emailed to the restaurant two days before delivery.
- 4.5.7 The goods are delivered by articulated lorry, typically 16.62m in length. This is typically parked for between 15 – 75 minutes. The duration of the stay depends upon the range and quantity of products to be delivered.

- 4.5.8 It is proposed that servicing will be undertaken on site. The delivery vehicle would use the car park to unload close to the restaurant and then exit the site in a forward gear.
- 4.5.9 A representative from Martin Brower will visit the site prior to any new restaurant opening and assess the designated delivery area. Any special requirements (although none are anticipated at this site) will be communicated to their transport and scheduling department.
- 4.5.10 A TRACK analysis is presented in Appendix 7.1 for a 16.62m delivery vehicle. The analysis demonstrates that a delivery vehicle can enter, manoeuvre around the car park and exit.
- 4.5.11 Refuse collection would be collected by a private contractor using a 9.6m refuse vehicle, 3 times per week and would occur outside of peak hours. Refuse collection would also occur from the car park.
- 4.5.12 Waste minimisation has been achieved through the redesign of tray liners and specifying the use of light-weight bin liners. Food wastage is minimised through the use of a computer system which monitors the amount of food served at given times of day, resulting in more accurate preparation and ordering of stock. This therefore, reduces the quantum of waste and frequency of collection required.
- 4.5.13 Service vehicles also collect empty delivery trays and crates which are returned to supplies for reuse.
- 4.5.14 Cooking oil from restaurants is collected by Martin Brower's delivery vehicles and is recycled into bio diesel.

PFS and Shop

- 4.5.15 It is expected that the PFS shop would receive up to 5 deliveries per week using a Rigid delivery vehicle. The delivery vehicle would use the delivery bay to the north of the shop. The vehicle is expected to be on site for 45 minutes.

- 4.5.16 It is proposed that deliveries would occur during quiet trading periods. Deliveries would be expected to be planned with booked delivery slots.
- 4.5.17 TRACK analysis for the Rigid delivery vehicle is included as Appendix 7.2.
- 4.5.18 It is expected that the PFS would receive 2 petrol deliveries per week. TRACK analysis for a petrol tanker accessing the site, unloading at the offset fill bay and exiting the site is included as Appendix 7.3. It is also proposed that tanker deliveries only occur during quiet trading periods. These would also be planned with booked delivery slots.
- 4.5.19 The PFS refuse would be stored in the compound on the northern side of the building. It is expected that refuse collections would be undertaken separately to the other uses by a private contractor up to three times per week.

Starbucks

- 4.5.20 The Starbucks would have milk, food and high-volume stock delivered every other day (3-4 times per week) and an ambient delivery once a week (from the same warehouse combined with a stock delivery). Therefore, in total there would be up to 4 deliveries per week. All the stock is delivered by the same operator with a Rigid delivery vehicle.
- 4.5.21 Food and drink deliveries would be scheduled to occur during quiet trading periods. It is expected that staff would cone off any spaces required for deliveries to unload. The delivery drivers are briefed at the depot of any on site management requirements or restrictions.
- 4.5.22 TRACK analysis for the Rigid delivery vehicle is included as Appendix 7.4.
- 4.5.23 The Starbucks refuse would be stored in a dedicated utility yard. It is expected that refuse collections would be undertaken separately to the McDonald's by a private contractor up to 3 times per week. These would also be scheduled to occur during quiet trading periods.

Greggs

- 4.5.24 The Greggs would have deliveries up to 7 times per week. All the stock is delivered by the same operator with a Rigid delivery vehicle.
- 4.5.25 Deliveries are scheduled to occur overnight during quiet trading periods.
- 4.5.26 The Greggs delivery vehicle would use the loading bay within the car park to unload.
- 4.5.27 TRACK analysis for a Rigid delivery vehicle is included as Appendix 7.5.
- 4.5.28 The Greggs refuse would be stored in a dedicated utility yard. It is expected that refuse collections would be undertaken separately to the other units by a private contractor 3 times per week. These would also be scheduled to occur during quiet trading periods.

Summary

- 4.5.29 The arrangements described above follow a 'tried and tested' methodology used successfully across the UK and it could be successfully undertaken at the proposed McDonald's, Greggs, Starbucks and PFS.

4.6 Drive Thru Lane

McDonalds

- 4.6.1 The drive thru lane forms an integral part of the McDonald's operation is shown adjacent to the; eastern northern and southern edges of the building (see Appendix 6.1).
- 4.6.2 When a customer wishes to purchase a meal without leaving their vehicle, the following steps are taken:
1. Enter the drive thru lane
 2. Place an order at one of the Customer Order Display (COD) units
 3. Pay at the first booth

4. Collect meal from the second booth (halfway along the southern elevation) and continue out of the drive thru lane.
- 4.6.3 In the event that a customer places a larger order, which could take longer to prepare (and potentially delay other drivers using the drive thru lane), then a member of staff will divert them to the 'reserve bay' or to the Fast Forward booth. The reserve bay is situated near the store entrance and once the order is ready, a member of staff will carry the meal from the restaurant, to the customer. If the customer is directed to the Fast Forward booth then their order is passed to them through the window.
 - 4.6.4 Side by side ordering facilities provide a more efficient drive thru process. The proposals would reduce the time taken to process customers through the drive thru facility and therefore assists in effectively managing the length of the drive thru queue. Drivers waiting for an order would use one of the two COD units within the drive thru lane depending upon how many vehicles are waiting. Both COD units would operate simultaneously at all times and in practice can be likened to a dual pay-barrier arrangement at multi-storey car parks across the country.
 - 4.6.5 A TRACK analysis is presented in Appendix 7.6 which illustrates a vehicle circulating the McDonald's drive thru lane.

Starbucks and Greggs

- 4.6.6 The Starbucks and Greggs would both have a single drive thru lane with a single order point and a single window for payment and collection. TRACK analysis is presented in Appendices 7.7 and 7.8 illustrate vehicles circulating the Starbucks and Greggs drive thru lanes.
- 4.6.7 The Starbucks would have a single reserve bay. The Greggs would have two reserve bays. In the event that an order would take longer than usual to prepare. The customer would be instructed to park in the reserve bay. The order will then be carried by a member of staff to the customer when it is ready.

5.0 PROPOSED TRIP GENERATION

5.1 McDonald's Traffic Generation

5.1.1 ADL Traffic & Highways Engineering commissioned Axiom Traffic Ltd to undertake counts and customer interview survey at the McDonald's restaurant at Newport Coldra (NP18 2NX). The restaurant is considered to be a good comparable as it is a Welsh restaurant similarly located near to the M4 motorway off a large roundabout. The Newport Coldra restaurant also has a similar level of market share.

5.1.2 Details of the surveyed restaurant are provided in Table 5A below.

Table 5A Comparable Restaurant Details

	Newport, Coldra	Proposed Pyle
Store Number	942	-
Address	Coldra Roundabout, Newport, NP18 2NX, J24 M4	J37 M4
Restaurant Type	Single Storey	Single Storey
Floor Area	319sqm	372sqm
No Seats	95	97
DT Features	Side by Side	Side by Side
Parking Provision	40	52
No of surrounding McDonald's Restaurants within 5km (inc. restaurant)	2	1
Population within 5km	74,424	34,574
Market Share McDonald's	37,212	34,574
Location	Roadside	Roadside

5.1.3 As noted previously, the Newport Coldra Restaurant has a similar level of market share (37,212) compared to the proposed restaurant (34,574).

5.1.4 The survey results for Newport Coldra have been taken as the proposed traffic generation for Pyle for the Friday evening and Saturday peak. Transaction data has been used to calculate the Am peak traffic. The proposed trips are summarised in Appendix 8.1. The network peak hour proposed traffic is summarised in Table 5B below.

Table 5B Proposed Traffic Generation (Averaged Surveyed)

	Peak Hour	Proposed Traffic	
		In	Out
Friday Peaks	08:00-09:00	114	114
	18:00-19:00	135	134
Saturday Peak	13:00-14:00	151	158

5.1.5 ADL have undertaken research which has proven that there is no statistically significant relationship between McDonald’s traffic and either; floor area, dining area, number of seats or parking provision, as shown on the graphs included in Appendix 9.0. Therefore, the Newport Coldra survey data has not been adjusted for any variable.

5.1.6 As TRICS is the industry standard methodology for traffic generation predictions, ADL have run the TRICS assessment of the traffic as a comparison exercise to the assessment in Section 5.1. The TRICS data is included in Appendices 8.2 and 8.3 and the results are shown in Table 5C below.

Table 5C McDonald’s Traffic Generation Based on TRICS

		McDonald’s TRICS Sites		ADL Assessment Based on McDonald’s Survey	
		In	Out	In	Out
Am Peak	Trip Rates	17.954	17.136	-	-
	Traffic Generation 377sqm	68	65	114	114
Pm Peak	Trip Rates	22.199	22.864	-	-
	Traffic Generation 377sqm	84	87	135	134
Saturday Peak	Trip Rates	41.752	41.752		
	Traffic Generation 377sqm	159	159	151	158

5.1.7 Table 5C demonstrates that based on TRICS the predicted traffic would be lower than that based on ADL’s survey assessment during the Friday peak periods, and similar during the Saturday peak. Therefore, the assessment in Table 5B is robust.

5.1.8 ADL have undertaken surveys at recently built restaurants where ADL also prepared the Transport Assessment for the purposes of reviewing the accuracy of McDonald’s traffic predictions. The results are summarised in Appendix 9.0 and Table 5D below.

5.1.9 Where the surveyed traffic matched the prediction this is 100%, a higher value means greater traffic than predicted and lower means less traffic was surveyed than predicted.

Table 5D Summary of Surveyed and Predicted McDonald's Traffic

	Wigan	Monks Cross	Stretford	Norton Park	Brickhill	Rawtenstall	Average
Friday	87%	76%	92%	88%	96%	106%	90%
Saturday	98%	119%	100%	98%	114%	103%	105%
Total	93%	99%	97%	94%	106%	105%	99%

5.1.10 The results in Table 5D demonstrate that overall ADL traffic predictions have been well matched with actual traffic generation, on average 99%. This demonstrates that ADL traffic predictions are robust.

5.2 PFS Traffic Generation

5.2.1 The proposed PFS traffic generation has been calculated based on the TRICS data in Appendix 8.4 and 8.5. The TRICS assessment included PFS with Retail sites in England and Wales located in edge of town or freestanding locations. The TRICS data for petrol filling stations is shown in Table 5E below.

Table 5E PFS Traffic Generation Based on TRICS

		PFS Traffic Generation	
		In	Out
Am Peak	Trip Rates	10.043	9.435
	Traffic Generation 8 bays	80	75
Pm Peak	Trip Rates	10.652	10.913
	Traffic Generation 8 bays	85	87
Saturday Peak	Trip Rates	10.968	10.806
	Traffic Generation 8 bays	88	86

5.3 Starbucks Traffic Generation

5.3.1 The proposed Starbucks traffic generation has been calculated based on the TRICS data in Appendices 8.6 and 8.7. The TRICS assessment included drive thru coffee shops in England and Wales situated in edge of town or freestanding locations. The details are provided in Table 5F below.

Table 5F Starbucks Traffic Generation Based on TRICS

		PFS Traffic Generation	
		In	Out
Am Peak	Trip Rates	16.808	15.493
	Traffic Generation 273sqm	46	42
Pm Peak	Trip Rates	11.925	13.052
	Traffic Generation 273sqm	33	36
Saturday Peak	Trip Rates	24.142	24.274
	Traffic Generation 273sqm	66	66

5.4 Greggs Traffic Generation

5.4.1 There are no drive thru Greggs sites on TRICS. The proposed Greggs traffic generation is considered to likely be similar to the traffic generated by the Starbucks unit and has therefore been calculated based on the TRICS data in Appendices 8.6 and 8.7. The TRICS assessment included drive thru coffee shops in England and Wales situated in edge of town or freestanding locations. The details are provided in Table 5G below.

Table 5G Greggs Traffic Generation Based on TRICS

		PFS Traffic Generation	
		In	Out
Am Peak	Trip Rates	16.808	15.493
	Traffic Generation 170sqm	29	26
Pm Peak	Trip Rates	11.925	13.052
	Traffic Generation 170sqm	20	22
Saturday Peak	Trip Rates	24.142	24.274
	Traffic Generation 170sqm	41	41

5.5 Total Development Traffic Generation

5.5.1 The total development traffic generation is summarised in Table 5H below.

Table 5H Total Development Traffic Generation

	Use	Traffic Generation	
		In	Out
Am Peak	McDonald's	114	114
	PFS	80	75
	Starbucks	46	42
	Greggs	29	26
	Total	269	257
Pm Peak	McDonald's	135	134
	PFS	85	87
	Starbucks	33	36
	Greggs	20	22
	Total	273	279
Saturday Peak	McDonald's	151	158
	PFS	88	86
	Starbucks	66	66
	Greggs	41	41
	Total	346	351

5.5.2 The total proposed inbound traffic generation would therefore be;

- Weekday Am Peak 269 vehicles
- Weekday Pm Peak 273 vehicles
- Saturday Peak 346 vehicles

5.6 Trips By Type

5.6.1 Interview surveys were undertaken at the surveyed McDonald's restaurant during the survey periods. The purpose of the customer interview surveys was to establish the type of trips visiting a McDonald's restaurant with drive thru facilities in a roadside location.

5.6.2 Three primary trip types are referred to in this report as follows:

- Additional Trips:
 - These are specific car journeys to visit the McDonald's whereby customers return to their original location immediately after completing their visit:

e.g. Home → McDonald's → Home

- In the case of the proposed restaurant these are specific car journeys to visit the restaurant and are expected to come from Pyle, North Cornelly and Porthcawl.
- Diverted Trips:
 - These are trips where a driver is already on the network and alters their route to visit the McDonald's:
 - e.g. Home → McDonald's → Other Home
 - Work → McDonald's → Home
 - In the case of the proposed restaurant these existing trips which would largely divert from the A48 Roundabout.
- Pass By Trips
 - These are also trips which are already on the network in any event which as the driver passes the site they decide to make a visit.
 - In the case of the proposed restaurant would be existing trips on the A4229, the M4 or Pyle Interchange and the B4283 Roundabout.

5.6.3 Collectively, pass by and diverted trips can be referred to as “existing trips” as they represent all existing vehicles on the network. Some of the trips to the development would likely be shared with the adjacent uses that make up the development. Therefore, the traffic generation presented above is likely a worst case scenario.

5.6.4 The data from the customer interview surveys have been analysed and a summary of the analysis is included in Table 5I below.

Table 5I Customer Interview Survey Results McDonald's

Trip Type		Friday	Saturday
		%	%
Additional	Sole purpose trips to McDonald's	14%	9%
Existing	Same O/D McDonald's not main purpose OR Different O/D Passing on network	86%	91%
Total		100%	100%

5.6.5 Table 5I demonstrates that on a Friday evening 14% of trips to McDonald's could be expected to be additional trips to the restaurant and 86% would be existing on the road network. On a Saturday 9% would be additional trips and 91% would be existing. For the purposes of assessment, it will be assumed that the customer trip activity would be the same during the Am peak. This is considered to be a robust assessment as breakfast trade is more likely to be pass by as customers typically have less time to make additional journeys during the morning peak period.

5.6.6 The proportion of McDonald's trips by type based on the Newport Coldra survey has been assumed to be the same for both the PFS, Greggs and Starbucks. As a result, the proposed peak hour traffic has been split between additional and existing trips in Table 5J below. Therefore, the vast majority of the PFS, Greggs and Starbucks are considered to be existing trips on the M4 motorway or A4229 which would divert to the site. This is considered robust as the Starbucks and Greggs are a similar use to the McDonald's, while petrol filling stations are also unlikely to generate a significant number of sole purpose trips.

Table 5J Proposed Trips By Type

Customer Trip Type	Friday					Saturday		
	%	Am Peak		Pm Peak		%	Peak	
		In	Out	In	Out		In	Out
Additional	14%	38	36	38	39	9%	31	32
Existing	86%	231	221	235	240	91%	315	319
Total	100%	269	257	273	279	100%	346	351

5.6.7 The number of additional trips on the network generated by the proposed development is expected to be:

- Weekday AM peak 38 vehicles
- Weekday PM peak 38 vehicles
- Saturday peak 31 vehicles

6.0 PARKING AND DRIVE THRU DEMAND

6.1 McDonald's Restaurant

Parking Demand

6.1.1 The maximum parking demand for the McDonald's (including staff, reserved and accessible parking) is based on the survey results at the Newport Coldra Restaurant as outlined in Section 5.1. The maximum parking demand for the McDonald's is shown below.

- Friday 37 vehicles
- Saturday 37 vehicles

6.1.2 The McDonald's car park has capacity for 46 vehicles. The McDonald's car park would therefore have more than sufficient capacity to accommodate the proposed demand.

Drive Thru Demand

6.1.3 The predicated McDonald's drive thru queues are also based on the surveys of the McDonald's store outlined in Section 5.1. The results are shown in Table 6A below.

Table 6A Predicted Drive Thru Queues: McDonald's

	Time	McDonald's
Weekday	Minimum Q	1
	Maximum Q	12
	Average Q	6
Saturday	Minimum Q	0
	Maximum Q	11
	Average Q	5

6.1.4 The McDonald's drive thru lane has capacity for 22 vehicles (based on a 4.5m saloon; a greater number of smaller cars could be accommodated). It is concluded that the drive thru lane would have more than sufficient capacity to accommodate the expected demand.

6.2 Starbucks Coffee Shop

Parking Demand

6.2.1 The maximum parking demand for the Starbucks (including staff, reserved and accessible parking) has been calculated based on TRICS. It should be noted that the on-site accumulation is not the same as the parking demand due to the drive thru lane. The results are summarised in Table 6B below.

Table 6B TRICS Parking Accumulation Assessment: Starbucks

Weekday		Saturday	
Hour	Parking Accumulation	Hour	Parking Accumulation
06:00-07:00	3	06:00-07:00	2
07:00-08:00	5	07:00-08:00	6
08:00-09:00	7	08:00-09:00	5
09:00-10:00	9	09:00-10:00	9
10:00-11:00	9	10:00-11:00	12
11:00-12:00	9	11:00-12:00	10
12:00-13:00	11	12:00-13:00	10
13:00-14:00	10	13:00-14:00	9
14:00-15:00	9	14:00-15:00	7
15:00-16:00	10	15:00-16:00	7
16:00-17:00	8	16:00-17:00	8
17:00-18:00	5	17:00-18:00	6
18:00-19:00	4	18:00-19:00	3
19:00-20:00	2	19:00-20:00	1
20:00-21:00	1	20:00-21:00	1

6.2.2 Table 6B demonstrates that the maximum parking demand for the Starbucks would be 12 vehicles. The parking provision for the Starbucks would be 25 spaces, therefore the Starbucks would have sufficient car parking to accommodate the demand.

Drive Thru Demand

6.2.3 The Starbucks drive thru lane has capacity for 9 vehicles. The maximum parking demand would be 12 vehicles based on the TRICS assessment. The relatively low parking demand suggests that the drive thru demand would also be low. As drive thru customers would spend less time on site than in store customers parking demand it is considered that the maximum drive thru queue would only be a few vehicles at most. Therefore, the drive thru capacity is considered sufficient.

6.3 Greggs Bakery

Parking Demand

6.3.1 The maximum parking demand for the Greggs (including staff, reserved and accessible parking) has been calculated based on TRICS. The results are summarised in Table 6C below.

Table 6C TRICS Parking Accumulation Assessment: Greggs

Weekday		Saturday	
Hour	Parking Accumulation	Hour	Parking Accumulation
06:00-07:00	2	06:00-07:00	2
07:00-08:00	4	07:00-08:00	4
08:00-09:00	5	08:00-09:00	3
09:00-10:00	6	09:00-10:00	6
10:00-11:00	6	10:00-11:00	8
11:00-12:00	6	11:00-12:00	7
12:00-13:00	8	12:00-13:00	7
13:00-14:00	7	13:00-14:00	6
14:00-15:00	6	14:00-15:00	5
15:00-16:00	7	15:00-16:00	5
16:00-17:00	6	16:00-17:00	5
17:00-18:00	4	17:00-18:00	4
18:00-19:00	3	18:00-19:00	2
19:00-20:00	2	19:00-20:00	1
20:00-21:00	1	20:00-21:00	1

6.3.2 Table 6C demonstrates that the maximum parking demand based on TRICS would be 8 vehicles. The Greggs would have 25 parking spaces which would be sufficient to accommodate the proposed demand.

Drive Thru Demand

6.3.3 The Greggs drive thru lane has capacity for 9 vehicles. Similar to the Starbucks, based on the TRICS parking accumulation assessment it is considered that the maximum drive thru queue would only be a few vehicles at most. The proposed drive thru capacity would therefore be sufficient.

6.4 PFS

6.4.1 The parking demand for the PFS has been calculated based on TRICS. Similar to the Starbucks and Greggs it should be noted that the on-site accumulation is different to the parking accumulation due to the presence of filling bays and EV charging bays.

6.4.3 The parking accumulation assessment for the PFS is summarised below in Table 6D.

Table 6D TRICS Parking Accumulation Assessment: PFS

Weekday		Saturday	
Hour	Parking Accumulation	Hour	Parking Accumulation
06:00-07:00	5	06:00-07:00	5
07:00-08:00	6	07:00-08:00	5
08:00-09:00	8	08:00-09:00	5
09:00-10:00	9	09:00-10:00	7
10:00-11:00	8	10:00-11:00	7
11:00-12:00	8	11:00-12:00	7
12:00-13:00	8	12:00-13:00	7
13:00-14:00	7	13:00-14:00	7
14:00-15:00	8	14:00-15:00	7
15:00-16:00	7	15:00-16:00	6
16:00-17:00	6	16:00-17:00	7
17:00-18:00	6	17:00-18:00	7
18:00-19:00	6	18:00-19:00	5
19:00-20:00	6	19:00-20:00	5
20:00-21:00	5	20:00-21:00	5
21:00-22:00	5	21:00-22:00	5
22:00-23:00	3	22:00-23:00	5
23:00-24:00	3	23:00-24:00	5

6.4.4 Table 6D demonstrates that based on the TRICS parking accumulation assessment the maximum parking demand would be a maximum of 9 vehicles parked on site at any one time. The PFS car park has capacity for 17 vehicles which would be sufficient to accommodate the demand.

7.0 NETWORK TRAFFIC FLOWS

7.1 Survey Details

7.1.1 An ATC survey was undertaken on the A4229 northeastbound for 7 days between 13/07/22 and 19/07/22 to record the speed and volume of traffic.

7.1.2 Classified turning counts were also undertaken at Pyle Interchange and the B4283 roundabout to record all movements. The surveys were undertaken on the 15th July 2022 07:00-10:00 hours and 16:00-19:00 hours, and 16th of July 2022 11:00-15:00 hours. The survey also recorded the minimum and maximum queues at both junctions by arm and lane in five minute intervals.

7.2 Survey Results

Speed Survey Results: A4229 Northeastbound

7.2.1 The results of the speed survey are summarized in Table 7A below.

Table 7A Speed Survey Results A4222 Northeastbound

	A4229 Northeast
Average	42.4mph
85 th %ile	49.4mph

7.2.2 Based on the speed survey, the traffic speeds are actually considerably lower than the national speed limit on the A4229. The required visibility splay based on the recorded speeds would be 4.5 x 102 metres based on SSD calculations. The visibility splays at the site access therefore accord with the standards.

Traffic Survey Results

7.2.3 The traffic survey results at Pyle Interchange have been analysed to ascertain the network peak hours. The traffic survey results for the junction are summarised in Tables 2B and 2C below.

Table 7B 2022 Survey Results: Pyle Interchange

	Time	A4229 (N)	M4 Slip (E)	A4229 (S)	M4 Slip (W)	Total
Friday	07:00	658	386	756	442	2242
	08:00	734	554	825	404	2517
	09:00	607	519	695	359	2180
	16:00	698	906	700	493	2797
	17:00	614	807	703	455	2579
	18:00	473	663	611	342	2089
Saturday	11:00	551	806	673	385	2415
	12:00	540	818	684	419	2461
	13:00	470	853	591	386	2300
	14:00	466	647	716	455	2284

7.2.4 Table 7B demonstrates that the peak hours for Pyle Interchange would be.

- Friday AM 08:00 – 09:00 hours 2517 vehicles
- Friday PM 16:00 – 17:00 hours 2797 vehicles
- Saturday 12:00 – 13:00 hours 2461 vehicles

Table 7C 2022 Survey Results: B4283 Roundabout

	Time	A4229 (NE)	Porthcawl Road	A4229 (SW)	B4283	Total
Friday	07:00	451	125	559	240	1375
	08:00	718	146	744	323	1931
	09:00	688	106	642	220	1656
	16:00	1096	128	688	243	2155
	17:00	1038	105	690	255	2088
	18:00	851	88	627	236	1802
Saturday	11:00	1023	113	641	274	1954
	12:00	1048	117	628	197	1901
	13:00	1031	87	581	174	1806
	14:00	885	80	691	217	1810

7.2.5 Table 7C demonstrates that the peak hours for the network are:

- Friday AM 08:00 – 09:00 hours 1931 vehicles
- Friday PM 16:00 – 17:00 hours 2155 vehicles
- Saturday 11:00 – 12:00 hours 1954 vehicles

7.2.6 Tables 2B and 2C therefore demonstrate that the peak hours for the two roundabouts coincide in the AM and PM peaks, although the Saturday peak hours differ. For the purpose of this assessment the peak hours at Pyle Interchange have been taken as the network peak hours.

7.2.7 The network peak hours are as follows:

- Friday AM 08:00 – 09:00 hours 4448 vehicles
- Friday PM 16:00 – 17:00 hours 4952 vehicles
- Saturday 12:00 – 13:00 hours 4362 vehicles

7.2.8 The 2022 network peak surveyed traffic flows are shown on the diagrams in Appendix 11.1.

Queue Survey Results

7.2.9 Queue surveys were also undertaken at Pyle Interchange and the B4283 Roundabout. Table 7D is provided below and shows the results of the queue surveys at Pyle Interchange. Table 7E is also provided and shows the results of the queue surveys at the B4283 Roundabout.

Table 7D Queue Survey Results: Pyle Interchange

		A4229 (N)		M4 Slip (E)		A4229 (S)		M4 Slip (w)	
		Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
Friday AM Peak	Min	0	0	0	0	0	0	0	0
	Max	8	8	7	4	6	6	4	3
	Ave. Max	4	3	3	2	3	3	3	2
Friday PM Peak	Min	0	0	0	0	0	0	0	0
	Max	10	5	16	6	8	6	7	6
	Ave. Max	3	2	8	3	3	3	3	3
Saturday Peak	Min	0	0	0	0	0	0	0	0
	Max	4	5	20	3	4	4	4	2
	Ave. Max	2	2	6	2	2	2	2	1

7.2.10 Table 7D demonstrates that the maximum queue would be 22 vehicles across both lanes on the M4 Slip Road (east) arm during the Saturday Peak. During this period, the minimum queue was 0 vehicles, and the average maximum was 8 vehicles. This suggests that while queuing does occur it appears to clear quickly. The level of queuing recorded on the M4 slip roads can be accommodated by the slip road. The length of the maximum recorded queue (8 vehicles in one lane) on the A4229 (S) arm would not extend to the proposed site access.

Table 7E Queue Survey Results: B4283 Roundabout

		A4229 (NE)		Porthcawl Road		A4229 (SW)		B4283	
		Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
Friday AM Peak	Min	0	0	0	0	0	0	0	0
	Max	4	2	4	2	6	1	3	4
	Ave. Max	2	1	1	2	3	0	2	2
Friday PM Peak	Min	0	0	0	0	0	0	0	0
	Max	4	2	4	6	4	1	3	5
	Ave. Max	2	1	1	2	3	0	2	2
Saturday Peak	Min	0	0	0	0	0	0	0	0
	Max	6	1	3	4	5	1	3	2
	Ave. Max	2	0	1	2	2	0	1	2

7.2.11 Table 7E demonstrates that the maximum queue would be 10 vehicles across two lanes on the Porthcawl Road arm during the Friday PM peak. The minimum queue at the arm during this period was 0 vehicles and the average maximum was 5 vehicles. This suggests that while queuing does occur it clears quickly.

7.2.12 It is therefore concluded that while there is queuing that occurs at the two roundabouts, it appears to clear quickly and is not severe when it does occur. Therefore, it is considered that there is no existing issue with queuing at the two roundabouts.

7.3 Base Traffic Flows

7.3.1 The 2022 surveyed traffic flows have been growthed to 2025 (year of opening) using the following TEMPro and NTM growth rates for Bridgend. Trunk road type was selected when sourcing the growth factors.

- Friday AM Peak 1.0283
- Friday PM Peak 1.0281
- Saturday Peak 1.0307

7.3.2 The 2025 Base Flows are provided as Appendix 11.2.

7.3.3 The 2025 Base Flows were also growthed to 2030 (five year assessment) using the following TEMPro and NTM growth rates.

- Friday AM Peak 1.0424
- Friday PM Peak 1.0431
- Saturday Peak 1.0467

7.3.4 The 2030 Base Flows are provided as Appendix 11.3.

7.4 Trip Distribution

Additional Trips

7.4.1 The additional trips to the development are expected to largely originate from Pyle or North Cornelly. There would also be a number of additional trips which would originate from South Cornelly and Porthcawl. Therefore, the additional trips have been distributed according to the traffic flows going into the network on all links other than the M4 arms at Pyle Interchange. The additional trip distribution is shown in Table 7F below.

Table 7F Additional Trip Distribution

Peak Period	Junction	Arm	2025 Base Flows	% Trips	Additional Trips
AM Peak	Pyle Interchange	A4229 (North)	756	38%	14
		B4283	332	17%	7
	B4283 Roundabout	A4229 (South)	765	38%	14
		Porthcawl Road	149	7%	3
	Total		2002	100%	38
PM Peak	Pyle Interchange	A4229 (North)	716	40%	15
		B4283	250	14%	6
	B4283 Roundabout	A4229 (South)	707	39%	15
		Porthcawl Road	130	7%	2
	Total		1803	100%	38
Saturday Peak	Pyle Interchange	A4229 (North)	555	36%	11
		B4283	203	13%	4
	B4283 Roundabout	A4229 (South)	647	42%	14
		Porthcawl Road	120	8%	2
	Total		1525	100%	31

7.4.2 The existing trip distribution has also been based on the traffic flows on the network. ADL have used DfT traffic count data to ascertain the traffic flows at the M4 Roundabout. The traffic data was counted in 2016, ADL have grown the traffic counts to 2025 levels using Temprow growth factors.

7.4.3 It is considered that the vast majority of trips would be pass-by trips at Pyle Interchange or on the M4 and A4229 which would divert into the site. There may be some trips that would divert from the A48 Roundabout north of Pyle Interchange. Therefore 20% of trips from the A4229 arm at Pyle Interchange would be diverted trips. The existing trip distribution is shown in Table 7G below.

Table 7G Existing Trip Distribution

Peak Period	Junction	Arm	2025 Base Flows	% Trips	Existing Trips
AM Peak	Pyle Interchange	A4229 (North)	756	11%	25
		M4 (East)	2216	31%	72
		M4 (West)	2902	40%	92
	B4283 Roundabout	B4283	332	5%	12
		A4229 (South)	765	11%	25
		Porthcawl Road	149	2%	5
Total			7120	100%	231
PM Peak	Pyle Interchange	A4229 (North)	716	8%	19
		M4 (East)	4017	47%	110
		M4 (West)	2786	32%	75
	B4283 Roundabout	B4283	250	3%	7
		A4229 (South)	707	8%	19
		Porthcawl Road	130	2%	5
Total			8606	100%	235
Saturday Peak	Pyle Interchange	A4229 (North)	555	9%	29
		M4 (East)	2569	39%	122
		M4 (West)	2418	37%	116
	B4283 Roundabout	B4283	203	3%	10
		A4229 (South)	647	10%	32
		Porthcawl Road	120	2%	6
Total			6512	100%	315

7.4.4 The outbound additional trips have been distributed according to their original starting point. The outbound existing trips have been distributed according to their direction of travel.

7.4.5 The development traffic flows are provided as Appendix 12.0.

7.5 Total Traffic Flows

7.5.1 The 2025 and 2030 Total traffic flows are included as Appendix 13.0.

8.0 TRAFFIC IMPACT ASSESSMENT

8.1 PICADY Assessment: Site Access

8.1.1 ADL have undertaken a PICADY assessment of the Site Access arrangements using the computer program Junctions 10. A plan showing the junction geometry is included as Appendix 14.1 and the output results are included in Appendix 14.2. The results are summarised in Table 8A below.

Table 8A PICADY Results: Site Access

Arm & Movement	2025 Total					
	Weekday AM Peak		Weekday PM Peak		Saturday Peak	
	RFC	Q	RFC	Q	RFC	Q
Site Access	0.41	1	0.42	1	0.53	1
2030 Total						
	Weekday AM Peak		Weekday PM Peak		Saturday Peak	
	RFC	Q	RFC	RFC	Q	RFC
Site Access	0.41	1	0.42	1	0.53	1

8.1.2 Table 8A demonstrates that the maximum RFC would be 0.53 with a queue of 1 vehicle during the Saturday peak. The site access would therefore have more than sufficient capacity to accommodate the traffic generated by the proposal.

8.2 ARCADY Assessment: Pyle Interchange

8.2.1 ADL have undertaken an ARCADY assessment using Junctions 10 of Pyle Interchange. A plan showing the junction geometry is included as Appendix 15.1 and the output results are included in Appendix 15.2. The results are summarised in Table 8B below.

Table 8B ARCADY Results: Pyle Interchange

Arm & Movement	2025 Base						2030 Base					
	Weekday AM Peak		Weekday PM Peak		Saturday Peak		Weekday AM Peak		Weekday PM Peak		Saturday Peak	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
M4 (East)	0.30	0	0.47	1	0.39	1	0.32	1	0.50	1	0.41	1
A4229 (South)	0.34	1	0.28	0	0.25	0	0.36	1	0.30	0	0.26	0
M4 (West)	0.26	0	0.30	0	0.23	0	0.28	0	0.31	0	0.24	0
A4229 (North)	0.35	1	0.31	0	0.23	0	0.37	1	0.33	1	0.25	0
2025 Total												
	Weekday AM Peak		Weekday PM Peak		Saturday Peak		Weekday AM Peak		Weekday PM Peak		Saturday Peak	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
	M4 (East)	0.37	1	0.57	1	0.47	1	0.39	1	0.60	1	0.50
A4229 (South)	0.43	1	0.38	1	0.36	1	0.44	1	0.40	1	0.37	1
M4 (West)	0.35	1	0.37	1	0.31	0	0.37	1	0.39	1	0.33	0
A4229 (North)	0.41	1	0.35	1	0.28	0	0.44	1	0.37	1	0.29	0

8.2.2 Table 8B demonstrates that the maximum RFC would be 0.60 with a queue of 1 vehicle on the M4 Slip Road (East) arm during the 2030 Total weekday PM peak. Pyle Interchange would therefore have more than sufficient capacity to accommodate the traffic generated by the development. The modelling demonstrates that the queues on the A4229 would have no impact on the proposed site access.

8.3 ARCADY Assessment: B4283 Roundabout

8.3.1 ADL have also modelled the B4823 Roundabout. A plan showing the junction geometry is provided as Appendix 16.1 and the output results are provided as Appendix 16.2. The results are summarised in Table 8C below.

Table 8C ARCADY Results: B4823 Roundabout

Arm & Movement	2025 Base						2030 Base					
	Weekday AM Peak		Weekday PM Peak		Saturday Peak		Weekday AM Peak		Weekday PM Peak		Saturday Peak	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
A4229 (East)	0.32	1	0.44	1	0.41	1	0.33	1	0.46	1	0.43	1
Porthcawl Road	0.16	0	0.16	0	0.13	0	0.17	0	0.17	0	0.14	0
A4229 (West)	0.59	1	0.52	1	0.46	1	0.62	2	0.54	1	0.48	1
B4283	0.33	1	0.22	0	0.17	0	0.35	1	0.23	0	0.18	0
2025 Total												
	Weekday AM Peak		Weekday PM Peak		Saturday Peak		Weekday AM Peak		Weekday PM Peak		Saturday Peak	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
	A4229 (East)	0.42	1	0.54	1	0.53	1	0.43	1	0.56	1	0.55
Porthcawl Road	0.19	0	0.20	0	0.17	0	0.20	0	0.21	0	0.19	0
A4229 (West)	0.67	2	0.60	2	0.55	1	0.70	2	0.63	2	0.58	1
B4283	0.39	1	0.26	0	0.21	0	0.41	1	0.28	0	0.23	0

- 8.3.2 Table 8C demonstrates that the maximum RFC would be 0.70 with a queue of 2 vehicles on the A4229 (west) arm during the 2030 Total scenario. The B4823 Roundabout would therefore have more than sufficient capacity to accommodate the proposed traffic.
- 8.3.3 The results of the capacity assessments above demonstrate that the traffic generated by the proposal would have a negligent impact on the operation of the surrounding road network and the road network would operate well within capacity.

9.0 MITIGATION MEASURES AND OTHER REPORTS

9.1 Mitigation Measures

9.1.1 No further mitigation measures are required.

9.2 Travel Plan/Delivery Management Plan

9.2.1 A Travel Plan and/or Delivery Management Plan could be secured by condition if required.

10.0 PLANNING POLICY ASSESSMENT

10.1 Planning Policy Wales (Edition 11 February 2021)

10.1.1 The Planning Policy Wales Edition 11 (adopted February 2021) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales.

10.1.2 Chapter 4.0 of PWW covers the theme of ‘Active and Social Places’ and the transportation components of place making.

10.1.3 The principle of the PWW policy is to encourage sustainable travel as set out in paragraph 4.1.1:

“4.1.1 The planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport. By influencing the location, scale, density, mix of uses and design of new development, the planning system can improve choice in transport and secure accessibility in a way which supports sustainable development, increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution by:

- *Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;*
- *Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and*
- *Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles.*

10.1.4 The proposed development site is accessible by walking, cycling and public transport. The vast majority of vehicle trips to the restaurant would be existing on the network in any event.

10.1.5 As set out in paragraph 4.1.9 The Welsh Government will seek to encourage cycling:

“4.1.9 The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport’.

10.1.6 It is proposed to provide cycle parking for staff and customers to encourage cycling. The site is located in a mature urban, environment and would link with the existing walking/cycling infrastructure.

10.1.7 Paragraph 4.1.11 states that development proposals should seek to maximise accessibility:

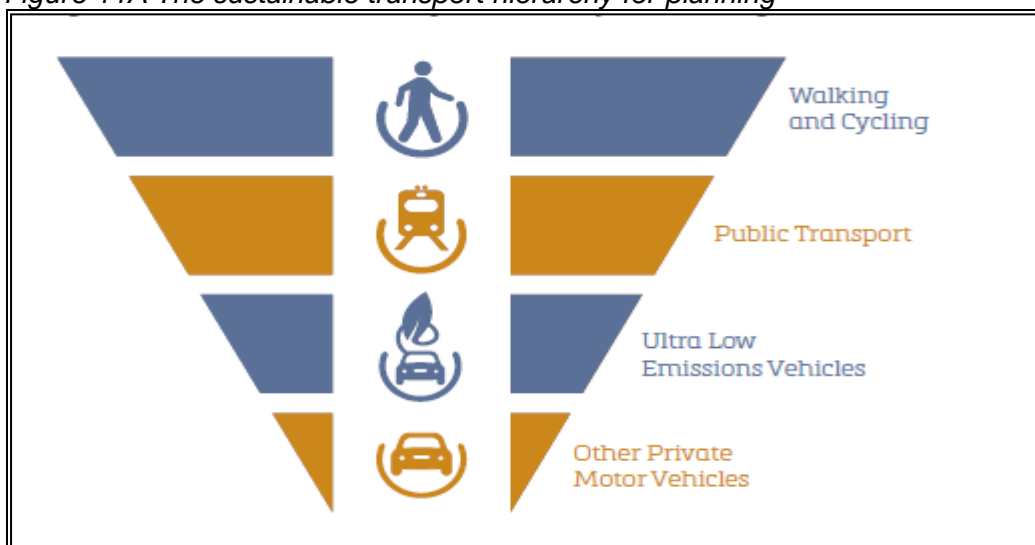
“4.1.11 Development proposals must seek to maximise accessibility by walking, cycling and public transport, by prioritising the provision of appropriate on-site infrastructure and, where necessary, mitigating transport impacts through the provision of off-site measures, such as the development of active travel routes, bus priority infrastructure and financial support for public transport services”.

10.1.8 The site is accessible by walking, cycling and public transport. The proposal would link to the existing pedestrian infrastructure.

10.1.9 The Welsh Government have set out a hierarchy for sustainable transport in relation to new development as follows:

“4.1.12 it is Welsh Government policy to require the use of a sustainable transport hierarchy in relation to new development, which prioritises walking, cycling and public transport ahead of the private motor vehicles. The transport hierarchy recognises that Ultra Low Emission Vehicles also have an important role to play in the decarbonisation of transport, particularly in rural areas with limited public transport services.”

Figure 11A The sustainable transport hierarchy for planning



10.1.10 There are bus stops close to the site. Cycle parking would be provided for customers and staff.

10.1.11 The PPW acknowledges in para 4.1.17 that in rural areas the approach to sustainable transport will be site specific:

“4.1.17 Different approaches to sustainable transport will be required in different parts of Wales, particularly in rural areas, and new development will need to reflect local circumstances.”

10.1.12 The level of sustainable travel options is considered reasonable for an edge of town/roadside location.

10.1.13 The PPW promotes Active Travel and sets out that new development should integrate with existing active travel networks;

“4.1.30 New development places additional demand on transport infrastructure and networks, with the location, layout and design of development affecting the distance and way in which people travel. Developing local active travel networks can help to mitigate the impact of new development, by providing an alternative mode of travel to the private car, particularly for shorter journeys. Provision for active travel must be an essential component of development schemes and planning authorities must ensure new developments are designed and integrated with existing settlements and networks, in a way which makes active travel a practical, safe and attractive choice.”

10.1.14 The proposed development is intended to provide a local facility primarily for existing motorists on the network in any event.

10.1.15 The PPW sets out in relation to cycle parking that:

“4.1.35 New development must provide appropriate levels of secure, integrated, convenient and accessible cycle parking and changing facilities. As well as providing cycle parking near destinations, consideration must also be given to where people will leave their bike at home. Guidance on cycle parking is contained within the Active Travel Design Guidance. Planning authorities may alternatively wish to adopt locally specific minimum cycle parking standards and guidance.”

10.1.16 Cycle parking will be provided in accordance with the Council's Standards.

10.1.17 The PPW sets out in relation to public transport that:

“4.1.37 Planning authorities must direct development to locations most accessible by public transport. They should ensure that development sites which are well served by public transport are used for travel intensive uses, such as housing, jobs, shopping, leisure and services, reallocating their use if necessary. In rural areas, planning authorities should designate local service centres, or clusters of settlements where a sustainable functional linkage can be demonstrated, as the preferred locations for new development.”

10.1.18 The site is accessible by public transport.

10.1.19 Paragraphs 4.1.49, 4.1.50, and 4.1.52 outline the Welsh policy regarding car parking provision:

“4.1.49 Car parking provision is a major influence on how people choose to travel and the pattern of development.

4.1.50 A design-led approach to the provision of car parking should be taken, which ensures an appropriate level of car parking is integrated in a way which does not dominate the development. Parking provision should be informed by the local context, including public transport accessibility, urban design principles and the objective of reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Planning authorities must support schemes which keep parking levels down, especially off-street parking, when well designed. The needs of disabled people must be recognised and adequate parking provided for them.

4.1.52 Local authorities should develop an integrated strategy on parking to support the overall transport and locational policies of the development plan. Local authorities should consider parking issues on a joint basis with neighbouring authorities. They should jointly establish maximum levels of parking for broad classes of development, together with a threshold size of development above which such levels will apply. These maximum standards should be set in collaboration with interested organisations. Local authorities will need to ensure that their parking standards reflect local transport provision, are adopted by individual authorities as supplementary planning guidance, and are kept under review. Parking standards should be applied flexibly and allow for the provision of lower levels of parking and the creation of high-quality places.”

10.1.20 An appropriate level of parking is proposed which is sufficient to accommodate the operational needs of the proposal.

10.1.21 PPW regarding Transport Assessments, sets out that:

“4.1.55 Transport Assessments are an important mechanism for setting out the scale of anticipated impacts a proposed development, or redevelopment, is likely to have. They assist in helping to anticipate the impacts of development so that they can be understood and catered for appropriately.”

10.1.22 A Transport Assessment has been prepared to support the planning application.

10.1.23 The proposal accords with the Welsh National Guidance.

10.2 Local Planning Policy

10.2.1 The existing Bridgend Local Development Plan (2006-2021) was Adopted in September 2013 is currently the main document setting out the Borough Council’s vision and guiding development in the Borough. A new Local Development Plan Deposit Consultation Document (2018-2033) has been drafted. The new Local Development Plan has been reviewed as a part of this TA as it will likely be in place when the proposed restaurant opens.

10.2.2 Policy SP3 refers to strategic transport planning principles and is split into several points. The points relevant to this application are summarised below.

“All development proposals should promote safe, sustainable and healthy forms of transport through good design, enhance walking and cycling provision, and improved public transport provision.

3) Favours development which is located close to public transport facilities.”

- The development would primarily serve motorists on the M4 which would largely be existing to the network.

“4) Reduces congestion, the need to travel, and reliance on the private car.”

- The majority of trips would be existing to the network in any event. The road network has more than sufficient capacity to accommodate the proposed demand. The services provided by the development would provide more local facilities for residents in Pyle and Porthcawl and would reduce the distance travelled by customers.

“6) Improves road safety”

- There are no highways safety issues that need to be addressed as a part of this development.

“9) Provides appropriate standards of car parking”

- The proposed level of car parking is sufficient to accommodate the proposed demand and accords with the Council’s standards.

10.2.3 Policy PLA5 refers to development in transport corridors which includes the M4 Junction 37. The policy states:

“Development which would:

- a) adversely affect safe and efficient movement in these corridors; and/or***
- b) create or exacerbate harm to the environment along them; and/or***
- c) not be capable of mitigation;***

Will not be permitted”

- The proposed development would not require any mitigation and would not have an adverse impact on the operation of the highway network.

10.2.4 The proposal therefore accords with national and local planning policy.

11.0 SUMMARY AND CONCLUSIONS

- 11.1 ADL Traffic and Highways Engineering have been appointed by McDonald's Restaurants Ltd to prepare this Transport Assessment (TA) in support of the planning application for the redevelopment of land off the A4229, Pyle, to provide a mixed-use roadside services development. The development comprises a McDonald's restaurant with side-by-side drive thru facilities, a Starbucks coffee shop with drive thru facilities, a Greggs bakery with drive thru facilities and an 8 pump petrol filling station with associated retail area and EV charging facilities.
- 11.2 Pre-application advice was provided by Bridgend County Borough Council.
- 11.3 There are no highways safety issues associated with the study area which need to be addressed as part of this application.
- 11.4 The analysis of the existing services along the M4 corridor has demonstrated that the nearest service facility to the east is 8.7km from the site and nearest service facility to the west is Moto Swansea which is 31km from the site. The proposed services therefore provides a service facility for motorists on the A4229 and provides an additional facility for motorists on the M4 where there is currently a lack of a services facility between the Moto Swansea and Welcome Break Sarn services.
- 11.5 There is an acceptable level of walking, cycling and public transport accessibility given the roadside nature of the site. Pedestrian improvements are proposed as part of the scheme.
- 11.6 It is proposed to redevelop the site to provide a mixed-use scheme comprised of a McDonald's restaurant, a PFS, Greggs bakery and a Starbucks coffee shop. The McDonald's restaurant would be a 377sqm (GFA), 356sqm (GIA), single storey building with side-by-side drive thru facilities. The dining area would be 96sqm with 76 seats. The Starbucks would be a 273sqm (GEA) single storey building with a drive thru lane and a 91sqm dining area. The PFS would have 8 filling bays, 2 of which can be used by HGV's, 10 Electric Vehicle Charging Points (EVCP's) and a 461sqm (GEA), 434sqm

(GIA) shop. The Greggs would be a 170sqm (GEA), 167sqm (GIA) single storey building with a drive thru lane and a 57sqm dining area.

- 11.7 There would be 47 parking spaces for the McDonald's including 2 accessible spaces and 1 grill bay. There would be 25 spaces for the Starbucks, including 2 accessible bays and 1 grill bay. There would be 19 spaces for the PFS and shop including 2 accessible bays. There would be 25 spaces including 2 accessible bays, and 2 grill bays provided for the Greggs bakery. There would therefore be a total of 113 car parking spaces (total) including 8 accessible spaces for disabled customers and 4 reserve bays for drive thru customers.
- 11.8 Access to the site would be provided via a left in, left out access arrangement with slip lanes on the A4229. Internally there would be a roundabout which would provide access to the different plots that comprise the scheme.
- 11.9 It is proposed to provide pedestrian access via a new footway on the northern side of the A4229. The footway would link to the existing footway on the B4283. The footway would access the site adjacent to the site ingress.
- 11.10 Appropriate arrangements are proposed for the servicing of the development and management of deliveries.
- 11.11 The total proposed traffic generation of the development is as follows:
- Am Peak 270 vehicles
 - Pm Peak 274 vehicles
 - Saturday Peak 348 vehicles
- 11.12 It has been demonstrated that during the weekday AM and PM peaks on a Friday 14% of trips to McDonald's could be expected to be additional trips to the development and 86% would be existing on the road network. During the Saturday peak 9% of trips could be additional and 91% would be existing on the network. These trip types have been applied to the PFS, Starbucks and Greggs.

11.13 The number of additional trips to the network are as follows:

- AM Peak 38 vehicles
- PM Peak 38 vehicles
- Saturday Peak 31 vehicles

11.14 The proposed development would have no material impact on the operation of the local highway network. The modelling has demonstrated that the queues on the A4229 would have no impact on the proposed site access.

11.15 The proposed parking provision is sufficient for the proposed operational requirement. The proposed drive thru lanes would have sufficient capacity to accommodate the anticipated demand.

11.16 A Travel Plan and/or a Delivery Management Plan could be dealt with by condition if required.

11.17 The proposal accords with national and local planning policy guidance.

11.18 It is concluded that there are no justifiable, traffic, transportation or highways reasons for refusing this application.

PRE-APPLICATION ADVICE

Mr. G. Powys Jones
gpowysjones@aol.com

Grwp Datblygu/Development Group (Planning)
Deialu uniongyrchol / Direct Line: 643152
Gofynnwch am / Ask for: Mr R. Davies

Ein cyf / Our ref: PE/319/2021
Eich cyf / Your ref:
Dyddiad / Date: 05 November 2021

By Email

Dear Powys,

REQUEST FOR NON STATUTORY ADVICE LAND ADJACENT TO M4 JUNCTION 37, PYLE DEVELOPMENT OF MOTORWAY RELATED SERVICE AREA

I refer to your pre-application submission received on 17 August 2021, and our Teams meeting on 1 October 2021 in relation to the above project. I apologise for the delay in responding to the query.

PROPOSAL AND SITE DESCRIPTION

The proposal is detailed in the supporting pre-application enquiry. In short, it has been submitted on behalf of Draycott Investments and Developments and it is proposed to develop a motorway-related service area with 4 separate segments to potentially include a petrol station with electric vehicle charging points (Site A), a McDonalds type drive thru and restaurant (Site D) and a Greggs or Starbucks type unit (Site C). Site B has not been allocated a use at this stage.

It is intended that the scheme would roughly replicate a similar development at St. Clears in Carmarthenshire and, subject to achieving planning permission, the developer would aim to be operational within 24-30 months.

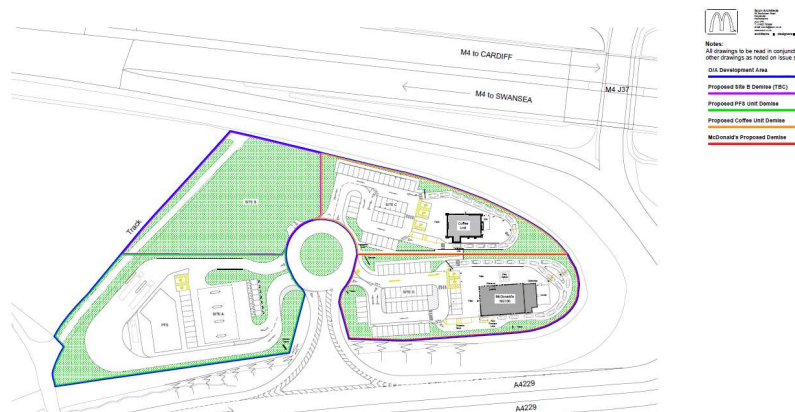


Fig. 1 – Indicative Layout

Ffôn/Tel: 01656 643643

Facs/Fax: 01656 668126

Ebost/Email: talktous@bridgend.gov.uk

Negeseuon SMS/ SMS Messaging: 07581 157014

Twitter@bridgendCBC

Gwefan/Website: www.bridgend.gov.uk

Cyfnwidi testun: Rhwch 18001 o flaen unrhyw un o'n rhifau ffon ar gyfer y gwasanaeth trosglwyddo testun

Text relay: Put 18001 before any of our phone numbers for the text relay service

Rydym yn croesawu gohebiaeth yn Gymraeg. Rhwch wybod i ni os mai Cymraeg yw eich dewis iaith

We welcome correspondence in Welsh. Please let us know if your language choice is Welsh

The service area will provide a facility for users of the M4 between the existing services at Sarn (Junction 36 to the east) and at Swansea West (Junction 47 to the west). Access to the site from the M4 will be gained via the A4229 and the roundabout that forms the junction with the B4283. The centrally located site entrance to the northern carriageway of the A4229 will include deceleration and acceleration lanes.



Fig. 2 – Aerial View of the Site

The site lies within the open countryside between the M4 and North Cornelly to the north and the A4229 and South Cornelly to the south. The site is also to the north-east of the Gaens Quarry Buffer Zone but is within the High Purity Limestone Safeguarding Area.

PROCEDURAL MATTERS

The proposal for the service area would cover an area in excess of 10,000 sq. m. (1 Ha) and would constitute 'Major Development.' It would, therefore, be classed as a project requiring you to undertake a formal pre-application consultation process. Developers are required to undertake pre-application consultation with “community consultees and “specialist consultees”. The consultee is required to provide a “substantive response” to the developer within 28 days, or within such period as agreed. Any subsequent application must then include a PAC Report to ensure validation.

In terms of “Community Consultees,” the site is located within the Cornelly Ward which is represented by Councillors Richard Granville (64 Heol Onnen, North Cornelly, Bridgend, CF33 4DS Home: 01656 749321 Cllr.Richard.Granville@bridgend.gov.uk) and Jefferson Tildesley MBE (Llanberis House, 23 Heol Fach, North Cornelly, CF33 4LB Work: 01656 643375 Home: 01656740320 Cllr.Jeff.Tildesley@Bridgend.gov.uk). It should be noted that Cllr Granville is the Vice Chair of the Council’s Development Control Committee.

The Clerk to Cornelly Council (Dawn Clark) can be contacted at: Cornelly Community Centre, Heol Las North Cornelly, Bridgend CF33 4AS Tel. No. 07882044798 E-mail Cornellyclerk@gmail.com

The list of “Specialist Consultees” should include the following:

- Transportation and Engineering (Highways) – Leigh Tuck – leigh.tuck@bridgend.gov.uk
- Biodiversity Policy and Management Officer (Ecology) – Jess Hartley - jess.hartley@bridgend.gov.uk
- Land Drainage (SAB Approval) – Gethin Powell - gethin.powell@bridgend.gov.uk

PLANNING HISTORY

None relevant.

RELEVANT PLANNING POLICIES

National Policies

Planning Policy Wales (PPW – Edition 11) Feb 2021.

Future Wales 2040

TAN12: Design (2016)

TAN18: Transport

PPW 11 re-affirms that good placemaking is essential to the delivery of sustainable development and is a key element in delivering the aspirations of the Well-being of Future Generations Act. Planning decisions, big or small 'should improve the lives of both our current and future generations'. As discussed at the meeting, and notwithstanding the target customers for this facility, PPW11 also promotes Active Travel as being a key component of future developments.

Local Policies

The Development Plan for the area comprises the Bridgend Local Development Plan 2006-2021 (LDP) which was formally adopted by the Council in September 2013 and within which the following Policies are of relevance:-

- Strategic Policy SP2 – Design and Sustainable Place Making
- Strategic Policy SP3 – Strategic Transport Planning Principles
- Strategic Policy SP4 – Conservation and Enhancement of the Natural Environment
- Strategic Policy SP10 – Retail and Commercial Hierarchy
- Strategic Policy SP14 – Infrastructure
- Policy ENV1 – Development in the Countryside
- Policy ENV6 – Nature Conservation
- Policy ENV9 – Development in Mineral Safeguarding Areas
- Policy PLA4 – Climate Change and Peak Oil
- Policy PLA5 – Development in Transport Corridors
- Policy PLA11 – Parking Standards

Supplementary Planning Guidance:

SPG02: Householder Development

SPG13: Affordable Housing

SPG16: Education Facilities' and Residential Development

SPG17: Parking Standards

MAIN CONSIDERATIONS

Principle of the Development

The site is located outside the main settlements of North Cornelly and South Cornelly as defined by Policy PLA1 of the Bridgend Local Development Plan (LDP). Adopted LDP Policy PLA1 (Settlement Hierarchy and Urban Management) accurately defines the urban area from the countryside to provide certainty and direction as to where appropriate development will be permitted. As the site in question is located outside of any settlement boundary as defined by Policy PLA1 it is therefore classed as being located within the countryside in planning terms. New building in the countryside is strictly controlled by the adopted LDP.

Policy ENV1 states:

Development in the countryside of the County Borough will be strictly controlled.

Development may be acceptable where it is necessary for:

- 1) Agriculture and/or forestry purposes;
- 2) The winning and working of minerals;
- 3) Appropriate rural enterprises where a countryside location is necessary for the development;
- 4) The implementation of an appropriate rural enterprise/ farm diversification project;
- 5) Land reclamation purposes;
- 6) Transportation and/or utilities infrastructure;
- 7) The suitable conversion of, and limited extension to, existing structurally sound rural buildings where the development is modest in scale and clearly subordinate to the original structure;
- 8) The direct replacement of an existing dwelling;
- 9) Outdoor recreational and sporting activities; or
- 10) The provision of Gypsy Traveller accommodation.

Where development is acceptable in principle in the countryside it should where possible, utilise existing buildings and previously developed land and/or have an appropriate scale, form and detail for its context.

The supporting text to the policy at paragraphs 4.1.11 and 4.1.12 state:

4.1.11 It is accepted that certain developments may be appropriate in the countryside, provided that they will encourage rural enterprise and bring wider community benefits to the County Borough or region. Examples are mineral extraction, or improvements to transportation, or essential utility service infrastructure, where these developments could not be located in neighbouring designated settlements. However these developments will still need to meet other policies in the Plan, particularly those in relation to nature and environmental protection.

4.1.12 Policy ENV1 therefore represents the starting point for the assessment of all future development proposals for development in 'the countryside' of the County Borough. The policy will not be set aside lightly, in the interests of maintaining the integrity of the countryside.

It is accepted that there are no specific policies within the LDP that relate to this type of development. As discussed at the meeting, the proposal for a new motorway service area to the south of Junction 37 of the M4 does not meet any of the exceptional criteria set out by Policy ENV1 of the adopted LDP.

As such, further justification would be required to demonstrate that there is an **overriding need** for this type of development in this countryside location.

It is apparent that the proposal is retail-led and places significant emphasis on introducing new A3 uses within the countryside. In order to deliver the 'Town Centre First' principle outlined within national planning policy, the Council considers that 'A' uses are most sustainably located within the town centres of the County Borough.

This reflects the fact that town centres are the most accessible parts of the County Borough and are adapting to become increasingly multi-functional. Such facilities and services should be directed to town centres in the first instance, to capitalise on their health and vibrancy, whilst ensuring intended users can easily walk, cycle and/or use public transport to access them.

In contrast, the proposal seeks to develop several A3 uses to the south of the M4. These developments would only be accessible by private vehicles, would lead to increased car-borne trip generation solely for the purposes of accessing such A3 outlets and would not be conducive to a modal shift towards active travel.

Whilst there is considerable commercial interest in developing A3 uses at this location, justification should be provided as to why this countryside location is considered more appropriate for a retail-led development than a town centre location. Therefore, you should clearly also demonstrate that there is an overriding need for this development contrary to Policy ENV1.

Highway Impact

The planning system has a key role to play in reducing the need to travel and supporting sustainable transport, by facilitating developments which:

- are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car;
- are designed in a way which integrates them with existing land uses and neighbourhoods; and
- make it possible for all short journeys within and beyond the development to be easily made by walking and cycling.

The site is not in a very sustainable location as it is going to be dependent on the private car due to its very nature.

A transport assessment will be required to quantify the vehicle movements generated by the development and understand the impact of any new trips on the local highway network.

The access to the site is considered to be too close to the M4 junction roundabout. This arm of the roundabout often suffers from queueing in the peak traffic hours and will most likely queue past the proposed site access creating a highway safety concern. To remove the concerns any access into site should be relocated as far west as possible.

As discussed at the meeting, there is reasonable concern that the proposal will become a 'destination in its own right' and draw local residents (from as far afield as Porthcawl) to the site. Due to the location of the site those local trips are likely to be made by private motor vehicles, which is contrary to Welsh Government Policy and the need to move towards a modal shift. You will, therefore, have to demonstrate how this concern can be mitigated.

The site should aim to promote active travel and link to existing routes where possible. Reference should be made to the Active Travel Integrated Network Maps, which identify the active travel routes which are yet to be constructed. The applicant should then illustrate where this proposal can link to the proposed routes and where possible provide the infrastructure.

In order to improve the sustainability credentials of the site, as well as incorporating electric vehicle charging points (and as many as possible), the applicant is invited to contact the transportation policy team of BCBC to discuss the potential of a park and ride use serving Porthcawl. However, any P&R scheme would need to be funded privately as the Council's preference is to support and use Government funding for an equivalent facility at Pyle Station as it would encourage linked public transport trips.

It is not possible to come up with a notional figure for the number of P&R or car share spaces required although it would be useful for you to carry out some research into this with providers. It will also heavily depend on the Porthcawl parking strategy surveys and study, which is currently taking place, that will quantify how many parking spaces will be lost in the Porthcawl regeneration project and will need to be replaced by the P&R scheme. That study is also looking at P&R sites on the outskirts of Porthcawl Town which would be funded by the regeneration.

As stated above, and mainly due to the location of this site, your client would have to provide the P&R land and also fund the bus services, as this is not a location which would be supported by the Cardiff Metro City Deal. It is therefore considered that this site would only have the potential to serve Porthcawl P&R.

Finally, parking should be provided as per SPG17 – the Council’s adopted parking standards.

Foul Drainage/Sustainable Drainage Systems

It is likely that foul water from the development will need to be disposed to a DCWW public sewer. You will need to provide an agreement in principle from DCWW for the proposed connection.

Surface water may be able to be disposed of via infiltration. Infiltration systems must be designed in accordance with BRE-Digest 365 and must not be situated within 5m of buildings or boundaries. A minimum of three infiltration tests shall be undertaken for each trial hole.

As the development will far exceed 100 sq. m., a sustainable drainage application will be required. Maintenance of the sustainable drainage features will remain with the single landowner. The applicant will need to consider how the interception criteria will be achieved for the hardstanding area associated with the petrol station and retail unit footprints. Drainage shall be to green SuDS features prior to disposal to the infiltration system.

These systems must be approved by the Bridgend SAB before construction work begins. The sustainable drainage application form shall be submitted before or alongside the planning application. The applicant is advised to contact the Bridgend SAB to discuss the drainage implications from the proposed development via the contact details within the link below (The sustainable drainage application form and supporting information required for the application can be accessed from the link below):

<https://www.bridgend.gov.uk/residents/recycling-waste-and-environment/environment/flooding/sustainable-drainage-systems/>

No surface water is allowed to discharge to the public highway.

No land drainage run-off will be permitted to discharge (either directly or indirectly) into the public sewerage system.

Ecology/Trees

The proposal will require a Preliminary Ecological Appraisal/Extended Phase 1 Habitat Survey which will inform what additional surveys are required and the biodiversity enhancement measures that can be implemented.

The survey will scope out any potential protected species issues and identify any mitigation measures if required, as well as recommendations in respect of timing of works and good working practices to reduce the impact on wildlife.

To assist, Supplementary Planning Guidance (SPG) 19 Biodiversity and Development: A Green Infrastructure Approach, includes detailed information on protected species, survey requirements and timing of works/surveys, which can be viewed at: <https://www.bridgend.gov.uk/media/1840/final-green-infrastructure-spg-for-web.pdf>

It is encouraging that you are aiming to retain as many trees around the periphery of the site as possible although a number of them will need to be removed to allow for the access and visibility splays.

It is advised that a tree survey and report are submitted with any subsequent application to indicate the level of felling and retention of trees in and around the site and a tree planting/landscaping scheme should illustrate the proposals to enhance the site from visual and biodiversity enhancement points of view.

S106 Obligations

Policy SP14 of the LDP requires applicants to enter into Planning Obligations or alternatively provide contributions if they are deemed necessary to offset any negative consequences of development. The most relevant issues to be considered in this regard relate to:-

Highway Improvements

There is likely to be a requirement to enter into a S106 agreement for a sum to facilitate new traffic orders.

Future Application Validation Requirements

The relevant documents that would be required to be submitted with any formal planning application are:-

- Site Location Plan
- Planning Supporting Statement
- Detailed Design and Access Statement
- Justification Statement to evidence the overriding need for this development
- Topographical Survey
- Detailed Site Layout, Plans and Elevations
- Drainage Scheme
- Landscaping Scheme
- Phase 1 Habitat Survey and Proposed Biodiversity Enhancements
- Transport Statement
- Construction Method Statement and
- PAC Report.

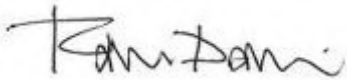
CONCLUSION

Having regard to the above, it is considered that a further meeting will be necessary once you have been able to prepare some evidence to show the overriding need for this development in this location and once you have considered the scope to increase the sustainability credentials of the scheme through a commercial P&R element to serve visitors to Porthcawl. A follow up meeting will concentrate on these matters before a detailed design can be prepared for comment.

The above advice is offered without prejudice to any future advice offered or decision made by the Authority in respect of any future proposals for the redevelopment of this site.

I trust that the above information is sufficient at this time.

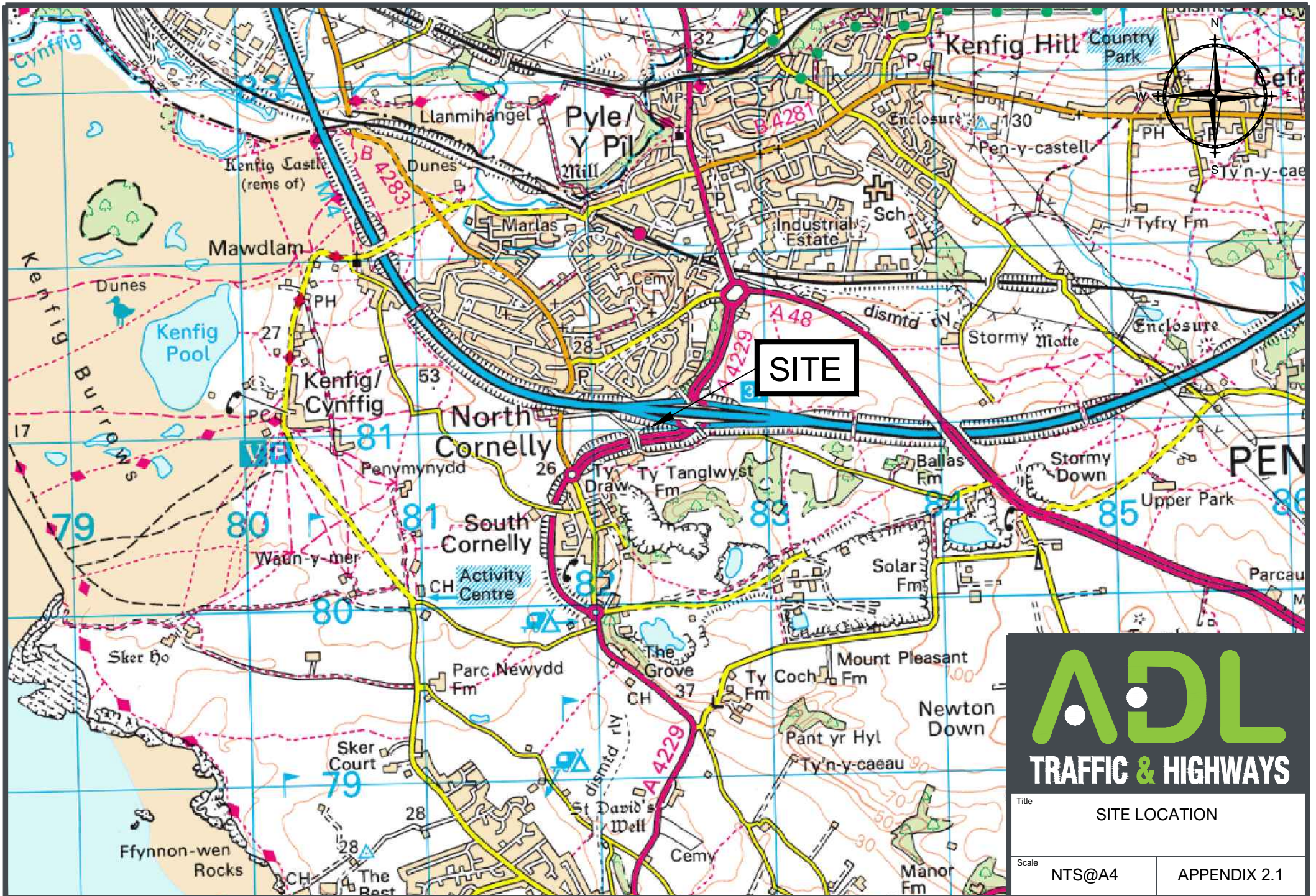
Yours sincerely,

A handwritten signature in black ink, appearing to read 'Rhodri Davies', written in a cursive style.

Mr. Rhodri Davies BA, BTP, MRTPI
Development and Building Control Manager

SITE LOCATION AND SURROUNDING AREA

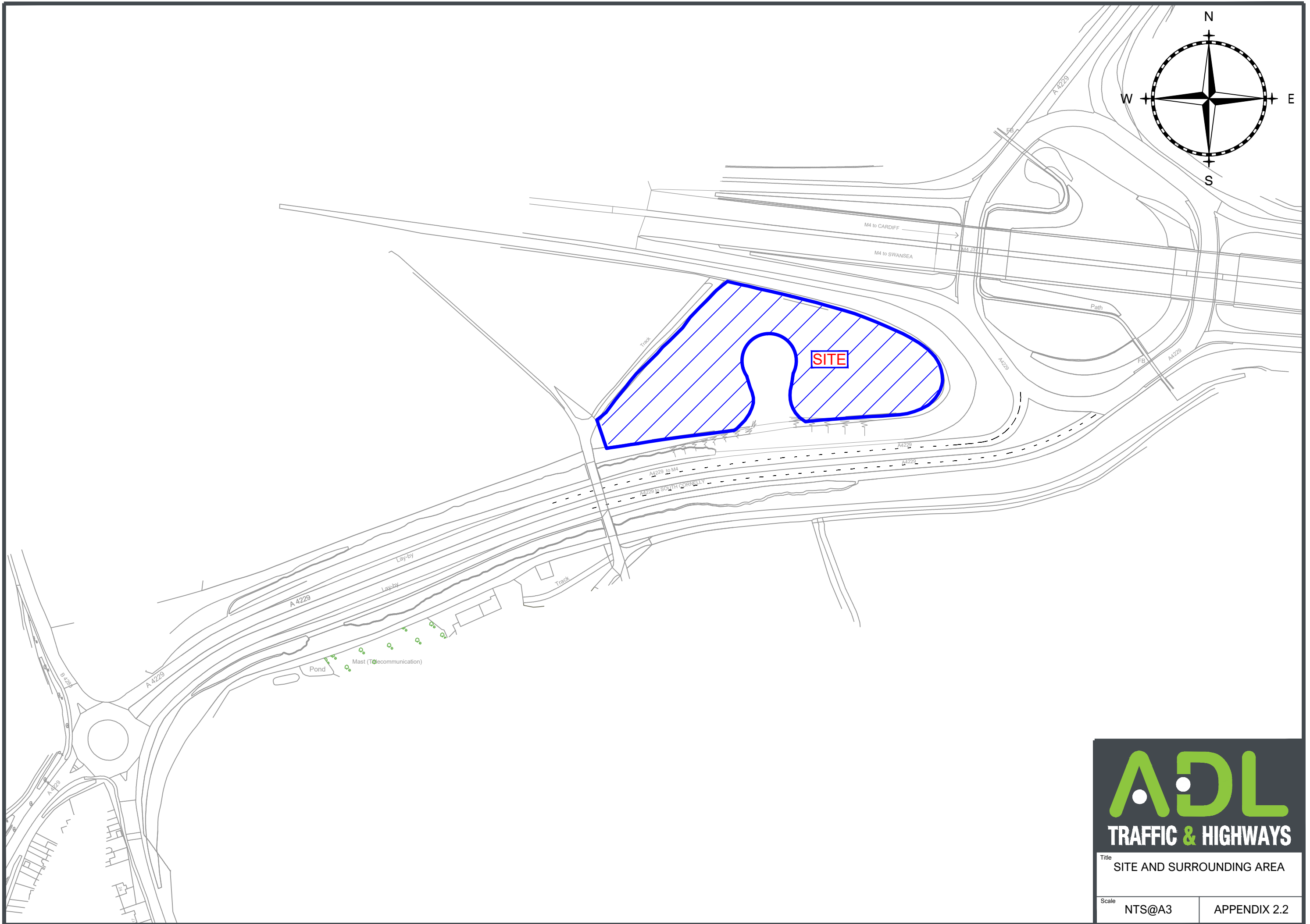
2.1	Site Location
2.2	Site and Surrounding Area



ADL
TRAFFIC & HIGHWAYS

Title: SITE LOCATION

Scale: NTS@A4 APPENDIX 2.1



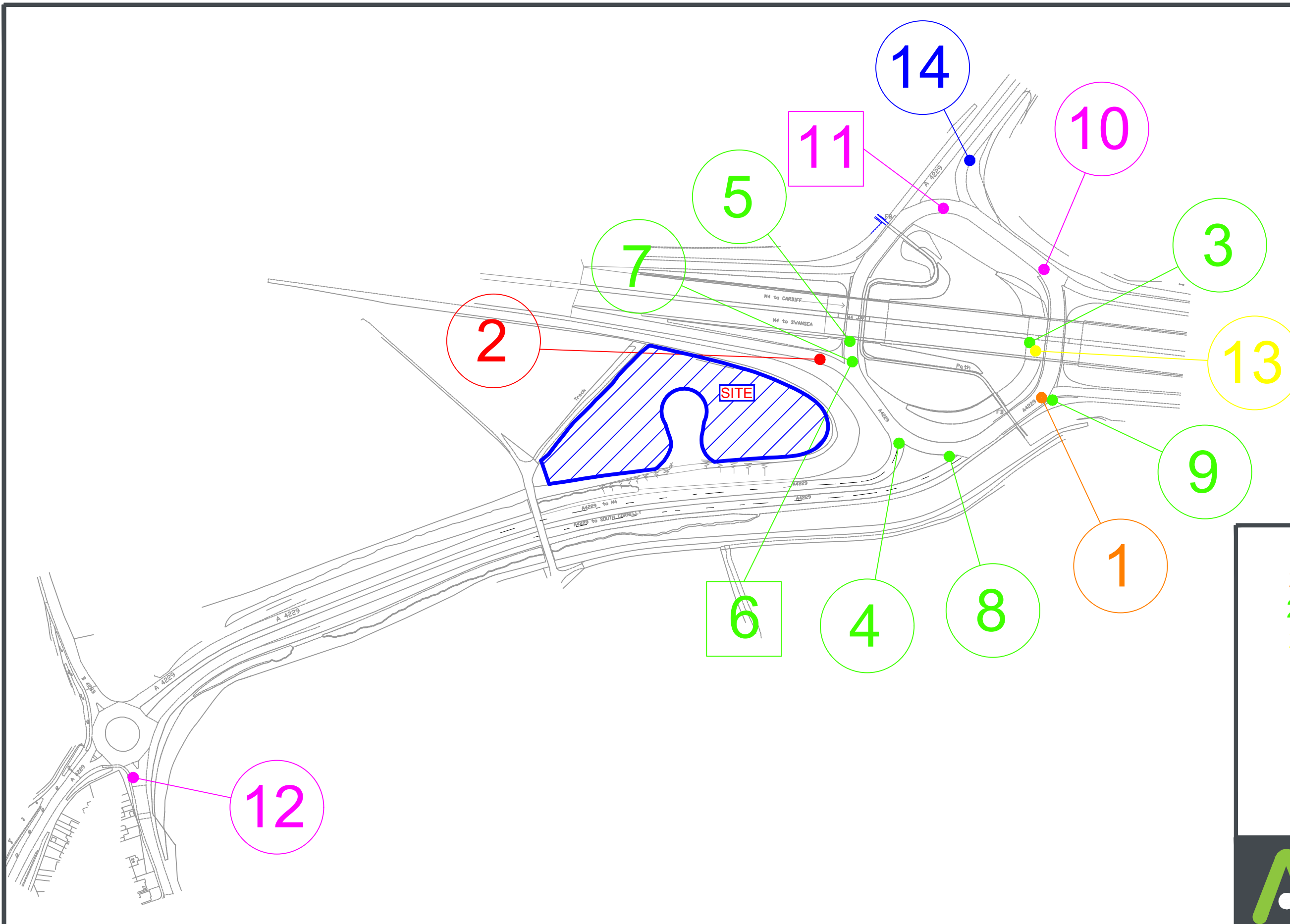
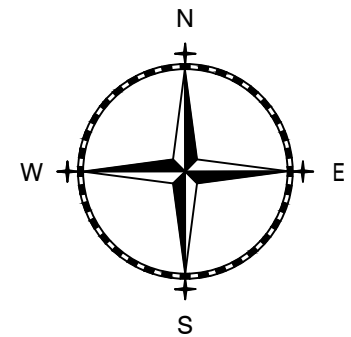
Title
SITE AND SURROUNDING AREA

Scale
NTS@A3

APPENDIX 2.2

ACCIDENT DETAILS

3.1	Accident Locations
3.2	Accident Details



KEY

2015	2016
2017	2018
2019	2020

○ Slight

□ Serious

△ Fatal

ADL
TRAFFIC & HIGHWAYS

Title
ACCIDENT LOCATIONS

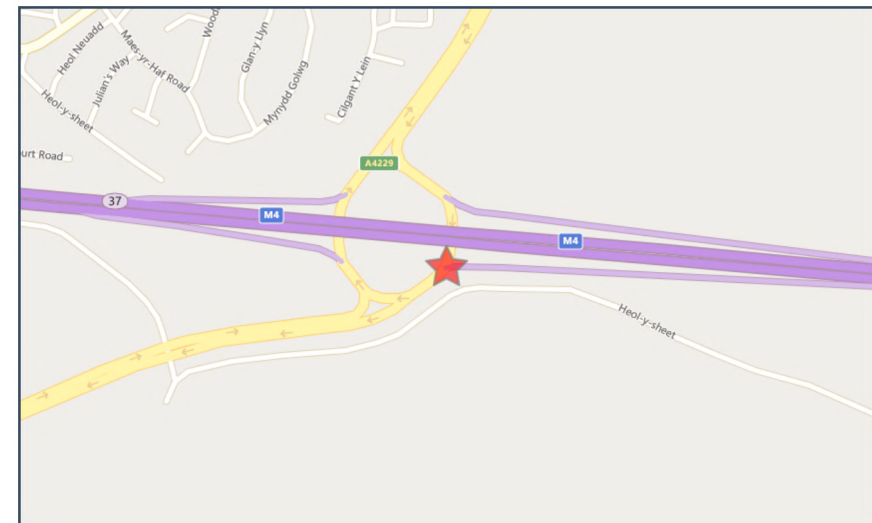
Scale NTS@A3	APPENDIX 3.1
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Validated Data

Crash Date: Saturday, March 07, 2015 **Time of Crash:** 9:52:00 AM **Crash Reference:** 2015621500418

Highest Injury Severity:	Slight	Road Number:	A4229	Number of Casualties:	1
Highway Authority:	Bridgend			Number of Vehicles:	2
Local Authority:	Bridgend County Borough			OS Grid Reference:	282647 181029
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Pedal cycle	-1	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

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

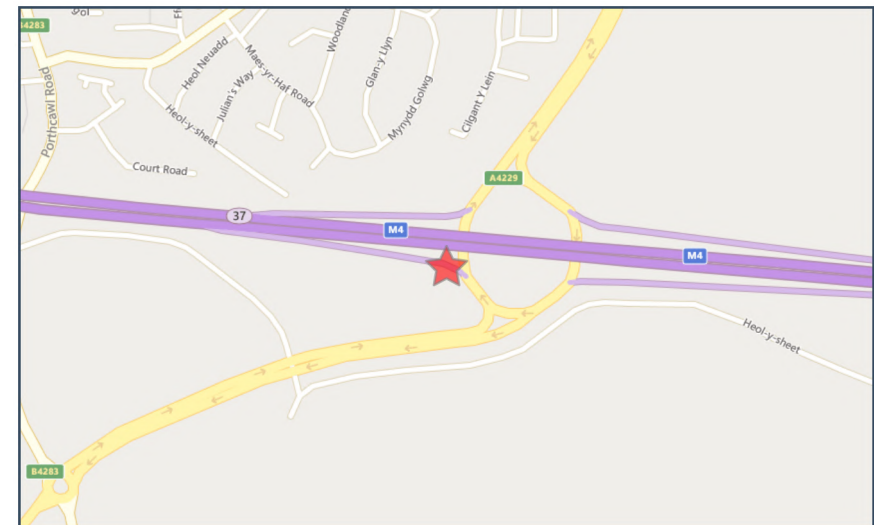
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Validated Data

Crash Date: Saturday, July 30, 2016 **Time of Crash:** 9:32:00 AM **Crash Reference:** 2016621601250

Highest Injury Severity:	Slight	Road Number:	A4229	Number of Casualties:	2
Highway Authority:	Bridgend			Number of Vehicles:	2
Local Authority:	Bridgend County Borough			OS Grid Reference:	282462 181061
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	12	Male	26 - 35	Vehicle is in the act of turning left	Nearside	Unknown	None	None
2	Agricultural vehicle	-1	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other
1	3	Slight	Vehicle or pillion passenger	Female	26 - 35	Unknown or other	Unknown or other

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

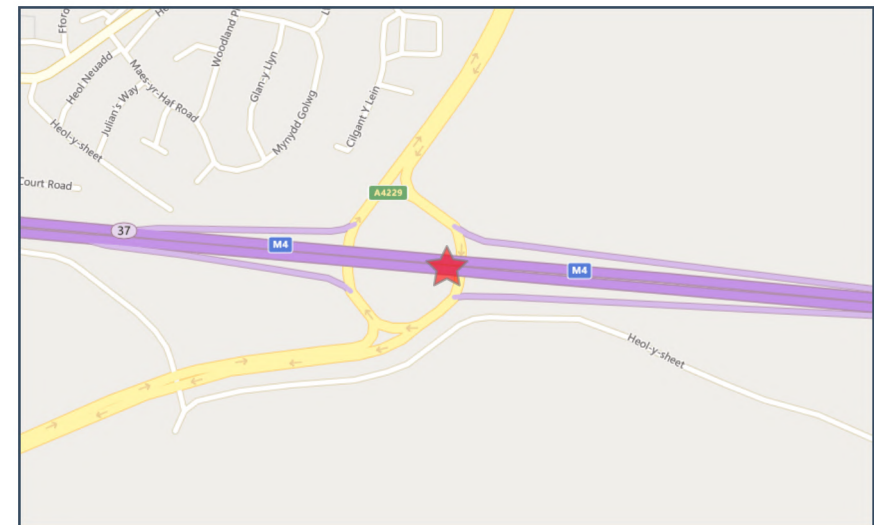
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Validated Data

Crash Date: Tuesday, January 31, 2017 **Time of Crash:** 10:49:00 AM **Crash Reference:** 2017621700206

Highest Injury Severity:	Slight	Road Number:	M4	Number of Casualties:	2
Highway Authority:	Bridgend	Number of Vehicles:	2	OS Grid Reference:	282637 181075
Local Authority:	Bridgend County Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	70				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Not Applicable				



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

Vehicles involved

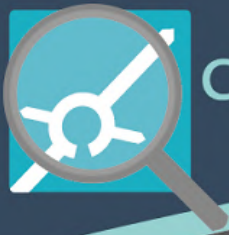
Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under		1 Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	Central crash barrier
2	Goods vehicle 7.5 tonnes mgw and over		1 Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Back	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other
1	3	Slight	Vehicle or pillion passenger	Male	16 - 20	Unknown or other	Unknown or other

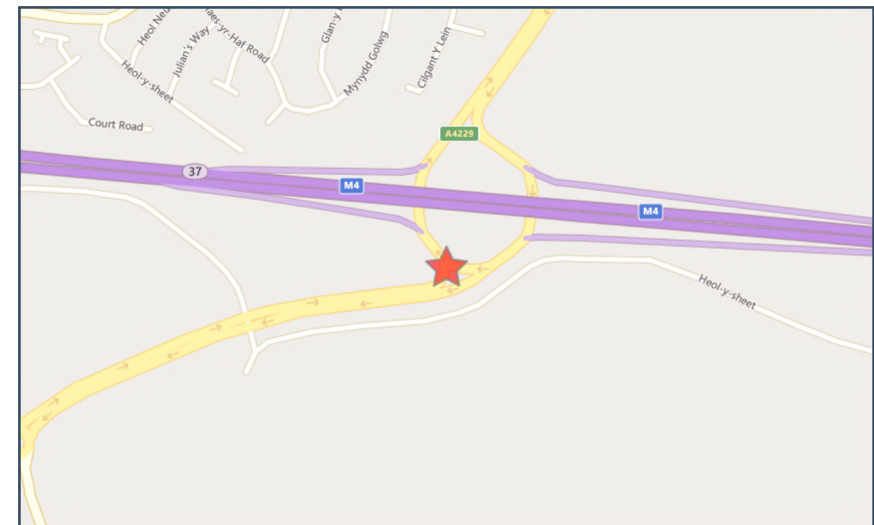
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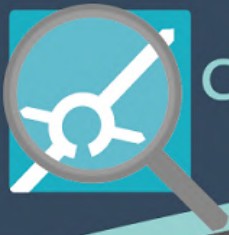


Validated Data

Crash Date:	Saturday, March 18, 2017	Time of Crash:	7:35:00 PM	Crash Reference:	2017621700479
Highest Injury Severity:	Slight	Road Number:	A4229	Number of Casualties:	5
Highway Authority:	Bridgend			Number of Vehicles:	2
Local Authority:	Bridgend County Borough			OS Grid Reference:	282528 180991
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)		4 Male	66 - 75	Vehicle is slowing down or stopping	Front	Journey as part of work	None	None
2	Car (excluding private hire)		3 Male	21 - 25	Vehicle is slowing down or stopping	Back	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other
2	3	Slight	Vehicle or pillion passenger	Female	21 - 25	Unknown or other	Unknown or other
2	4	Slight	Vehicle or pillion passenger	Male	26 - 35	Unknown or other	Unknown or other
2	5	Slight	Vehicle or pillion passenger	Female	0 - 5	Unknown or other	Unknown or other
2	6	Slight	Vehicle or pillion passenger	Female	46 - 55	Unknown or other	Unknown or other

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

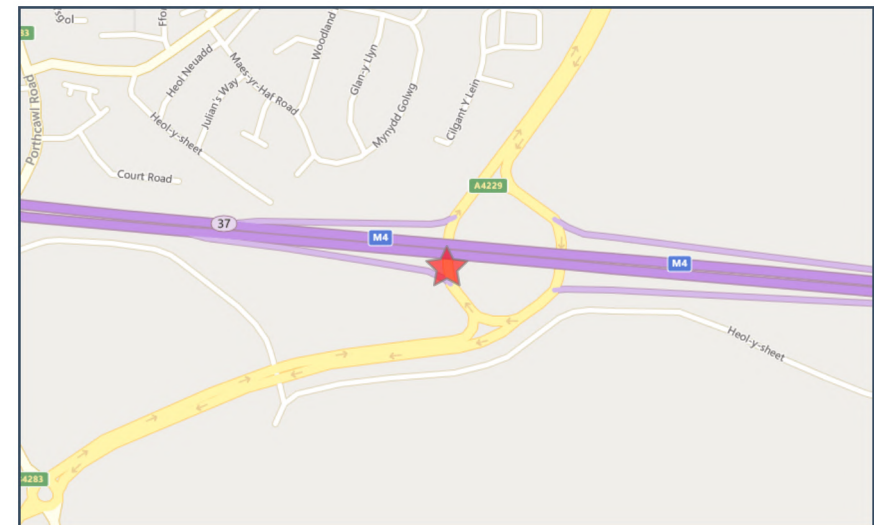
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Validated Data

Crash Date: Monday, April 17, 2017 **Time of Crash:** 12:27:00 PM **Crash Reference:** 2017621700628

Highest Injury Severity:	Slight	Road Number:	A4229	Number of Casualties:	1
Highway Authority:	Bridgend	Number of Vehicles:	1	OS Grid Reference:	282487 181076
Local Authority:	Bridgend County Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



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Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Motorcycle over 50cc and up to 125cc	6	Female	16 - 20	Vehicle is slowing down or stopping	Did not impact	Unknown	Kerb	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	16 - 20	Unknown or other	Unknown or other

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

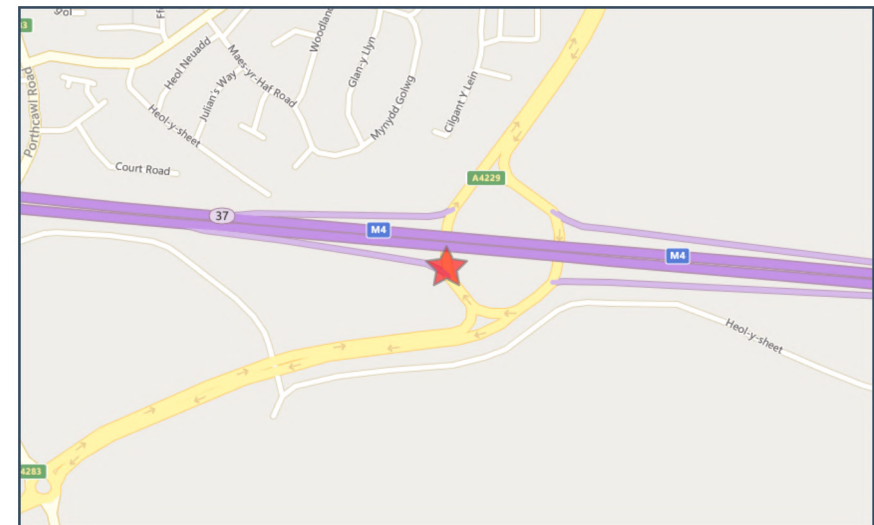
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Validated Data

Crash Date: Saturday, April 29, 2017 **Time of Crash:** 11:14:00 PM **Crash Reference:** 2017621700697

Highest Injury Severity:	Serious	Road Number:	M4	Number of Casualties:	1
Highway Authority:	Bridgend	Number of Vehicles:	1	OS Grid Reference:	282489 181059
Local Authority:	Bridgend County Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	21	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Did not impact	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	2	Serious	Vehicle or pillion passenger	Male	46 - 55	Unknown or other	Unknown or other

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

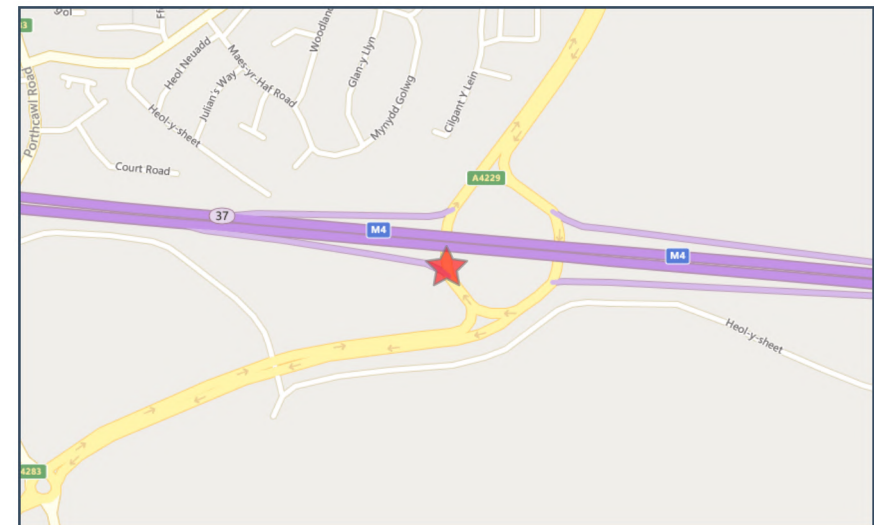
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Validated Data

Crash Date: Sunday, April 30, 2017 **Time of Crash:** 12:59:00 AM **Crash Reference:** 2017621700698

Highest Injury Severity:	Slight	Road Number:	M4	Number of Casualties:	1
Highway Authority:	Bridgend	Number of Vehicles:	1	OS Grid Reference:	282489 181059
Local Authority:	Bridgend County Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	70				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

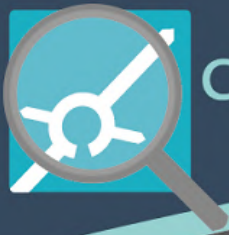
Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under	5	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Unknown	None	Nearside or offside crash barrier

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

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

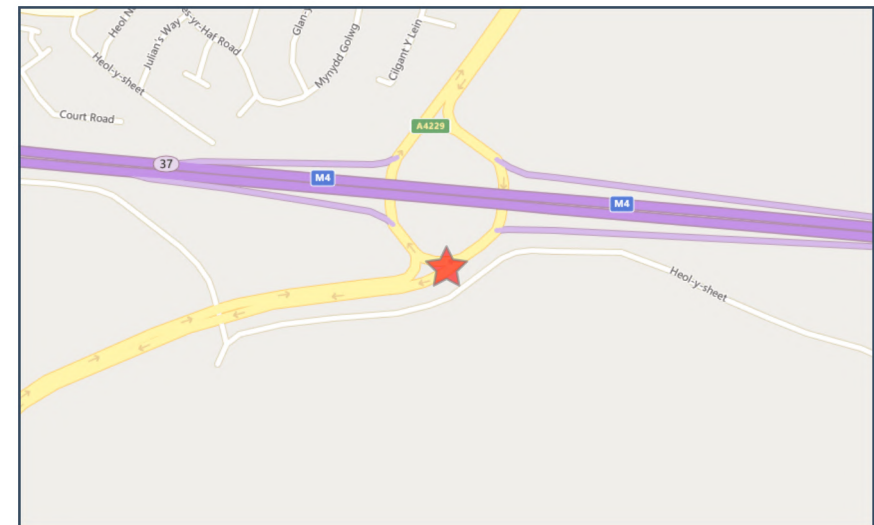
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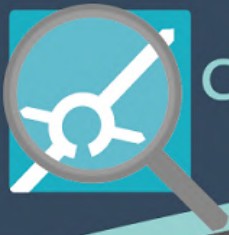
Validated Data

Crash Date: Thursday, September 28, 2017 **Time of Crash:** 1:28:00 PM **Crash Reference:** 2017621701371

Highest Injury Severity:	Slight	Road Number:	M4	Number of Casualties:	1
Highway Authority:	Bridgend	Number of Vehicles:	1	OS Grid Reference:	282570 180980
Local Authority:	Bridgend County Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	70				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	1	Male	46 - 55	Vehicle is in the act of turning left	Front	Unknown	None	Lamp post

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

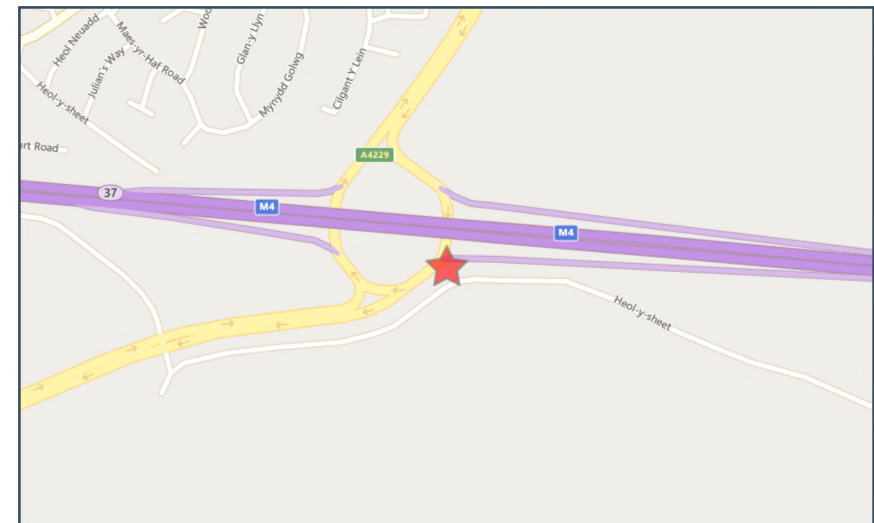
For more information about the data please visit: www.crashmap.co.uk/home/Faq

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Validated Data

Crash Date:	Wednesday, November 29, 2017	Time of Crash:	1:43:00 PM	Crash Reference:	2017621701594
Highest Injury Severity:	Slight	Road Number:	M4	Number of Casualties:	1
Highway Authority:	Bridgend			Number of Vehicles:	2
Local Authority:	Bridgend County Borough			OS Grid Reference:	282656 181027
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	70				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Slip road				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	10	Female	56 - 65	Vehicle is slowing down or stopping	Front	Unknown	None	None
2	Car (excluding private hire)	8	Female	36 - 45	Vehicle is waiting to proceed normally but is held up	Back	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	56 - 65	Unknown or other	Unknown or other

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

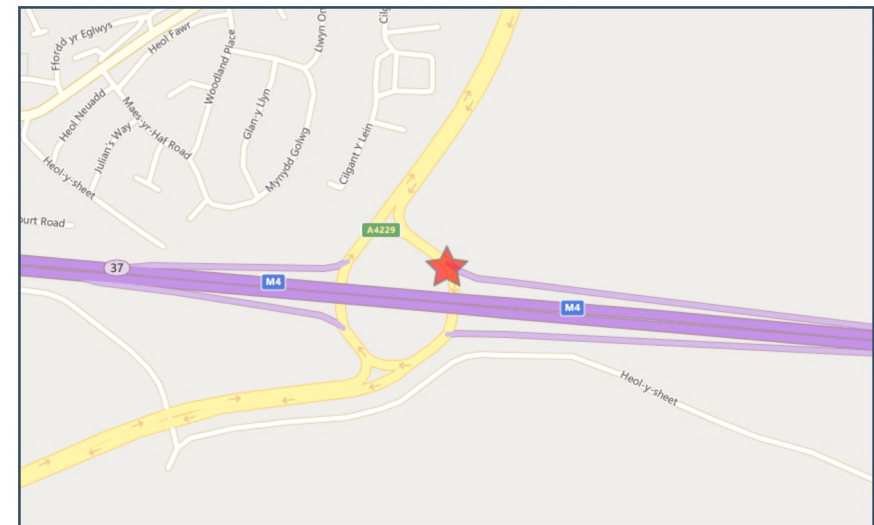
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Validated Data

Crash Date: Friday, August 10, 2018 **Time of Crash:** 4:48:00 PM **Crash Reference:** 2018621801017

Highest Injury Severity:	Slight	Road Number:	M4	Number of Casualties:	1
Highway Authority:	Bridgend			Number of Vehicles:	2
Local Authority:	Bridgend County Borough			OS Grid Reference:	282649 181136
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	14	Male	36 - 45	Vehicle is in the act of turning left	Nearside	Unknown	None	None
2	Car (excluding private hire)	1	Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	2	Slight	Driver or rider	Male	66 - 75	Unknown or other	Unknown or other

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

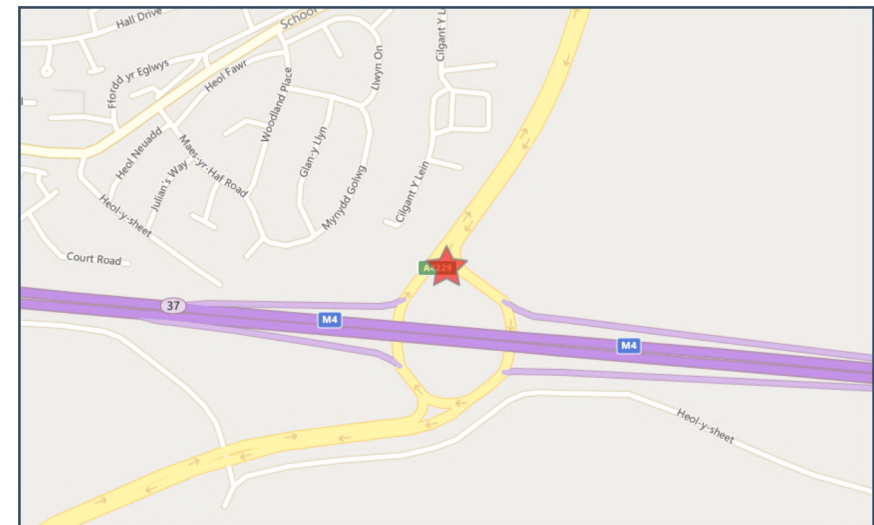
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Validated Data

Crash Date: Saturday, October 06, 2018 **Time of Crash:** 7:52:00 AM **Crash Reference:** 2018621801289

Highest Injury Severity:	Serious	Road Number:	M4	Number of Casualties:	2
Highway Authority:	Bridgend	Number of Vehicles:	1	OS Grid Reference:	282565 181187
Local Authority:	Bridgend County Borough				
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	70				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

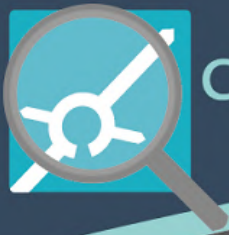
Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	11	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	Kerb	Road sign/Traffic signal

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other
1	2	Serious	Vehicle or pillion passenger	Female	56 - 65	Unknown or other	Unknown or other

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

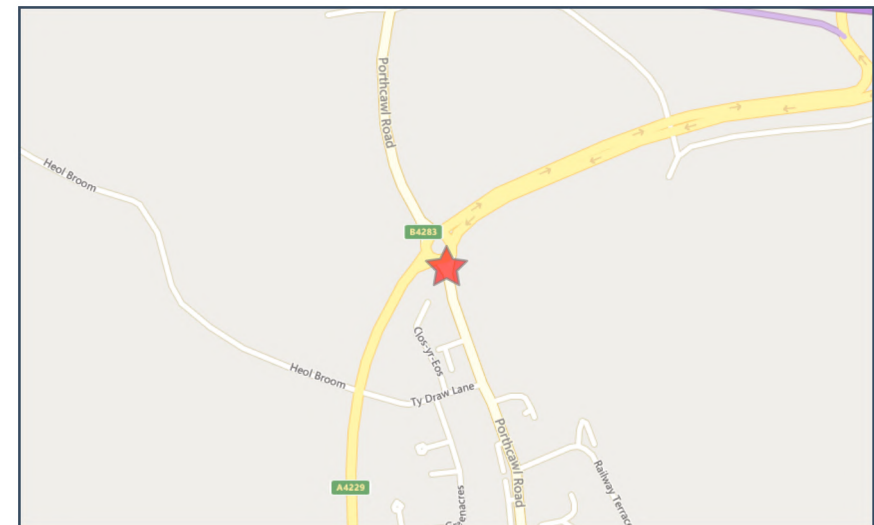
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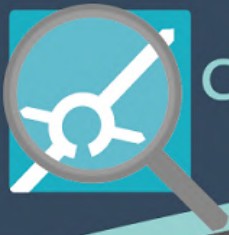
Validated Data

Crash Date: Friday, November 09, 2018 **Time of Crash:** 5:12:00 PM **Crash Reference:** 2018621900064

Highest Injury Severity:	Slight	Road Number:	A4229	Number of Casualties:	2
Highway Authority:	Bridgend			Number of Vehicles:	2
Local Authority:	Bridgend County Borough			OS Grid Reference:	281889 180712
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	1	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	Road sign/Traffic signal
2	Car (excluding private hire)	10	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other
2	2	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

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

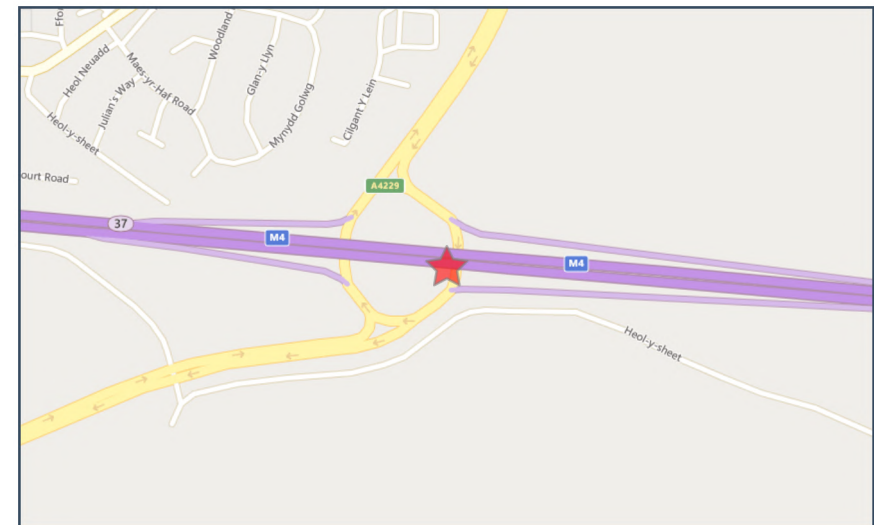
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Validated Data

Crash Date: Tuesday, March 05, 2019 **Time of Crash:** 7:35:00 PM **Crash Reference:** 2019621900317

Highest Injury Severity:	Slight	Road Number:	M4	Number of Casualties:	1
Highway Authority:	Bridgend			Number of Vehicles:	1
Local Authority:	Bridgend County Borough			OS Grid Reference:	282642 181068
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	70				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Not Applicable				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	12	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	Central crash barrier

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other

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

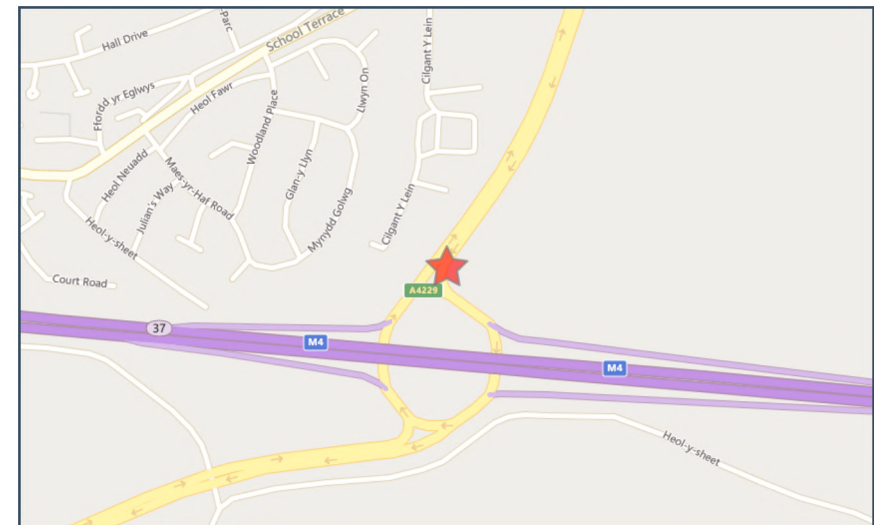
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Validated Data

Crash Date: Wednesday, February 05, 2020 **Time of Crash:** 5:06:00 PM **Crash Reference:** 2020622000211

Highest Injury Severity:	Slight	Road Number:	M4	Number of Casualties:	1
Highway Authority:	Bridgend	Number of Vehicles:	3	OS Grid Reference:	282587 181227
Local Authority:	Bridgend County Borough				
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	70				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under		3 Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Unknown	None	None
2	Car (excluding private hire)		2 Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Back	Unknown	None	None
3	Car (excluding private hire)		1 Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Back	Unknown	None	None

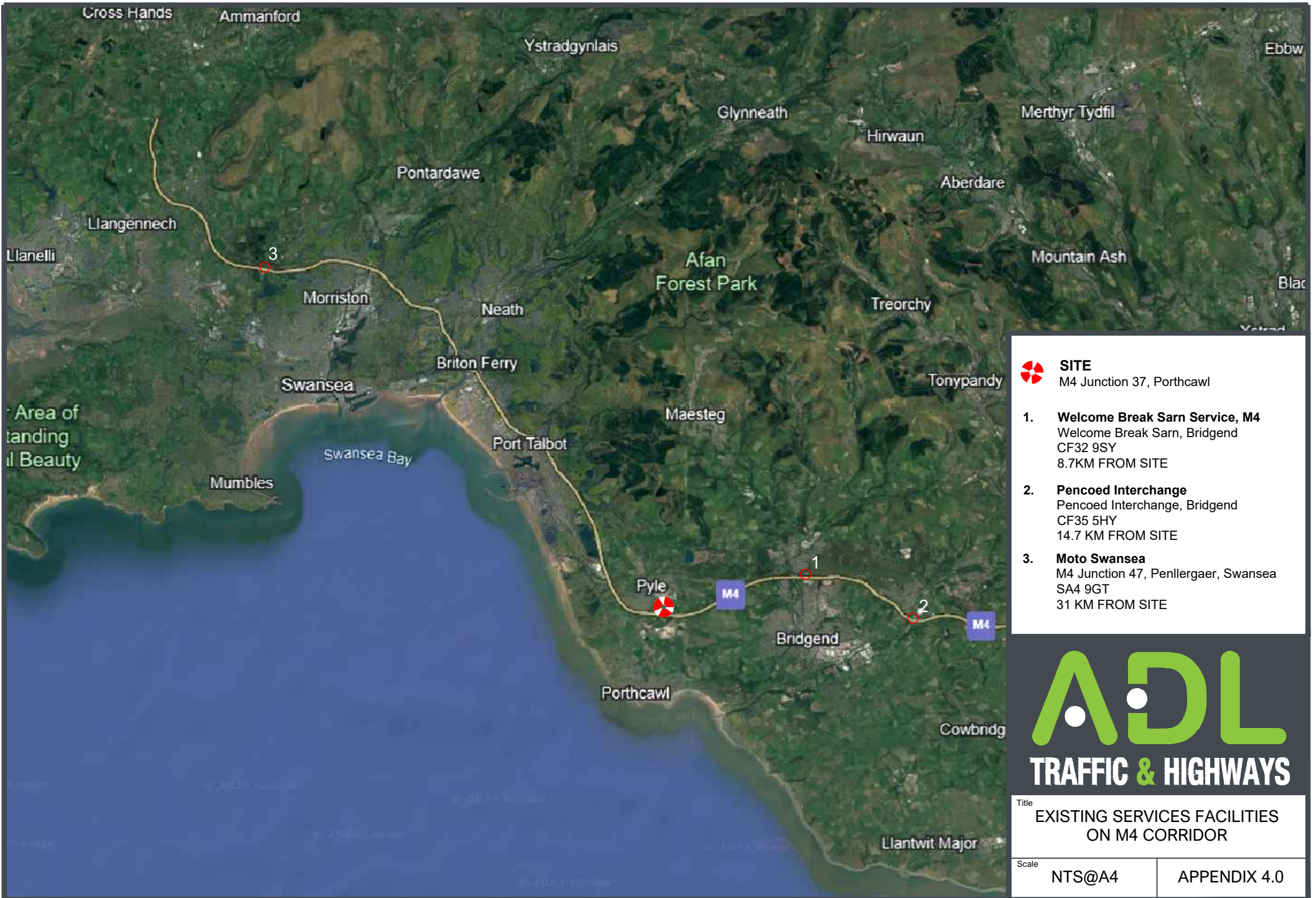
Casualties


Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
	2	2 Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other

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

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EXISTING FACILITIES ON M4 CORRIDOR



SITE
 M4 Junction 37, Porthcawl

- Welcome Break Sarn Service, M4**
 Welcome Break Sarn, Bridgend
 CF32 9SY
 8.7KM FROM SITE
- Pencoed Interchange**
 Pencoed Interchange, Bridgend
 CF35 5HY
 14.7 KM FROM SITE
- Moto Swansea**
 M4 Junction 47, Penllergaer, Swansea
 SA4 9GT
 31 KM FROM SITE

ADL
TRAFFIC & HIGHWAYS

Title
 EXISTING SERVICES FACILITIES
 ON M4 CORRIDOR

Scale	NTS@A4	APPENDIX 4.0
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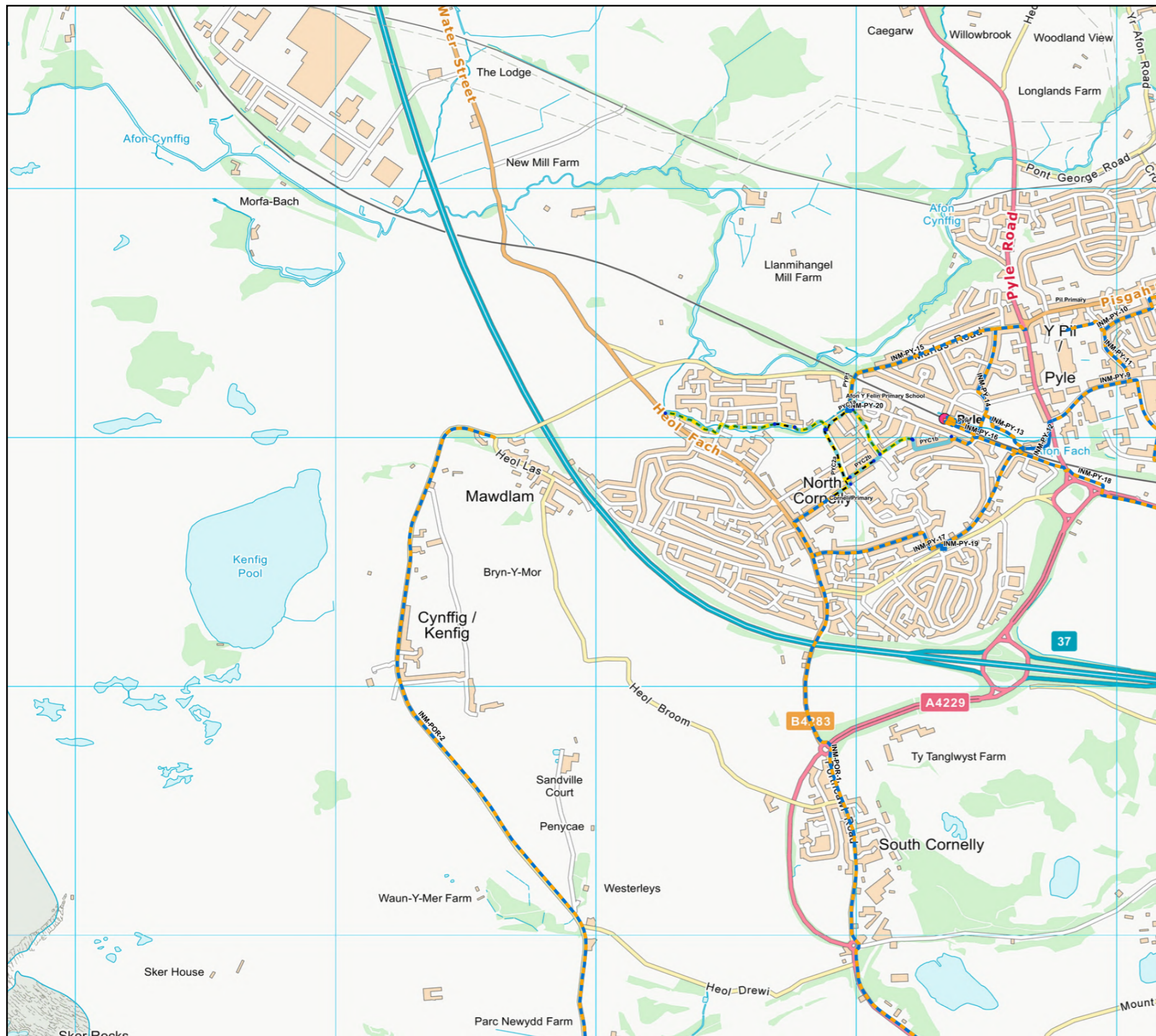
ACCESSIBILITY

- 5.1 Active Travel Improvements Plan
- 5.2 Bus Stop Locations
- 5.3 Bus Route Plan

Map Rhwydwaith Integredig/Integrated Network Map 9

Produced by the Active Travel web site. Gynhyrchwyd gan y wefan Teithio Llesol.

Bridgend County Borough Council
Civic Offices
Angel Street
Bridgend, CF31 4WB



Legend / Eglurhad

Active Travel Routes / Llwybrau Teithio Llesol

- Undefined path design / Dyluniad llwybr heb ei ddiffinio
- Footpath (away from road) / Llwybr troed (i ffwrdd o'r ffordd)
- Footway (alongside road) / Troedffordd (ochr yn ochr â ffordd)
- Cycle track (away from road) / Trac beicio (i ffwrdd o'r ffordd)
- Cycle track (alongside road) / Trac beicio (ochr yn ochr â ffordd)
- Shared use foot/cycle path (away from road) / Llwybr cerdded/beicio a rennir (i ffwrdd o'r ffordd)
- Shared use foot/cycle path (alongside road) / Llwybr cerdded/beicio a rennir (ochr yn ochr â ffordd)
- Segregated foot/cycle path (away from road) / Llwybr cerdded/beicio wedi'i wahanu (i ffwrdd o'r ffordd)
- Segregated foot/cycle path (alongside road) / Llwybr cerdded/beicio wedi'i wahanu (ochr yn ochr â ffordd)
- Cycle route (on road, not segregated) / Lôn feicio (ar y ffordd, heb ei gwahanu)
- Cycle lane (on road, segregated) / Lôn feicio (ar y ffordd, wedi'i gwahanu)
- Pedestrian zone / Ardal cerdded
- Pedestrian and cycle zone / Ardal cerdded a beicio
- Road without footway / Ffordd heb droedffordd

Line end points / Pwyntiau diwedd llinell

Integrated Network Walking



Integrated Network Cycling

Integrated Network Shared Use

Landmarks / Tirnodau

Bus Station / Gorsaf Fysus

Hospital / Ysbyty

Railway Station / Gorsaf Reilffordd

Schools / Ysgolion

Labels / Labeli

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Er bod Llywodraeth Cymru wedi gwneud pob ymdrech i sicrhau bod y wybodaeth ar y wefan hon yn gywir ac yn gyfredol, mae Llywodraeth Cymru yn cymryd unrhyw gyfrifoldeb am unrhyw wybodaeth anghywir. Lluniwyd y data o hawliau tramwy cyhoeddus, RhTI yr AO, Llwybrau Trefol RhTI yr AO a data sy'n deillio o ffotograffau o'r awyr wedi'i ategu gan arolwg maes. Yn y map ar-lein yn darparu canllaw yn unig ac nid yw cofnod cyfreithiol.





SITE



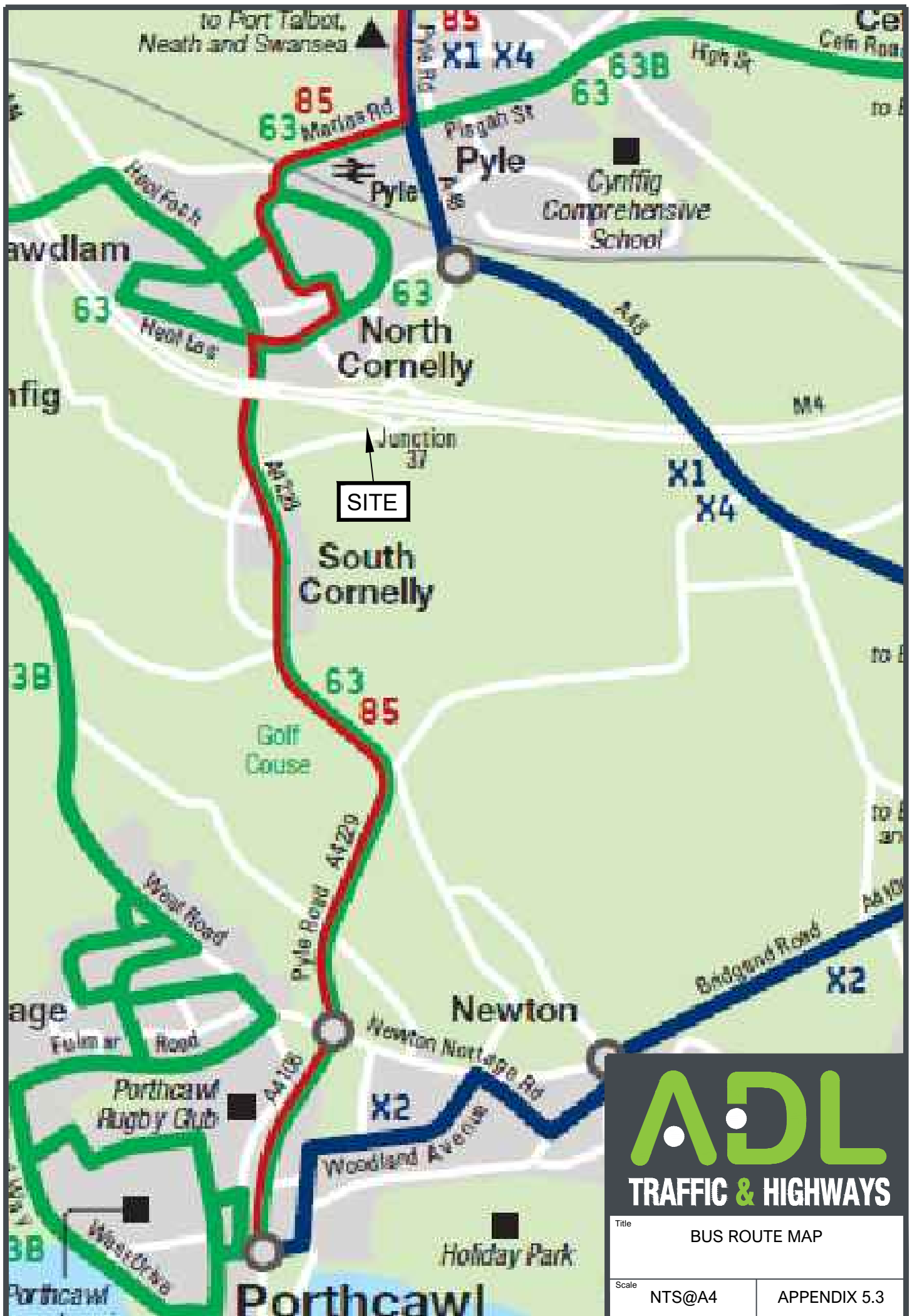
ADL

TRAFFIC & HIGHWAYS

Title
BUS STOP LOCATIONS

Scale
NTS@A4

APPENDIX 5.2



ADL

TRAFFIC & HIGHWAYS

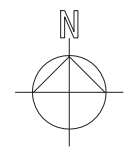
Title
BUS ROUTE MAP

Scale NTS@A4	APPENDIX 5.3
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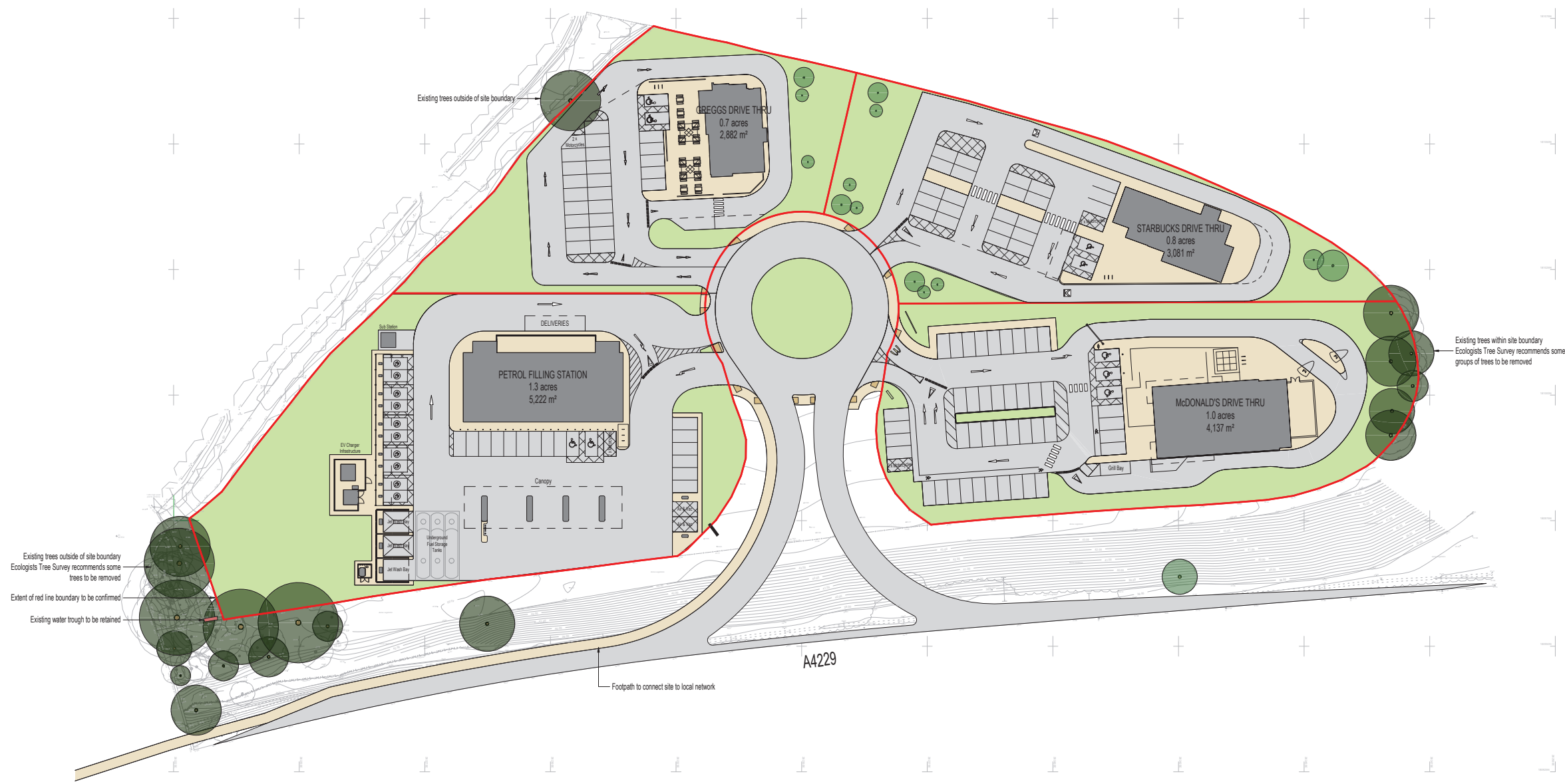
DEVELOPMENT PROPOSALS

- 6.1 Architects Site Layout: Wider Site Layout
- 6.2 Access Arrangements: Visibility Splays
- 6.3 Proposed Footway

Construction (Design and Management) Regulations
 Design risk assessments are carried out throughout the design stage of this project in accordance with company procedures and manuals. Where reasonably possible areas of risk applicable to design and end use of the construction have been identified and then eliminated, mitigated or accepted as a residual risk. Note that general risks of which a competent designer or contractor should be aware are not included. This drawing is to be used in conjunction with the Pre-Construction Information and all related documents prepared in accordance with the current Construction (Design and Management) Regulations 2015 and all applicable Health and Safety legislation as currently amended.



- LEGEND:
- Site boundary
 - Proposed building
 - Hardstanding - Pedestrian route
 - Hardstanding - Vehicle route
 - Soft landscaping - refer to Landscape Designers info for further details
 - Pedestrian crossing - blister paving



P8	Sb Station added RE MWR MWR	24/01/2024
P7	Kerb lines and footway to McDonald's site entrance amended as per Transport Planners comments RE MWR MWR	27/11/2023
P6	Merge and diverge lanes added RE MWR MWR	13/11/2023
P5	Parking provision for Greggs and Starbucks amended in line with Transport Planners comments. Footway width reduced to 2 meters RE MWR MWR	10/11/2023
P4	Footpath / Cycleway added. Footpath added around roundabout. Footpath between McDonald's and Starbucks omitted RE MWR MWR	06/11/2023
P3	Site amendments to suit Highway Engineers comments. Revisions Clouded RE MWR MWR	28/09/2023
P2	Filling Station Layout updated LF RE MWR	24/07/2023
P1	Issue of coordination LF RE MWR	12/07/2023
P0	First Issue. Issued for Client and Design Team review RE MWR MWR	13/04/2023

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	APPROVED BY	DATE
Stage 3 - Spatial Coordination	LEVEL OF MODEL DEFINITION (LOD)				
	LOD 3 - Approximate Model				

PURPOSE OF ISSUE - SUITABLE FOR... STATUS or SUITABILITY
 Design Intent Only Status S1 - Delivery Team Coordination

Existing trees outside of site boundary
 Ecologists Tree Survey recommends some trees to be removed
 Extent of red line boundary to be confirmed
 Existing water trough to be retained

Existing trees within site boundary
 Ecologists Tree Survey recommends some groups of trees to be removed

01 - Proposed Site Plan
 1 : 500



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 LONDON 0207 138 3560
 WREXHAM 01978 357 887
 www.lawray.co.uk
 CLIENT
 Draycott Group

PROJECT TITLE
 Junction 37 Motorway Services

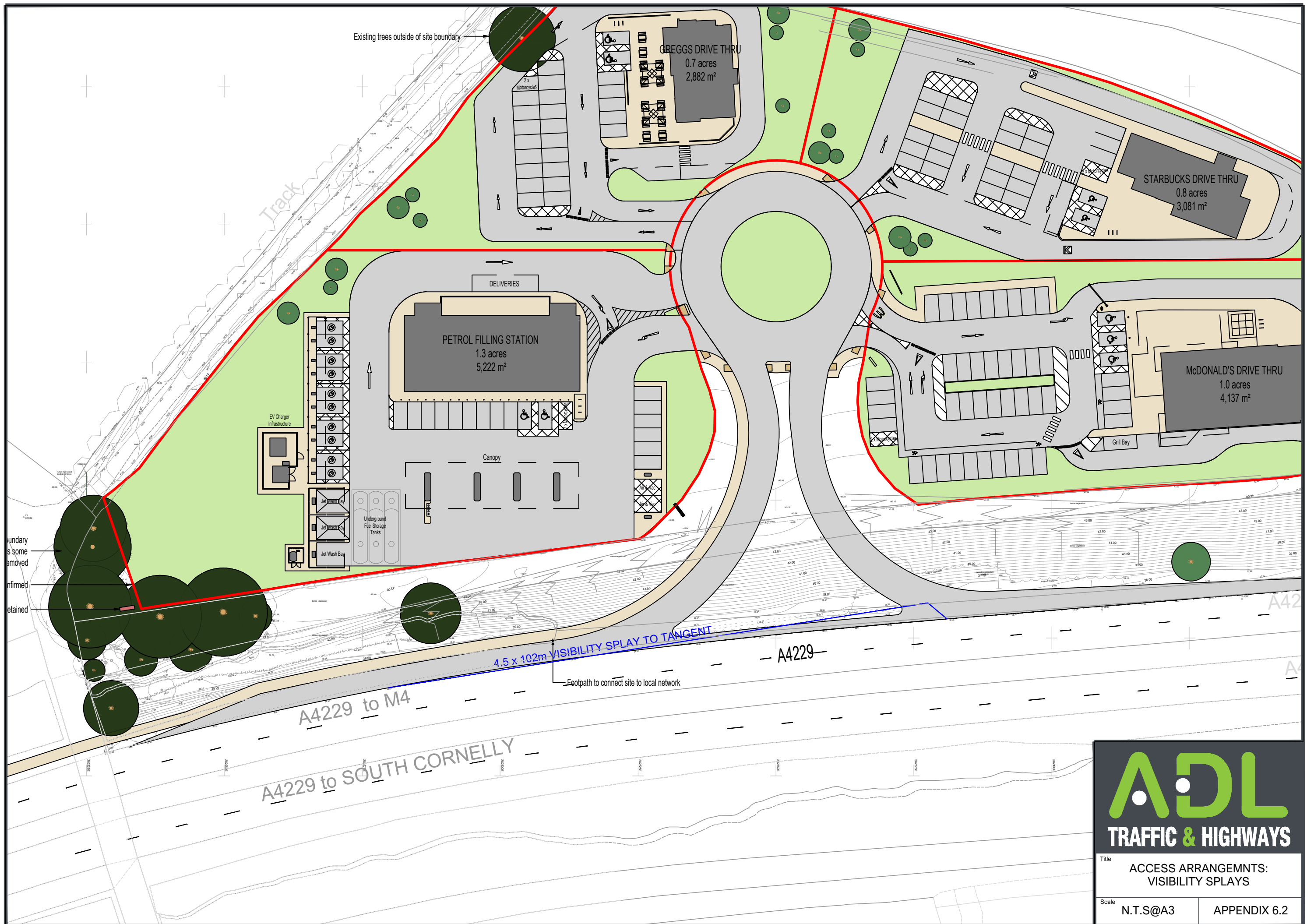
DRAWING TITLE
 Proposed Site Plan

PROJECT No 19804 SCALE @ A1 1 : 500

DRAWING No	19804	1980	Project - Original	Issue	Level	Scale	Revision
19804	1980	Project - Original	Issue	Level	Scale	Revision	
19804	1980	Project - Original	Issue	Level	Scale	Revision	

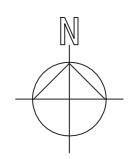
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APPENDIX 6.1
 ARCHITECTS SITE LAYOUT: WIDER SITE LAYOUT



Title		ACCESS ARRANGMENTS: VISIBILITY SPLAYS
Scale	N.T.S@A3	APPENDIX 6.2

Construction (Design and Management) Regulations
 Design risk assessments are carried out throughout the design stage of this project in accordance with company procedures and manuals. Where reasonably possible all areas of risk applicable to design and end use of the construction have been identified and then eliminated, mitigated or accepted as a residual risk. Note that general risks of which a competent designer or contractor should be aware are not included. This drawing is to be used in conjunction with the Pre-Construction Information and all related documents prepared in accordance with the current Construction (Design and Management) Regulations 2015 and all applicable Health and Safety legislation as currently amended.



LEGEND:

- Site boundary
- Proposed building
- Hardstanding - Pedestrian route
- Hardstanding - Vehicle route
- Soft landscaping



P4	Site Station added RE MWR MWR	24/01/2024
P3	Kerb lines and footway to McDonalds site entrance amended RE MWR MWR	27/11/2023
P2	Transport Planners comments RE MWR MWR	13/11/2023
P1	Merge and diverge lines added RE MWR MWR	10/11/2023
P0	Parking provision for Greggs and Starbucks amended in line with Transport Planners comments. Footway width reduced to 2 meters RE MWR MWR	06/11/2023
P0	First Issue. Issued for Design Team coordination RE MWR MWR	06/11/2023

REV.	DESCRIPTION DRAWN BY CHECKED BY APPROVED BY	DATE
RIBA PLAN OF WORK WORKSTAGE	LEVEL OF MODEL DEFINITION (LOD)	
Stage 3 - Spatial Coordination	LOD 3 - Approximate Model	

PURPOSE OF ISSUE - SUITABLE FOR...	STATUS or SUITABILITY
Design Intent Only	Status S1 - Delivery Team Coordination

Proposed Site Plan and Footpath Connection
 1: 1500



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 WREXHAM 01978 357 887
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 CLIENT
 Draycott Group

PROJECT TITLE
 Junction 37 Motorway Services

DRAWING TITLE
 Proposed Site Plan and Footpath Connection

PROJECT No 19804	SCALE @ A1 1: 1500
DRAWING No 19804-01-001	REVISION P4
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APPENDIX 6.3
 ARCHITECTS SITE LAYOUT:
 PROPOSED FOOTWAY