Plasyfelin Primary School, Caerphilly

Transport Assessment

Project Number: 60741299

December 2024

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
			
Ben Burton Senior Consultant	Spiro Panagi Associate Director	Jeremy Douch Regional Director	Spiro Panagi Associate Director

Revision History

Revision	Revision date	Details	Authorised	Name	Position
V1	28/04/2024	BREEAM Stage 2 Submission	SP	Spiro Panagi	Associate Director
V2	09/12/2024	PAC Submission	SP	Spiro Panagi	Associate Director

Distribution List

# Hard Copies	PDF Required	Association / Company Name

Prepared by:

AECOM Limited
5 Callaghan Square
Cardiff CF10 5BT
United Kingdom

T: +44 29 2067 4600
aecom.com

Table of Contents

Figures

Tables

Appendices

1. Introduction

1.1 Introduction

1.1.1 AECOM was commissioned by Caerphilly County Borough Council (CCBC) to provide transport planning inputs into the redevelopment of Plasyfelin Primary School.

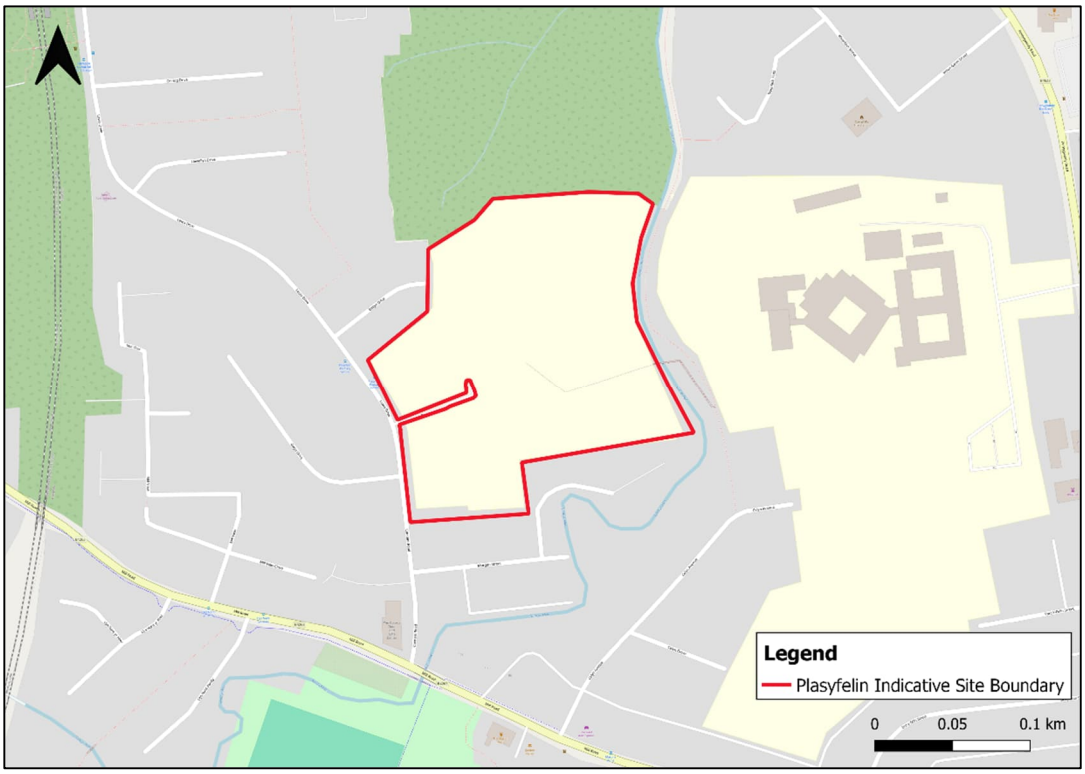
1.1.2 The proposals include for a complete redevelopment of Plasyfelin Primary School. This includes the addition of a new replacement building, car parking provision, safe crossing points and a 3G MUGA pitch. At this stage of the design it is expected that the proposals will expand the capacity of the school from the current 287 pupils to 480 pupils through the inclusions of additional general provision as well as a nursery facility.

1.1.3 This Transport Assessment (TA) has been prepared to be submitted to CCBC Local Planning Authority (LPA), alongside a planning application.

1.2 Site Location

1.2.1 The Proposed Development considered within this TA is located in Caerphilly, at the existing Plasyfelin Primary School premises. The site is bordered to the west by Caenant Road / Lewis Drive, which provides the primary access for all modes. The site is bounded to the south by Morgan Street and to the north by a woodland area containing mature trees. There is an existing gated access to the northwest of the premises via Emlyn Drive. The immediate area surrounding the site is predominantly residential in nature. The boundary of the Proposed Development is shown in **Figure 1-1**.

Figure 1-1: Proposed Development Boundary



1.3 BREEAM

1.3.1 The Proposed Development has been assessed in reference to the latest BREEAM guidance. BREEAM is a platform for assessing the sustainability credentials for the built environment. Two BREEAM topics relate specifically to Transportation and are considered in this TA and the Travel Plan (TP) also submitted: Tra01 'Transport Assessment and Travel Plan', and Tra02 'Sustainable Transport Measures'. For each topic, a number of credits are available which contribute towards the overall BREEAM rating for a new development.

1.3.2 Tra01 aims 'to reward awareness of existing local transport and identify improvements to make it more sustainable'. Two credits are available for the following:

- Undertake a site-specific Transport Assessment that includes current and future travel patterns and the impact of travel associated with site users and the development proposals, an appraisal of existing opportunities for travel by sustainable modes (i.e. walking and cycling, public transport), and the location of existing complementary amenities in relation to the site.
- The preparation of a Travel Plan that provides a long-term management strategy which encourages more sustainable travel to and from the development. This process should involve the end-user of the development (if possible), and there should be a commitment to the implementation of the measures contained in the Travel Plan.

1.3.3 Section 2 of this TA provides an audit of existing accessibility to the site by all modes of transport. This includes a calculation of the public transport Accessibility Index (AI) and assessment of the current accessibility to local amenities, in accordance with the methodologies contained in the BREEAM guidance.

1.3.4 A TP has been prepared which aims to promote the use of the most sustainable forms of travel for all types of journeys associated with the development.

1.3.5 Tra02 aims 'to maximise the potential for local public, private and active transport through provision of sustainable transport measures appropriate to the site'. A pre-requisite to being assessed on this topic is the achievement of the criteria contained in Tra01. There are 10 credits available to be awarded by following the advice:

- Award credits (according to the existing AI score for the development) based on the number of sustainable transport measures implemented, covering public transport, private transport and active travel.

1.3.6 Section 2 of this TA presents the existing sustainable transport measures and local amenities in close proximity to the Proposed Development. Section 3 of this TA describes the measures that will be implemented at the Proposed Development to improve sustainable access.

1.4 Report Structure

1.4.1 This TA report is structured as follows:

- **Section 2** – Existing Situation and Site Accessibility: Examines the local transport conditions in the vicinity of the site and the accessibility of the site to non-car modes of travel;
- **Section 3** – Development Proposals: Provides a detailed description of the development proposals, including the proposed means of access and parking provision;
- **Section 4** – Planning Policy Review: Considers the development in the context of relevant national and local planning and transport policies;
- **Section 5** – Trip Generation: Sets out the method for calculating the likely trip generation of the Proposed Development.
- **Section 6**– Transport Implementation Strategy: Sets out objectives and targets in managing travel demand, whilst detailing the infrastructure and measures necessary to achieve them;
- **Section 7** – Conclusions: Summarises the key findings and conclusions of the TA; and

- **Section 8** – BREEAM Compliance: a checklist for the benefit of assessing this TA for BREEAM against guidance.

2. Existing Site and Accessibility

2.1 Introduction

2.1.1 This section of the TA provides a description of the site location and its existing usage, the local highway network, current safety record and traffic conditions, and accessibility for non-car modes of travel.

2.2 Site Location and Existing Usage

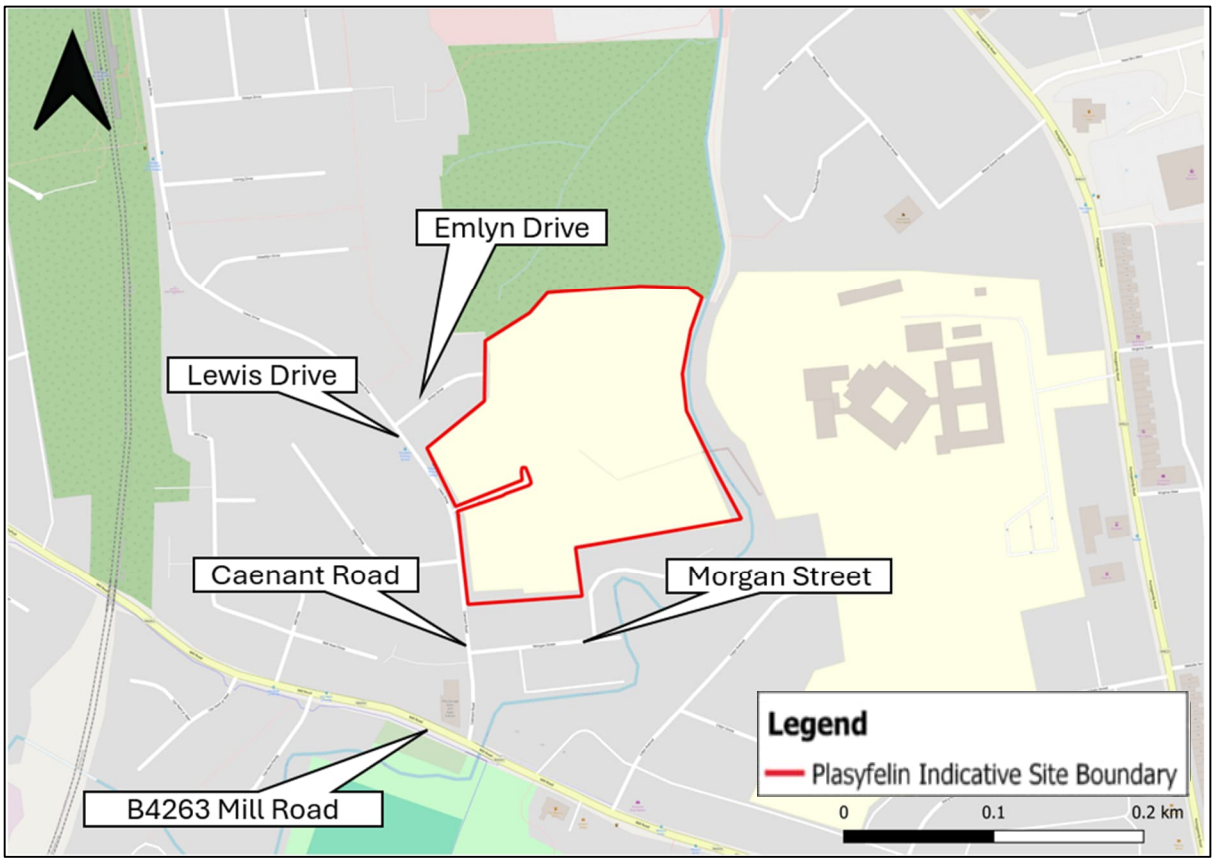
2.2.1 The Proposed Development is bordered to the west by Caenant Road / Lewis Drive, which provides the primary access for all modes. The site is bounded to the south by Morgan Street and to the north by a woodland area containing mature trees. To the east the site is bound by trees which line Nant yr Aber, separating the premises from the Ysgol Gyfun Cwm Rhymni site. Two cul-de-sacs bound the site to the north and south, Emlyn Drive and Morgan Street, respectively. There is an existing gated access to the northwest of the premises via Emlyn Drive. The immediate area surrounding the site is predominantly residential in nature. The boundary of the Proposed Development is shown in **Figure 1-1**.

2.2.2 The site is currently occupied by Plasyfelin Primary School, with the proposals seeking to replace and enhance existing facilities. Plasyfelin Primary School is currently understood to provide facilities for a current enrolment of 287 pupils, with 45 members of staff, including teaching and ancillary staff. The school operates a typical education term timetable, with the Autumn Term between September and December, the Spring Term between January and March and the Summer Term between April and July.

2.3 Local Highway Network

2.3.1 The following paragraphs provide a description of the characteristics of the local highway network surrounding the Proposed Development. The roads described below are labelled on **Figure 2-1.**

Figure 2-1: Local Highway Network



Caenant Road/Lewis Drive

2.3.2 Access to the school is currently taken via Caenant Road / Lewis Drive. Caenant Road is identified as a 20mph zone, which was in place prior to the nationwide changes in Welsh speed limits. It is a single carriageway residential street with a road width of approximately 5.0m. There are various speed cushions or humps in place along the route.

2.3.3 The road primarily provides access to neighbouring residential areas, the Energlyn & Churchill Park Railway Station and Plas Y Felin Primary School. This also forms part of a local bus route with bus stops provided in close proximity to the school entrance.

B4263 Mill Road

2.3.4 The B4263 Mill Road is a main local distributor route to the south of Caenant Road / Lewis Drive. The speed limit in the locality of the site 20mph. The road has a width of around 5.0m and is a single carriageway, it operates as one-way to the east of Dol-Y-Felin Street / Tafwys Walk, (westbound) located to the east of the school. There are traffic calming measures along this route including priority loss areas. The road primarily serves as a connection to the centre of Caerphilly and local residential areas.

2.3.5 Mill Road is a bus route, with multiple stops provided in the vicinity of the school. It also serves as a local destination for day to day facilities.

Emlyn Drive

2.3.6 Emlyn Drive is a residential cul-de-sac which borders the site to the north. A gated access exists at the back of the turning head, which provides access to the northern areas of the school grounds. The route is narrow with footways of 0.5 metres width provided on each side. Access to private driveways is provided along its short length and on street parking also occurs.

Morgan Street

2.3.7 Morgan Street borders the southern extent of the site. The road is a residential cul-de-sac which provides direct access to private driveways and also to the rear of properties along the school boundary. Footways are provided on both sides of the route and these appear to be of appropriate or standard width.

2.4 Walking and Cycling

2.4.1 There are limited existing, designated walking or cycling routes available in close proximity to the school. However, footways are present along the residential routes, these are generally supplemented with dropped kerbs and tactile paving in the vicinity of the site. Caenant Road has historically been a 20mph zone, prior to changes in national residential route speed limits. Footways on Caenant Road are generally in the order of 2 metres in width and street lighting is in place. Caenant Road is adjoined by a number of residential cul-de-sacs, all of which have continuous footway provision of some form, to provide continuous active travel connections to the main road. Traffic calming features, in the form of speed bumps, are in place throughout the length of Caenant Road / Lewis Drive, which alongside the 20mph speed limit, has helped to contribute to a relatively low-speed traffic environment.

2.4.2 The nearest designated cycle route (Council ref. CCBC Link 13) is located on Mill Road, to the south of the site, and follows the alignment of National Cycle Network (NCN) 475. Mill Road comprises the main distributor route to the south of Caenant Road / Lewis Drive. The nearest crossing facilities to this route are available approximately 25 metres to the east of the junction between Mill Road / Caenant Road and are provided in the form of a zebra crossing.

2.4.3 A number of future walking / cycling route improvements are identified as part of Caerphilly's Integrated Network Maps, including a walking and cycling route along the length of Caenant Road / Lewis Drive (ref. INMC58), connecting to Energlyn & Churchill Park Railway Station. Further walking and cycling route improvements are proposed along Mill Road (INMC377) and to the east of the school along Celyn Avenue and Nant yr Aber, which currently comprises an off-street walking route alongside the river, connecting to the Asda Superstore located to the north of the school.

2.4.4 In terms of a wider active travel network connection, NCN route 475 forms part of a wider, continuous route between Caerphilly and Senghenydd, to the northwest. NCN 475 continues southwards through Morgan Jones Park, connecting to NCN 4 to the south of Caerphilly Castle. NCN 4 forms part of a long-distance route between London and Fishguard, encompassing destinations such as Bath, Bristol, Newport, Swansea and Tenby.

Planned Walking & Cycling Improvements

2.4.5 According to DataMapWales' Active Travel Network Mapping, and as indicated above, there is a future walking route (ref. INMC58) proposed along Caenant road/ Lewis Drive, adjacent to the site. This will provide a connection to the existing walking and cycling route ref. CCBC Link 13 and proposed route ref. INMC56, located along Mill Road.

2.5 Public Transport

2.5.1 Existing public transport services operating in the vicinity of the Proposed Development have been identified with reference to current timetable and routeing information.

Bus Services

2.5.2 The IHT's *Guidance for Providing for Public Transport in Developments*, published in 1999, suggests 400m as the 'acceptable' walking distance to a bus stop. The nearest bus stops to access existing services to the Proposed Site are located approximately 70m walking / cycling distance from the existing school access, for both eastbound and westbound travel. These stops are named 'Churchill Park, after Plasyfelin Primary School' and 'Churchill Park o/s Plasyfelin Primary School' and are situated on Lewis Drive. There is one service which serves these stops, this is the G service from Caerphilly to Churchill Park Howard Drive. This service also serves the rail station stop 'Energlyn and Churchill Park Station' located 340m away. There are further bus stops within walking distance of approximately 230m, along Mill Road named 'Caerphilly, before Llys Nant Pandy' and 'Caerphilly, after Llys Nant Pandy'. These stops are served by service C (Caerphilly to Penyrheol) and service E (Senghenydd to Caerphilly). Along Nantgarw Road, situated 550m from the site are two stops named 'Caerphilly, before Crescent Road' and 'Caerphilly, after Cresent Road'. These stops are served by the 26, 86X, 120, K, L and B services.

2.5.3 **Table 2-1** provides a summary of the bus services which are available from the bus stops on Lewis Drive and also on Mill Road. Times and frequencies listed are reflective of the latest available timetable.

Table 2-1: Summary of Local Bus Services

Service	Relevant Stop	Route	Days	First Service	Last Service	Approximate Frequency
G	Churchill Park, after Plasyfelin Primary School	Caerphilly Interchange Stand 2 to Churchill Park Howard Drive	Mon-Fri	08:56	18:01	Hourly
			Sat	08:56	18:01	Hourly
	Churchill Park, o/s Plasyfelin Primary School	Churchill Park Howard Drive to Caerphilly Interchange Stand 11	Mon-Fri	08:02	17:02	Hourly
			Sat	08:02	17:02	Hourly
C	Caerphilly, after Llys Nant Pandy	Caerphilly Interchange Stand 3 to Penyrheol Terminus	Mon-Fri	07:15	22:40	Every 30 mins- 1 hour
			Sat	07:16	22:40	Every 30 mins- 1 hour
			Sun	11:24	20:24	Every 1-2 hours

	Caerphilly, before Llys Nant Pandy	Penyrheol Terminus to Caerphilly Interchange Stand 11	Mon-Fri	07:35	22:57	Every 30 mins- 1 hour
			Sat	07:35	22:57	Every 30 mins- 1 hour
			Sun	09:44	20:44	Every 1-2 hours
E	Caerphilly, before Llys Nant Pandy	Senghenydd High Street – Caerphilly Interchange Stand 11	Mon-Fri	09:20	17:20	Hourly
			Sat	09:20	17:20	Hourly
	Caerphilly, after Llys Nant Pandy	Caerphilly Interchange Stand 2 – Senghenydd Upper Brynhyfryd Terrace	Mon-Fri	09:38	17:38	Hourly
			Sat	09:38	17:38	Hourly
26	Caerphilly, after Crescent Road	Ebbw Vale - Abertillery - Blackwood - University Hospital Of Wales and Caerphilly - Cardiff	Mon-Fri	06:32	19:57	Hourly
			Sat	06:32	19:57	Hourly
			Sun	08:47	19:47	Hourly
86X	Caerphilly, before Crescent Road	Caerphilly Interchange Stand 11 – University Hospital of Wales	Mon-Fri	06:49	20:20	Hourly
			Sat	07:22	19:22	Hourly
	Caerphilly, after Crescent Road	University Hospital of Wales – Caerphilly Interchange Stand 11	Mon-Fri	05:57	19:17	Hourly
			Sat	06:32	18:32	Hourly
120	Caerphilly, before Crescent Road	Blaen-cwm Turning Circle - Caerphilly Interchange Stand 7	Mon-Fri	07:35	21:04	30 mins
			Sat	07:37	21:04	30 mins
K	Caerphilly, after Crescent Road	Caerphilly Interchange Stand 2 - Caledfryn Ffordd Eynon Evans	Mon-Fri	09:13	17:13	Hourly
			Sat	09:13	17:13	Hourly
	Caerphilly, before Crescent Road	Caledfryn Ffordd Eynon Evans - Caerphilly	Mon-Fri	09:44	17:49	Hourly
			Sat	09:44	17:49	Hourly

		Interchange Stand 11				
B	Caerphilly, after Crescent Road	Caerphilly Interchange Stand 1 - Senghenydd Turning Circle	Mon-Fri	06:23	23:02	20 mins
			Sat	06:23	23:02	20 mins
			Sun	10:54	22:23	Hourly
	Caerphilly, before Crescent Road	Senghenydd Cenydd Terrace - Cardiff Greyfriars Road GE	Mon-Fri	05:57	23:38	20 mins
			Sat	05:57	23:38	20 mins
			Sun	09:31	22:56	Hourly
L	Caerphilly, before Cresent Road (Also serves Bryncenydd Heol-y-Parc (o/s 46)	Caerphilly - Caerphilly via Glenfields, Bryncenydd	Mon-Fri	09:04	16:27	1-2 hours
			Sat	09:04	14:32	1-2 hours

Source: Bustimes.org (December 2024)

2.5.4 **Table 2-1** shows that there are multiple and viable options for bus travel in the study area, with services running regularly throughout the day, to a range of local destinations.

Rail Services

2.5.5 The site benefits from the close proximity of Energlyn and Churchill Park railway station, situated to the northwest of the school. This station is located on the Cardiff City Line and is approximately 380m from the school, via a short walk or by cycle. The station offers regular local services between Penarth via Cardiff City Centre and other services to Rhymney and Bargoed. Energlyn and Churchill Park is accessible via Lewis Drive.

2.5.6 Aber railway station is also within reasonable walking distance, located approximately 1km away from the site. Regular services run from this station to Cardiff Central, Penarth, Bargoed, Rhymney and Ystrad Mynach. This station is situated on the same line as Energlyn & Churchill Park albeit some additional local services call at Aber.

2.5.7 Facilities provided at the station and services to / from these are summarised in **Table 2-2** and **Table 2-3** respectively.

Table 2-2: Summary of Facilities at Energlyn and Churchill Park & Aber Stations

Facility	Station	
	Energlyn and Churchill Park	Aber
Car Parking	No	128 spaces
Disabled Car Parking	No	No
Taxi Rank	No	No
Cycle Storage	8 spaces	No
Staffing / Ticket Office	No	No
Self Service Ticket Machines	Yes	Yes
Step Free Access Coverage	Yes, Category B2	Yes, Category B2

Source: Transport for Wales (December 2024).

Table 2-3: Summary of Rail Services at Energlyn and Churchill Park Station

Station	Direction	Days	First Service	Last Service	Approximate Frequency
Energlyn & Churchill Park	Towards Cardiff Central	Mon-Fri	06:32	22:19	30 minutes
		Sat	06:31	22:19	30 minutes
		Sun	09:36	21:34	Hourly
	Towards Bargoed	Mon-Fri	06:16	22:59	30 minutes
		Sat	06:16	23:00	30 minutes
		Sun	09:16	22:18	Hourly

Source: Transport for Wales (December 2024).

2.5.8 In summary, there is a frequent provision of rail services from the nearby station to local destinations, and beyond into Cardiff City Centre. Services begin early in the morning and finish late at night, ensuring a provision to suit a wide range of commuting times. Connections at Cardiff Central provide opportunities to board services providing access to a number of national destinations. Overall, this displays a high availability of rail services to/from the site and surrounding area.

2.6 Accessibility Index

2.6.1 A requirement of the BREEAM process is the calculation of the Accessibility Index (AI). In line with the current guidance an assessment of the AI of the site has been undertaken using the AI calculator and associated methodology contained within the BREEAM documents.

2.6.2 The assessment involves establishing the average number of bus and rail services per hour from compliant transport nodes during a site's operating hours. The guidance specifies a five-hour operating period (07:30hrs – 10:00hrs & 15:00hrs – 17:30hrs) as the default hours of operation for a typical day for 'Preschool, school, sixth form college' building types, which is deemed appropriate for this site. Compliant transport nodes are those within 1km of the premises for rail and 650m for bus.

2.6.3 With regard to rail accessibility, two stations are reachable within 1km walking distance of the school. The nearest railway station is Energlyn & Churchill Park, which is approximately 380m walking distance to the north of the site, via Lewis Drive. Aber Railway Station is located approximately 1km walking distance to the south of the site. Both stations are therefore eligible for inclusion in the calculation, providing regular services to Cardiff and other local destinations. The nearest bus stops are located approximately 70m to the north of the school on Lewis Drive. Additional services from three other bus stops, all located within 650m walking distance of the site, have been considered in the calculation. For bi-directional services, average frequency has been calculated for one direction only.

2.6.4 The AI calculations and the bus nodes and services considered as part of the assessment are included in **Appendix A**. The input frequencies of services from compliant nodes results in an **AI** of **8.20**, which according to BREEAM guidance, is sufficient to achieve three credits for this building type.

2.7 Accessibility to Amenities

2.7.1 The proximity of the site in relation to a specific range of local complementary amenities has been reviewed in line with BREEAM guidance, and in particular Table 7.1 of the criteria contained within topic Tra01. In accordance with Table 7.1, the definition of local amenities includes: 'appropriate food outlets', 'access to cash', and 'access to a recreation or leisure facility for fitness or sports', all to be located within 500m of the site.

2.7.2 **Table 2-4** demonstrates that there is a good range of the specific amenities referenced in the BREEAM guidance within 500m walking distance of the existing school access. Specifically, this meets a requirement of BREEAM topic Tra01 which is to demonstrate that 'at least three accessible amenities are present'.

2.7.3 Additionally, there are further facilities located beyond the BREEAM 500m requirement, which also contribute to the sustainable location of the premises. These include an Asda superstore, Trecenydd Business Park, Morrisons with an ATM and Owain Glyndwr playing field.

Table 2-4: BREEAM Local Amenities within 500m of the Site

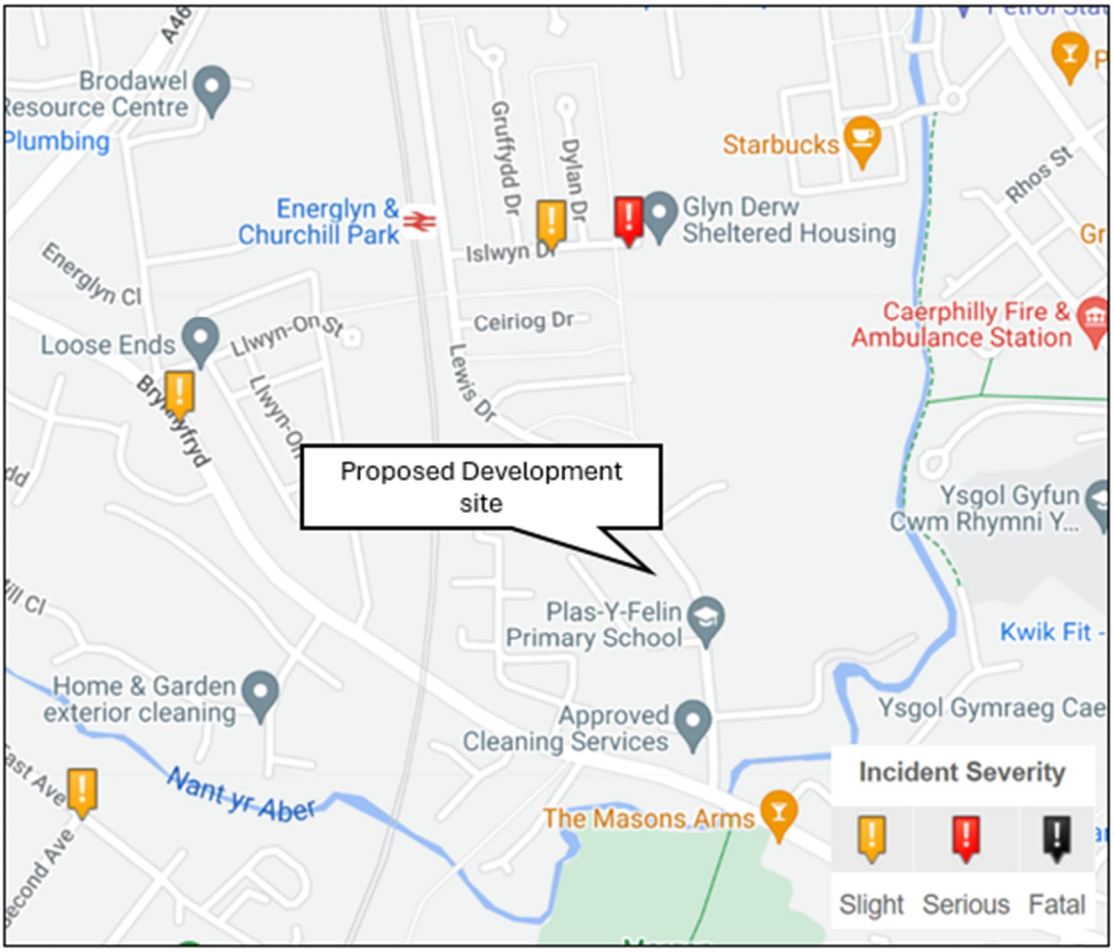
Category	Within 500m?	Name / Location	Distance from site (m)
Appropriate food outlet	✓	The Masons Arms (Pub Restaurant) and Golden Valley Chinese Take Away	190m
Access to cash	✗	-	-
Access to an outdoor open space	✓	On-site and Morgan Jones Park	0m/200m
Access to a recreation or leisure facility for fitness or sports	✓	On-site	0m
Publicly available postal facility	✓	Mill Road	230m
Community facility	✓	St Helen's Church	500m
Over the counter services associated with a pharmacy	✗	-	-
Public Sector GP surgery or general medical centre	✗	-	-
Childcare facility or school	✓	On-site	0m

Note: all distances measured from the site access along pedestrian routes.

2.8 Highway Safety

2.8.1 A review of Personal Injury Collision (PIC) data has been undertaken on the local study area, using the 'Crashmap' online resource to determine whether there are any locations on the local highway network with poor collision records. An extract showing the PICs recorded in the study area during the latest available five-year period from 1st January 2018 to 31st December 2022 (correct at the time of writing) is reproduced as **Figure 2-2**. The study area for the purposes of this assessment includes the extent of Caenant Road / Lewis Drive and the B4263, within the vicinity of the school.

Figure 2-2: Personal Injury Collisions in the Vicinity of the Site



Source: Crashmap (2024)

2.8.2 Over the five year period, a total of three PICs occurred within the vicinity of the site. Two of the incidents were recorded on Islwyn Drive, one being 'serious' and the other 'slight' in severity. The serious PIC included one vehicle and the slight PIC included two vehicles. Each of these PICs resulted in a single casualty. The incident along Brynhyfryd Road was recorded as a 'slight' PIC with three vehicles and one casualty involved.

2.8.3 The low number of PICs over the five-year period equates to less than one incident per year, suggesting there are no existing safety issues in the area local to the site, and the Proposed Development is unlikely to give rise any issues of safety to highway users. The fact there are no incidents on the immediate road next to the school, again suggests there are no inherent safety issues. Therefore, no further detailed investigation or in depth analysis is deemed to be required beyond this high-level review.

3. Development Proposals

3.1 Introduction

3.1.1 This section of the TA outlines the development proposals, including the method of access for all vehicle types, as well as the internal movement, deliveries and servicing strategies.

3.2 Overview of Proposals

3.2.1 The Proposed Development intends to redevelop and replace the existing Plasyfelin Primary School with a new facility, this will be contained within the existing site boundary. The redevelopment and associated expansion will include the repurposing of some of the amenity grassland to the east of the school.

3.2.2 At this stage, the draft preferred option shows the following elements will potentially be included within the design:

- A main school building to the southwest of the premises, to include classrooms, a main hall, a small hall, a kitchen, and administration rooms;
- A revised pupil capacity from the 287 current provision/enrolment to 480 on a two form entry basis, this will also include provision for a 60 place nursery; Two hard play areas adjacent to the east and south of the main school building;
- One soft play area to the north of the main school building;
- Two Multi-Use Game Areas (MUGA) in the centre and north of the site;
- A new formal parking area in the centre of the site, indicatively showing 67 total parking spaces, three of which are for marked for disabled use;
- Cycle parking spaces and associated facilities, to be provided in accordance with SPG and also BREEAM requirements; and
- A service yard in the southwest corner of the school.

3.2.3 At this stage of the design process, it is expected that the proposals will expand the capacity of the school from the current enrolment of 287 pupils to 480 pupils through the inclusions of additional general provision as well as a nursery facility. Based on the current understanding, there are around 45 teaching and ancillary staff in the school. As part of the proposals, it is anticipated that this number is likely to rise in association with the increase in pupil capacity. The details of proposed staff increases will be developed further over the forthcoming design development stages.

3.2.4 An extract of the proposed site layout is shown on **Figure 3-1**. A full version of the plan is included in **Appendix B.**

Figure 3-1: Proposed Site Layout Plan

3.3 Access Strategy

3.3.1 Vehicular access to the Proposed Development's will continue to be provided from the existing access along Caenant Road/Lewis Drive, with modest but appropriate enhancements. Under the proposed use of the existing arrangements, junction visibility splays of 2.4m by 25m, commensurate with the 20mph speed restriction on Caenant Road / Lewis Drive, have been considered in each direction. The visibility extents are shown on a plan contained at **Appendix C**, demonstrating that the visibility splays can be accommodated within the highway extent.

3.3.2 Pedestrian access will also be delivered primarily through this route with a revised network of internal footways and crossings at logical and safe places. The proposals also identify the potential to link with the footpath to the eastern boundary of the site at Nant yr Aber.

3.3.3 Appropriate and legible access will be developed and provided (i.e. through on-carriageway markings and appropriate signage) to direct users to appropriate areas to maximise efficiency of movement and minimise conflict. The access with Caenant Road / Lewis Drive will be reconfigured to appropriate modern standards and ensured that it operates safely and efficiently for all users.

3.3.4 Deliveries, servicing and refuse collection will continue to take place, as per the arrangements of the existing school, served from Caenant Road/Lewis Drive. Internally, the Stage 2 layout has indicatively shown a service area to the southwest corner of the site. Swept Path Analysis (SPA) investigations have been conducted to simulate the manoeuvrability of a robust length 11.3m refuse vehicle. The vehicle simulation includes the reconfigured site access junction, moving through the internal site layout and assessing the turning manoeuvre within the proposed servicing area to the southwest corner of the site, where bin storage is proposed to be located. SPA has demonstrated these manoeuvres are achievable without the requirement for any significant amendments to the internal layout. An equivalent exercise has been undertaken for an 8.60m fire appliance, to demonstrate emergency vehicle access can be achieved and can circulate the internal site layout. The consideration of these large rigid vehicle is suitably robust to serve as a proxy vehicle for school deliveries which are usually carried out by similar or smaller sized rigid commercial vehicles. The results of the SPA for these vehicles is contained in **Appendix C**.

3.3.5 SPA has been conducted for a robust 'large car' of 5m length, to ensure the proposed car parking area can be accessed and manoeuvred within. This has demonstrated that all spaces can be easily accessed without any issue. The result of this analysis is demonstrated in **Appendix C**.

3.4 Parking Provision

Car Parking

3.4.1 The consideration of the proposed level of parking, has endeavoured to provide an appropriate level of provision that achieves a suitable balance between meeting the needs of parking standards and development demands but working to promote sustainable transport.

3.4.2 At this design stage, there are a total of 67 proposed car parking spaces including three disabled spaces. One Commercial vehicle space, 5% motorcycle spaces and 10% EV charging spaces will also be provided, based on the CCBC Parking SPG, and informed by general guidance.

3.4.3 The exact allocation of parking spaces is yet to be confirmed at the time of writing and layout options are at the space fit or concept design stage. In the future design stages and once the relevant information is available regarding staff uplift, the parking provision will need to be reviewed and refined to ensure compliance against the SPG parking standards.

Cycle Parking

3.4.4 The provision of cycle parking spaces will be based on both the standards contained within the CCBC Parking SPG, as well as BREEAM requirements which have been set for educational building types category. From an initial review, the BREEAM requirement is likely to be greater than that of the Parking SPG. At this stage of design development, it is forecast that the proposals will work to comply with the BREEAM requirements, which sets out a requirement of one cycle space per 10 staff and students (combined) and could exceed the CCBC standards.

3.4.5 In terms of the design of the parking arrangements, secure storage racks will be provided and these will include appropriate access, to a fixed structure with overhead covering. These will be served with adequate lighting and designed in positions of appropriate surveillance which makes them visible from occupied buildings.

3.4.6 In addition to secure external cycle parking, internal facilities such as lockers, drying areas, changing rooms and shower facilities will be provided. This will provide the key support structure which will assist those who wish to cycle do so as a primary travel mode all year round.

4. Planning Policy Review

4.1 Introduction

4.1.1 This section of the TA provides a review of existing planning and transport policies at a national and local level considered relevant to the Proposed Development.

4.2 National Policy

Planning Policy Wales

4.2.1 Edition 12 of PPW was published in February 2024 and sets out the land use planning policies of the WG. It is supported by a number of Technical Advice Notes (TANs), which provide detailed planning advice on subjects contained within PPW. *TAN 18: Transport* is considered of particular relevance to the Proposed Development and is included in this policy review. An overarching theme within PPW is the commitment of the WG to sustainability.

4.2.2 Planning policy in Wales is plan-led, with up to date LDPs forming a fundamental part of the system. PPW states that planning applications *"must be determined in accordance with the adopted plan unless material considerations indicate otherwise."*

4.2.3 PPW outlines the vision for development of a more effective and efficient transport system, the promotion of more sustainable and healthy forms of travel, as well as minimising the need to travel. PPW indicates that this will be achieved through integration:

- "Within and between different types of transport;
- Between transport measures and land use planning;
- Between transport measures and policies to protect and improve the environment; and
- Between transport measures and policies for education, health, social inclusion and wealth creation."

4.2.4 The WG outlines a support for a transport hierarchy in relation to the accessibility of new development that prioritises walking and cycling in the first instance, followed by public transport, ultra-low emissions vehicles and finally other private motor vehicles.

4.2.5 Paragraph 4.1.11 states:

"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. Importantly, sustainable transport infrastructure and services should be prioritised and put in place from the outset, before people have moved in and travel patterns have been established."

4.2.6 Paragraph 4.1.15 further states the importance of walking and cycling facilities when there is development that is likely to increase movements.

"Careful consideration needs to be given in development plans to the allocation of new sites which are likely to generate significant levels of movement, to ensure that access provisions which enable walking and cycling, as well as for public transport, are included from the outset and that any implications associated with airborne pollution can be addressed".

4.2.7 Paragraph 4.1.41 relates to the provision of facilities for EVs:

"To encourage the use of Ultra Low Emission Vehicles (ULEVs), the planning system should encourage and support the provision of ULEV charging points as part of new development.

Charging points must not cause an obstruction to walking or cycling, should be resistant to vandalism, and located where there is good lighting and natural surveillance."

4.2.8 Paragraph 4.1.50 states that car parking provision has a major influence on both mode choice and development patterns. Paragraph 4.41.51 stresses the importance that car parking should be integrated in a way that does not dominate development.

4.2.9 Paragraphs 4.1.56 to 4.1.57 identify the requirements for development proposals to be accompanied by an appropriate level of transport assessment. It directs professionals to the TAN 18 for guidance on the preparation and content of assessments.

Technical Advice Note 18: Transport

4.2.10 TAN 18 was published in March 2007. It describes how to integrate land use and transport planning and explains how transport impacts should be assessed and mitigated. It supports, and should be read in conjunction with, PPW.

4.2.11 The integration of land use and transport planning forms part of an overall sustainable development approach by the WG towards strategy and policy objectives. This is predominantly through maximising the accessibility of developments by sustainable modes of transport. This also includes reducing the need to travel and encouraging multi-purpose trips. Accessibility is defined in TAN 18 as *"the relative ability to take up services, markets or facilities."*

4.2.12 Paragraph 4.6 states that parking standards for new developments should be determined on an evidence basis which includes accessibility to other modes of transport.

4.2.13 Section 5 requires all new development to be designed in a way that is inclusive for all. The design of the development also plays an important role in providing genuine alternatives to car travel.

4.2.14 Section 6 highlights the ability for walking and cycling to replace shorter car journeys, as well as the ways in which developments can encourage this. This includes the creation and protection of safe and legible pedestrian and cycle routes along key desire lines, and provision of cycle parking and facilities.

4.2.15 Section 7 considers the role that public transport can play in offering an alternative to car travel, giving emphasis to the provision of new services and facilities, as well as facilitating interchange, as methods of encouraging uptake.

4.2.16 TAN 18 requires a Transport Implementation Strategy to be included within a TA. This should seek to:

- *"Identify what policy objectives and requirements are set by the development plan in terms of access to the development and movements in and around the site;*
- *Identify what access arrangements are required for a successful development (meeting the needs of the developer, end user, addressing impacts on neighbours and existing movements surrounding the site); and*
- *Specify the package of physical, management and promotional measures needed to accommodate the requirements identified above, such as physical infrastructure, the design and location of buildings, parking management, financial incentives and dedicated travel plan co-ordinators."*

4.2.17 The TIS is set out in **Section 6**.

The Wales Transport Strategy 2021

4.2.18 The *Wales Transport Strategy 2021* (WTS) was published in March 2021 and provides a long-term vision for transport over the next 20 years. The vision of the WTS is *"an accessible, sustainable and efficient transport system."* In order to deliver its vision, the WTS sets out three priorities:

- Priority 1 – Bring services to people in order to reduce the need to travel;
- Priority 2 – Allows people and goods to move easily from door to door by accessible, sustainable transport; and

- Priority 3 – Encourage people to make the change to more sustainable transport.

National Transport Finance Plan

4.2.19 The *National Transport Finance Plan* (NTFP) provides the timescales for financing and delivery of schemes in Wales. The NTFP is not a policy document and nor does it prioritise schemes to be taken forward. It was published in 2015 and an update was since published in 2018.

4.2.20 This has identified that scheme reference R27h includes a "*Range of improvements including major infrastructure improvements to reduce congestion and increase capacity at junctions*" on the M4 between Junctions 35 and 49 from 2019/20 onwards.

Active Travel (Wales) Act 2013

4.2.21 The *Active Travel (Wales) Act* became law in Wales in November 2013 and has since been updated in July 2021. The Act makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve their infrastructure for walking and cycling every year. It also requires both the WG and local authorities to promote walking and cycling as a mode of transport.

4.2.22 As discussed in **Section 2**, a set of Integrated Network Maps was submitted by CCBC to the WG in 2017, which set out the Council's plans for improving active travel over the following 15 years. Any plans deemed relevant to the site have been identified in **Section 2.**

4.2.23 The Act is accompanied by a statutory design guidance document, published in December 2014, which provides advice on the planning, design, construction and maintenance of active travel networks and infrastructure, and is to be used at all stages of the process. Reference has been made to this guidance in the planning and design of the Proposed Development.

Wellbeing of Future Generations (Wales) Act 2015

4.2.24 The *Wellbeing of Future Generations (Wales) Act 2015* has resulted in the WG outlining seven goals in a 'wellbeing statement' (published in 2017) that contribute to sustainable development and details the aims to improve economic, social, environmental and cultural wellbeing of Wales for future generations. The Act places a duty on Local Authorities to set wellbeing objectives and contribute to achieving the seven well-being goals, which are:

- A prosperous Wales;
- A resilient Wales;
- A healthier Wales;
- A more equal Wales;
- A Wales of cohesive communities;
- A Wales of vibrant culture and thriving Welsh language; and
- A globally responsible Wales.

4.2.25 The seven goals form the basis for twelve objectives, also detailed in the wellbeing statement. Several of these are directly relevant to this Proposed Scheme:

- Drive sustainable growth and combat climate change;
- Promote good health and well-being for everyone;
- Build healthier communities and better environments; and
- Deliver modern and connected infrastructure.

4.3 Local Policy

Caerphilly County Borough Local Development Plan up to 2021 (2010)

4.3.1 The Caerphilly County Borough Local Development Plan was adopted in November 2010 and sets out to serve the county up until 2021 but is still currently in adoption. The LDP is in place to identify areas for development to be situated and provides a framework for decision making.

4.3.2 Policy CW1 refers to development proposals which will generate a significant number of trips and their need to encourage active travel modes. It is stated that they will only be permitted if:

- *A) Walking and cycling are modes of travel which have been actively encouraged for short trips to and within the development and to nearby services and facilities, including public transport nodes, through the provision of appropriate infrastructure;*
- *B) Provision has been made for ease of cycling, including secure bike storage and cyclist facilities.*

4.3.3 Policy CW3 refers to design considerations from a highway perspective. Bullet points B and C are relevant to this type of development and state:

- *B) The proposal ensures that new access roads within development proposals are designed to a standard that:*

  i) Promotes the interests of pedestrians, cyclists and public transport before that of the private car, and

  ii) Safely and effectively accommodates the scale and nature of traffic, which those roads are intended to serve

- *C) Parking, appropriate servicing and operational space have been provided in accordance with the CSS Wales Parking Standards 2008*

Second Replacement Caerphilly County Borough Local Development Plan up to 2035

4.3.4 Caerphilly County Borough Council are currently reviewing their replacement development plan which is set to be adopted in December 2024 and replace the current framework. Within the new plan, the council will aim to achieve certain outcomes, including:

- Supporting sustainable development
- Be based on and underpinned by early, meaningful, and effective community engagement;
- Be based on understanding of function of areas and their functional linkages to areas beyond administrative boundaries;
- Have distinctive plans set out;
- Be resilient to climate change;
- Ensure sustainable management of natural resources;
- Deliver what is intended through viable and deliverable plans;
- Be proactive and responsive with the plans, keeping them up to date and flexible to accommodate changes.

Car Parking Standards Council Approved Supplementary Planning Guidance LDP 5

4.3.5 This SPG was adopted in January 2017. It sets out a consistent approach to parking facilities associated with new development and change of use. The guidance supports the Caerphilly County Borough Local Development Plan up to 2021.

4.3.6 This particular development is concerned with the standards for Primary Schools in particular. The car parking and cycle standards specifically for Primary Schools are as follows:

Table 4-1: Nursery, Infants & Primary Schools Parking Requirements Zones 2-4

Type of Development	Operational	Non-operational
Nursery/Infants/Primary Schools	1 commercial vehicle space	1 space per member of teaching staff, 1 space per 3 non-teaching staff, 1 space per 30 pupils visitor spaces, bus parking as required

Source: Car Parking Standards Part 1 of 2, Council Approved Supplementary Planning Guidance LDP 5 (2017)

Table 4-2: Cycle Parking Standards for Nursery, Infants & Primary Schools

	Cycle Parking Provision	
Type of Development	Long Stay	Short Stay
Nursery, Infants & Primary Schools	1 stand per 5 staff and 1 stand per 20 children	1 stand /100 children

Source: Car Parking Standards Part 1 of 2, Council Approved Supplementary Planning Guidance LDP 5 (2017)

4.4 Summary

4.4.1 This section of the report has set out and discussed the planning policies at a national and local level considered relevant to the Proposed Development.

4.4.2 The scheme will be adapted to conform with both local and national policy. The proposals seek to redevelop the existing school provision for a replacement facility. This accords with a number of policy targets in ensuring development is located appropriately and at the correct sites. There will be a key focus in ensuring walking and cycling takes priority, building on the current arrangements, making sure the site redevelopment integrates with off-site provision. It will be made a priority of the design that access arrangements will ensure safe and suitable access can be achieved for all people.

5. Trip Generation

5.1 Introduction

5.1.1 This section of the TA sets out the method for calculating the likely trip generation of the Proposed Development.

5.2 Existing School

5.2.1 The premises is currently occupied by Plasyfelin Primary School. At present, the school is understood to have a capacity for 287 enrolled pupils, and employs 45 permanent members of teaching and ancillary staff.

5.3 Proposed Development Personnel

Staff

5.3.1 There is currently understood to be a total of 45 permanent members of teaching and ancillary staff at the school. As part of the proposals, it is anticipated that this number is likely to increase in association with the increase in pupil capacity, these details will become available over the more detailed stages of the development design.

5.3.2 There is currently no known data available on how the existing staff travel to the school. In the absence of any other relevant and meaningful data the 2021 census data for 'Method of Travel to Work' for MSOA 'Caerphilly 022' has been used to determine how staff are likely to travel to the school. The location of this MSOA is outlined in **Figure 5-1** and the indicative modal split presented in **Table 5-1.**

Figure 5-1: 'Caerphilly 022' MSOA

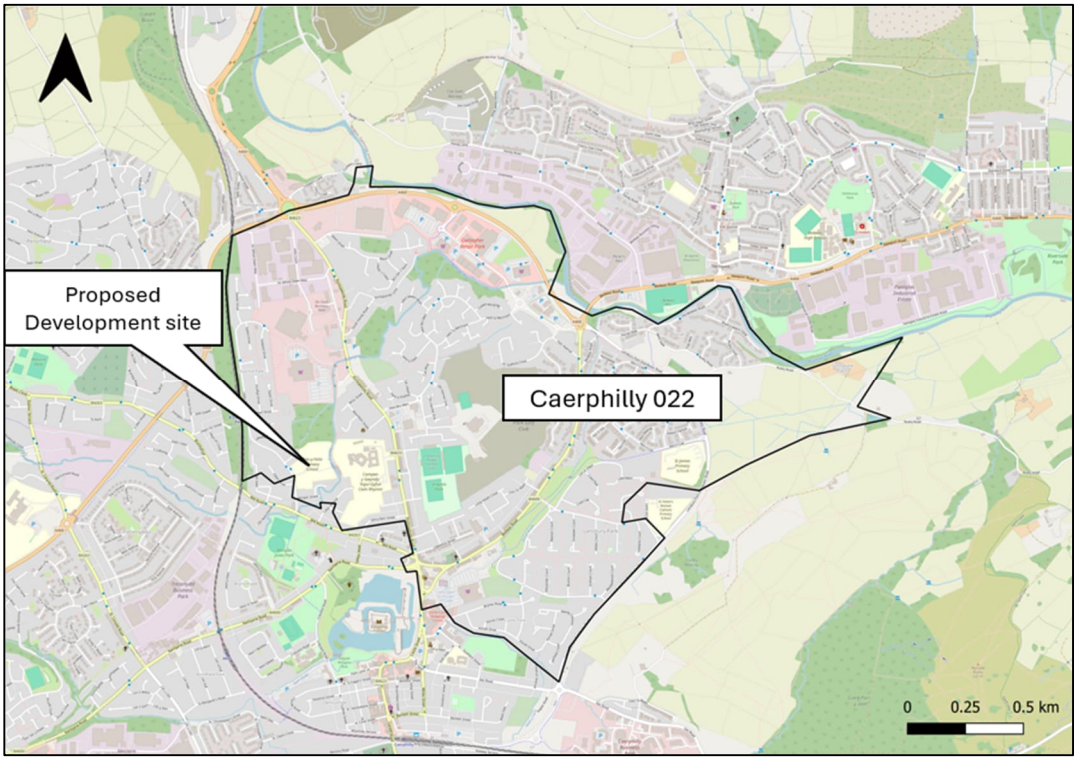


Table 5-1: 2021 Census Journey to Work Mode Shares

Mode	2021 Census Mode Share
Walk	10%
Pedal Cycle	2%
Driving/Passenger in a Car or Van	80%
Public Transport	7%
Taxi	1%
Motorcycle, Scooter or Moped	0%
Total	**100%**

5.3.3 The 2021 census data journey to work mode shares have been applied to the 45 staff which are typically on-site daily to calculate the resultant multi-modal trip generation for the Proposed Development which is set out in **Table 5-2**. This will need to be revisited when details of the proposed teaching and ancillary staff are available.

Table 5-2: Proposed Development Multi-Modal Staff Trip Generation

Mode	Staff
Walk	5
Pedal Cycle	1
Driving/Passenger in a Car or Van	36
Public Transport	3
Taxi	0
Motorcycle, Scooter or Moped	0
Total	**45**

5.3.4 **Table 5-2** indicates that approximately 36 of the 45 total staff are forecast to travel to and from the school via car / van. Five staff members are expected to walk from within the local area, with the remaining forecast to travel by bike or public transport. Due to the proximity of multiple bus stops, and the nearby rail stations it is anticipated that a higher number of staff may choose to travel to the proposed development by public transport than that which is suggested by the 2021 Census data.

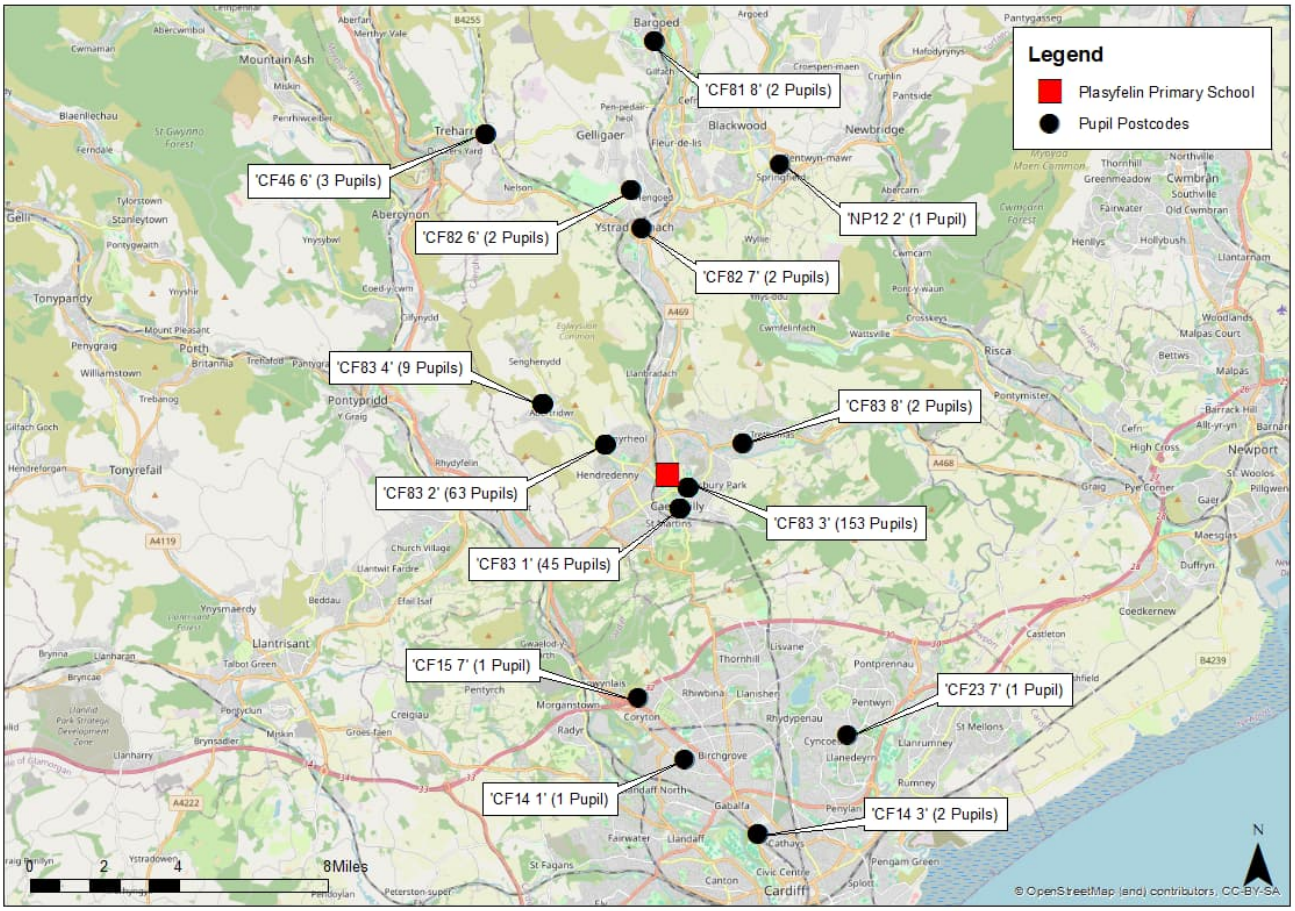
5.3.5 As part of the monitoring strategy in the Travel Plan, travel behaviour surveys will be undertaken at the Proposed Development post occupation to understand how staff are travelling to / from the school.

Pupils

5.3.6 Plasyfelin Primary School is currently understood to contain 287 pupils. The Proposals are set to expand the capacity of students in the school to 480 including 60 nursery pupils. It is understood that the majority of existing pupils are located within a reasonable locality of the school, and as such the existing school does not currently provide home to school contracted transport services. The majority of pupils are therefore assumed to walk to school, and this is anticipated to be the primary method of travel for the additional pupil cohort.

5.3.7 An initial exercise has been undertaken to understand the broad location of the existing pupil cohort currently in attendance, based on partial postcode data provided by CCBC on behalf of Plasyfelin Primary School. This indicative pupil distribution is represented below in **Figure 5-2.**

Figure 5-2: Indicative School Pupil Distribution



5.3.8 As can be seen from the above extract, the partial postcode data currently used for analysis is too broad to enable a detailed assessment of pupil travel to and from the school to be undertaken. This does however demonstrate that the majority of existing pupils reside within Caerphilly and in reality, may be concentrated in closer proximity to the school than what is represented by the partial postcode data. It is currently being considered whether a more detailed review of pupil postcode locations will be permitted and developed further over the forthcoming, more advanced RIBA stages, through collaboration with the school and CCBC.

5.3.9 For the purposes of a broad assessment, the partial postcode data has been aggregated into approximate distance bands in order to determine an estimated distance between home location and Plasyfelin Primary School. The travel distances of the existing pupil cohort are set out in **Table 5-3.**

Table 5-3: Pupil Postcode Distances

Distance	Number of Pupils	Proportion of Pupils
Under 1 mile	261	91%
1 to under 2 miles	0	0%
2 to under 5 miles	14	5%
5 miles and over	12	4%
Total	**287**	**100%**

5.3.10 In the absence of any other meaningful data being available at this stage, the National Travel Survey NTS0614 '*Trips to and from school by main mode, trip length and age*' dataset has been used to determine how students are likely to travel to the school. It is acknowledged that this data is based on how primary school children travel to school in England, however there is no data readily available for how children travel to school in Wales.

5.3.11 In the absence of surveyed mode share data for the existing pupils, this exercise attempts to forecast how pupils are likely to travel to the school. Furthermore, as part of the Travel Plan, the Proposed Development will be committed to undertaking a travel behaviour survey post-occupation which will accurately determine how pupils are travelling to/from the school. The 2023 NTS0614 '*Trips to and from school by main mode, trip length and age*' data is provided in **Table 5-4.**

Table 5-4: NTS0614 Trips to and from School by Main Mode and Trip Length: Aged 5-10 years

Main mode	Under 1 mile	1 to under 2 miles	2 to under 5 miles	5 miles and over	All lengths
Walk	80%	23%	4%	0%	47%
Pedal Cycle	2%	1%	0%	2%	2%
Car / Van (Driver / Passenger)	17%	71%	84%	70%	45%
Bus	1%	3%	11%	15%	4%
Other[1]	0%	2%	1%	13%	2%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

5.3.12 The proportion of students travelling each distance to the Proposed Development set out in **Table 5-3** have been applied to the NTS0614 data set out in **Table 5-4** to determine how the students are likely to travel to the site. The resultant multi-modal trip generation for the existing pupils of Plasyfelin Primary School are outlined in **Table 5-5.**

Table 5-5: Existing Pupil Mode Share

Mode	Under 1 mile	1 to under 2 miles	2 to under 5 miles	5 miles and over	Total	Mode Share
Walk	209	0	1	0	209	73%
Pedal Cycle	5	0	0	0	5	2%
Car / Van (Driver / Passenger)	44	0	12	8	65	22%
Public Transport[2]	3	0	2	3	8	3%
Total	**261**	**0**	**14**	**12**	**287**	**100%**

5.3.13 **Table 5-5** indicates that approximately 209 pupils could currently travel to/from the school on foot. Approximately 22% of pupils are shown to potentially travel to / from the school as a passenger in a car/van. The school has advised the project team that it is a fact that a significant majority of pupils walk to school, therefore, in reality it is expected there would be an increased walking mode share for existing pupils.

5.3.14 The vast majority of all existing pupils reside within one mile of the school, as reflected by the large proportion (73%) of pupils who are anticipated to travel to school on foot. This would be enabled by the comprehensive provision of pedestrian facilities between the school site and the surrounding residential areas, as detailed in Section 2 of this TA.

5.3.15 As part of the proposals, the total number of pupils will increase from 287 to 480. It is envisaged that the majority of the additional 193 pupils will travel as per the existing pupil cohort.

5.3.16 **Table** 5-6 applies the mode share derived in **Table 5-5** to the additional 193 pupils.

Table 5-6: Pupil Mode Share (Proposed School)

Mode	Mode Share	Existing Pupils	Proposed Pupils	Total Proposed
Walk	73%	209	141	350
Pedal cycle	2%	5	4	9
Car / van	22%	65	43	108

[1] Rail and other modes of transport
[2] Bus and Rail

Public Transport	3%	8	5	13
Total	**100%**	**287**	**193**	**480**

5.3.17 Of the additional 193 pupils, 43 are forecast to travel to / from the school as a passenger in a car / van. As previously stated, the school has advised that a significant majority of pupils live in close proximity to the school and arrive on foot, and this will be expected to continue following occupation of the Proposed Development. Therefore, it is likely that a lower proportion of pupils will travel as private vehicle passengers than is indicated by the high level analysis provided.

6. Transport Implementation Strategy

6.1 Introduction

6.1.1 TAN 18 requires any TA document to provide the information necessary to assess the suitability of an application in travel demand and traffic impact terms. It recommends that a TIS should be included within the TA. The TIS is intended to set objectives and targets in managing travel demand, whilst detailing the infrastructure and measures necessary to achieve them. The TIS should also set up a framework for monitoring the targets including modal travel choice.

6.1.2 A TIS shares many of the same goals as a Travel Plan (TP); therefore, the modal information, targets and measures set out in this chapter will inform the TP which will prepared and submitted alongside the TA as part of the planning application submission.

6.2 Mode Share and Targets

6.2.1 Mode share targets are used to evaluate the success of the TIS and to identify areas on which further measures should be focused in order to help to drive travel behaviour change. To enable the setting of valid and realistic targets, a valid baseline first needs to be established.

6.2.2 Section 5 sets out the forecast mode share of the staff based at the proposed development. This has been determined from 2021 census data using respondents who work in the 'Caerphilly 022' MSOA. This shows that 80% of staff are forecast to travel as a driver of a car / van, 10% on foot, 7% via public transport (including rail), 2% via bicycle and 0% via motorcycle.

6.2.3 A TP has been prepared which aims to promote the use of the most sustainable forms of travel for all types of journeys associated with the development. It will be required to be in place when the replacement school is fully operational and it is appropriate to set targets based on the forecast mode share for that time. The target will be to reduce the 'car' mode share for staff over five years, consistent with the DfT report *Smarter choices: Changing the way we travel* (2004). Following a baseline travel survey and better understanding of the operational requirements of staff, specific mode share reduction targets may be confirmed or adjusted as appropriate, during the drafting of the TP and following discussions between CCBC and the Travel Plan Co-ordinator (TPC).

6.3 Monitoring and Evaluation

6.3.1 The point at which baseline travel surveys are required will be subject to agreement with CCBC as the Local Highway Authority. A minimum response rate to the travel surveys will be required to be set and agreed to ensure that the data is representative.

6.3.2 The format of the baseline and monitoring surveys will also need to be agreed with CCBC. In general, these will seek to establish the actual travel patterns, the reasons for travel choice and potential measures to encourage consideration of alternatives. For staff, it is envisaged that the surveys will be primarily online-based, but paper copies will also be made available to staff should they prefer. The arrangements for the survey of pupil trips to and from the school will also need to be agreed with CCBC.

6.3.3 The results of the baseline travel surveys will be analysed and the factors influencing travel behaviour will be investigated. It will then be necessary for the TPC to review and update the respective TP to include additional details and the need for any other measures not already included that require further investigation. Specific objectives and targets will need to be identified, separated into short / medium / long term targets, and will need to be SMART (Specific, Measurable, Achievable, Realistic, and Timed). Specific actions and measures to encourage sustainable modes of travel will be identified. For the on-going management of the TP to be successful and to deliver the desired outcomes, it is important that the parties involved in the delivery of the TP, which means the TPC, and CCBC, work effectively in partnership to achieve the desired results.

6.3.4 Monitoring of the TP will be required for a five-year period from the date of the baseline travel surveys. They will be undertaken at intervals of one, three and five years after the date (or close to the date) of the baseline travel surveys. The TPC will aim to coordinate the baseline travel surveys and subsequent monitoring surveys to ensure consistency between the collection of data for the TP. Surveys will avoid sustained periods of inclement weather or when there is significant disruption to the local road or public transport network.

6.3.5 A monitoring report will be prepared by the TPC for each monitoring survey. These will identify the results of the surveys and success of the measures implemented in achieving the targets. The reports will be submitted to CCBC for comment. If the targets are not met, then it will be necessary to review what remedial measures need to be implemented to mitigate the impact of any under achievement.

6.4 Travel Plan Measures and Interventions

6.4.1 In order to achieve the reduction in single occupancy car use and encourage a modal shift to more sustainable forms of travel, a number of TP measures will be implemented.

6.4.2 A TPC will be appointed who will be responsible in ensuring the success of the TP and its targets and objectives. The TP will contain a range of measures additional to those that will be provided as part of the development to enhance the attractiveness of sustainable travel and to encourage the use of the walking, cycling and public transport infrastructure. Additional measures include:

- Newsletters to staff members;
- Noticeboards within the staff / visitor areas advertising sustainable transport information; and
- Promotion of national sustainable transport initiatives such as national walk to school day and bike to school week, etc.

6.5 Physical Measures and Interventions

6.5.1 Physical measures will be implemented to encourage journeys to and from the school site using sustainable transport modes and to ensure that safe and secure access can be provided for non-motorised users. Potential interventions are suggested in the following paragraphs.

On-Site Measures

6.5.2 It is proposed that people of all ages and abilities shall be able to easily enter into, and move through the landscape and each space within it via level or ramped entry points where necessary. Internal footways will be aligned to suit desire lines and entry points and internal access roads which require crossing will include dropped kerbs, tactile paving and on-carriageway markings as appropriate. The focus will also be on the easy and direct transition to and from transport modes and the school.

6.5.3 Cycle parking will be provided in accordance with parking standards and in appropriate and secure locations. This will be supported with a suite of internal facilities such as lockers, drying areas, staff changing rooms and shower facilities. This will provide the key support structure which will assist those who wish to cycle to do so as a primary travel mode all year round.

7. Conclusions

7.1.1 AECOM was commissioned by the Caerphilly County Borough Council's Education Department to provide transport planning inputs into the redevelopment of Plasyfelin Primary School for a replacement facility.

7.1.2 The proposed redevelopment will consist of:

- A main school building to the southwest of the Site, to include classrooms, a main hall, a small hall, a kitchen, and administration rooms
- A revised pupil capacity from the 287 current enrolment provision to 480 over a two form entry, this will include provision for a 60 place nursery;
- Two hard play areas adjacent to the east and south of the main school building;
- One soft play area to the north of the main school building;
- Two Multi-Use Game Areas (MUGA) in the centre and north of the Site;
- A new formal parking area in the centre of the Site, indicatively showing 67 total parking spaces, three of which are marked for disabled use;
- Cycle parking spaces and associated facilities, to be provided in accordance with SPG and BREEAM requirements; and
- A service yard in the southwest corner of the school.

7.1.3 A detailed review of the existing highway network and baseline situation has been carried out. The premises benefits from a very good existing provision of sustainable travel. This includes existing provision for pedestrians and cyclists in the locality. According to DataMapWales' Active Travel Network Map there are planned walking and cycling paths along Caenant Road/Lewis Drive and Mill Road. Opportunities for public transport use have been identified including local bus stops and rail stations, all of which are considered an opportunity to build upon good foundations and a real and attractive alternative to single-occupancy vehicle use.

7.1.4 The development proposals will be adapted to conform with both local and national policy. The proposals seek to redevelop the existing school provision for a replacement facility. This accords with a number of policy targets in ensuring development is located appropriately and at the correct sites. There will be a key focus in ensuring walking and cycling takes priority, building on the current arrangements, making sure the site redevelopment integrates with off-site provision.

7.1.5 The exact allocation of parking spaces is yet to be confirmed at the time of writing and layout options are at the space fit or concept design stage. In the future design stages and once the relevant information is available, the parking provision will need to be reviewed against the SPG parking standards.

7.1.6 The provision of cycle parking spaces will be based on both the standards contained within the CCBC Parking SPG, as well as BREEAM requirements for educational building types. In terms of the design of the parking arrangements, secure racks will be provided with appropriate access, in a fixed structure with overhead covering. These will be served with adequate lighting and designed in positions of appropriate surveillance which makes them visible from occupied buildings. This will be further supported through proposed internal facilities such as lockers, drying areas, changing rooms and shower facilities.

7.1.7 Plasyfelin Primary School is understood to currently employ 45 staff members including ancillary staff and this is expected to increase in line with the proposed expansion of capacity to 480 pupils. Currently, there is no known available data on how staff currently travel to the existing school. In the absence of any other relevant and meaningful data the 2021 census data for 'Method of Travel to Work' for MSOA 'Caerphilly 022' has been used to determine how staff are likely to travel to the Proposed Development.

7.1.8 Early initial analysis has been carried out on pupil home locations in relation to the school. This will need to be progressed with further detail in order to forecast likely pupil movements. Forecasts have been made on the likely existing and proposed travel modes using national data, professional judgement and industry best practise.

7.1.9 Objectives have been outlined in the TP for the reduction of private car use amongst staff and visitors and a commitment to a TP and monitoring programme has been made. The TP will need to be reviewed in the context of the location of the school and baseline travel surveys. The measures that will be implemented as part of the development proposals have been outlined to help to achieve the objectives set. TP measures will add another layer of interventions once the TP is established. This will continue to promote and encourage the range of facilities available and improve awareness or provision wherever possible.

7.1.10 The proposed redevelopment of Plasyfelin Primary School is considered to work to achieve policy requirements in locating education development in appropriate locations. The proposals which have been presented have been considered in as much detail as currently available. The findings of this TA is that the proposed expansion of the school would not result in any significant impact, in traffic terms, on the local highway network. Furthermore, the masterplan has been assessed and found to be safe and appropriate for the proposed use. It is therefore requested that the Highway Authority considers this scheme and provides a supportive and favourable recommendation for approval.

8. BREEAM Compliance

8.1.1 **Table 8-1** provides a checklist of information to show where the BREEAM requirements have been met, which will assist in determining compliance.

Table 8-1: BREEAM Criteria and Compliance

Number	Criteria	Compliance
TRA 01	a: Existing, travel patterns and opinions of existing building or site users towards cycling, walking and public transport, to identify relevant constraints and opportunities.	Information not available. However valid statistics have been used from Census Data which includes this site and how people travel into and out of the area.
	b: Travel patterns and transport impact of future building or site users.	Set out in Section 5 and 6 of TA.
	c: Current local environment for pedestrians and cyclists, accounting for any age-related requirements of occupants and visitors;	Set out in Section 2 of TA.
	d: Reporting of the number and type of existing accessible amenities, within 500m of the site	Set out in Section 2 of TA.
	e: Disabled access accounting for varying levels and types of disability, including visual impairment.	Shown on layout drawings contained within Appendix B.
	f: Calculation of the existing public transport Accessibility Index (AI)	Set out in Section 2 of TA and Appendix A.
	g: Current facilities for cyclists	Information not available.
	The occupier has been involved in the development of the TP.	The Education Department and School has been involved through the project and Travel Plan preparation.
	The TP will be implemented post construction and will be supported by the building's management in operation.	The TP includes a commitment to the implementation of the measures and regime contained within.
TRA 02 *Credits 1 to 10 Transport Options Implemented*	**Public Transport Measures** • The existing AI achieves all 28 (1). • Increase in AI through (i) negotiations with bus / train companies (2) or (ii) a dedicated service (3). • Public Transport information system (1).	The site location has an AI score of 8.20.
	Private Transport Measures • Electric charging for at least of 10% of the total car parking capacity (1). • Car sharing group or facility for at least 5% of the total car parking capacity (1).	Electric charging will be provided for at least 10% of the total car parking capacity, as set out in Section 3 of TA.
	Active Travel Measures • Consult with the Local Authority on the state of the local cycle networks and public accessible routes (2). • Compliant cycle storage (1). • At least two compliant cyclist facilities (1). • Three existing amenities present (1).	• It is forecast that the proposals will work to comply with the BREEAM requirements for educational building types. • The proposed Council improvements for the local network have been considered and reported. Some of these will provide enhanced active travel facilities in the immediate vicinity of the site. • Internal facilities will include lockers drying areas, staff changing rooms and shower facilities. • The existing amenities include a bus stop near the school access to link with active travel journeys, separate pedestrian access to the south of the main access and some existing level of cycle parking and nearby connections to designated cycle network routes.
	Alternative Transport Measures	Council based schemes have been identified, as required, these have been published by the

Number	Criteria	Compliance
	• Site specific improvement measures (not covered above) implemented (1-3).	Council to show how the active travel network will be expanded in the county borough. The schemes relevant and immediately local to this development have been set out in Section 2 of this TA.

Appendix A BREEAM Accessibility Index (AI) Calculation

BREEAM 2018 Tra01/02 Accessibility Index calculator

BREEAM UK delivered by bre

Using the drop down boxes make the relevant selections and press the 'Select' button

Building type: School

No. nodes required: 6

Select

Plas y Felin Primary School

Public transport type	Bus									
Distance to node (m)	72									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	0.8									

Llys Nant Pandy

Public transport type	Bus									
Distance to node (m)	250									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	2	0.8								

Heol y Parc

Public transport type	Bus									
Distance to node (m)	550									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	0.6									

Crescent Road

Public transport type	Bus									
Distance to node (m)	550									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	3	1	0.8	2	0.6					

Energlyn & Churchill Park

Public transport type	Rail									
Distance to node (m)	400									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	2.4	1.2								

Aber

Public transport type	Rail									
Distance to node (m)	900									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	3.8	1.2								

Accessibility Index	8.20

Appendix B Proposed Site Layout

PROPOSED SITE PLAN

1 : 500

Notes:
- This drawing is copyright.
- Do not scale dimensions from this drawing.
- This drawing is to be read in conjunction with all other relevant drawings.
- All discrepancies on this drawing are to be reported to the architect.
- Do not modify any element of this drawing.
- Use drawing only for purpose(s) issued.
- This drawing may contain colour.

North Point

Scale Bar

0 5m 15m 25m

Scale: 1:500

Key Plan

Hazard

1

HAZ-xx
To warn of significant hazards or information that is unusual

To be read in conjunction with all other consultant's information

Refer to CDM Schedule XXXX-IBI-WB-XX-SC-A-572-0010

The following external model files are included within this drawing:

Please note:
1. Sprinkler Tank location is indicative and subject to design development and review with Fire Engineer and CDM Advisor.
2. Sprinkler Tank dimensions are also indicative and subject to specialist input.
3. Landscape strategy under going RIBA 3 design development and is subject to detailed analysis and specification.
4. Initial Swept Path Analysis has been undertaken for the vehicle routes; road layout and turning arrangements are to be further developed as the design progresses.
5. Memorial Garden and Growing Area to potentially be relocated; to be determined by construction phasing as scheme develops.
6. Potential one-way car parking system still to be agreed; to be developed during RIBA 3 design.

Rev	Date	Revision Notes	Drawn	Review
P01	06/12/2024	First issue for PAC	VS	CF

Logos

ARCADIS
www.arcadis.com

Project
Plasyfelin Primary School

Drawing Title
PROPOSED SITE PLAN

Job Number	Date	Security Classification	Drawn By
144724	21/11/2024		VS
Scale@A1	Purpose		Reviewed By
1 : 500	FOR PLANNING		CF

Drawing Number: PYF-ARC-XX-XX-PL-A-100111

Revision: P01

Appendix C Visibility Splays & Swept Path Analysis

Plasyfelin Primary School

1 - Site Access Visibility Splays

NOTE: Full alignment of surrounding highways not shown on OS mapping. Assumed extents of highway boundaries shown.

AECOM

Filename: L:\LEGACY\UKBRI2FP001\VOL1TP\PROJECTS\DEVELOPMENT PLANNING\CARDIFF OFFICE WORK\PLASYFELIN PRIMARY SCHOOL, CAERPHILLY\CAD\02_SHEETS\PYF-ARC-XX-XX-DR-A-100101_P03_PROPOSEDSITEPLAN_AECOM SPA.DWG Last saved by: BENJAMIN.BURTON1 Last Plotted: 11/27/2024 4:25 PM

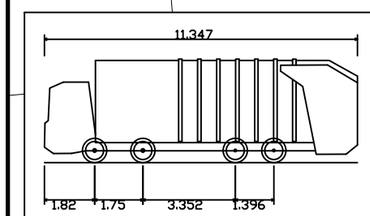
Project Management Initials: Designer: BB Checked: SP Approved: SP

Printed on ___% Post-Consumer Recycled Content Paper

A3 297x420mm

Refuse Vehicle - Site Access Junction (Widened)

Large Refuse Vehicle (4 axle)



Large Refuse Vehicle (4 axle)	
Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

Refuse Vehicle - Internal Access to Bin Store

Large Refuse Vehicle (4 axle)

Large Refuse Vehicle (4 axle)

Potential requirement for localised widening to accommodate 11.3 metre refuse vehicle. Unlikely to be required for smaller refuse vehicles.

Bins

Indicative location of bin storage.

N

Plasyfelin Primary School

2 - Vehicle Swept Path Analysis - Refuse Vehicle

NOTE: Full alignment of surrounding highways not shown on OS mapping. Assumed extents of highway boundaries shown.

AECOM

Filename: L:\LEGACY\UKBRI2FP001\VOL1TP\PROJECTS\DEVELOPMENT PLANNING\CARDIFF OFFICE WORK\PLASYFELIN PRIMARY SCHOOL, CAERPHILLY\CAD\02_SHEETS\PYF-ARC-XX-XX-DR-A-100101_P03_PROPOSEDSITEPLAN_AECOM SPA.DWG Last saved by: BENJAMIN.BURTON1 Last Plotted: 11/27/2024 4:25 PM

Project Management Initials: Designer: BB Checked: SP Approved: SP

Printed on ___% Post-Consumer Recycled Content Paper

A3 297x420mm

Fire Tender - Site Access Junction (Widened)

Fire Tender - Internal Access

DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

Plasyfelin Primary School

3 - Vehicle Swept Path Analysis - Fire Tender

NOTE: Full alignment of surrounding highways not shown on OS mapping. Assumed extents of highway boundaries shown.

AECOM

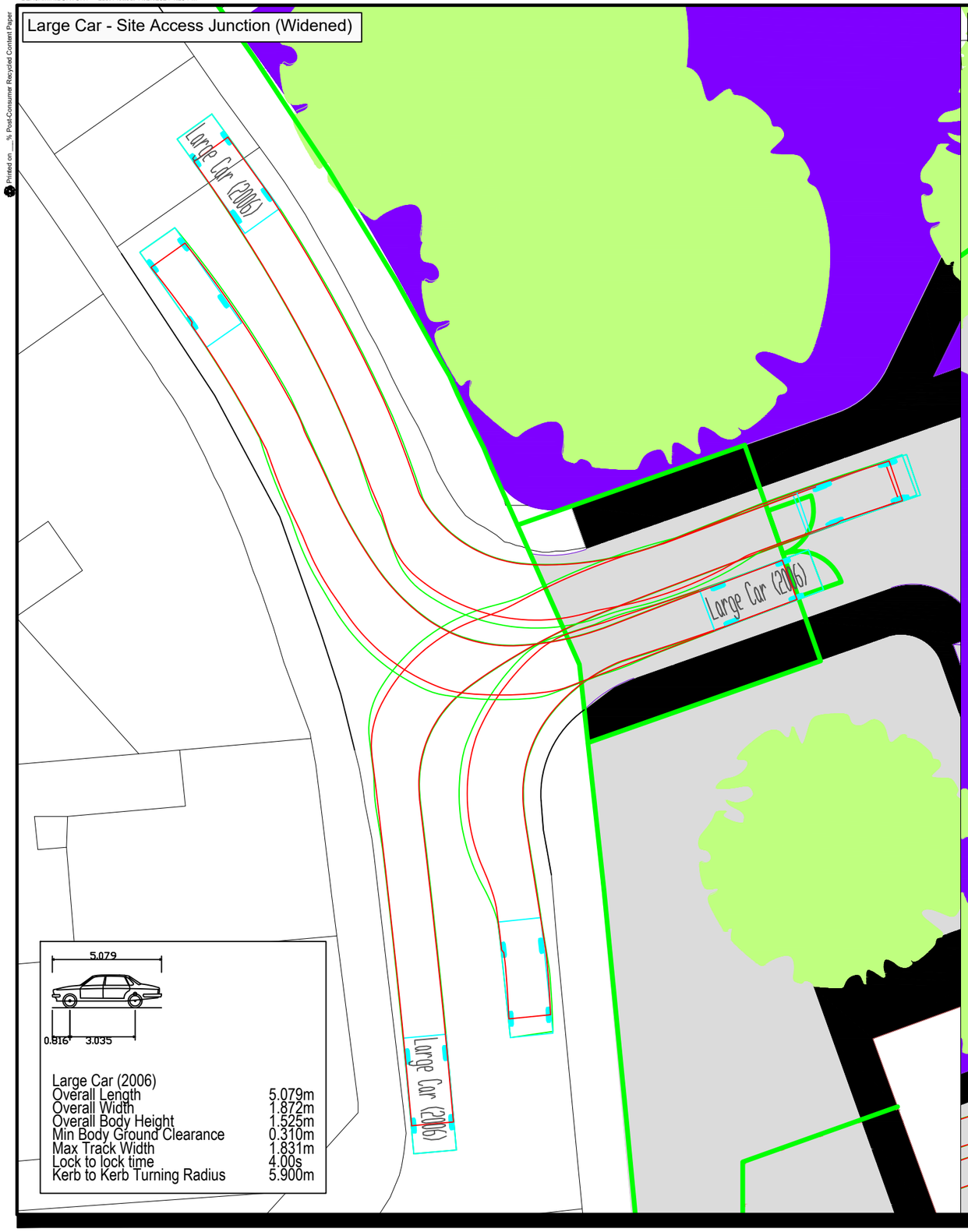
Filename: L:\LEGACY\UKBR\2FP001\VOL1TP\PROJECTS\DEVELOPMENT PLANNING\CARDIFF OFFICE WORK\PLASYFELIN PRIMARY SCHOOL, CAERPHILLY\CAD\02_SHEETS\PYF-ARC-XX-XX-DR-A-100101_P03_PROPOSEDSITEPLAN_AECOM SPA.DWG Last saved by: BENJAMIN.BURTON1 Last Plotted: 11/27/2024 4:25 PM

Project Management Initials: Designer: BB Checked: SP Approved: SP

Printed on ___% Post-Consumer Recycled Content Paper

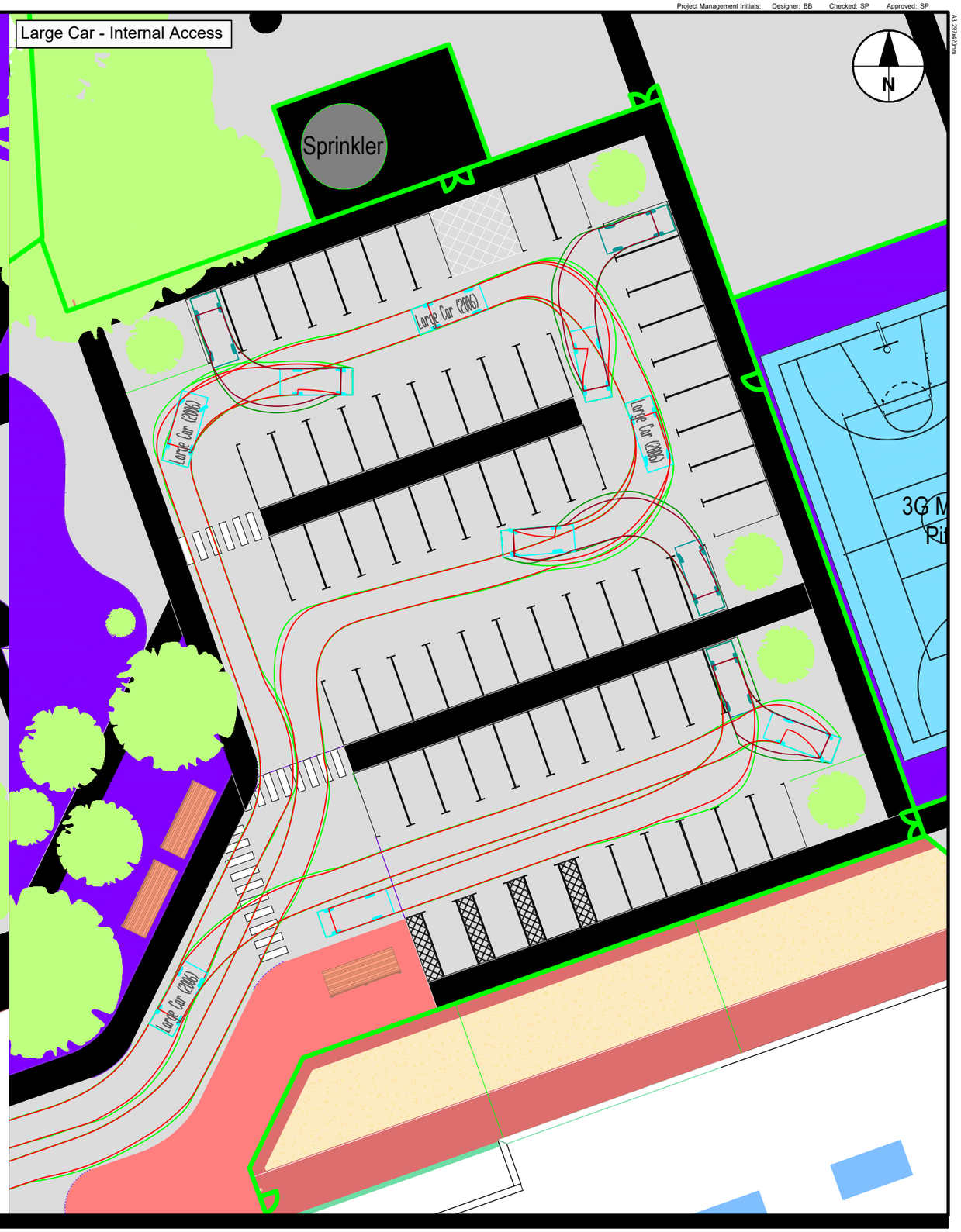
A3 297x420mm

Large Car - Site Access Junction (Widened)



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m

Large Car - Internal Access



Plasyfelin Primary School

4 - Vehicle Swept Path Analysis - Large Car

NOTE: Full alignment of surrounding highways not shown on OS mapping. Assumed extents of highway boundaries shown.

AECOM

aecom.com