St Richard Gwyn Catholic High School, Barry

Transport Statement

Vale of Glamorgan Education Department

Project Number: 60697670

January 2023

Delivering a better world

Quality information

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

Revision History

Revision	Revision date	Details	Authorised	Name	Position
V1	26/01/2023	Draft Issue for PAC	SP	Spiro Panagi	Associate Director

Distribution List

# Hard Copies	PDF Required	Association / Company Name

Prepared for:

Vale of Glamorgan Education Department

Prepared by:

AECOM Limited
5 Callaghan Square
Cardiff CF10 5BT
United Kingdom

T: +44 29 2067 4600
aecom.com

© 2023 AECOM Limited. All Rights Reserved.
This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1. Introduction 5
2. Site Accessibility 8
3. Proposed Development 16
4. Planning Policy Review 22
5. Trip Generation 27
6. Transport Implementation Strategy 30
7. Summary & Conclusions 32
8. BREEAM Compliance 32

Figures

Figure 1-1: Site Location 5
Figure 2-1: Future Walking and Cycling Route Improvements 10
Figure 2-2: Personal Injury Collisions in the Vicinity of the Site 15

Tables

Table 2-1: Summary of Local Bus Services 12
Table 2-2: Summary of Facilities at Cadoxton Railway Station 13
Table 2-3: Summary of Rail Services at Cadoxton Railway Station 13
Table 2-4: BREEAM Local Amenities within 500m of the Site 15
Table 3-1: VoG Car Parking Standards Applied to Proposed Development 19
Table 3-2: VoG Cycle Parking Standards Applied to Proposed Development 20
Table 5-1: Staff Mode Share (Existing School) 28
Table 5-2: Staff Mode Share (Proposed School) 29
Table 8-1: BREEAM Criteria and Compliance 34

Appendices

Appendix A BREEAM Accessibility Index

Appendix B Proposed Site Layout

Appendix C Swept Path Analysis (SPA) & Junction Visibility

1. Introduction

1.1 Introduction

1.1.1 AECOM has been commissioned by the Vale of Glamorgan Education Department (VoG) to produce a Transport Statement (TS) to accompany a planning application for the redevelopment of St Richard Gwyn Catholic High School, around 3.5km to the northeast of Barry.

1.1.2 The Proposed Development comprises a redevelopment of the existing St Richard Gwyn Catholic High School to expand its capacity from 815 to 1,110 pupils, including the development of a new Specialist Resource Base (SRB) with capacity for 60 pupils, which forms part of the total proposed school capacity. The SRB utilises areas within the mainstream school buildings, in an inclusive approach accommodating pupils with behavioural issues or similar, who may not be suited to the lesson timetable of the mainstream school, but who are not required to attend a separate school facility elsewhere. The number of staff is expected to increase in accordance with pupil capacity increase, from 96 to 132 total staff. The total 132 proposed staff could result in 74 designated as teaching staff and 58 as non-teaching staff.

1.2 Site Location

1.2.1 The Proposed Development is located at the existing St Richard Gwyn Catholic High School. The school is accessed from Argae Lane, which connects to the A4231, at its south western extent, approximately 3.5km northeast of Barry. The location of the Proposed Development is shown in **Figure 1-1**.

Figure 1-1: Site Location

1.3 BREEAM

1.3.1 The Proposed Development has been assessed in reference to the latest available 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 Transport Statement and the Travel Plan 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 (or Transport Statement) 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 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 TS 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 Travel Plan (TP) has been prepared through the initial design feasibility stages of the proposals. The final completed TP will be submitted as part of this planning application and this aims to promote the use of the most sustainable forms of travel for all types of journeys associated with the scheme. This has been produced in consultation with both the site occupier or the Council's education department to ensure that the document aligns with operational requirements.

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 are available for the provision of the following:

- 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 TS presents the existing sustainable transport measures and local amenities in close proximity to the school. Section 3 of this TS describes the measures that will be implemented as part of the Proposed Development to improve sustainable access.

1.4 Scope of the Report

1.4.1 The development proposals are not for a new school and instead propose a redevelopment of the existing St Richard Gwyn Catholic High School to expand its capacity. The SRB facility will form part of the proposed expansion, which will see an increase from 815 to 1,110 pupils, including providing 60 SRB pupil places. The accessibility of the existing school has been investigated, with specific regard to BREEAM requirements and also for the needs of SRB.

1.4.2 Therefore, in consideration of the above and that the level of detail is required to be proportionate to the scale of development, and that robust assumptions have been employed where information is not currently available, it has been determined that a Transport Statement is adequate to inform a planning application. We will seek the Local Highway Authority comments and dialogue on this approach during the decision making process.

1.5 Document Structure

1.5.1 The TS is structured as follows:

- **Section 2** – 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 forecast trip generation for the typical operation of the Proposed Development;
- **Section 6** – Transport Implementation Strategy;
- **Section 7** – Conclusions: Summarises the key findings and conclusions of the TS; and
- **Section 8** – BREEAM Compliance: summarises compliance to BREEAM criteria.

2. Site Accessibility

2.1 Introduction

2.1.1 This section sets out information regarding the local highway network, walking, cycling and public transport accessibility, local amenities and the area's highway safety record.

2.2 Site Location and Existing Usage

2.2.1 The proposed development is located at the site of, and includes the existing St Richard Gwyn Catholic High School. St Richard Gwyn is a faith based English medium secondary school which will continue to operate with the introduction of the proposals.

2.2.2 The school is accessed from Argae Lane, which connects to the A4231, approximately 3.5km northeast of Barry. There are four existing and operational vehicular connections to the highway network, with an additional gated field maintenance access. In addition, a separate active travel route is also provided. The location of the Proposed Development is shown in **Figure 1-1.**

2.2.3 The Proposed Development comprises a redevelopment of St Richard Gwyn Catholic High School, which is currently in use. The existing school has capacity for 815 pupils and employs just under 100 staff, with just over 50 of those designated as teaching staff. Both the existing school and the proposed redevelopment cater for pupils inclusive of ages of 11-16.

2.3 Local Highway Network

2.3.1 The following section provides a description of the characteristics of the local highway network surrounding the school. The roads described are labelled and shown on **Figure 1-1,** for ease of reference.

Argae Lane

2.3.2 Argae Lane is a single-carriageway road that provides access to the site, at its southern western extent. As it continues east and north past the school it also provides access to a golfing facility, an equestrian centre and rural properties. At around 1.6km to the north of the school, Argae Lane connects with St Andrews Road and forms the minor arm of a priority junction.

2.3.3 Argae Lane is rural in character, which is more evident to the north and east of the school. It has an average carriageway width ranging between 6.0m to 7.3m and is subject to a 30mph speed limit in the immediate vicinity of the high school. Approximately 330m northeast of its signalised junction with the A4231, and at the north eastern boundary of the site the speed limit changes to the national speed limit of 60mph.

2.3.4 In the vicinity of the site a footway is provided on the site and southern side of the carriageway. The route is illuminated with public lighting located within the verge on the opposite side of the carriageway to the footway. Traffic Regulation Orders (TROs) in the form of double yellow lines, School Keep Clear markings, and a series of stops 'No Stopping Except for Local Buses' prohibit parking along the school frontage.

2.3.5 Argae Lane is a bus route for school buses and the school internal access infrastructure provides bus turning facilities. This allows buses to enter and exit via a separate access and egress turn in a loop and park within the bus stops which are provided along the site side of the carriageway and facing the A4231.

2.3.6 The southernmost access to the school is the field maintenance access at around 80m from the junction with the A4231. The active travel link is located at around 30m north of the access and 110m from the junction. This provides a traffic free connection from the highway around the car park and into the school grounds. The vehicular access to the car parking area is located a further 50m north of the active travel access.

2.3.7 At a distance of 260m from the junction, and 100m from the car park access, an egress is provided from the bus turning loop, with the access located an additional 40m beyond this point. The turning loop is one-way and wide enough for large vehicles to use. The internal route has parking restriction along the full length of both sides. At the eastern end of the loop a junctions exists to access a large informal parking area. This junction would be expected to operate as a left in and left out to comply with the turning loop that it takes access from.

A4231

2.3.8 The A4231 runs in a northwest to southeast alignment, approximately 200m to the south of the school. To the east of its signalised junction with Argae Lane, the A4231 is predominantly single-carriageway with one lane in each direction. To the west of Argae Lane, the A4231 is dualled and consists of one lane in the southeast direction and two lanes heading northwest-bound, travelling uphill. A dedicated left-turn lane is provided for vehicles turning into Argae Lane from the northwest, this forms a priority junction access onto Argae Lane. The A4231 is subject to a 50mph speed limit in the vicinity of Argae Lane and has an average lane width of 3.5m.

2.3.9 Cycle facilities are present on the A4231 in the form of Advanced Stop Lines (ASL), provided on both the east and western approaches to the signalised junction between the A4231 and Argae Lane. ASL are also in place on both A4231 approaches to its junction with Coldbrook Road East, approximately 120m northwest of Argae Lane.

2.3.10 Pedestrian facilities on the A4231 within the vicinity of the site are limited. There are no footways present on either side of the A4231 at its junctions with Argae Lane and Coldbrook Road East. A pedestrian underpass is located at the southern extent of Argae Lane, which crosses beneath the A4231, before re-emerging onto Dobbins Road, approximately 300m south of the school site. The underpass and the associated footpath connect with Dobbins Road at a raised zebra crossing facility. This provides for safe pedestrian movement between the school and the residential areas to the south, in the absence of any formal at-grade crossing facilities on the A4231.

2.3.11 Although no bus stops are present on the A4231 in the vicinity of the school, it forms part of the bus service network, connecting Argae Lane to the residential areas lying to the south of the A4231, north of Barry. Within the vicinity of the site, the A4231 is illuminated with public lighting located within verges on both sides of the carriageway.

Coldbrook Road East

2.3.12 Coldbrook Road East connects to the A4231 via a signalised T-Junction, approximately 120m northwest of signalised junction with Argae Lane. Coldbrook Road East provides the closest access from the school to the residential areas which exist to the north of Barry. It performs a traditional residential distributor road function and is subject to a 30mph speed limit and has a variable carriageway width, widening in places to allow for right-turn ghost islands into connecting residential streets.

2.3.13 Coldbrook Road East has continuous footway provision on both sides of the carriageway, south of Dobbins Road, around 45m from the junction with the A4231. Cycle facilities are present on Coldbrook Road East in the form of ASL at the signalised junction with the A4231. The route along Coldbrook Road East is well-lit, with regular public lighting located adjacent to the footway, on both sides of the carriageway.

2.3.14 Coldbrook Road East forms a key section of the bus service network in the local area, with bus stops provided regularly along the route, on both sides of the carriageway. Coldbrook Road East connects the school with further residential areas to the south, as well as towards Barry town centre.

2.4 Walking and Cycling

2.4.1 A footway is present on the south eastern side of Algae Lane between the A4231 and the existing school bus / coach egress junction. The footway width varies between a minimum of 2m, up to 3.5m. Coldbrook Road East has continuous footway provision on both sides of the carriageway, south of Dobbins Road. As discussed above, cycle facilities are provided at the signalised junction between Argae Lane and the A4231, in the form of ASL. There are no National Cycle Network (NCN) routes available in proximity to the site.

2.4.2 A pedestrian underpass is located at the southern extent of Argae Lane, approximately 70m south of the existing pedestrian / cycle entrance to the school site. The underpass crosses beneath the A4231, before re-emerging onto Dobbins Road, approximately 300m south of the school site, linking directly with a Zebra Crossing facility. This provides for safe pedestrian movement between the school and the residential areas to the south, in the absence of any formal at-grade crossing facilities on the A4231.

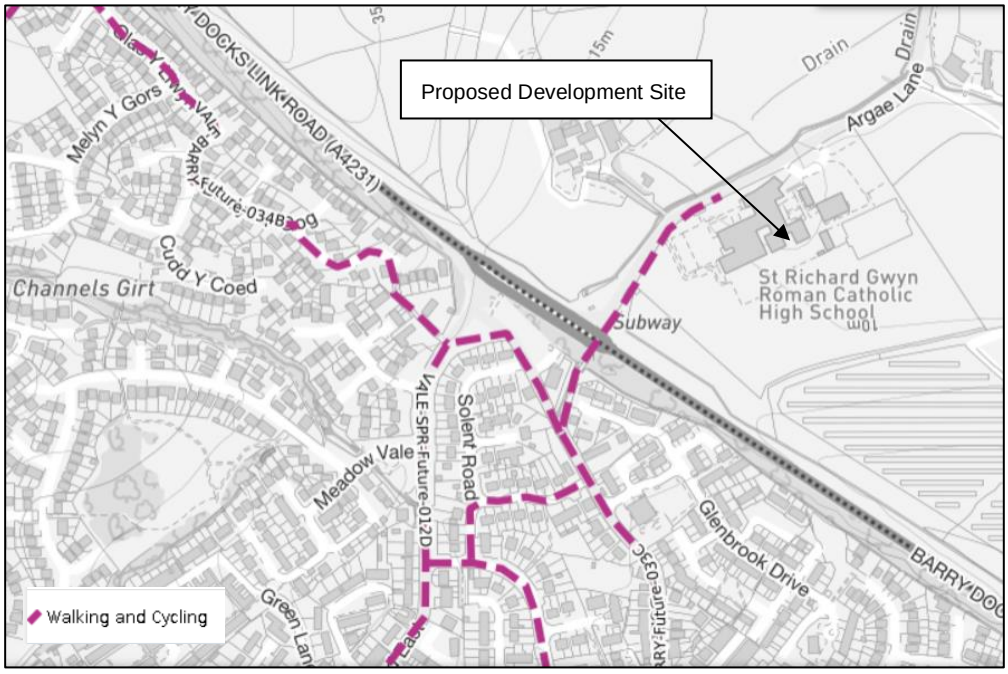
Planned Walking & Cycling Improvements

2.4.3 A set of Integrated Network Maps was submitted by VoG to the Welsh Government (WG) in November 2017, which set out the Council's plans for enhancing active travel infrastructure over the following 15 years. The following network improvements have been identified as part of the approved Integrated Network Maps, and of relevance to the Proposed Development:

- 'VALE-SPR-Future-012D': Medium term improvements for both walking and cycling along the footway and subway route between St Richard Gwyn Catholic High School and Dobbins Road, as well as on Coldbrook Road East.

2.4.4 The future route improvements proposed within the vicinity of the site are shown on **Figure 2-1**, an extract from the online map viewer provided by the VoG to view both existing and future routes designated for active travel improvements. These proposals will enhance the connectivity by active modes of travel to ensure that this is conducted safely between the school and the surrounding residential areas.

Figure 2-1: Future Walking and Cycling Route Improvements



Source: DataMapWales (via ValeofGlamorgan.gov.uk)

2.5 Public Transport

2.5.1 Existing public transport services operating in the vicinity of the school have been identified with reference to current timetable and most recently available 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. However, it states that this does not need to be slavishly adhered to, rather it is more important to provide services that are easy to understand and attractive to use.

2.5.3 The nearest bus stops to the site are located on Coldbrook Road East, with the southbound stop located approximately 300m walking distance from the active travel entrance to the high school. The northbound stops are situated slightly further south on Coldbrook Road East, approximately 390m from the high school entrance. These stops, referred to as 'Little Coldbrook', are served by service 100, which takes a circular route between Barry Island, Barry Town Centre and Calcot. Service 100 is operational on Sundays only, therefore, nearby stops offering a wider range of services have been considered. The stops on Langlands Road, referred to as 'Ewbank Close' offer three additional services, all of which operate during the traditional working / school week. These stops are located approximately 700m walking distance from the site.

2.5.4 **Table 2-1** provides a summary of the bus services which are available from the bus stops local to the site. Times and frequencies listed are reflective of the latest available timetable, which may be reduced compared to before the COVID-19 pandemic.

Table 2-1: Summary of Local Bus Services

Service Number	Route	Days	First Service	Last Service	Approx. Frequency
100 (Little Coldbrook)	Barry Circular (Outbound)	Sundays	11:36	19:06	2 Hours
	Barry Circular (Inbound)	Sundays	12:46	20:16	90 minutes
93 (Ewbank Close)	Cardiff – Barry	Mon-Fri	08:08	18:14	Hourly
	Barry - Cardiff	Mon-Fri	07:37	17:50	Hourly
94 (Ewbank Close)	Cardiff - Barry	Mon-Fri	07:41	23:44	20-40 minutes
		Sat	07:40	23:46	30-60 minutes
		Sun	09:34	21:34	Hourly
	Barry - Cardiff	Mon-Fri	06:23	22:14	20-40 minutes
		Sat	07:32	22:14	20-40 minutes
		Sun	08:18	23:41	Hourly
95 (Ewbank Close)	Cardiff – Barry Island	Mon-Fri	07:18	21:46	30 minutes
		Sat	07:54	20:09	30 minutes
		Sun	10:42	18:48	Hourly
	Barry Island - Cardiff	Mon-Fri	06:17	21:35	30 minutes
		Sat	06:28	21:02	30 minutes
		Sun	10:48	18:45	Hourly

Source: Bustimes.org (January 2023).

2.5.5 Overall, bus services operate at a reasonable frequency from stops near to the school, offering multiple services to local destinations within Barry as well as further afield to Cardiff, from which a wider range of regional services are available.

Rail Services

2.5.6 The nearest railway station is Cadoxton station, which is located approximately 1.1km to the south of the site, as the crow flies. Cadoxton station is accessible by active travel modes via Coldbrook Road East, with a 1.7km walking or cycling distance equating to a 22-minute walk or seven-minute cycle.

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

Table 2-2: Summary of Facilities at Cadoxton Railway Station

Facility	Details
Car Parking	31 spaces
Disabled Car Parking	No
Cycle Storage	2 spaces
Staffing / Ticket Office	Yes
Self Service Ticket Machines	Yes
Step Free Access Coverage	Yes

Source: National Rail (January 2023).

Table 2-3: Summary of Rail Services at Cadoxton Railway Station

Direction	Days	First Service	Last Service	Approximate Frequency
Towards Merthyr Tydfil (via Cardiff)	Mon-Fri	06:01	18:06	30 minutes
	Sat	06:01	22:06	30 minutes
	Sun	10:09	18:06	Hourly
From Merthyr Tydfil (via Cardiff)	Mon-Fri	07:26	20:26	30 minutes
	Sat	07:26	21:57	30 minutes
	Sun	10:59	18:58	Hourly
Towards Aberdare (via Cardiff)	Mon-Fri	06:21	18:51	30 minutes
	Sat	06:21	22:21	30 minutes
	Sun	09:07	19:06	Hourly
From Aberdare (via Cardiff)	Mon-Fri	07:13	19:41	30 minutes
	Sat	07:41	19:41	30 minutes
	Sun	11:10	21:11	Hourly
Towards Bridgend (via Cardiff)	Mon-Fri	05:58	22:59	Hourly
	Sat	05:58	21:57	Hourly
	Sun	08:57	18:58	120 minutes
From Bridgend (via Cardiff)	Mon-Fri	06:21	23:22	Hourly
	Sat	06:21	23:22	Hourly
	Sun	10:21	22:21	120 minutes

Source: National Rail (January 2023). All services listed are direct.

2.5.8 Overall, there is a good provision of rail services from Cadoxton to key destinations, both locally and regionally. Services begin early in the morning and finish late at night, ensuring a provision to suit a wide range of travel times. Connections at Cardiff Central provide opportunities to board services covering a number of national destinations. In review, 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 an Accessibility Index (AI) for the proposed development. An assessment of the AI of the site has been undertaken in line with the AI calculator and associated methodology contained within the BREEAM guidance.

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 to 10:00hrs & 15:00hrs to 17:30hrs) as the default hours of operation for a typical day for a 'School' site. Compliant transport nodes are those within 1km of the premises for rail and 650m for bus. Cadoxton Railway Station is located approximately 1.7km walk away from the site, via walkable routes and therefore, has not been included in the assessment. The nearest bus stops to the site are located on Coldbrook Road East, with the southbound stop located approximately 300m walking distance from the active travel entrance to the high school. The northbound stops are situated slightly further south on Coldbrook Road East, approximately 390m from the high school entrance. For bi-directional services, average frequency has been calculated for one direction only.

2.6.3 The AI calculations and the bus nodes and services considered as part of the assessment are included in **Appendix A.**

2.6.4 The input frequencies of services from compliant nodes results in an **AI of 0.19** which, according to BREEAM guidance, is not sufficient to achieve a credit for this building type. However, it must be considered that the school currently provides contracted bus services for pupils which does fulfil the role of public transport and is direct and purposely provided. This is not readily accessible for staff but does account for a significant proportion of the travel modal share for the largest user group. In addition, although Cadoxton Railway Station has been excluded from the AI calculations, it still comprises a realistic option for travel and is reachable by bike or foot, within a reasonable distance, as outlined in Section 2.5.

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 guidance 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** sets out the range of specific amenities referenced in the BREEAM guidance and highlights those within 500m walking distance of the school premises. This demonstrates the site meets a requirement of BREEAM topic Tra01 which is to demonstrate that 'at least three accessible amenities are present'.

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

Category	Within 500m?	Name / Location	Distance from site (m)
Appropriate food outlet	✓	The Clubhouse Restaurant	300m
Access to cash	✗	-	-
Access to an outdoor open space	✓	On Site	0m
Access to a recreation or leisure facility for fitness or sports	✓	On Site	0m
Publicly available postal facility	✗	-	-
Community facility	✗	-	-
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 along pedestrian routes.

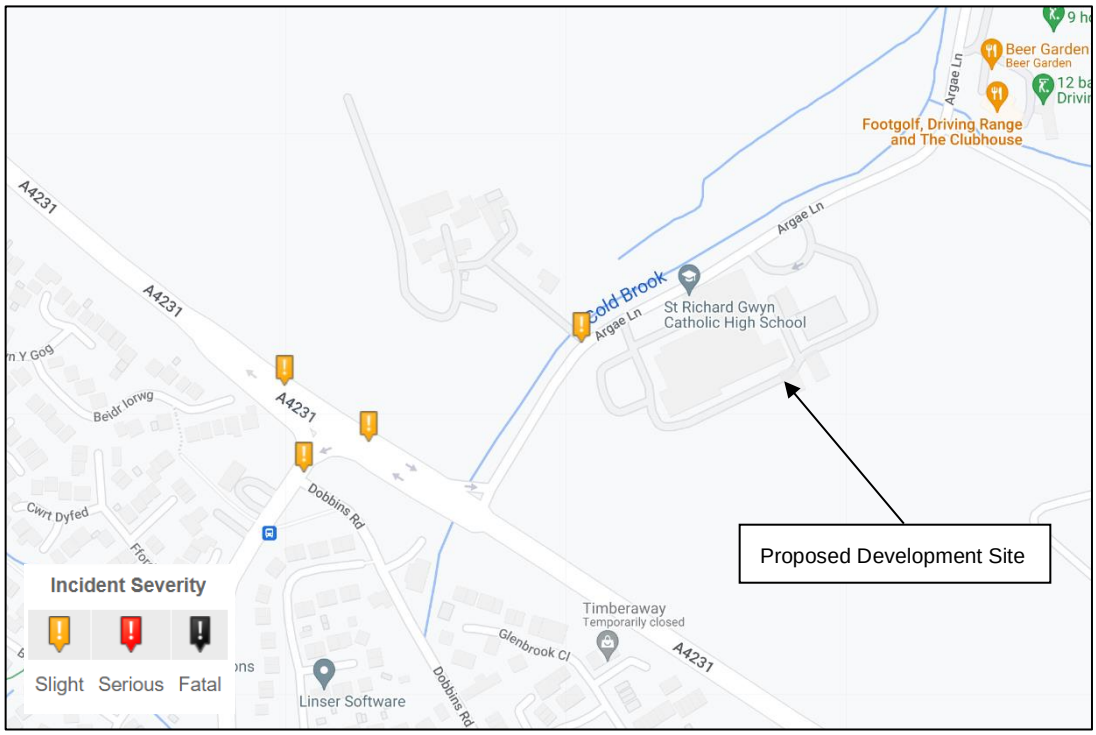
2.7.3 **Table 2-4** shows there are limited amenities located within 500m walking distance of the site, which is largely due to the rural positioning of the high school on the edge of the settlement. As such, a number of complimentary facilities, such as a doctors / pharmacy, postal facility and additional food outlets are located to the southwest of the A4231, with many within 1km walking or cycling distance, and accessible via safe active travel routes.

2.8 Highway Safety

2.8.1 A review of Personal Injury Collision (PIC) data has been obtained from the 'Crashmap' online resource to determine whether there are any locations on the local highway network with poor collision records. This approach presents an interim review or a triage approach to whether more detailed investigations may be needed.

2.8.2 An extract showing the PICs recorded in the study area during the latest available five-year period which at the time of writing includes from 1st January 2017 to 31st December 2021 is reproduced as **Figure 2-2.** The study area for the purposes of this assessment includes Argae Lane and its connection to the A4231.

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



Source: Crashmap (January 2023)

2.8.3 Over the five-year period, a total of four PICs have been identified within the vicinity of the site, including one on Argae Lane. Each of the PICs were classified as 'slight' with three occurring in the vicinity of the signalised junction between Coldbrook Road East and the A4231. The 'slight' PIC on Argae Lane took place in close proximity to an access junction to farm buildings located opposite the high school.

2.8.4 The low number of PICs over the five-year period equates to less than one incident per year at a signalised junction and therefore suggests there are no existing safety issues in the area local to the school. The Proposed Development is unlikely to give rise any issues of safety to highway users given that it proposes additional capacity for the same existing land use.

2.8.5 Therefore, given the findings, it is concluded that no further investigations or detailed analysis is deemed to be required beyond this high-level review.

2.9 Summary

2.9.1 The site is located in a rural environment on the periphery of Barry, adjacent to a north east principal travel corridor. There are a range of local complementary facilities available within a reasonable walking and cycling distance. There is good provision of public transport services located nearby to the Proposed Development, as well as a level of walking and cycling accessibility to the large residential areas south of the A4231. Based on the review of the latest five years of personal injury collision data, it was concluded there are no highway safety concerns in the study area.

3. Proposed Development

3.1 Introduction

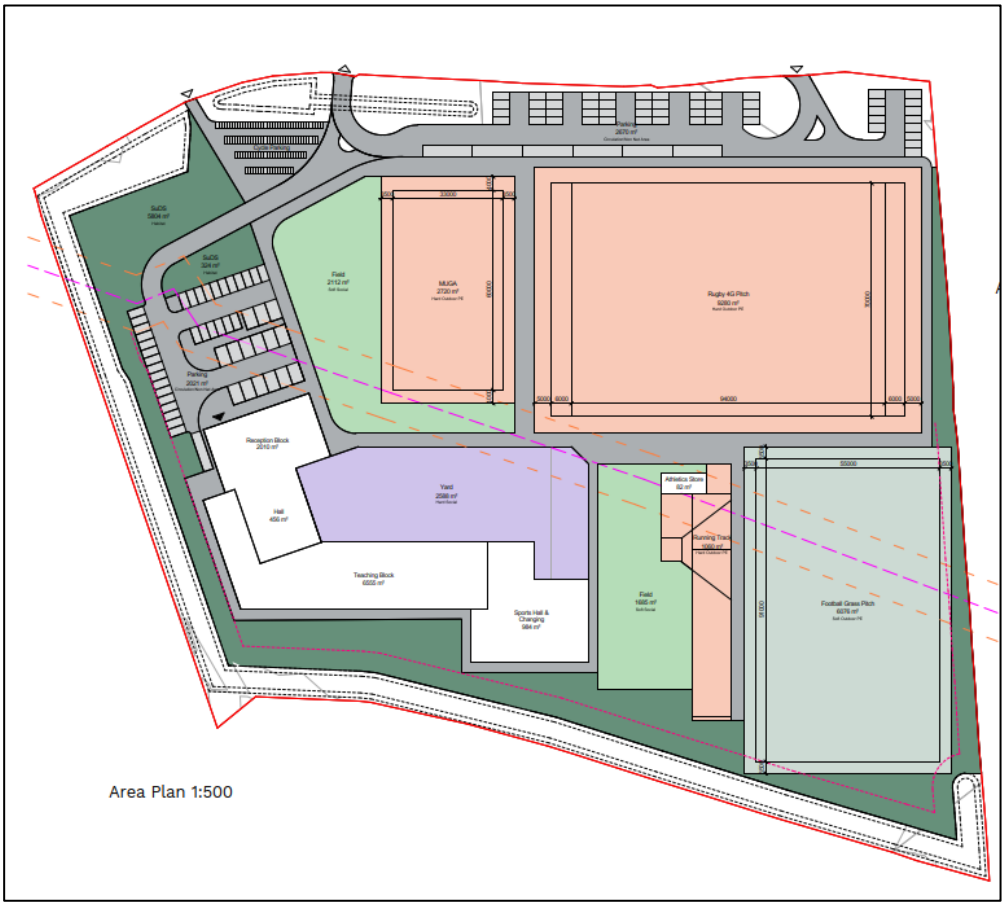
3.1.1 This section of the TS outlines the scheme proposals, including the method of access for all travel modes, as well as the internal movement, deliveries and servicing strategies.

3.2 Overview of Proposals

3.2.1 The Proposed Development comprises a redevelopment of the existing St Richard Gwyn Catholic High School to expand its capacity from 815 to 1,110 pupils, including the development of a new Specialist Resource Base (SRB) with capacity for 60 pupils, which forms part of the total proposed school capacity. The SRB utilises areas within the mainstream school buildings, in an inclusive approach accommodating pupils with behavioural issues or similar, who may not be suited to the lesson timetable of the mainstream school, but who are not required to attend a separate school facility elsewhere. The number of staff is expected to increase in accordance with pupil capacity increase, from 96 to 132 total staff. The total 132 proposed staff could result in 74 designated as teaching staff and 58 as non-teaching staff.

3.2.2 An extract of the proposed site layout is illustrated in **Figure 3-1.** A more detailed version is available at **Appendix B.**

Figure 3-1: Proposed Site Layout



3.3 Access Strategy

3.3.1 The proposed redevelopment of the school will work to provide a more efficient access strategy across its frontage on Argae Lane. The existing maintenance gate and active travel route would remain unaffected by the proposals, with the active travel route being enhanced and fully integrated into pedestrian access across the wider masterplan.

3.3.2 The vehicular access arrangements will be upgraded, whilst still maintaining use of existing access point. The current bus turning loop entrance will become the entrance for all vehicles into the school. The existing school car park access will be modified to provide an egress only arrangement for all vehicles out of the site. The existing bus loop egress will be removed as part of the proposals.. Vehicular movement within the premises will be largely contained to one-way west to east, with some localised two way movements permitted to allow access within car parking areas.

3.3.3 The access strategy will result a rationalisation of the existing access arrangements and this will see general traffic split across an access and egress. The existing car park access junction will operate as exit-only as part of the proposals, with all vehicles using it to leave the site, including coaches and buses.

3.3.4 In the vicinity of the school, Argae Lane is currently subject to a 30mph speed limit. There is no new access being created and instead the existing access will continue to allow vehicles to exit onto Argae Lane but prohibit access into the school. Under the proposed use of the existing arrangements, emerging visibility of 2.4m x 43m would normally be required, in accordance with nationally applicable standards set out within MfS. This has been set out and it is evident that the visibility splays can be accommodated within the highway extent or within the school premises. For splays which pass through the site boundary, the treatment will ensure that security mesh fencing will be installed to allow transparency. The visibility extents at this proposed egress at the existing site access are shown on a plan contained at **Appendix C**.

3.3.5 Appropriate and legible access will be developed and provided through the internal circulation (i.e. through on-carriageway markings and appropriate signage) to direct users to appropriate areas to maximise efficiency of movement and minimise conflict.

3.3.6 Coach or bus parking has been considered to be provided internally, removing the need for vehicles to attend on the highway. Arriving coaches / buses to the internal drop-off / pick-up bays will be directed to circulate through this area to join the back of the queue / park in nearest available spaces to the exit of the area so as to maximise stacking capacity.

3.3.7 Swept Path Analysis (SPA) has been undertaken of the proposed coach / bus pick-up / drop-off bays located adjacent to the MUGA and Rugby 4G pitch pick-up / drop-off point, as shown in **Appendix C**. The area could potentially be used by school buses; therefore, SPA was undertaken using a 10m single deck bus. The SPA indicates that the current design adequately accommodates the manoeuvring of a 10m bus, including access and egress of both the first and last pick-up / drop-off spaces.

3.3.8 Refuse collection and servicing has been assumed to take place in the area outside the front of the main building entrance and reception. Therefore, SPA investigations have been conducted to simulate the manoeuvrability of a robust length 11.3m refuse vehicle. The vehicle simulation includes the site access and egress junctions, as well the internal site layout and turning manoeuvre within the southernmost parking area, adjacent to the main school entrance. SPA has demonstrated these manoeuvres are achievable. The consideration of this 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 this vehicle is contained in **Appendix C**.

3.3.9 SPA has been conducted for a robust ‘large car’ of 5m length, to ensure each of the three proposed car parking areas can be accessed and manoeuvred within. The majority of spaces are easily accessed without any issue. There may be some additional refinements or assessment need of some spaces provided at the end of an aisle to allow for a car to swing into the space. This can be considered in more detail during the planning submission stage. The results of this analysis is demonstrated in **Appendix C**.

Pedestrian & Cycle Access

3.3.10 Pedestrian and cycle access will be retained via the existing dedicated access, located approximately 50m south of the proposed site egress junction and 70m from the underpass access on Argae Lane. This will provide a segregated route to the school entrances and to access school outdoor areas, separating vehicle access and non-motorised user access. An area of secure cycle parking will be provided in close proximity to this junction, to allow a safe and convenient location for pupils, staff or visitors to dismount and store their bikes.

3.3.11 An internal network of walkways will be provided to accommodate walking movements through the site, including between the pedestrian / cycle entrance and the main school entrance and reception. A wide walkway is provided between the MUGA and the Rugby 4G pitch, allowing for through-movements between the coach / bus pick-up / drop-off area and the school yard and teaching areas to the south.

3.4 Parking

Car Parking

3.4.1 The VoG Parking Standards 2019 has been adopted as Supplementary Planning Guidance (SPG). The standards identify how the *CSS Wales Parking Standards 2008* will be applied across the VoG. The parking standards seek to assist developers, designers and builders in the preparation and submission of planning applications, and to achieve a common approach to the provision of vehicle parking facilities associated with new development and change of use.

3.4.2 The parking standards are defined according to a zoning system based on the number, range and characteristics of facilities within walking distance and the level of public transport provision. The school itself is located within 'Zone E – Deep Rural', the description of which is as follows:

"This zone comprises scattered individual buildings and is characterised by areas with no local facilities within walking distance. Motorised travel is required for all journeys but the most local. Public transport services are very infrequent or beyond walking distance. There is no shortage of land for parking provision within the site but the adjacent highway system offers no opportunities to park cars because of the narrowness of the highway."

3.4.3 **Table 3-1** summarises the car parking standards in the SPG and their application to the proposed development at full capacity.

Table 3-1: VoG Car Parking Standards Applied to Proposed Development

Type	Sub-Category	Standard	Maximum Provision
Operational	Commercial Vehicle Space	1 space	1
		Total	**1**
Non-Operational	Teaching Staff	1 space per each member of teaching staff	74
	Ancillary Staff	1 space per two ancillary staff	29
	Students aged 17+	1 space per 10 students aged 17+	0
	Visitors	3 spaces	3
		Total	**106**

Note: Standards are for the 'Education – Secondary Schools' use type in the SPG.

3.4.4 **Table 3-1** shows that, in terms of operational parking, one commercial vehicle space is required, this can also be managed with appropriate design, as show in the refuse vehicle SPAs. In regard to non-operational parking, the maximum provision permitted by the standards is 106 spaces. The SPG also states that disabled parking should account for 5% of the total parking provision - on the basis of the maximum provision permitted of 106 spaces, this equates to six disabled bays. The proposed development provides a total of 101 spaces, of which 15 are designated as disabled bays. The total provision is therefore in accordance with standards.

3.4.5 The SPG states that coach / bus parking is to be provided as required. The masterplan included within these proposals seeks to remove highway designated bus parking and relocate these within the school. The proposed site layout includes a total of six pick-up / drop-off spaces, which also satisfies the SPG requirement to provide an area for the picking up and setting down of school children.

Cycle Parking

3.4.6 **Table 3-2** summarises the cycle parking standards in the SPG and their application to the proposed development at full capacity.

Table 3-2: VoG Cycle Parking Standards Applied to Proposed Development

Cycle Parking Type	Standard	Required Provision
Short Stay	1 stand per 100 students	12
Long Stay	1 stand per 5 staff	27
	1 stand per 6 students aged 17+	0
	Total	**39**

Note: Standards are for the 'Education – Secondary Schools & Colleges of Further Education' use type in the SPG.

3.4.7 **Table 3.2** shows that a minimum of 39 cycle parking spaces are required. The masterplan shows a total of 120 cycle parking spaces, which is in accordance with VoG standards. In addition to the consideration of the SPG cycle parking standards set out in **Table 3-1,** consideration has been made to BREEAM standards for educational building types, which sets out a requirement of one cycle space per 10 staff and students (combined). The total number of spaces required for BREEAM is greater than those required by the parking SPG, setting out the requirement for a minimum of 125 cycle spaces, based on the total number of pupils and staff proposed. At this early stage it is forecast that the proposals will work to comply with the BREEAM requirements. this will first require a refinement of the proposed staff increases, and if required, a corresponding uplift in cycle parking provision.

3.4.8 The SPG states that cycle parking should be located in a safe, secure and convenient location and for reasons of security, cycle parking facilities should be located in areas that are visible and therefore allow for informal surveillance. The proposed cycle parking is situated between two parking areas and is in close proximity to the dedicated pedestrian / cycle entrance, and is therefore considered to be in accordance with standards.

3.4.9 The SPG also requires the provision of appropriate lockers, changing and shower facilities to support staff cycling trips; these facilities are included as part of the internal building design.

3.5 Construction Traffic

3.5.1 Managing the construction impacts will form part of the Construction Traffic Management Plan (CTMP) or similar document. The management measures will be intended to protect the environment, amenity and safety of local residents, businesses, the general public and the surroundings in the vicinity of the Proposed Development.

3.5.2 As part of the CTMP, a construction vehicle routeing regime for access to the construction site will be identified and agreed with the Local Highway Authority (LHA) to ensure that drivers of construction related vehicles do not use inappropriate routes which are unsuitable by virtue of their width, alignment or character. The CTMP will also consider measures to discourage deliveries during peak traffic periods on the highway network. There will ongoing monitoring of the CTMP during the construction phase to establish the effectiveness of the measures.

3.6 Summary

3.6.1 The Proposed Development comprises a redevelopment of the existing St Richard Gwyn Catholic High School to expand its capacity from 815 to 1,110 pupils, including the development of a new Specialist Resource Base (SRB) with capacity for 60 pupils. The number of staff is expected to increase in accordance with pupils from 96 to 132, with 74 being teaching staff and 58 being non-teaching staff.

3.6.2 The proposed access strategy will reconfigure the existing access points between the school and Argae Lane to include one access point and one egress point for all vehicles including buses, coaches and private cars belonging to staff or visitors. Vehicular movement will operate one-way across the site frontage and bus / coach drop-off area, some localised two way movement will be permitted to maximise car parking efficiency.

3.6.3 Pedestrian and cycle access will be retained via the existing dedicated access, located approximately 50m south of the proposed site egress junction and 70m from the underpass access on Argae Lane. This will provide a segregated route to the school entrances, separating vehicle access and non-motorised user access. An internal network of walkways will be provided to accommodate walking movements through the site.

3.6.4 Car, cycle and motorcycle parking will be provided in accordance with adopted standards. In summary this includes 106 car parking spaces (of which 15 are designated as disabled bays) and 120 cycle parking spaces. Pick-up / drop-off spaces for six coaches / buses are provided adjacent to the MUGA and Rugby 4G pitch.

4. Planning Policy Review

4.1 Introduction

4.1.1 This section of the TS provides a review of relevant existing planning and transport policies at a national and local level considered relevant to the proposed development.

Planning Policy Wales

4.1.2 Edition 11 of PPW was published in February 2021 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.

4.1.3 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."* This chapter provides a review of the VoG LDP to demonstrate that the proposed development accords with policy.

4.1.4 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."*

4.1.5 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. The proposed measures to support this are set out in **Chapter 6** of this TS.

4.1.6 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."

4.1.7 Paragraph 4.1.40 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."

4.1.8 Paragraph 4.1.49 states that car parking provision has a major influence on both mode choice and development patterns.

4.1.9 Paragraphs 4.1.55 to 4.1.56 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 (TAN) 18: Transport

4.1.10 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.

4.1.11 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"* (p.8).

4.1.12 Paragraph 4.6 states that parking standards for new development should be determined on an evidence basis which includes accessibility to other modes of transport. The proposed development provides car and cycle parking in accordance with the VoG Parking Standards SPG (March 2019), as discussed in **Chapter 3** of this TS.

4.1.13 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. This includes sufficient cycle parking in close proximity to the school access, for pupils who cycle to school, and ensuring suitable accessibility within the site for all pupils and staff.

4.1.14 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.

4.1.15 Annex D contains the guidance thresholds, by land planning use, where a Transport Assessment could be considered as required. A table is provided, following paragraph D.4, which sets out the thresholds in gross floor area, dwellings or seats, as required per land use. In relation to schools, it states '*All new schools (see D5 below)*' Paragraph D5 advises that:

"All new schools should be subject to a TA. The level of analysis should provide the decision maker with suitable data regarding the accessibility of the site by all modes and the impacts on movement patterns likely to occur. The level of detail should be proportionate to the scale of development."

4.1.16 The development proposals are not for a new school and instead propose a redevelopment of the existing St Richard Gwyn Catholic High School to expand its capacity. The SRB facility will form part of the proposed expansion, which will see an increase from 815 to 1,110 pupils, including providing 60 SRB pupil places. The accessibility of the existing school site has been investigated, with specific regard to BREEAM requirements and also for the needs of SRB. Therefore, in consideration of the above and that the level of detail is required to be proportionate to the scale of development, it has been determined that a Transport Statement is adequate to inform a planning application.

Wales Transport Strategy

4.1.17 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.

4.1.18 The Proposed Development will aim to improve integration between modes, facilitate the use of existing school transport availability, and improve connectivity. It is therefore considered to be aligned with the WTS.

National Transport Finance Plan

4.1.19 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.

4.1.20 The purpose of the NTFP is to:

- Provide the timescale for financing schemes undertaken by the WG;
- Provide the timescale for delivering these schemes and detail the estimated expenditure required to deliver the scheme; and
- Identify the likely source of financing to allow delivery to take place.

4.1.21 The NTFP is not a policy document nor does it seek to prioritise schemes to be taken forward. It brings together projects already being delivered. Some of these are already under construction. Others are already under development but are not yet being built.

Active Travel (Wales) Act 2013

4.1.22 The *Active Travel (Wales) Act* became law in Wales in November 2013. 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.

4.1.23 The purpose of this Act is to require local authorities to continuously improve facilities and routes for pedestrians and cyclists and to prepare maps identifying current and potential future routes for their use. The Act also requires new road schemes (including road improvement schemes) to consider the needs of pedestrians and cyclists at design stage.

4.1.24 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 will be made to this guidance in the planning and design of the proposed development.

Well-being and Future Generations (Wales) Act 2015

4.1.25 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.

4.1.26 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.

4.1.27 The proposals are committed to improving pedestrian safety in the vicinity of the school with the reduction of accesses, reduction of roadside bus parking to include internal integrated facilities and introduction of a one-way system for cars. These could encourage and sustain a mode shift away from car to walking, cycling and bus use. By creating an area that supports active travel that communities use, the area will be healthier and have an improved environment to live and work and be educated in.

4.2 Local Policy

4.2.1 Planning legislation states that applications must be determined in accordance with the LDP unless material considerations indicate otherwise.

The Vale of Glamorgan Local Development Plan

4.2.2 The VoG LDP was updated in June 2017 and covers the period 2011-2026. The vision for the VoG is for a place:

- *"That is safe, clean and attractive, where individuals and communities have sustainable opportunities to improve their health, learning and skills, prosperity and wellbeing; and*
- *Where there is a strong sense of community in which local groups and individuals have the capacity and incentive to make an effective contribution to the future sustainability of the area."*

4.2.3 In support of the social, economic and sustainable themes intrinsic to the LDP and Community Strategy Vision, ten key strategic objectives have been developed that set the context of the LDP Strategy. The strategic objective most appropriate to this scheme is:

- Objective 3: To reduce the need for VoG residents to travel to meet their daily needs and enabling them greater access to sustainable forms of transport.

4.2.4 The LDP further develops 'Strategic Policies' to underpin the LDP Strategy and further develops policies specifically relating to 'Managing Growth' and 'Managing Development' in the VoG.

4.2.5 Strategic Policy SP7 (Transportation) states:

"Sustainable transport improvements that serve the economic, social and environmental needs of the Vale of Glamorgan and promote the objectives of the South East Wales Regional Transport Plan and the Local Transport Plan will be favoured"; and

"Priority will be given to schemes that improve highway safety and accessibility, public transport, walking and cycling. All new developments that have a direct impact on the strategic transportation infrastructure will be required to deliver appropriate improvements to the network".

4.2.6 Policy MG6 (provision of Education Facilities) provides details of land allocations for specific school sites, however, it goes onto state that *"existing schools will be extended or improved to meet demand for school places during the plan period."*

4.2.7 Policy MD2 (Design of New Development) states, in relation to transport and highways, that development proposals should:

- *"Provide a safe and accessible environment for all users, giving priority to pedestrians, cyclists and public transport users";* and
- *"Have no unacceptable impact on highway safety nor cause or exacerbate existing traffic congestion to an unacceptable degree".*

4.2.8 In respect to this, the LDP states:

"All new development should be highly accessible. Walking and cycling have an important role to play in the management of movement across the area, particularly reducing the number of short trips taken by car. Developers will be required to ensure that new developments

encourage walking and cycling by giving careful consideration to location, design, access arrangements, travel 'desire lines' through a development, and integration with existing and potential off-site links. Providing safe and convenient walking and cycling environments will help tackle health problems associated with physical inactivity and social exclusion factors arising from car dependency, poor access to services and public transport facilities."

4.2.9 The scheme seeks to provide a safe and accessible environment, particularly for pedestrians and cyclists, and to ensure efficient and safe movement of vehicles on site through provision of appropriate drop-off / pick-up facilities.

The Vale of Glamorgan Local Transport Plan 2015-2030

4.2.10 The Local Transport Plan (LTP) seeks to identify the sustainable transport measures required to ensure the VoG adheres to current requirements and good practices to allow for a sustainable transport environment for the period 2015 to 2020 as well as looking forward to 2030. It therefore seeks ways to secure better conditions for pedestrians, cyclists and public transport users and to encourage a change in travel choices away from the single occupancy car.

4.2.11 As most journeys by car, particularly for shopping and school travel, are relatively short, better conditions for pedestrians and cyclists can lead to a reduction in car use. A reduction in car use can promote good health and well-being, reduce the negative impacts on the environment that car travel can bring, offer better access to services and facilities, which in turn can offer improved economic opportunities and reduce the potential for traffic accidents. Sustainable transport infrastructure and services are therefore an important feature of modern-day life.

The Vale of Glamorgan Parking Standards

4.2.12 The VoG parking standards are set out in SPG to the LDP; the SPG was adopted in March 2019.

4.2.13 The SPG sets out the VoG's parking standards and explains the planning policy for parking requirements for new developments or changes of use. The parking standards seek to promote and ensure transparent and consistent approaches to the provision of parking. In addition to this, it helps to inform developers and designers what is expected of them in terms of sustainability considerations and travel planning.

4.2.14 The Proposed Development provides parking in accordance with the SPG, as discussed at **Chapter 3** of this TS.

4.3 Summary

4.3.1 This chapter of the report has provided a review of existing planning and transport policies at a national and local level that are considered relevant to the proposed development.

4.3.2 Planning law requires that applications for planning permission must be determined in accordance with the adopted LDP. The proposed development is considered to align with the objectives of the LDP.

4.3.3 The Proposed Development will comply with the national and local policy and guidance, they support land use planning principles, with access to the site being safe and suitable for all users thereby reducing the need to travel. The proposed access arrangements will integrate with off-site provision to facilitate take up of sustainable modes. Parking will be provided in accordance with the adopted parking standards and will take account of the operational needs of the SRB provision in providing additional parking spaces. In summary, the proposals are considered to be consistent with both overarching national and local planning and transport policy.

5. Trip Generation

5.1 Introduction

5.1.1 This section of the TS sets out the methodology for calculating the trip generation of the Proposed Development. It has been set out that the scheme will form part of the existing school and seeks to provide purposed built facilities for the existing St Richard Gwyn Catholic High School to expand its capacity from 815 to 1,110 pupils, including the development of a new Specialist Resource Base (SRB) with capacity for 60 pupils. The number of staff is expected to increase in accordance with pupil capacity increase, from 96 to 132 total staff. The total 132 proposed staff could result in 74 designated as teaching staff and 58 as non-teaching staff.

5.1.2 This proposed increase in pupils and associated staff is considered to be of limited scale. This section will set out the key considerations for the potential increase in pupil and staff movements.

5.2 Trip Generation

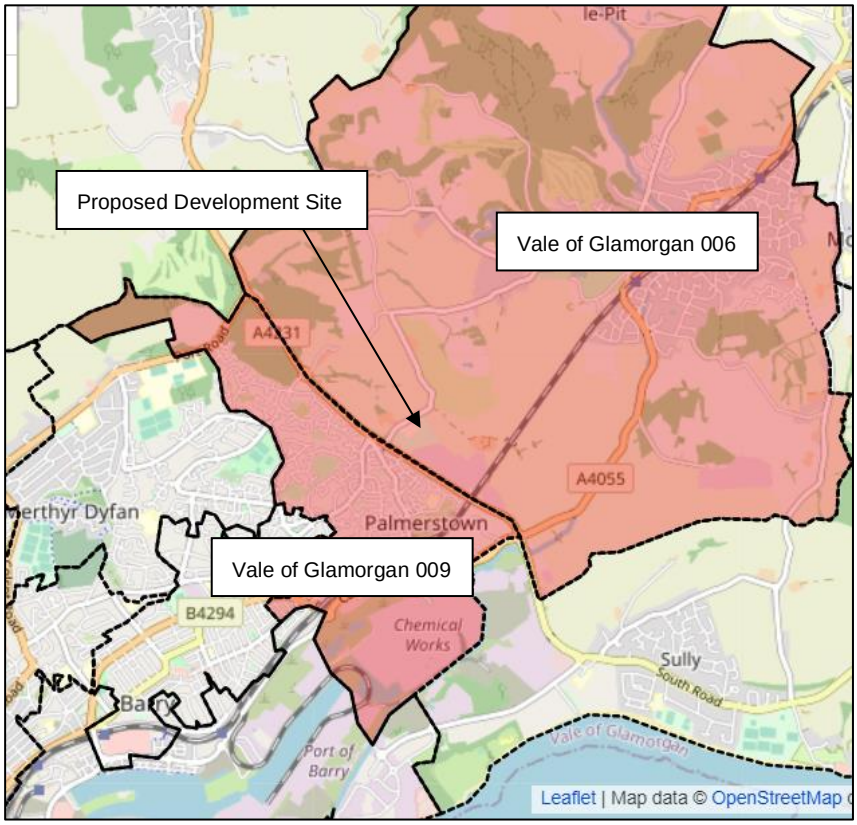
Existing School

5.2.1 The methodology that has been employed to provide an indication of forecast traffic movements includes a use of data recorded from the 2011 Census. This is considered a reasonable method for establishing an interim mode share, and will be reviewed as part of the development of the TP.

Staff

5.2.2 The existing school comprises a total of 96 staff, of which 42 are ancillary and 54 are teaching staff. The number of staff arriving by car / LGV has been identified based on a mode share derived through analysis of the 2011 Census 'Journey to Work' data. This has been undertaken for employment trips to the Vale of Glamorgan 006 and 009 Middle Super Output Areas (MSOA). The school lies on the border of the two MSOAs and as such, data for both MSOAs has been analysed to produce an average mode share. The location of the school in the context of the two MSOAs is shown on **Figure 5-1**. It should be set out and acknowledged that the 2011 census data is over 10 years old. This may not now be such a close representation of employment travel movements for this area as it once was. As part of the Travel Plan for the Proposed Development, post-occupation travel behaviour surveys will be undertaken. This will provide a more accurate baseline for the future Travel Plan monitoring.

Figure 5-1: Vale of Glamorgan 006 and 009 MSOAs



5.2.3 The mode share has been applied to the existing staff total of 96; the mode share and resulting number of staff using each mode is set out in **Table 5-1.**

Table 5-1: Staff Mode Share (Existing School)

Mode	Mode Share (AVG of VoG 006 & 009)	No. of Staff
Walk	10%	10
Pedal Cycle	2%	2
Driving a Car or Van	74%	71
Passenger in a Car or Van	7%	7
Public Transport	5%	5
Taxi	0%	0
Motorcycle, Scooter or Moped	1%	1
Total	**100%**	**96**

5.2.4 **Table 5-1** indicates that approximately 71 of the 96 existing employed staff are forecast to travel to and from the school being the driver of a car / van, with seven travelling as a passenger. Ten staff members are expected to walk from within the local area, with the remaining eight forecast to travel by bike, motorcycle or public transport.

Pupils

5.2.5 The existing school comprises a total of 815 pupils. The designation of the school is faith-based and has a large catchment area, meaning that the significant majority of pupils arrive by school bus.

Proposed School

Staff

5.2.6 As part of the proposals, the number of staff is expected to increase in accordance with pupils from 96 to 132, with 74 being teaching staff and 58 being non-teaching staff. It is envisaged that the additional 36 staff will travel according to the mode share of existing staff which has been forecast in **Table 5-1.** The total number of proposed staff, including existing staff, travelling by each mode is shown in **Table 5-2.**

Table 5-2: Staff Mode Share (Proposed School)

Mode	Mode Share (AVG of VoG 006 & 009)	No. of Staff
Walk	10%	13
Pedal Cycle	2%	3
Driving a Car or Van	74%	98
Passenger in a Car or Van	7%	10
Public Transport	5%	6
Taxi	0%	1
Motorcycle, Scooter or Moped	1%	1
Total	**100%**	**132**

5.2.7 **Table 5-2** indicates that out of the proposed total of 132 staff, 98 are forecast to drive to and from the school via car / van. When compared to the existing trip generation of the school, this could represent an additional 27 trips to and from the school by car / van.

Pupils

5.2.8 As part of the proposals, the total number of pupils will increase from 815 to 1,110 including 60 new pupils as part of the SRB. It is envisaged that the majority of the additional 235 mainstream pupils will travel as per the existing pupil cohort, with the significant majority travelling by school bus. Of the 60 pupils proposed as part of the new SRB facility, it is envisaged that some will be transported by school bus, whilst others may require pick-up / drop-off.

Trip Generation Summary

5.2.9 In summary, the proposed redevelopment of the school may result in up to 27 additional vehicle trips to and from the premises, associated with an increase in staff members. The consideration for the trip generation for the additional 235 mainstream pupils is that these will, in the significant majority, be accommodated on school buses. In terms of the provision of 60 SRB pupils, these are envisaged to travel by contracted school transport such as taxis and school buses.

5.2.10 There is unlikely to be a significant increase in vehicular trips associated with the proposals. The school will also be subject to a Travel Plan which will target the reduction of car use and replace this with more sustainable forms of travel.

6. Transport Implementation Strategy

6.1 Introduction

6.1.1 TAN 18 requires any TS 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 TS. 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 TP; therefore, the modal information, targets and measures set out in this chapter will inform the TP which has been prepared alongside the evolvement of the masterplan and will accompany the submission as part of the planning application.

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 towards more sustainable practices. To enable the setting of appropriate and realistic targets, a valid baseline first needs to be established.

6.2.2 **Table 5-2** sets out the forecast mode share of the staff based at the Proposed Development. This has been determined from 2011 census data using an average mode share of respondents who work in both the Vale of Glamorgan 006 and 009 MSOAs. This shows that 74% of staff are forecast to travel as a driver of a car / van, 7% as a passenger in a car / van, 10% on foot, 5% via public transport (including rail), 2% via bicycle and 1% via motorcycle.

6.2.3 A TP has been prepared and will accompany the TS as part of the planning application submission. It will be required to be in place when the redevelopment of the 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 by 6% 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 VoG and the Travel Plan Coordinator (TPC).

6.3 Monitoring and Evaluation

6.3.1 The point at which baseline travel surveys are required will be subject to agreement with VoG as the LHA. 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 VoG. 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 / from the school will also need to be agreed with the VoG, given the specific nature and needs of transporting pupils.

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 VoG, 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 VoG 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 and services. 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.

6.4.3 Where possible, the TPC will work alongside staff to identify what additional measures could be implemented. Where appropriate, ‘travel training’ will be provided to pupils.

6.5 Physical Measures and Interventions

6.5.1 Physical measures will be implemented to encourage journeys to / from the school using sustainable transport modes and to ensure that safe and secure access can be provided for non-motorised users.

On-Site Measures

6.5.2 The proposed school redevelopment will benefit from the existing school infrastructure provision. Pedestrian and cycle access will be retained via the existing segregated vehicle and pedestrian access, located to the south of the existing school main access junction. This will provide a segregated route to the school entrances, separating vehicle access and non-motorised user access. An area designed and constructed for the purpose of cycle parking provision, including around 120 cycle spaces will be provided in close proximity to this active travel link, to allow a safe and convenient location for pupils, staff or visitors to dismount and store their bikes. Lockers, changing and shower facilities will be provided on-site as part of the internal building design.

7. Summary & Conclusions

7.1 Summary

7.1.1 The Proposed Development is located at the existing St Richard Gwyn Catholic High School. The school is accessed from Argae Lane, which connects to the A4231, at its south western extent, approximately 3.5km northeast of Barry. The development proposals are not for a new school and instead propose a redevelopment of the existing St Richard Gwyn Catholic High School to expand its capacity. The SRB facility will form part of the proposed expansion, which will see an increase from 815 to 1,110 pupils, including providing 60 SRB pupil places. The accessibility of the existing school site has been investigated, with specific regard to BREEAM requirements and also for the needs of SRB.

7.1.2 The school is situated in a rural environment on the periphery of Barry, adjacent to a northeast principal travel corridor. There are a range of local complementary facilities available within a reasonable walking and cycling distance. There is good provision of public transport services located nearby to the proposed development, as well as walking and cycling accessibility to the large residential areas south of the A4231. Based on the review of the latest five years of personal injury collision data, it was concluded there are no highway safety concerns in the study area.

7.1.3 The Proposed Development comprises a redevelopment of the existing St Richard Gwyn Catholic High School to expand its capacity from 815 to 1,110 pupils, including the development of a new Specialist Resource Base (SRB) with capacity for 60 pupils. The number of staff is expected to increase in accordance with pupils from 96 to 132, with 74 being teaching staff and 58 being non-teaching staff.

7.1.4 The proposed access strategy will reconfigure the existing access points between the school and Argae Lane to include one access point and one egress point for all vehicles including buses, coaches and private cars belonging to staff or visitors. Vehicular movement will operate one-way across the site frontage and bus / coach drop-off area, some localised two way movement will be permitted to maximise car parking efficiency.

7.1.5 Pedestrian and cycle access will be retained via the existing dedicated access, located approximately 50m south of the proposed site egress junction and 70m from the underpass access on Argae Lane. Car, cycle and motorcycle parking will be provided in accordance with adopted standards. In summary this includes 106 car parking spaces (of which 15 are designated as disabled bays) and 120 cycle parking spaces. Pick-up / drop-off spaces for six coaches / buses are provided adjacent to the MUGA and Rugby 4G pitch.

7.1.6 The scheme will comply with the national and local policy and guidance, they support land use planning principles, with access to the site being safe and suitable for all users thereby reducing the need to travel. The proposed access arrangements will integrate with off-site provision to facilitate take up of sustainable modes. Parking will be provided in accordance with the adopted parking standards and will take account of the operational needs of the SRB provision in providing additional parking spaces. In summary, the proposals are considered to be consistent with both overarching national and local planning and transport policy.

7.1.7 In summary, the proposed redevelopment of the school may result in up to 27 additional vehicle trips to and from the school, associated with an increase in staff members. The consideration for the trip generation for the additional 235 mainstream pupils is that these will, in the significant majority, be accommodated on school buses. In terms of the provision of 60 SRB pupils, these are envisaged to travel by contracted school transport such as taxis and school buses. Overall, the proposed development is not considered to result in a significant impact on the surrounding highway network.

7.1.8 Targets have been set for the reduction of private car use and a commitment to a TP and monitoring programme has been made. The measures that will be implemented as part of the development proposals have been outlined to help to achieve the targets and objectives set. This will include the implementation of an appropriate internal circulation system for school traffic which will reduce the conflicts between traffic and between traffic and pedestrians, pick-up and drop-off areas in recognition of the specialist facility, and cycle parking in close proximity to the school access.

7.1.9 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.

7.2 Conclusions

7.2.1 The Proposed Development will comply with the national and local policy and guidance, with access to the premises being safe and suitable for all users. The site is accessible via a range of sustainable modes which will be further encouraged via a number of improvements. In summary, the proposals comply with national and local policies.

7.2.2 Further to the findings of this TS, and the future work identified to be completed prior to planning submission, it can be concluded that there would be no transport planning reasons why the proposed development should not be granted planning permission.

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.
	b: Travel patterns and transport impact of future building or site users.	Set out in Section 5 of TS.
	c: Current local environment for pedestrians and cyclists, accounting for any age-related requirements of occupants and visitors;	Set out in Section 2 of TS.
	d: Reporting of the number and type of existing accessible amenities, within 500m of the site	Set out in Section 2 of TS.
	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 2.6 of TS and Appendix A.
	g: Current facilities for cyclists	Set out in Section 2 of TS and TP.
	The occupier has been involved in the development of the TP.	The education department has been involved through the project and commissioned the Travel Plan preparation. The Travel plan will be shared with the existing school (current occupier) and the proposed principal staff of the SRB facility (future occupier).
	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).	Set out in Section 2.6 of TS and Appendix A. The site location has an AI score of 0.19 which, according to BREEAM guidance, is not sufficient to achieve any credits for this building type The site location has an AI score of 0.19 which, according to BREEAM guidance, is not sufficient to achieve any credits for this building type.
	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).	• Ten electric vehicle charging points to be provided comprising 10% of the total car parking spaces. • Five spaces to be designated as for car sharing purposes.
	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).	• Cycle storage and appropriate lockers / changing facilities / showers / drying spaces to be provided.
	Alternative Transport Measures • Site specific improvement measures (not covered above) implemented (1-3).	None identified.

Appendix A BREEAM Accessibility Index

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: 1

Select

NODE 1 - Little Coldbrook

Public transport type	Bus									
Distance to node (m)	450									
	Service 1	Service 2	Service 3	Service 4	Service 5	Service 6	Service 7	Service 8	Service 9	Service 10
Average frequency per hour	0.2									

Accessibility Index	0.19

Appendix B Proposed Site Layout

Notes

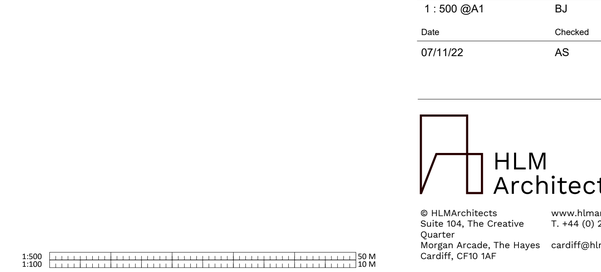
Check all dimensions on site. Do not scale from this drawing
Report any discrepancies and omissions to HLM Architects
This Drawing is Copyright ©

	Site Red Line Boundary
BB104 AREAS	
	Habitat 1,100m²
	Hard Outdoor PE 487 m²
	Hard Social 2,823m²
	Soft Social 2,700m²
	Circulation/ Non Net area 3,975 m²
	Building 2,615m²

50 M
10 M
1:500
1:100

Area Plan 1:500

Area Plan 3D 1:2000



Rev	Description	Date	By	Chk
P02	UPDATE AND REISSUE FOR DESIGN TEAM	07/11/2022	BJ	HYD
P01	PRELIMINARY ISSUE FOR COMMENT	01/09/2022	BJ	VOG

Revisions

Suitability

Project

S0 WORK IN PROGRESS

15-1229-01 ST. RICHARD GWYN SCHOOL

Client

VALE OF GLAMORGAN

Title

BB99 PROPOSED (OPTION 2)

Drawing No.	Revision
SRG-HLM-V1-ZZ-DR-L-0004	P02

Scale	Drawn
1 : 500 @A1	BJ
Date	**Checked**
07/11/22	AS

HLM Architects

© HLMArchitects
Suite 104, The Creative Quarter
Morgan Arcade, The Hayes
Cardiff, CF10 1AF

www.hlmarchitects.com
T. +44 (0) 29 2039 6070
cardiff@hlmarchitects.com

1:500
1:100
50 M
10 M

Appendix C Swept Path Analysis (SPA) & Junction Visibility

Filename: L:\LEGACY\UKBRI2FP001\VOL1TP\PROJECTS\DEVELOPMENT PLANNING\CARDIFF OFFICE WORK\ST RICHARD GWYN, BARRY\CAD\02_SHEETS\SITE LAYOUT REVIEW NOV 22.DWG Last saved by: BENJAMIN.BURTON1 Last Plotted: 1/24/2023 5:43 PM

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

A3 297x420mm

Key:

2.4m x 43m Visibility Splay (MfS)

Area to be Kept Clear of Obstructions

High transparency, mesh-style fencing, as per the existing situation, would provide acceptable levels of visibility.

Cycle Parking

St Richard Gwyn Catholic High School, Barry

Site Layout Review

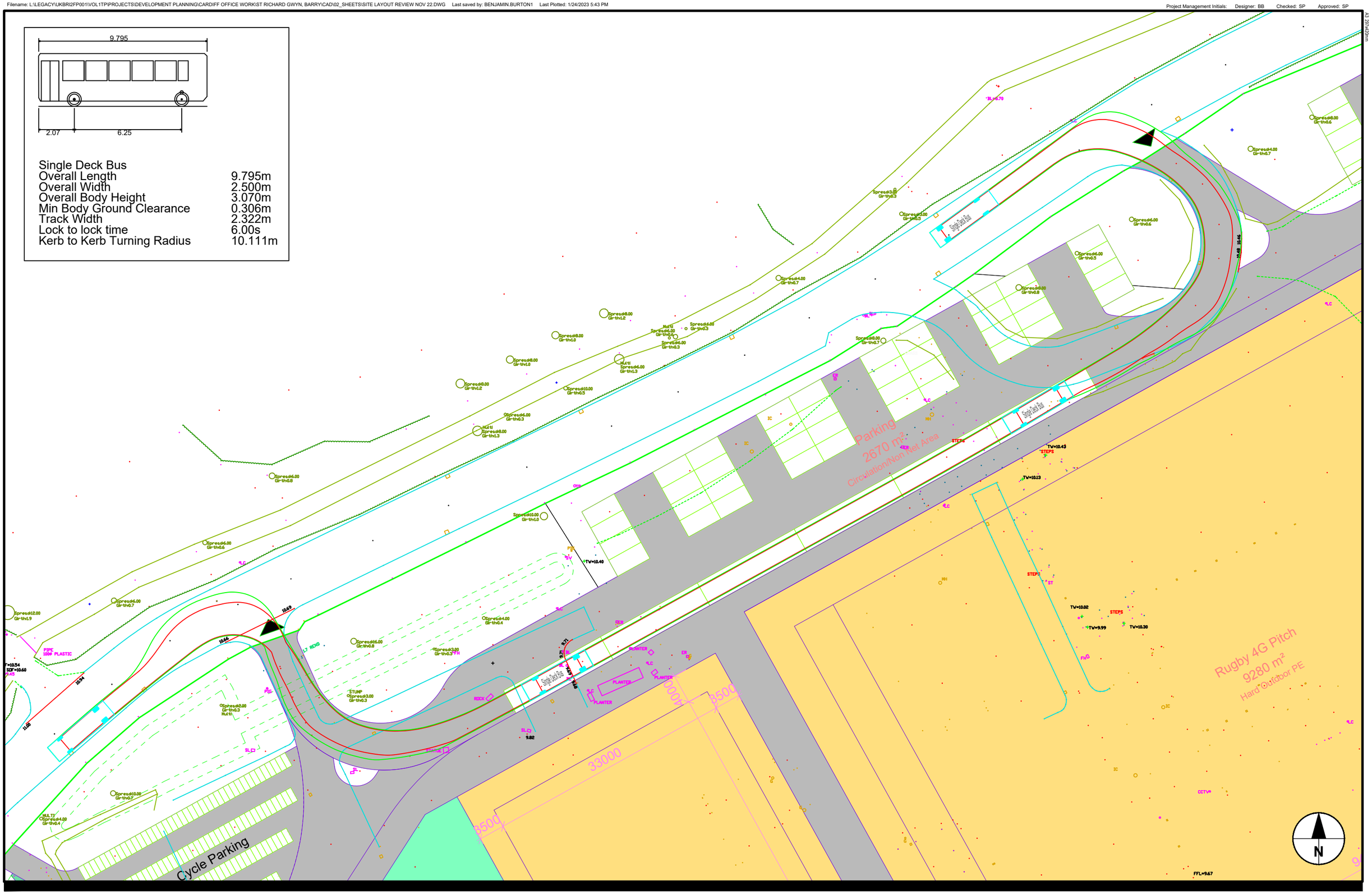
FOR INFORMATION ONLY

AECOM

Filename: L:\LEGACY\UKBRI2FP001\VOL1TP\PROJECTS\DEVELOPMENT PLANNING\CARDIFF OFFICE WORK\ST RICHARD GWYN, BARRY\CAD\02_SHEETS\SITE LAYOUT REVIEW NOV 22.DWG Last saved by: BENJAMIN.BURTON1 Last Plotted: 1/24/2023 5:43 PM

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

A3 297x420mm



Single Deck Bus	
Overall Length	9.795m
Overall Width	2.500m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	10.111m

St Richard Gwyn Catholic High School, Barry

Site Layout Review

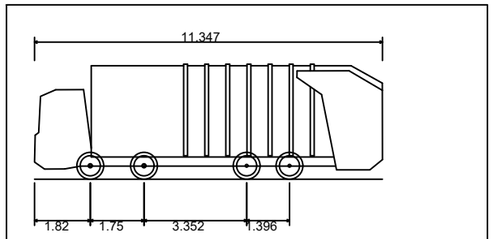
FOR INFORMATION ONLY

AECOM

Filename: L:\LEGACY\UKBRI2FP001\VOL1TP\PROJECTS\DEVELOPMENT PLANNING\CARDIFF OFFICE WORK\ST RICHARD GWYN, BARRY\CAD\02_SHEETS\SITE LAYOUT REVIEW NOV 22.DWG Last saved by: BENJAMIN.BURTON1 Last Plotted: 1/24/2023 5:44 PM

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

A3 297x420mm



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

Assumed location of refuse servicing area

St Richard Gwyn Catholic High School, Barry

Site Layout Review

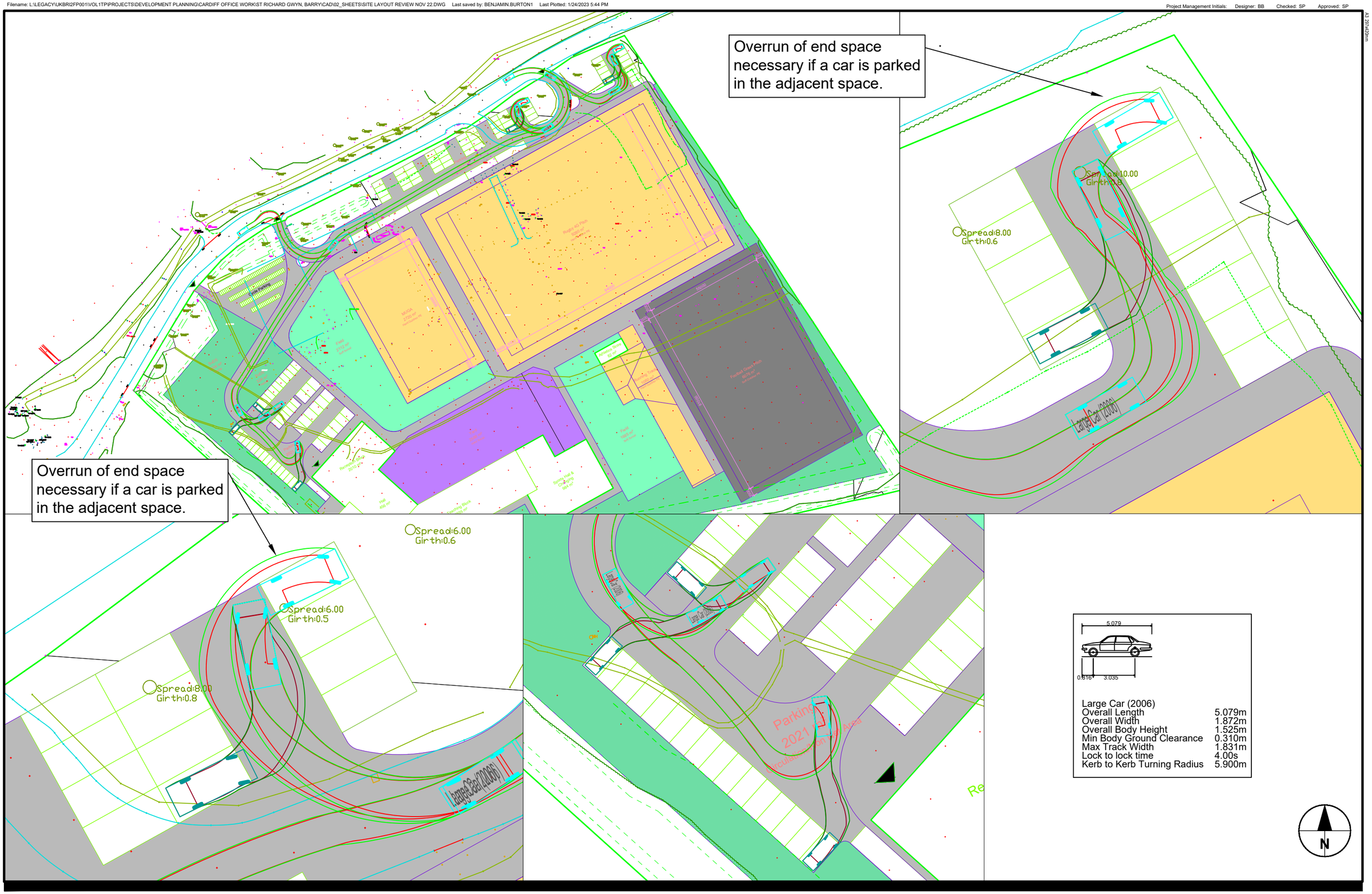
FOR INFORMATION ONLY

AECOM

Filename: L:\LEGACY\UKBRI2FP001\VOL1TP\PROJECTS\DEVELOPMENT PLANNING\CARDIFF OFFICE WORK\ST RICHARD GWYN, BARRY\CAD\02_SHEETS\SITE LAYOUT REVIEW NOV 22.DWG Last saved by: BENJAMIN.BURTON1 Last Plotted: 1/24/2023 5:44 PM

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

A3 297x420mm



St Richard Gwyn Catholic High School, Barry

Site Layout Review

FOR INFORMATION ONLY

AECOM

aecom.com