Pell Frischmann

Land at Mwyndy

Transport Assessment

February 2026

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1. Introduction

1.1. Overview

1.1.1. Pell Frischmann has been commissioned by Talbot Green Developments Ltd (the Client) to provide transport planning and highways advice in support of a proposed development of land at Mwyndy, east of the A4119 in Rhondda Cynon Taf.

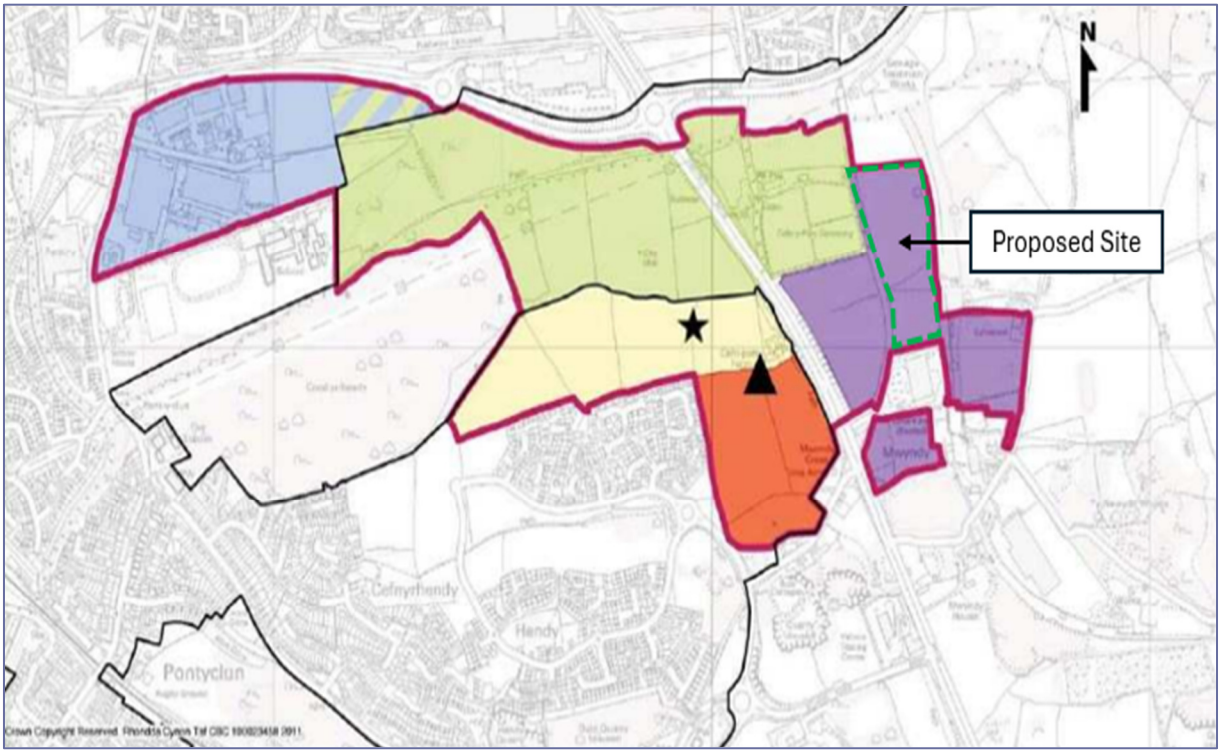
1.1.2. The local Planning and Highway Authority is Rhondda Cynon Taf County Borough Council (RCTCBC).

1.1.3. This Transport Assessment (TA) has been prepared in order to summarise the transport characteristics of the local transport network and provides a review of the potential impact that developing the area of land identified as the 'Site' may have on the operation of the local highway network.

1.2. Site Context and Planning History

1.2.1. The site forms the eastern extent of the Mwyndy / Talbot Green allocation site, Local Development Plan Allocation SSA 8, and is located on the land to the south of the Cefyn-y-Parc Cemetery. The allocation consists of the construction of 500 dwellings, 15 hectares of employment land, 23,400sqm retail floor space, 10,000sqm of leisure floor space, a primary school, library/community facility and amenity space. The location of the site within the allocation area, consisting of approximately 5.3 hectares, is identified in **Figure 1.1**.

Figure 1.1: Site location within the SSA 8 LDP Allocation



Source: RCTCBC Local Development Plans with Pell Frischmann annotations

1.2.2. The A4119 junction serving the site and adjacent allocated employment land has recently been upgraded to introduce a signal control arrangement. This including signalling the A4119 / Ffordd Cefn-Yr-Hendy junction to form a single 4 arm staggered junction.

1.2.3. The junction change was delivered as part of the Melin Newydd development for 460 dwellings west of the A4119. It is understood that there are aspirations for the Mwyndy Cross arm of the junction to be widened to accommodate development of the allocated employment land adjacent to the site.

1.2.4. Review of the Transport Assessment and associated Technical Notes that supported the Melin Newydd planning application confirms that there is an intention for a two-phase approach to upgrading the Mwyndy Cross junction. Phase 1, already delivered, retains the single lane arrangement on the road

serving the proposed development site and Phase 2 would see this arm widened to provide separate left and right turn lanes, in addition to a two-lane exit. Phase 2 also sees a second right turn lane introduced on the southern arm of the A4119 and the introduction of a dedicated southbound left-turn lane.

1.2.5. It should be noted that the delivery of the separate left and right turn lanes and two-lane exit on the Mwyndy Cross arm as part of the phase 2 upgrade is reliant upon third-party land that is not within the gift of the Client.

1.2.6. It is noted that a planning application for a data centre on land to the west of the site, south of the cemetery, was approved in May 2025 (Application ref: 25/0138/FUL). This includes the provision of a new vehicular access on the western side of Mwyndy Cross, approximately 45m north of the customer access to Arthur Lewellyn Jenkins and localised widening of the carriageway. A 2m wide footway will also be provided along the northern / western side of Mwyndy Cross between the signalised junction and the new site access junction.

1.3. Development Overview

1.3.1. The proposed development is for an employment scheme consisting of two different options as follows:

- Option 1 – Erection of a 9,980sqm Class B1c light industrial building with associated access, parking, drainage, landscaping, services and utilities; and,
- Option 2 – Erection of a 21,490sqm Class B8 data centre with associated access, parking, drainage, landscaping, services and utilities.

1.3.2. Access to the site is to be by way of a simple priority junction located on Mwyndy Cross, approximately 140m north of the customer access to Arthur Lewellyn Jenkins.

1.3.3. Indicative masterplans for the site, for each of the two development options, including the proposed points of access are provided in **Appendix A**.

1.4. Report structure

1.4.1. This TA examines the effects of the proposed development on the local highway network in terms of road safety, accessibility by sustainable travel modes and junction capacity. This includes consideration of operational matters such as the proposed access arrangements. A trip forecasting exercise coupled with junction capacity assessment of the network of signal-controlled junctions on the A4119 has also been completed.

1.4.2. The remainder of this report is structured as follows:

- Chapter 2 – reviews relevant national and local policy;
- Chapter 3 – summarises the local highway context, considers the accessibility of the site by non-car modes and provides a review of collision data;
- Chapter 4 – outlines the development proposal for the site including the proposed site access arrangements;
- Chapter 5 – provides the trip generation and assignment summary for the proposed development options;
- Chapter 6 – provides junction capacity assessment; and,
- Chapter 7 – provides a summary and conclusion to the report.

2. Policy Review

2.1. Introduction

2.1.1. This chapter of the TA identifies those policy documents that are considered to be relevant to the development proposal. The following national, regional, and local policy documents will be reviewed in relation to transport/highways matters relevant to the proposed development:

- **National Policy**
  - Planning Policy Wales (PPW), Edition 12
  - Technical Advice Note 18: Transport
  - Technical Advice Note 12: Design
  - Manual for Streets
  - Llwybr Newydd: The Wales Transport Strategy (2021)
  - National Transport Delivery Plan (2022-2027)
  - Active Travel Delivery Plan (2024-2027)
  - Electric Vehicle Charging Strategy for Wales (2021)
  - Active Travel (Wales) Act (2013) & Active Travel Act Guidance (July 2021)

- **Local Policy**
  - Rhondda Cynon Taf Local Development Plan (LDP) (2006-2021)
  - Revised Rhondda Cynon Taf Local Development Plan (2022-2037)
  - Supplementary Planning Guidance: Access, Circulation & Parking Requirements (March 2011)
  - Supplementary Planning Guidance: Design and Placemaking (March 2011)
  - Electric Vehicle Charging Strategy (2021-2030)
  - RCTCBC Delivering Design and Placemaking: Access, Circulation and Parking Requirements SPD (March 2011)

2.2. National Policy

Planning Policy Wales (PPW) (Edition 12, February 2024)

2.2.1. Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs), Welsh Government Circulars, and policy clarification letters, which together with PPW provide the national planning policy framework for Wales. The latest version of PPW, Edition 12, was published in February 2024.

Future Wales – The National Plan 2040

2.2.2. Future Wales: The National Plan 2040 is the Welsh Government's national spatial development framework. It sets the strategic direction for planning and development across Wales for the next 20 years. The plan provides a national vision for sustainable places, shaping how and where future growth should happen, and guiding Local Development Plans (LDPs) and planning decisions at every level.

2.2.3. The Plan Emphasises the following points:

- Sustainable placemaking as a central pillar of planning policy;
- A need to address the climate and nature emergencies;
- The importance of well-connected, compact, and resilient communities;
- Supporting the Welsh language, identity, and culture;
- Integration of transport, housing, employment, and environmental policy.

2.2.4. To help deliver this vision, the Placemaking Wales Charter serves as a practical framework for shaping development in a way that aligns with the national priorities set out in Future Wales.

People and Places: Placemaking Wales Core Principles

2.2.5. The Placemaking Wales Charter sets out six key principles that underpin high-quality, people-focused places. These principles align with the goals of Future Wales and support consistent delivery of placemaking across planning and development sectors:

People and Community

- Places should be planned with and for people.
- Community engagement is essential from the earliest stages.
- Development must promote well-being, equality, social cohesion, and a strong sense of belonging.

Location

- Land should be used efficiently and in a way that supports existing places.
- New development should reduce the need to travel by co-locating homes, jobs, services, and leisure.
- Connectivity and sustainability are key location factors.

Movement

- Walking, cycling, and public transport must be prioritised over private car use.
- Developments should provide safe, direct, and well-integrated active travel routes.
- Public transport infrastructure should be central to site design.

Mix of Uses

- Places should support a mix of residential, commercial, and community functions.
- This supports economic activity, social interaction, and a more inclusive, diverse population.
- Mixed uses reduce travel needs and support vibrant, 24-hour communities.

Public Realm

- Streets and public spaces should be welcoming, safe, accessible, and inclusive.
- Green infrastructure, sustainable drainage, and landscape design must be well integrated.
- Public spaces should promote interaction and activity for all age groups

Identity

- Development should respond to and enhance the unique cultural, linguistic, and physical character of a place.
- Heritage, language, and local distinctiveness must be valued and reflected in design.
- Proposals should strengthen the sense of place and continuity.

Delivery of Sustainable Development

2.2.6. New developments must contribute to the Welsh Government's overarching goal of sustainable development, as embedded in PPW Edition 12. From a transport planning perspective, sustainability is promoted through the following:

- **Modal Shift and Emissions Reduction:** Developments should enable a shift away from private car use towards low-carbon transport modes – particularly walking, cycling, and public transport – thereby reducing transport-related greenhouse gas emissions.
- **Climate Resilience and Infrastructure Adaptation:** Transport infrastructure must be designed to withstand future climate risks, including flooding and heat impacts, using resilient materials, sustainable drainage systems (SuDS), and strategic site layout.
- **Efficient Land Use and Accessibility:** Development patterns should support compact, connected, and accessible communities, reducing the need to travel long distances and enabling multi-purpose trips through the co-location of complementary land uses.

Sustainable Goals

2.2.7. New development proposals should contribute to the national sustainable development goals, particularly in line with the Well-being of Future Generations (Wales) Act 2015. These are discussed in Chapter 5, "Productive and Enterprising Places."

A Healthier Wales

- By encouraging active travel (walking and cycling) and reducing reliance on private vehicles, developments support healthier lifestyles and reduce air pollution.

A Resilient Wales

- Transport infrastructure must be designed to withstand future climate impacts, including flooding and extreme weather, ensuring long-term operational resilience.

A More Equal Wales

- Developments should provide equitable access to jobs, education, and services through well-connected, affordable, and inclusive transport networks.

A Prosperous Wales

- Efficient transport systems contribute to economic productivity by reducing congestion, improving access to employment, and supporting reliable freight and logistics.

A Globally Responsible Wales

- By promoting low-emission travel and sustainable site planning, developments help reduce Wales's environmental footprint and align with global climate goals

Technical Advice Note 18: Transport

2.2.8. This Note outlines the principles for integrating land use with transport planning and provides guidance on how to assess and mitigate transport impacts.

2.2.9. This document outlines that sustainable development should be delivered through:

- Integration of transport and land use planning;
- Integration between different types of transport, and
- Integration of transport policy with policies for the environment, education, social justice, health, economic development, and wealth creation.

2.2.10. Integration of land use planning with the development of transport infrastructure supports the Welsh Government's broader sustainable development goals by:

- Promoting resource and travel-efficient settlement patterns;
- Ensuring new development is situated in locations with existing or planned access to public transport, walking, and cycling, thereby reducing travel demand and encouraging social inclusion;
- Managing parking provision;
- Ensuring that both new developments and major modifications to existing ones include suitable infrastructure for pedestrians (including those with mobility or access needs), cyclists, public transport, traffic management, and parking/servicing;
- Encouraging proximity of developments to related uses to support multi-purpose trips;
- Promoting cycling and walking;
- Supporting the delivery of accessible, high-quality public transport;
- Supporting the development of a reliable and efficient freight network;
- Encouraging well-designed streets that provide a safe public environment and a distinctive sense of place; and

- Ensuring that transport infrastructure or service enhancements required for new development do not compromise the functionality of existing transport networks.

2.2.11. The developer, in collaboration with the Council, is working to enhance sustainable connectivity both to the site and within the wider area.

Technical Advice Note 12: Design

2.2.12. This Note provides detailed guidance on how good design should be integrated into the planning process for new developments.

2.2.13. Paragraph 4.13 is relevant to this development and states the following:

'Movement and ease of access for all to and from development should be appraised at the strategic and local level, with a view to supporting a shift from car use to walking, cycling, and public transport, and recognising the need for better connectivity within areas and with the surrounding areas. Consideration should be given to the volume and relative ease of pedestrian movements, including people with mobility or sensory impairments. Similar consideration of volume and ease of movement should be given to cycle, public transport, and car movements, while areas of conflict, congestion, and connections should be identified throughout the area surrounding the site.'

Manual for Streets (2007)

2.2.14. The Department for Transport's Manual for Streets, introduced in 2007, replaced the earlier general guidance manual DB32. It provides design principles specifically tailored for lightly trafficked residential streets and highways.

2.2.15. Section 4.2.1 states the following regarding sustainable development:

''A key consideration for achieving sustainable development is how the design can influence how people choose to travel. Designers and engineers need to respond to a wide range of policies aimed at making car use a matter of choice rather than habit or dependence. Local transport plans and movement strategies can directly inform the design process as part of the policy implementation process.''

2.2.16. Section 4.4.3 is also imperative for new developments:

"By creating linkages between new housing and local facilities and community infrastructure, the public transport network and established walking and cycling routes are fundamental to achieving more sustainable patterns of movement and to reducing people's reliance on the car."

Llwybr Newydd: The Wales Transport Strategy (2021)

2.2.17. This Strategy sets out the Welsh Government's vision for an accessible, sustainable, and efficient transport system that supports social equality, environmental goals, and economic development. It guides transport policy and planning across Wales, with key supporting documents like the National Transport Delivery Plan (2022–2027) and the Active Travel Delivery Plan (2024–2027) providing detailed actions to deliver this vision, focusing on improving public transport, active travel, and reducing carbon emissions.

National Transport Delivery Plan (2022-2027)

2.2.18. The National Transport Delivery Plan (2022–2027) sets out how the Welsh Government will deliver the priorities of Llwybr Newydd: The Wales Transport Strategy 2021.

2.2.19. It aims to create a more sustainable, accessible, and efficient transport system that supports the well-being of future generations. The plan focuses on reducing the need to travel, enabling seamless and sustainable transport, and encouraging a shift toward greener travel modes. It includes mode-specific delivery plans for areas such as rail, bus, active travel, roads, and freight, supported by a new governance and appraisal framework (WelTAG).

Active Travel Delivery Plan (2024-2027)

2.2.20. The Active Travel Delivery Plan (2024–2027) functions as the current Walking and Cycling Action Plan for Wales. It outlines how walking, wheeling, and cycling will be promoted and supported over the next three years, replacing the previous 2016 action plan. The plan is structured around four themes: Leading the change, stepping up delivery, demonstrating impact, and making active travel the first choice. It aims to embed active travel into everyday life through improved infrastructure, behaviour change initiatives, school and workplace engagement, and strong leadership at all levels.

Electric Vehicle Charging Strategy for Wales (2021)

2.2.21. This Strategy outlines the Welsh Government's approach to developing a comprehensive EV charging infrastructure across the country. The strategy aims to ensure that by 2025, all users of electric cars and vans in Wales are confident they can access charging facilities when and where needed. This vision aligns with the broader goals of reducing carbon emissions from the transport sector and supporting the transition to low-emission vehicles.

2.2.22. Key objectives include expanding the charging network with thousands of fast and rapid chargers, improving the user experience through contactless payments and reliable infrastructure, and integrating charging facilities into urban planning and along major roads. The strategy is supported by significant investment to deliver these goals and forms part of the Welsh Government's wider commitment to sustainable transport and decarbonisation.

Active Travel (Wales) Act (2013) & Active Travel Act Guidance (July 2021)

2.2.23. The guidance provides updated direction to Welsh local authorities on planning, designing, and delivering high-quality walking and cycling infrastructure in line with the Active Travel (Wales) Act 2013. It emphasises a user-centric approach, ensuring that infrastructure meets the needs of all users, including children, people with disabilities, and those using adapted cycles, prioritising comfort, safety, and accessibility.

2.2.24. The guidance encourages the development of routes segregated from motor traffic where possible to create safe and enjoyable active travel paths. It also highlights the importance of community engagement in the planning process to ensure local needs are met and active travel is encouraged. Supported by significant government investment, the guidance aims to help Wales become a leader in active travel infrastructure, promoting sustainable transport, reducing carbon emissions, and improving public health through walking and cycling.

2.3. Local Policy

Rhondda Cynon Taf Local Development Plan (LDP) (2006–2021)

2.3.1. This Plan provided a strategic framework for land use, housing, employment, retail, and environmental protection across the county borough. It aims to support sustainable growth by guiding new housing developments, allocating employment land, promoting mixed-use sites, and protecting natural resources. Due to evolving planning policies and local needs, the plan is currently being replaced by the Revised Local Development Plan (RLDP) 2022–2037, which is scheduled for adoption in May 2026. Until then, the 2006–2021 LDP remains the operative development plan for the area.

Revised Rhondda Cynon Taf Local Development Plan (RLDP) (2022–2037)

2.3.2. The Revised Rhondda Cynon Taf Local Development Plan (RLDP) 2022–2037 is an emerging strategy to guide land use, housing, employment, infrastructure, and environmental protection in the county borough over the next 15 years. It aims to deliver approximately 8,450 new homes, with a strong focus on affordable housing, alongside strategic development sites such as Llanilid and Llanilltud Faerdref. The plan emphasises sustainable development, safeguarding natural resources, and community engagement

through extensive public consultations. Scheduled for adoption in May 2026, the RLDP will replace the current 2006–2021 plan and shape the area's growth to 2037.

Supplementary Planning Guidance: Access, Circulation & Parking Requirements (March 2011)

2.3.3. This Planning Guidance provides detailed standards for the design and layout of access roads, vehicle circulation, and parking in new developments within Rhondda Cynon Taf. It aims to ensure safe, efficient, and convenient movement for vehicles, pedestrians, and cyclists, while supporting the council's broader planning policies. This guidance helps developers meet local requirements to promote sustainable and accessible transport options. It remains the most current guidance on these matters in the area.

Supplementary Planning Guidance: Design and Placemaking (March 2011)

2.3.4. The Supplementary Planning Guidance: Design and Placemaking from March 2011 remains the latest official guidance published by Rhondda Cynon Taf County Borough Council on this topic.

2.3.5. It provides detailed advice to support high-quality design in new developments across Rhondda Cynon Taf. It emphasises the importance of creating places that are attractive, safe, sustainable, and responsive to local character and community needs. The guidance promotes good urban design principles, including connectivity, legibility, and well-designed public spaces, to enhance the overall sense of place and quality of life. It remains a key reference for ensuring developments contribute positively to the built environment.

Electric Vehicle Charging Strategy (2021-2030)

2.3.6. The Electric Vehicle Charging Strategy (2021–2030) for Rhondda Cynon Taf outlines the Council's commitment to supporting the transition from petrol and diesel vehicles to electric vehicles (EVs) as part of its broader sustainable transport goals.

2.3.7. The strategy sets out ten ambitions, including the development of a comprehensive EV charging infrastructure, the establishment of workplace and community charging points, and the transformation of the Council's fleet towards more sustainable methods of transportation.

2.3.8. The Council has also developed an Implementation Plan and Action Plan to guide the delivery of these ambitions, ensuring a coordinated and practical approach to EV charging across the county borough.

2.3.9. These efforts align with the Council's goal of becoming a carbon-neutral local authority by 2030 and contribute to the reduction of carbon emissions and improved air quality.

RCTCBC Delivering Design and Placemaking: Access, Circulation and Parking Requirements SPD (March 2011)

2.3.10. RCTCBC's Supplementary Planning Guidance document '*Delivering Design and Placemaking: Access, Circulation and Parking Requirements, March 2011*' sets out parking requirements for developments. The proposed site at Mwyndy Cross is located within Zone 3 '*Suburban or Near Urban*'. The policy defines Zone 3 as follows:

"*Zone 3 comprises all of the remaining urban areas outside the Principal Towns and the Key Settlements, as contained within the settlements boundaries of the LDP. There areas contain the smaller settlements and local centres offering a range of local facilities. There is generally a regular bus service to the town centres and in some cases there are local railway stations. The strategic sites of the LDP are also included in this zone for the purposes of the parking guidelines.*"

Car parking

2.3.11. The land use specific guidance on parking is provided in Appendix A of the policy document and in relation to the proposed development specifically Table e2: General Industry, Distribution and Storage: Zones 2, 3 & 4. Table e2 has been replicated below for ease of reference. It should be noted that there are no standards for data centres.

Table 2.1: RCTCBC Car Parking Standards for General Industry, Distribution and Storage (Zones 2, 3 & 4)

Type of Development	Operational	Maximum Non-operational
General Industry (< 235m^2)	1 van space	2 spaces
General Industry (> 235m^2)	See Note 4	1 space per 80 m^2
Distribution / Storage (< 1000m^2)	35% of GFA	1 space per 80 m^2
Distribution / Storage (> 1000m^2)	25% of GFA	1 space per 80 m^2

2.3.12. The guidance document also supplies parking notes relevant to the proposed development as follows:

1. Vehicles should be able to enter and leave the site in a forward gear.
2. Visitor parking is included in the non-operational parking.
3. For premises up to a maximum of 235sqm gross floor area, an increase of 20% will be permitted without the need for additional parking. This allowance can only be made once and any parking displaced must be relocated.
4. Operational requirements:

GFA m^2	Minimum m^2	GFA m^2	Minimum m^2	GFA m^2	Minimum m^2
100	70	500	100	1,001	150
250	85	1,000	150	2,000	200

5. Above 2,000sqm Gross Floor Area (GFA), the required minimum operational area should be taken as 10% of GFA.
6. If the premises are to be used as a distribution depot, adequate space must also be provided to accommodate commercial vehicles that are likely to be parked overnight.

2.3.13. It should be noted that the car parking standards for Rhondda Cynon Taf are maximum standards. This approach is intended to support sustainable transport policies by limiting the amount of parking provided and encouraging the use of alternative modes of transport.

Motorcycle Parking

2.3.14. The guidance for motorcycle parking applies to all classes of development and requires that spaces are provided at a rate of 5% of the total number of car parking spaces.

2.3.15. Motorcycle parking should be situated in a safe, secure, and convenient area, ensuring that other vehicles cannot encroach upon or obstruct the designated motorcycle parking spaces and robust anchor points must be provided, albeit not presenting a slip / trip hazard. Bay sizes are recommended to be 2.8m x 1.3m.

Cycle Parking

2.3.16. The guidance document considers long and short stay cycle parking for the proposed development separately, with the former addressing the needs of staff and the later addressing the needs of visitors.

2.3.17. The guidance confirms that parking should be located in a safe, secure and convenient location and that appropriate signage should be provided to indicate the location of short-term cycle parking.

Table 2.2: RCTCBC Cycle Parking Standards by Land use Type

Type of Development	Long Stay	Short Stay
e) Industry	1 stand per 500m^2	1 stand per 1000m^2
e) Industrial Warehouses & Storage Centres	1 stand per 500m^2	No requirement

Parking Guidelines for Disabled People

2.3.18. The adopted guidance confirms that appropriately positioned parking places, “preferably within 50m of the facility served by the car park” and of a size in line with the Department for Transport document ‘Inclusive Mobility’ should be provided. The recommended proportions for blue badge holders, relevant to the proposed development are as follows:

- For car parks associated with new employment premises; 5% of the total car park capacity.

Electric Vehicle Charge Space Requirements

2.3.19. The Welsh Government's Future Wales Planning Policy Plan 2040 confirms the volume of Electric Vehicle (EV) parking to be provided with document stating that:

- New or substantially refurbished non-domestic buildings will be required to have a minimum of 10% of parking spaces allocated of EV charging.

3. Site Context

3.1. Introduction

3.1.1. The site is located approximately 1.8km south of Talbot Green[1] and consists of two fields. It is bound to the north by another field, the east by a wooded area, the south by Arthur Lewellyn Jenkins and to the west by a local access road – Mwyndy Cross. The site is currently accessed by vehicles via a gated field access, which includes a full height kerb junction, approximately 300m north of the A4119 / Mwyndy Cross junction. Pedestrians can also access the site using Public Right of Way (PROW) ANT/298/1, via a separate kissing gate immediately south of the gated vehicular access.

3.1.2. The current access road, Mwyndy Cross, also facilitates access to both the Cefyn y Parc Cemetery and Arthur Lewellyn Jenkins and will in due course facilitate access to the neighbouring employment plots in the SSA 8 allocations site. The site in the context of the local setting is presented in **Figure 3.1**.

Figure 3.1: Site location within local road network

Source: © OpenStreetMap with Pell Frischmann annotations

3.2. Highway Network

3.2.1. The key roads that enable access to the development site are shown on **Figure 3.1** and are described individually below.

M4 Motorway

3.2.2. The M4 motorway is a strategic road route extending from west London to southwest Wales. It provides connectivity to key cities such as Newport, Cardiff, Swansea, Reading, Swindon and Bristol. It is located approximately 3.6km southeast of Talbot Green, and 2.3km southeast of the proposed development, and follows a general east-west alignment. Locally it is accessed via Junction 34.

[1] Measured from the Talbot Road / Ely Valley Road / B4595 / A4119 signalised junction.

3.2.3. Junction 34, also known as the Miskin Interchange connects the M4 with the A4119, providing access to areas such as Llantrisant and the Rhondda Valleys. The interchange is a four-arm roundabout, with on and off slips provided on the alignment of the M4. The interchange consists of two-lane approaches on all arms and a two-lane circulatory carriageway - the latter being subject to the national speed limit. The junction is fully street lit and partially signalised in proximity to the westbound off slip.

A4119

3.2.4. The A4119 is an important road in South Wales, linking several key locations. It begins at Junction 34 of the M4 motorway, extends northward, passing through areas such as Llantrisant, Talbot Green, Penygriag and Tonypandy. This road serves as a vital connection for both local and regional traffic, enabling movement between Cardiff and the Rhondda Valleys.

3.2.5. The A4119 is a two-way dual carriageway with a posted 40mph speed limit in the vicinity of the site. It includes street lighting on both sides for the majority of its length, and locally footways are also present on both sides of the carriageway albeit the provision is only retained for approximately 120m on the eastern side of the carriageway, north of the Mwyndy Cross staggered signalised junction.

3.2.6. The recently upgraded signalised junction at Mwyndy Cross also includes a staggered pedestrian crossing on the northern arm of the junction to facilitate east-west pedestrian / cycle movements - the central reservation offering a refuge at this crossing point. Additionally, northbound and southbound bus stops are present on the A4119 in proximity to its junction with School Road - these being approximately 700m from the centre of the prosed development site.

School Road

3.2.7. The B4264 School Road connects to the A4119 at a signal-controlled junction southwest of the proposed development site and facilitates access to Miskin and Pontyclun. This road is a two-way single carriageway with a central median strip provided along the majority of its length west of the DVSA driving test centre. School Road is subject to a 30mph speed limit and is street lit. Pedestrian facilities are limited to the easternmost 100m (approximately) of the carriageway from the A4119, resulting in no continuous formal pedestrian connectivity along this route.

Unnamed Road between Ffordd Cefn-Yr-Hendy & A4119

3.2.8. The unnamed road located approximately 90m south of Mwyndy Cross that connects Ffordd Cefn-Yr-Hendy to the A4119 forms the southern arm of the recently upgraded signalised junction facilitating access to the site. It is a two-way single carriageway with double yellow lines on both sides for most of its length. A footway is available on both sides of the carriageway in proximity to the A4119 with this reducing to the southern side only from a point approximately 50m west of the junction. This providing a link between the wider pedestrian infrastructure on the A4119 and Ffordd Cefn-Yr-Hendy. The junction also includes a staggered controlled pedestrian crossing for north-south movements.

3.2.9. The road is subject to a 20mph speed limit, is street lit and provides direct pedestrian access to bus stops. The stop on the northern side of the carriageway consists of an on-road stop with a post and flag arrangement, while the stop on the southern side is in a layby equipped with a post and flag arrangement displaying limited service information. The road is lined by a small number of residential properties and several commercial businesses, including a garage. All have direct frontage access onto the unnamed road.

Mwyndy Cross / Park View

3.2.10. Mwyndy Cross / Park View is an adopted two-way single carriageway road immediately west of the proposed development site. It currently provides access to a small number of residential dwellings and the Arthur Lewellyn Jenkins retail unit on the eastern side of the carriageway in proximity to the A4119 and towards its northern extent the Cefn-Parc Cemetery – all accesses are via simple priority junction

arrangements. Parking associated with the cemetery takes place along its frontage but appears to be localised.

3.2.11. Mwyndy Cross / Park View is a non-through route for vehicular traffic and includes staggered pedestrian guard railing across the carriageway, in proximity to the A473 underpass, to prevent further progress by vehicles.

3.2.12. Footway provision is included on the eastern side of the carriageway along its full length with this connecting the A4119 to the southwest with Cardiff Road, and the nearest bus stops, to the north.

3.2.13. The road has a posted speed limit of 20mph and is street lit in proximity to the A4119 signalised junction only.

Public Rights of Way

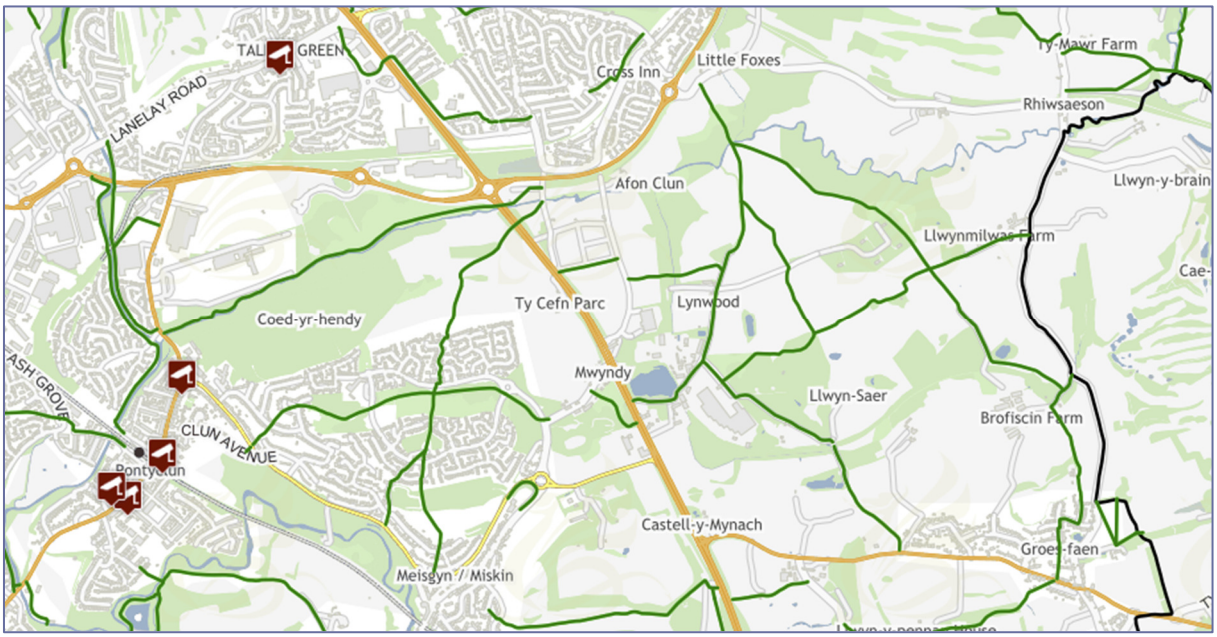
3.2.14. In addition to the existing footway network, the site benefits from access to a number of Public Rights of Way (PROW) with these both surrounding and bisecting the site. Based on the nature of the PROW it is anticipated that the majority will be used for recreational activities. However, they can be utilised, in combination with the existing footway network, to access local areas such as Miskin and Pontypool to the west, Llantrisant and Talbot Green to the north and Groes-faen to the east.

3.2.15. The closest PROW to the site are as follows:

- Footpath route ANT/318/1 to the west of the site running along the southern side of the cemetery and providing east-west connectivity;
- Footpath route ANT/298/1 running through the southern portion of the site, also providing east-west connectivity; and,
- Footpath route ANT/289/2 to the west of the site, and connecting to ANT/298/1, which follows a broadly north-south alignment connecting to Cross Inn to the north and the A4119 in proximity to Groes-faen to the south.

3.2.16. The PROW network in the vicinity of the site is illustrated in **Figure 3.2**.

Figure 3.2: Local Public Rights of Way Network



Source: © https://maps.rctcbc.gov.uk

3.2.17. The development proposals will retain Footpath ANT/298/1, on a revised alignment, and in doing so this provides pedestrian connectivity between the site and the wider area east, south and north of the allocation.

3.3. Pedestrian Accessibility

3.3.1. The development site is located east of a significant transport corridor in a semi-rural setting and has seen no new development in recent years. Therefore, whilst the local pedestrian network includes connectivity to the north, south, east and west the provisions currently in place reflect the level of local development, with footways generally included along active site frontages but not necessarily on both sides of the carriageway.

3.3.2. In the immediate vicinity of the site a 1.5m (approx.) wide footway is provided along the eastern side of Mwyndy Cross for its full length. This provides a continuous footway connection between the A4119 to the south and Cardiff Road in the Cross Inn area of Llantrisant to the north. Approximately 610m north of the Mwyndy Cross / A4119 staggered junction the footway passes over the Afon Clun. North of the river the footway widens to approximately 2m and at a point approximately 60m north of the river crossing, and preceding the A473 underpass, pedestrian guard railing is installed across the carriageway preventing vehicular access and effectively creating a shared use space for pedestrians and cyclists.

3.3.3. The Chartered Institute for Highways and Transportation (CIHT) document 'Providing for Journeys on Foot' states at paragraph 1.12 that:

"walking accounts for over a quarter of all journeys and four fifths of journeys of less than one mile"

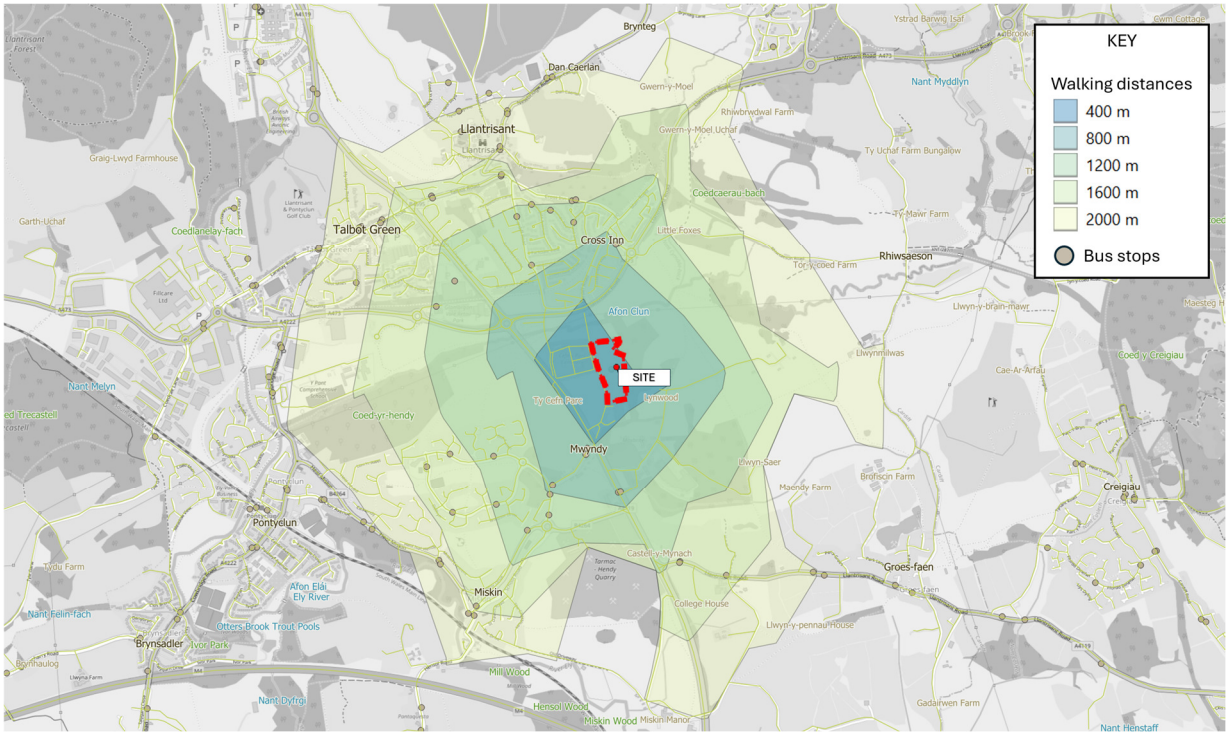
3.3.4. The document also provides suggested acceptable walking distances for a range of destinations. Those suggested walking distances have been reproduced in **Table 3.1**.

Table 3.1: CIHT Suggested Acceptable Walking Distances

Distance Category	Town Centres (m)	Commuting / School / Sightseeing (m)	Elsewhere (m)
Desired	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

3.3.5. **Figure 3.3** illustrates the identified walking catchments up to 2km walking distance (25-minute walk time) from the site.

Figure 3.3: Walking Catchment up to 2km and Bus Stop Locations



Source: © OpenStreetMap with Pell Frischmann annotations

3.3.6. It can be seen from **Figure 3.3** that there are a number of local towns and villages within an accessible 25-minute walking catchment of the site which provide opportunities for non-car-based travel. These include Miskin, Talbot Green, Cross Inn and Llantrisant, all of which have residential populations from which employees for the proposed development could be drawn. It can also be seen that there are a number of bus stops within the 400m and 800m walking distances of the site. **Table 3.2** identifies the closest bus stop facilities and population centres with walking and cycling access times.

Table 3.2: Walking Distance to Local Residential Areas and Closest Public Transport Opportunities

Destination	Distance From Site	Walking Time (mins)	Cycle Time (mins)
Mwyndy Cross norththbound bus stop - rhogaja	350m	5 minutes	3 minutes
Mwyndy Cross southbound bus stop - rhogajd	400m	6 minutes	3 minutes
A4119 southbound bus stop - rhopjpa	600m	8 minutes	2 minutes
A4119 northbound bus stop - rhopjpd	650m	9 minutes	4 minutes
Talbot Green (Heol Y Gyfraith)	2.0km	28 minutes	8 minutes
Llantrisant (Heol-Y-Sarn)	2.0km	33 minutes	15 minutes
Miskin (Miskin Fields)	1.5km	21 minutes	9 minutes
Cross Inn (Main Road)	1.0km	15 minutes	4 minutes

3.3.7. As demonstrated in **Figure 3.3** and **Table 3.2** the close proximity of the development site to local population areas and public transport provides a genuine alternative to car-based travel to and from the site, and therefore provide opportunities to reduce the impact of the proposed development on the local highway network.

3.4. Cycle Accessibility

3.4.1. In relation to cycle accessibility the site shares similar characteristics to walking provisions i.e. the semi-rural setting and limited local development in recent years means that whilst cyclists can access the site from the north, south, east and west dedicated cycle provisions in the immediate vicinity of the site are limited and Cyclists currently routing along Mwyndy Cross do so by travelling along the carriageway.

3.4.2. Cycle infrastructure is provided at the Mwyndy Cross signalised junction. This consists of a section of off-road route on the western side of the carriageway and Toucan crossings on the northern and southern arms of the junction. A cycle transition from the off-road route onto the A4119, in a northbound direction, is also provided on the northern arm of the junction. This including a sign plate confirming to cyclists that they are to rejoin the carriageway. The local cycle provisions are well signposted.

3.4.3. The site also benefits from its close proximity to National Cycle Network Route 4 which passes through Cross Inn on a roughly east-west alignment and can be accessed from Cardiff Road approximately 850m north from the site - a 3-minute cycle.

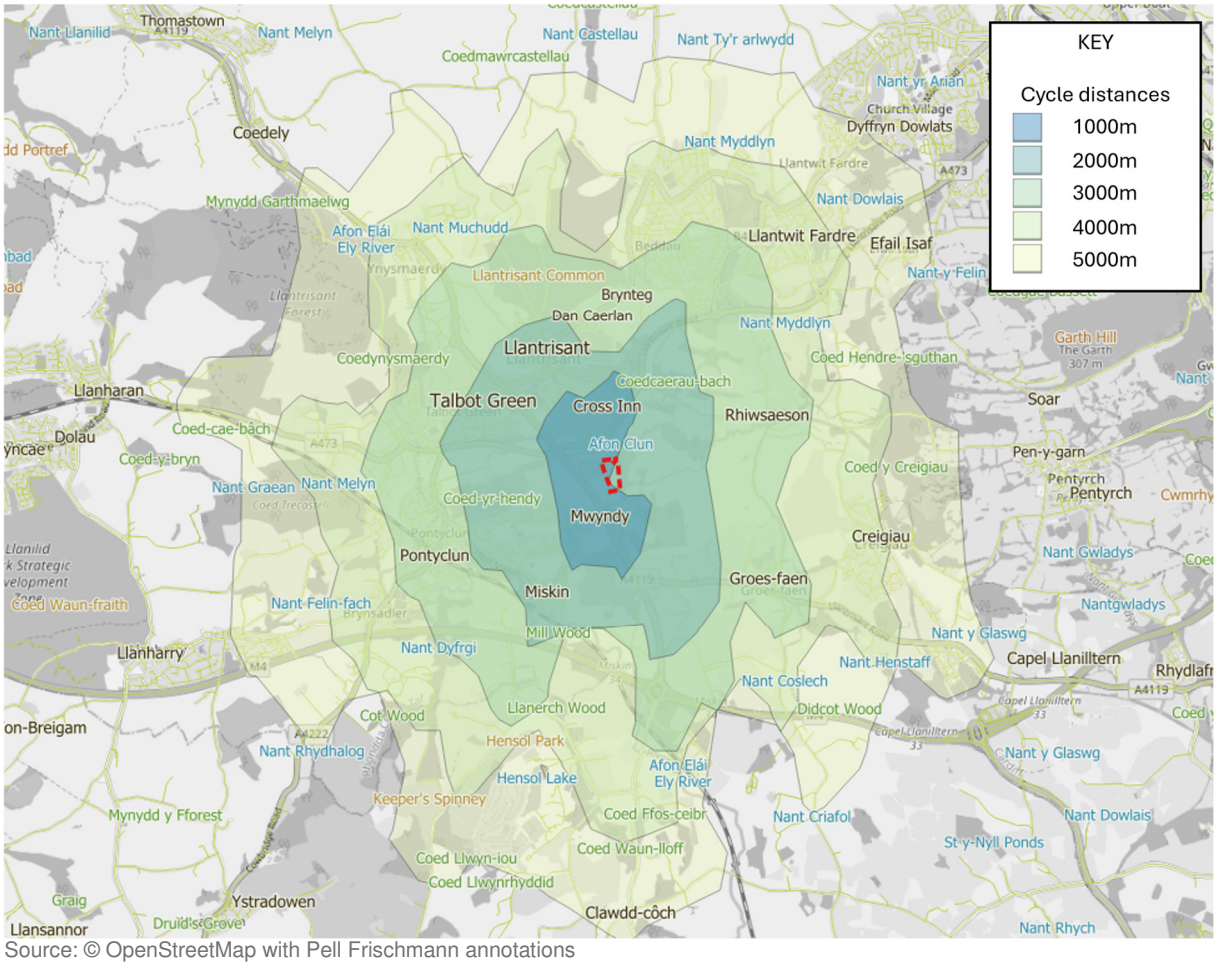
3.4.4. National Route 4 is a long-distance cycle route extending from London in the east to Fishguard in the west. The section of Route 4 that passes through Cross Inn primarily follows quiet country lanes and traffic-free paths.

3.4.5. National and local policy encourages sustainable development and a shift away from private car use. However, there is no specific recommended maximum cycle distances for access to services from new developments stated within the NPPF or local planning policy. It is noted that the distances people will be willing to travel on a bicycle will be highly variable depending on the type of development, site users and age profile as well as the perception of personal safety in the local environment. However, Local

Transport Note 2/08 (published by the Department for Transport) does provide a useful reference point, with this indicating that an acceptable distance for general trips by cycle is considered to be up to 5km (5,000m). However, it also acknowledges that this may be slightly longer (up to 8km) for those commuting to employment uses by bicycle.

3.4.6. **Figure 3.4** demonstrates the cycle catchment up to a 5km cycle distance (a 25-minute cycle time) from the site.

Figure 3.4: Cycling Catchment



Source: © OpenStreetMap with Pell Frischmann annotations

3.4.7. It can be seen from **Figure 3.4** that multiple key regional locations outside Mwyndy, including numerous population centres, are accessible by bicycle from the site.

3.5. Bus Accessibility

3.5.1. As identified in **Figure 3.3** there are a number of local bus stops within walking distance of the site, the closest of which are located on the unnamed road linking Ffordd Cefy-Yr-Hendy and on the A4119 which also forms the western arm of the Mwyndy Cross junction.

3.5.2. The bus stops are currently accessible from the site using a combination of the footways on the eastern side of Mwyndy Cross, the Toucan crossings across the A4119 included at the Mwnydy Cross junction, and the footways on either side of the unnamed road. The unnamed road stop on the northern side of the carriageway consists of an on-road stop with a post and flag arrangement. The unnamed road stop on the southern side of the carriageway consists of a post and flag arrangement. Both stops are served by route 122 Tonypandy to Talbot Green and Cardiff.

3.5.3. A further pair of accessible bus stops are located on the A4119 approximately 600-650m south of the site. These stops are accessible from the site via the pedestrian crossing provisions at the Mwyndy Cross junction and the footways provided on both sides of the A4119. Both of the stops consist of on-

road stops with raised kerbs and a post and flag arrangement. These stops are served by route 122 Tonypandy to Talbot Green and Cardiff and, route 124 Maerdy to Porth and Cardiff.

3.6. Rail Accessibility

3.6.1. The closest railway station to Mwyndy is Pontyclun Railway Station. It is located approximately 2.9km west of the site and can be accessed by bicycle and on foot via Station Approach, National Cycle Network Route 4, Cardiff Road and Mwyndy Cross, making it a convenient travel option for commuters who combine rail and cycle travel. It is also accessible by car via the Mwyndy Cross junction, the B4264, Llantrisant Road and Station Approach - a six-minute drive.

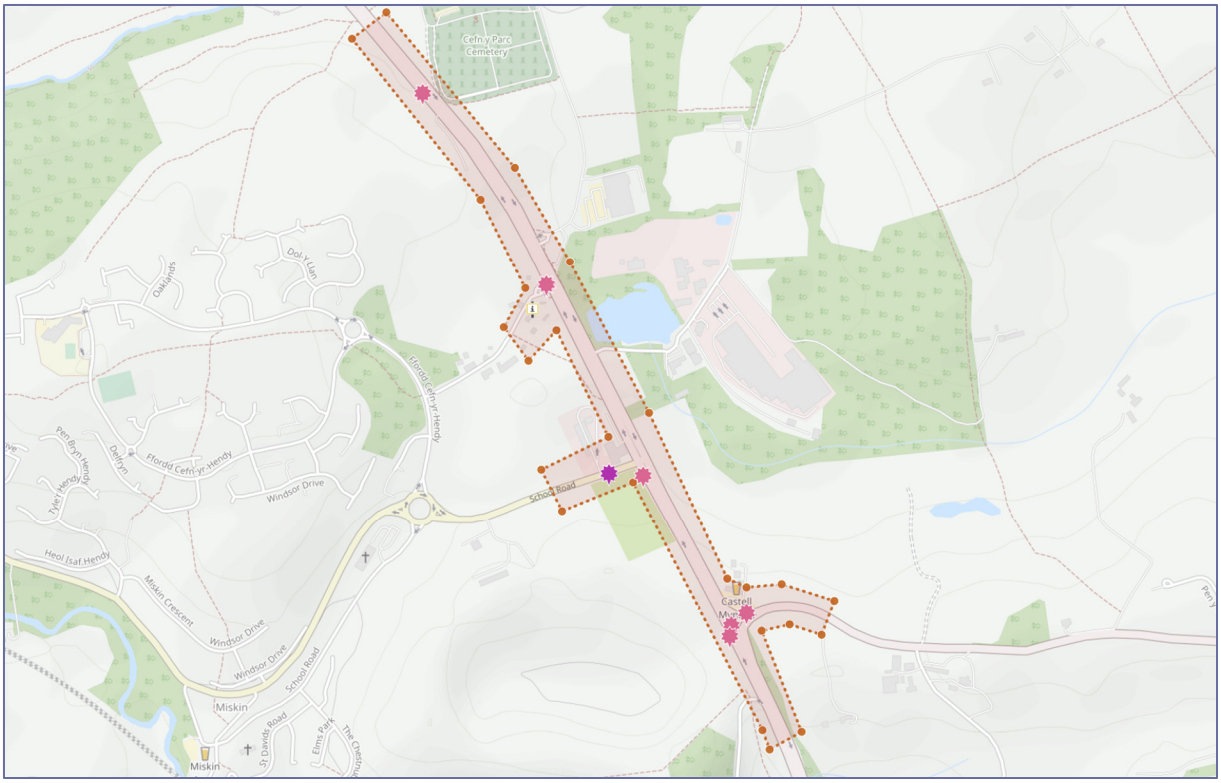
3.6.2. Pontyclun Railway Station is an unstaffed, minor station and is a stop on the South Wales Main Line. It is served by trains on the Maesteg Line and occasionally by the Swanline Cardiff to Swansea regional services, with early-morning services to Manchester and late-night services to Carmarthen. The station has basic facilities including ticket machines, waiting areas, and customer help points. It is equipped with step-free access to both platforms, although access between platforms requires use of a footbridge or a longer detour via Station Terrace. The station includes a car park with 22 car parking spaces.

3.6.3. The station has a regular service frequency. On weekdays, there are approximately 37 trains per day, with early morning services running at 1 train per hour, morning peak at 3 trains per hour, off-peak at 2 trains per hour, evening peak at 3 trains per hour, and late evening at 1 train per hour. On weekends, the frequency is slightly reduced, with around 19 trains on Sundays.

3.7. Collision Data

3.7.1. Collision data has been obtained from the publicly available Bikedata and Crashmap databases which utilises official data published by the Department for Transport as submitted to them by police forces (STATS 19). The data covers the most recent five-year period with this covering the period 2019-2023 (inclusive). A map identifying the extent of the collision study area and the location of the collisions within the study period is included in **Figure 3.5**.

Figure 3.5: Collision Locations and Severity



Source: © https://bikedata.cyclestreets.net

3.7.2. A total of eight collisions have been recorded across the area of search of which one is identified as serious and seven as slight in relation to the severity of injuries sustained. Of the total number of collisions recorded one involved a cyclist and a car, one involved two motorcycles, one involved a goods vehicle and a car, and the remaining five all involved cars. A summary of the collisions is included in **Table 3.3**.

Table 3.3: Collision Summary Table

Date / Time	Location	Severity	No. of vehicles	No. of Casualties	Casualty Type
12:39pm, 28th September 2023	A4419 approach to Castell Mynach signalised junction	slight	2	1	Car occupant
3:30pm, 27th July 2022	School Road	serious	2	2	Motorcycle rider/passenger
11:37pm, 9th December 2022	Castell Mynach signalised junction	slight	2	1	Car occupant
11:08am, 4th November 2022	Unnamed Road / A4119 junction	slight	2	1	Cyclist
6:11pm, 8th December 2020	Unnamed Road / A4119 junction	slight	2	3	Car occupant, Goods vehicle occupant
12:09pm, 27th March 2019	A4119 Castell Mynacj junction	slight	2	1	Car occupant
9:56am, 26th September 2019	South of School road A4119 signalised junction	slight	4	1	Car occupant
3:25pm, 25th November 2019	A4119 approximately 320m north of Mwyndy Cross signalised junction	slight	4	3	Car occupant

3.7.3. **Table 3.3** confirms that there was a total of three collisions in 2019, one in 2020, three in 2022 and one in 2023.

3.7.4. It can be seen from **Figure 3.5** that that the collisions are dispersed across the study area and are generally dispersed across the study period, with the maximum occurrence in any one year being three collisions. Notwithstanding this, a review of the STATS 19 collision characteristics for the serious collision and the collision involving a cyclist has been undertaken with the results summarised below:

- Collision data report 2022622200575: The incident occurred on School Road west of the A4119 on 27/07/2022 and involved two motorcycles. The posted speed limit for the section of road on which the incident occurred was 30mph. The incident occurred at 15:30 in daylight hours. The weather was recorded as fine and the road surface was dry. Both vehicles were travelling northwest to southeast, the first point of impact was the front of both vehicles and the collision occurred whilst they were slowing or stopping. None of the provided characteristics indicate a deficiency with the local highway and it is likely that the collision occurred as a result of human error.

- Collision data report 2022622200841: The incident occurred on the unnamed road linking Ffordd Cefn-yr-Hendy to A4119 on 04/11/2022 and involved a car and a cyclist. The posted speed limit for the section of road on which the incident occurred was 30mph. The incident occurred at 11:08 in daylight hours. The weather was recorded as fine and the road surface was dry. The pedal cycle was travelling northeast to northwest and the car was travelling northwest to southwest. The first point of impact was the front of the bicycle and the nearside of the car. The collision occurred whilst the car was making a right turn manoeuvre. The provided characteristics indicate that the

collision is likely to have occurred as a result of a failure to judge the path and speed of the involved vehicles.

3.7.5. In summary it can be seen from the review undertaken that the collisions recorded within the study area are largely in locations situated away from the proposed development site and are well dispersed across the study area / period. Review of the collision characteristics suggest that the collisions have generally occurred as a result of poor driver / rider awareness, and therefore the proposed development is unlikely to introduce any new safety concerns on the local highway network.

4. Development Proposals

4.1. Introduction

4.1.1. The proposed development site forms the eastern extent of the Mwyndy / Talbot Green allocation site, Local Development Plan Allocation SSA 8.

4.1.2. The proposed employment development consists of two options as follows:

- Option 1: Erection of a 9,980sqm Class B1c light industrial building with associated access, parking, drainage, landscaping, services and utilities.

- Option 2: Erection of a 21,490sqm Class B8 data centre with associated access, parking, drainage, landscaping, services and utilities.

4.1.3. Indicative masterplans for the site, for each of the two development options, including the proposed points of access are provided in **Appendix A**.

4.2. Pedestrian and Cycle Access

4.2.1. A single point of access into the site is proposed for pedestrians and cyclists, for both development options. The access for pedestrians consists of 2m wide footways proposed on both sides of the carriageway along the new access road from the proposed junction with Mwyndy Cross. Cyclists will be able to access the site using the main vehicular entrance.

4.2.2. As part of the development proposal PROW ANT/298/1 is to be realigned. As part of the realignment a separate new footway link will be provided on the eastern boundary to provide a connection between the existing concertina fence and gate to the footway proposed along the eastern side of the new access road.

4.2.3. An uncontrolled pedestrian crossing facility with dropped kerbs and tactile paving is proposed across the new access road to the south of the eastern PROW connection. This will enable pedestrians to travel along the footway on the northern side of the new access road and route north along the footway on the eastern side of Mwyndy Cross. This facilitating a connection to PROW ANT/318/1 that runs east-west along the southern edge of the cemetery, in addition to the route towards Llantrisant to the north.

4.3. Vehicle Access

Development Option 1

4.3.1. Vehicle access to the site is to be delivered in a single location. The proposed access strategy includes a simple priority junction located on Mwyndy Cross and a new access road leading into the site and the parking and servicing areas.

4.3.2. The current masterplan for this development option is such that the industrial building would be separated into a number of individual units. This includes a small number of car parking spaces provided directly outside the entrances to each unit, in addition to space for servicing vehicles. A main car park is then proposed on the southern side of the building.

4.3.3. The junction on Mwyndy Cross has been designed to align with Rhondda Cynon Taff Highway Design guidance which includes the requirement for a minimum junction spacing of 60m between junctions on the same side of the road. This accounting for the position of the Arthur Llewellyn Jenkins service vehicle access.

4.3.4. The proposed access arrangements are as presented in drawing 10109837-PEF-XX-XX-DR-C-001001 included in **Appendix B**.

4.3.5. The posted speed limit along Mwyndy Cross is 20mph, with this resulting in visibility splay requirements of 2.4m x 25m in accordance with guidance provided in Manual for Streets (MfS). However, for

completeness visibility splays of 2.4m x 43m are shown to be achievable at the access which are in line with MfS requirements for a design speed of 30mph. This is confirmed in drawing 10109837-PEF-XX-XX-DR-C-001001 included in **Appendix B**.

4.3.6. The proposed access has been designed to accommodate the vehicle tracking requirements of a 16.5m articulated vehicle including tapered junction radii and a 7.5m wide carriageway. This is demonstrated in the swept path analysis drawings 10109837-PEF-XX-XX-DR-C-001002 and 10109837-PEF-XX-XX-DR-C-001003 provided at **Appendix C**.

4.3.7. It should be noted that the smaller units at the far northern end of the site will need to be serviced by smaller vehicles such as 10m / 12m rigid vehicles, as shown in the swept path analysis drawings.

Development Option 2

4.3.8. The vehicle access to the site for development Option 2 is essentially the same as that proposed for development Option 1 in terms of the simple priority junction located on Mwyndy Cross and new access road leading into the site. However, for security purposes associated with a data centre, a gated access would be provided at the eastern end of the internal access road as part of this development option. This would include a security lodge at the access gates.

4.3.9. Just beyond the gated access, a priority junction will be provided to facilitate access to the proposed car park. A 4.5m wide road will also be provided along the eastern side of the proposed building which will be for service vehicles accessing the service yard on the northern side of the building. A passing place will also be provided on the eastern side of the building.

4.3.10. The proposed access arrangements for this development option are as presented in drawing 10109837-PEF-XX-XX-DR-C-000001 included in **Appendix B**.

4.3.11. The proposed access has been designed to accommodate the vehicle tracking requirements of a 16.5m articulated vehicle including tapered junction radii and a 7.5m wide carriageway. This is demonstrated in the swept path analysis drawings 10109837-PEF-XX-XX-DR-C-000002, 10109837-PEF-XX-XX-DR-C-000003 and 10109837-PEF-XX-XX-DR-C-000004 provided at **Appendix C**.

Car and Motorcycle Parking

Development Option 1

4.3.12. A total of 89 car parking spaces are proposed under development Option 1, in addition to 10 motorcycle parking spaces. Of the 89 car parking spaces provided, 9 will be accessible spaces for the mobility impaired and 10 will have electric vehicle charging (EVC) provision.

4.3.13. Based on the RCTCBC parking standards, set out in Section 2, the maximum number of car parking spaces that could be provided for development Option 1 (1 space per 80sqm for industrial uses) would be 125 spaces. The proposed provision of 89 spaces is therefore in line with the RCTCBC standards.

4.3.14. The proposed provision of 10 motorcycle parking spaces exceeds the RCTCBC minimum requirements of 5% of the total number car parking spaces being for motorcycles.

4.3.15. The proposed provision of 9 accessible parking spaces meets the RCTCBC minimum requirements of 5% of the total number car parking spaces being accessible bays.

4.3.16. The proposed parking provision for this development option is therefore in accordance with the RCTCBC parking standards set out in Section 2 of this report.

4.3.17. The proposed provision of 10 parking spaces with EVC provision is in accordance with the Welsh Government's Future Wales Planning Policy Plan 2040, which requires a minimum of 10% of the car parking spaces to have EVC provision.

Development Option 2

4.3.18. A total of 100 car parking spaces are proposed under development Option 2, in addition to 10 motorcycle parking spaces. Of the 100 car parking spaces provided, 5 will be accessible spaces for the mobility impaired and 10 will have electric vehicle charging (EVC) provision.

4.3.19. The RCTCBC parking standards do not include any standards for data centre uses. However, based on the RCTCBC parking standards for industrial uses (1 space per 80sqm), the maximum number of spaces that could be provided for development Option 2 would be 269 spaces. Given the nature of a data centre, it is considered that the 100 car parking spaces proposed is appropriate and is also in line with the RCTCBC standards.

4.3.20. The proposed provision of 10 motorcycle parking spaces exceeds the RCTCBC minimum requirements of 5% of the total number car parking spaces being for motorcycles.

4.3.21. The proposed provision of 5 accessible parking spaces meets the RCTCBC minimum requirements of 5% of the total number car parking spaces being accessible bays.

4.3.22. The proposed parking provision for this development option is therefore in accordance with the RCTCBC parking standards set out in Section 2 of this report.

4.3.23. The proposed provision of 10 parking spaces with EVC provision is in accordance with the Welsh Government's Future Wales Planning Policy Plan 2040, which requires a minimum of 10% of the car parking spaces to have EVC provision.

Cycle Parking

4.3.24. The proposed cycle parking provision is the same for both development options, with 5 short stay Sheffield style cycle stands (10 spaces) and a covered cycle storage facility to accommodate 24 cycles as long stay provision proposed.

4.3.25. Based on the RCTCBC cycle parking standards, development Option 1 would require 20 long stay and 10 short stay cycle parking spaces. The proposed cycle parking provision therefore meets the requirements of the RCTCBC cycle parking standards.

4.3.26. Development Option 2 would require 43 long stay cycle parking spaces and 22 short stay spaces if applying the RCTCBC standards for industry. Given the nature of a data centre, and there not being any standards for that land use, it is considered that the proposed provision of 24 long stay spaces and 10 short stay spaces is appropriate for development Option 2.

Servicing and Emergency Vehicle Access

4.3.27. For development Option 1, space will be provided in front of each individual unit for service vehicles. The majority of the units will be able to be serviced by a 16.5m articulated vehicle, as demonstrated in drawing 10109837-PEF-XX-XX-DR-C-001003 provided at **Appendix C**. The smaller units at the far northern end of the site will need to be serviced by smaller vehicles such as 10m / 12m rigid vehicles.

4.3.28. For development Option 2, three servicing / loading bays will be provided within the service yard on the northern side of the building. Swept path analysis has been undertaken for an 16.5m articulated vehicle to demonstrate that this size of vehicle will be able to access and exit the site in a forward gear, as shown on drawings 10109837-PEF-XX-XX-DR-C-000002, 10109837-PEF-XX-XX-DR-C-000003 and 10109837-PEF-XX-XX-DR-C-000004 provided at **Appendix C**.

4.3.29. A maintenance perimeter access road and footway will also be provided along the western side of the building in both development options.

5. Trip Analysis

5.1. Introduction

5.1.1. This section of the report provides a review of forecast traffic generated by the proposed development and assignment of this traffic onto the local highway network, for the two development options.

5.1.2. It should be noted that during design development the proposed floorspace quantum of the two development scenarios has reduced slightly. Our assessment has been completed against the previously proposed floor area with the reductions meaning our assessment of impacts is all the more robust. The higher floor areas that have been assessed for each of the two development options are as follows:

- Option 1: 10,882sqm light industrial building.
- Option 2: 23,052sqm data centre.

5.2. Trip Generation

Option 1 – B1c Light Industrial Building

5.2.1. A trip generation assessment has been undertaken to assess the potential number of trips that could be generated by the development Option 1 proposals. Trip rates have been identified using the TRICS (v7.11.3) database, with survey sites which share similar characteristics to the proposed development in terms of land use, scale and accessibility. Multi-modal survey sites have been utilised.

5.2.2. The following site selection criteria has been used within TRICS to identify vehicle trip rates for the light industrial building element of the proposals:

- Land use category 02 C: Employment / Industrial Unit;
- London, Scotland, Northern Ireland and Ireland removed;
- Gross Floor Area: 690-67,459sqm;
- Date range: 01/01/2016 – 08/11/2023;
- Survey days: Monday – Friday; and,
- Selected locations: Edge of town, Suburban Area (PPS6 Out of Centre) and Neighbourhood Centre (PPS6 Local Centre).

5.2.3. A total of five survey sites were identified using the above criteria. The TRICS output report identifying the daily arrival and departure profile is included at **Appendix D** and summarised in **Table 5.1**.

Table 5.1: Vehicle Trip Generation – Industrial Unit (10,882sqm)

Time period	Arrival trip rate	Departure trip rate	Total trip rate	Arrival trips	Departure trips	Total trips
0800-0900	0.150	0.036	0.186	16	4	20
1600-1700	0.023	0.167	0.190	3	18	21
Daily	1.458	1.351	2.809	159	147	306

5.2.4. It can be seen from the table above that development Option 1 is predicted to generate up to 20 two-way vehicle trips in the AM peak period and up to 21 two-way vehicle trips in the PM peak, with a total of 306 vehicle movements two-way across the daily profile.

Option 2 – B8 Data Centre

5.2.5. A trip generation assessment has been undertaken to assess the potential number of trips that could be generated by the development Option 2 proposals, for the data centre. Trip rates have been identified using the TRICS (v7.11.3) database, with survey sites which share similar characteristics to the proposed development in terms of land use, scale and accessibility. Multi-modal survey sites have been utilised.

5.2.6. The following site selection criteria has been used within TRICS to identify vehicle trip rates for the development Option 2 proposals:

- Land use category 02 I: Employment / Data Centre;
- London, Scotland, Northern Ireland and Ireland removed;
- Gross Floor Area: 5,677-21,200sqm;
- Date range: 01/01/2016 – 24/05/2023;
- Survey days: Monday – Friday; and,
- Selected locations: Suburban Area (PPS6 Out of Centre)[2].

5.2.7. A total of two survey sites were identified using the above criteria. The TRICS output report identifying the daily arrival and departure profile is included at **Appendix D** and summarised in **Table 5.2**.

Table 5.2: Vehicle Trip Generation – Data Centre (23,052sqm)

Time period	Arrival trip rate	Departure trip rate	Total trip rate	Arrival trips	Departure trips	Total trips
0800-0900	0.123	0.036	0.159	28	8	36
1600-1700	0.011	0.101	0.112	3	23	26
Daily	0.820	0.813	1.633	189	187	376

5.2.8. It can be seen from the table above that development Option 2 is predicted to generate up to 36 two-way vehicle trips in the AM peak and 26 two-way vehicle trips in the PM peak, and a total of 376 vehicle movements two-way across the daily profile.

5.3. Trip Distribution

5.3.1. The peak hour vehicle trips generated by the proposed development have been distributed onto the local highway network based upon the observed flows from the traffic surveys undertaken in February 2025, applying proportional splits at each junction.

5.3.2. The resulting distribution of development trips at Mwyndy Cross junction, is presented in **Table 5.3** and the distribution across the wider A4119 network being considered as part of this assessment are shown in the network flow diagrams provided at **Appendix E**.

Table 5.3: Development Trip Distribution

Route	AM % Traffic	PM % Traffic
To A4119 (N)	47%	44%
To A4119 (S)	53%	56%
From A4119 (N)	47%	44%
From A4119 (S)	53%	56%

Figures in this table have been rounded to present whole numbers

[2] Edge of town and Neighbourhood Centre (PPS6 Local Centre) sites were also included in the selections but there were no sites in this category.

6. Junction Capacity Assessment

6.1. Introduction

6.1.1. This chapter of the TA sets out the highway impact assessment, including junction capacity assessments undertaken to assess the impact of the proposed development on the local highway network for each of the two development options.

6.1.2. As noted in Section 5, the floor areas that have been assessed for each of the two development options are higher than those currently proposed. This therefore results in a robust assessment of the impact of the proposed development on the local highway network.

6.2. Modelling Methodology

6.2.1. Junction capacity assessments have been undertaken for the following junctions:

- A4119 / Mwyndy Cross / Ffordd Cefyn-Yr-Hendy staggered signal-controlled junction; and,
- A4119 / School Road signal-controlled junction.

6.2.2. The two junctions have been assessed in a single network model using the LinSig V3 software for a 2030 forecast year. Junction capacity assessment results are presented, for signal-controlled junctions, in terms of 'Degrees of Saturation' ('DoS'), expressed as a percentage (%).

6.2.3. For signal-controlled junctions, a DoS of less than 90% indicates that the junction is operating within its theoretical capacity; a DoS of equal to or greater than 90% but less than 100% indicates that the junction is approaching its capacity (but remains within capacity); and a DoS of equal to or greater than 100% indicates that it has either reached or exceeded its theoretical capacity. Beyond 100% DoS, queues and delays increase disproportionately with increasing demand flow. In particular, to signals, queues would begin to not be able to discharge fully within each cycle and delays increase as a result.

6.2.4. For signal-controlled junctions, the 'Practical Reserve Capacity' (PRC) of the junction is also used to assess the impact of traffic. The PRC is calculated from the maximum degree of saturation on a lane controlled by the stage stream; and is a measure of how much additional traffic could pass through a junction controlled by the stage stream whilst maintaining a maximum Degree of Saturation (DoS) of 90% on all lanes.

6.2.5. A positive value indicates that a junction has spare capacity, whilst a negative value demonstrates that a junction is either approaching or is already experiencing capacity issues and could be subject to congestion.

6.3. Traffic Baseline

6.3.1. Manual classified junction turning count surveys were completed by a specialist independent traffic survey company on Thursday 13th February 2025 at the two signal-controlled junctions on the A4119 listed in Section 6.2. The weekday surveys were completed between the hours of 07:00-10:00 and 16:00 – 19:00.

6.3.2. The network peak hours recorded within the traffic surveys were 07:45 – 08:45 and 16:15 – 17:15. This data has been replicated in the network flow diagrams included in **Appendix E**.

6.3.3. The peak hour survey data has been utilised in the network review summarised through the remainder of this section.

6.4. Network Traffic Growth and Committed Development

6.4.1. In order to forecast background traffic flows (i.e. those in the absence of the proposed development) in 2030, traffic flows associated with individual local committed developments have also been accounted for.

6.4.2. Given the level of committed development traffic accounted for, using site-specific information, TEMPro growth has not been applied as this would result in double counting of committed development trips on the local highway network.

6.4.3. The approach to deriving committed development vehicle trips for each of the local committed development sites is summarised as follows.

Melin Newydd (Cefn-Yr-Hendy)

6.4.4. Traffic flows associated with the consented Melin Newydd (Cefn-Yr-Hendy) development comprising 460 dwellings, primary school and local centre on land west of the A4119 have been obtained from the traffic flow diagrams included in Transport Assessment, produced by Vectos, that supported the planning application (Application ref: 16/1385/OUT). These have been replicated in the network flow diagrams included at **Appendix E**.

North West Cardiff

6.4.5. It is noted that committed development at North West Cardiff was included in the assessment carried out by Vectos for the Melin Newydd development. However, neither the Vectos TA nor TA Addendum reports included traffic flow diagrams that identified the traffic flows accounted for in relation to the North West Cardiff developments on their own.

6.4.6. As a result of the above, we have extracted the flows by applying the TEMPro growth factors noted in the Vectos TA to the '2016 observed' traffic flows included in the TA to derive 2026 future base traffic flows without committed development. We have then subtracted these flows from those shown in the '2026 Forecast (+ committed NO MWYNDY)' flow diagrams in order to derive the traffic flows for North West Cardiff committed development. These traffic flows are included in the network flow diagrams included at **Appendix E**.

6.4.7. It is acknowledged that a reasonable number of dwellings have already been built out and therefore traffic associated with these dwellings would have been on the network at the time the traffic surveys were carried out in February 2025. Therefore, there is likely to be an element of double counting in the traffic flows used in this assessment.

Mwyndy Cross Data Centre (western SSA 8 employment allocation parcel)

6.4.8. As noted in Section 1 a planning application for a data centre on land to the west of the site, south of the cemetery, was approved in May 2025 (Application ref: 25/0138/FUL). This forms the western SSA 8 employment allocation parcel.

6.4.9. A Technical Note, produced by AtkinsRealis, was submitted in support of the planning application and stated that *"on average there will be 6 permanent staff on site which will generate 6 trips per shift change and there will be 2 shifts per day, 0600-1800 (day shift) & 1800-0600 (night shift), with occasional visitors and maintenance staff on the site"*. However, no further information on anticipated trip generation was included, although the note also stated that 7 car parking spaces would be provided as part of the development.

6.4.10. As a result of the above, we have accounted for 7 vehicles arriving and departing during each of the morning and evening peak hours. This accounts for a robust assessment given it is considered unlikely that many vehicle trips would be made on the basis of the above shift patterns / times and that staff will also be able to access the site by sustainable modes of transport.

6.4.11. The traffic flows for this committed development have been distributed onto the network using the same distribution used to assign the proposed development traffic as set out in **Table 5.3**. The traffic flows are included in the network flow diagrams included at **Appendix E**.

6.5. Assessment Scenarios

6.5.1. Junction capacity assessments have taken account of the following scenarios, for both AM and PM peak hours:

- 2025 Surveyed Base
- 2030 Future Base with Committed Development
- 2030 Future Base with Committed Development and Proposed Mwyndy Option 1 Development
- 2030 Future Base with Committed Development and Proposed Mwyndy Option 2 Development

6.6. Traffic Impact

6.6.1. The results of the junction capacity assessments are summarised in the following section of this report. The full modelling output reports are included at **Appendix F**.

A4119 Signalised Junctions

6.6.2. The network of signalised junctions on the A4119 to the west of the development site has been modelled using the LinSig V3 software package. A summary of the modelling results for each of the assessment scenarios is presented in the tables below.

6.6.3. It should be noted that a MOVA (Microprocessor Optimised Vehicle Actuation) system is currently in place along this section of the A4119 corridor. MOVA is an adaptive traffic control system which is responsive to traffic conditions and therefore often leads to increases in capacity at junctions. The effects of MOVA cannot be replicated in LinSig modelling, as the green times and cycle time can vary throughout the modelled hour. It is therefore considered likely that in reality the junctions operate with slightly more capacity than shown in the capacity assessment results presented below.

6.6.4. **Table 6.1** provides a summary of the modelling results for the 2025 base scenario.

Table 6.1: Modelling results – 2025 Base

Arm	Movement	AM Peak Hour		PM Peak Hour	
		DOS (%)	MMQ (PCUs)	DOS (%)	MMQ (PCUs)
Junction 1: Mwyndy Cross / A4119					
A4119 (N)	Left / Ahead	48.4%	12.0	56.1%	15.2
A4119 (N)	Ahead	55.1%	13.2	63.9%	17.6
Employment Access	Right / Left	4.7%	0.2	12.2%	0.5
A4119 (S)	Ahead	56.6%	2.0	71.9%	9.9
A4119 (S)	Ahead	53.9%	1.8	68.5%	6.3
A4119 (S)	Right	2.3%	0.2	0.6%	0.0
Junction 2: Ffordd Cefyn-Yr-Hendy / A4119					
A4119 (N)	Ahead	46.4%	1.0	54.1%	1.7
A4119 (N)	Ahead	43.4%	0.6	50.5%	1.2
A4119 (N)	Right	54.4%	6.3	76.6%	8.6
Ffordd Cefyn-Yr-Hendy	Left / Right	39.5%	6.0	38.8%	5.4
A4119 (S)	Ahead / Left	66.8%	9.1	83.6%	12.2
A4119 (S)	Ahead	61.9%	1.6	77.7%	6.5
Junction 3: School Road / A4119					
A4119 (N)	Ahead	51.0%	12.9	50.4%	10.4
A4119 (N)	Right / Ahead	47.5%	11.9	49.4%	9.3
School Road	Left / Right	78.6%	12.0	92.1%	10.6
A4119 (S)	Ahead / Left	80.3%	25.3	92.5%	42.1
A4119 (S)	Ahead	72.1%	22.9	77.9%	28.3
		PRC = 12.0%		PRC = -2.8%	

6.6.5. It can be seen from the above that the Mwyndy Cross / A4119 / Ffordd Cefyn-Yr-Hendy staggered junction currently operates within capacity on all arms, in both the AM and PM peak periods.

6.6.6. The School Road junction is shown to operate within capacity in the AM peak, although it is nearing capacity in the PM peak on the School Road and southern A4119 arms.

6.6.7. **Table 6.2** provides a summary of the modelling results for the 2030 future base with committed development scenario.

Table 6.2: Modelling results – 2030 Base with Committed Development

Arm	Movement	AM Peak Hour		PM Peak Hour	
		DOS (%)	MMQ (PCUs)	DOS (%)	MMQ (PCUs)
Junction 1: Employment Access / A4119					
A4119 (N)	Left / Ahead	51.4%	13.1	59.1%	16.5
A4119 (N)	Ahead	59.1%	15.0	70.8%	21.3
Employment Access	Right / Left	10.3%	0.5	18.8%	0.8
A4119 (S)	Ahead	61.4%	3.1	76.0%	3.7
A4119 (S)	Ahead	58.1%	2.7	72.3%	3.1
A4119 (S)	Right	4.0%	0.3	2.3%	0.2
Junction 2: Ffordd Cefyn-Yr-Hendy / A4119					
A4119 (N)	Ahead	49.1%	1.1	59.8%	18.6
A4119 (N)	Ahead	46.2%	1.1	56.1%	17.4
A4119 (N)	Right	53.9%	7.0	87.4%	12.8

Ffordd Cefyn-Yr-Hendy	Left / Right	53.0%	9.2	43.9%	6.9
A4119 (S)	Ahead / Left	71.6%	9.4	91.1%	34.8
A4119 (S)	Ahead	66.4%	2.1	84.7%	10.8
Junction 3: School Road / A4119					
A4119 (N)	Ahead	56.9%	14.5	53.9%	12.3
A4119 (N)	Right / Ahead	53.5%	13.5	50.5%	13.7
School Road	Left / Right	87.5%	17.2	97.0%	14.5
A4119 (S)	Ahead / Left	88.4%	31.8	100.2%	69.8
A4119 (S)	Ahead	79.9%	26.5	83.0%	32.6
		PRC = 1.8%		PRC = -11.4%	

6.6.8. It can be seen from the above that in the future year scenario with committed development scenario the Mwyndy Cross / A4119 / Ffordd Cefyn-Yr-Hendy staggered junction continues to operate within capacity in both the AM and PM peak periods, on all arms, although the southern A4119 arm is shown to be approaching capacity in the PM peak period.

6.6.9. The School Road junction is shown to continue to operate within capacity in the AM peak period. The School Road arm is shown to be approaching capacity in the PM peak and the southern A4119 arm is shown to be at capacity in the PM peak period.

6.6.10. **Table 6.3** provides a summary of the modelling results for the 2030 future base with committed and proposed Mwyndy Option 1 development scenario.

Table 6.3: Modelling results – 2030 Base with Committed and Proposed Mwyndy Option 1 Development

Arm	Movement	AM Peak Hour		PM Peak Hour	
		DOS (%)	MMQ (PCUs)	DOS (%)	MMQ (PCUs)
Junction 1: Employment Access / A4119					
A4119 (N)	Left / Ahead	51.7%	13.2	59.1%	16.5
A4119 (N)	Ahead	59.4%	15.1	70.8%	21.3
Employment Access	Right / Left	14.0%	0.6	35.6%	1.7
A4119 (S)	Ahead	61.6%	3.1	75.9%	4.8
A4119 (S)	Ahead	57.9%	2.7	72.3%	4.8
A4119 (S)	Right	9.1%	0.7	2.9%	0.2
Junction 2: Ffordd Cefyn-Yr-Hendy / A4119					
A4119 (N)	Ahead	48.8%	1.1	57.6%	17.0
A4119 (N)	Ahead	46.5%	1.1	54.2%	11.1
A4119 (N)	Right	53.9%	7.0	91.0%	13.7
Ffordd Cefyn-Yr-Hendy	Left / Right	53.2%	9.2	45.3%	7.0
A4119 (S)	Ahead / Left	72.0%	9.4	89.8%	32.7
A4119 (S)	Ahead	66.5%	2.1	83.6%	11.2
Junction 3: School Road / A4119					
A4119 (N)	Ahead	56.7%	14.4	54.2%	12.3
A4119 (N)	Right / Ahead	53.8%	13.7	50.8%	11.2
School Road	Left / Right	87.7%	17.3	96.9%	14.4
A4119 (S)	Ahead / Left	88.8%	32.3	100.3%	70.8
A4119 (S)	Ahead	80.3%	26.9	83.0%	32.6
		PRC = 1.3%		PRC = -11.5%	

6.6.11. It can be seen from the above that proposed development Option 1 would have a minimal impact on the operation of the junctions assessed.

6.6.12. **Table 6.4** provides a summary of the modelling results for the 2030 future base with committed and proposed Mwyndy Option 2 development scenario.

Table 6.4: Modelling results – 2030 Base with Committed and Proposed Mwyndy Option 2 Development

Arm	Movement	AM Peak Hour		PM Peak Hour	
		DOS (%)	MMQ (PCUs)	DOS (%)	MMQ (PCUs)
Junction 1: Employment Access / A4119					
A4119 (N)	Left / Ahead	52.0%	13.2	59.1%	16.5
A4119 (N)	Ahead	59.6%	15.2	70.7%	21.2
Employment Access	Right / Left	17.8%	0.8	41.3%	2.0
A4119 (S)	Ahead	61.9%	3.1	75.9%	4.8
A4119 (S)	Ahead	57.6%	2.7	72.3%	4.8
A4119 (S)	Right	12.6%	0.9	2.9%	0.2
Junction 2: Ffordd Cefyn-Yr-Hendy / A4119					
A4119 (N)	Ahead	48.6%	1.1	57.7%	17.1
A4119 (N)	Ahead	46.8%	1.1	54.2%	11.6
A4119 (N)	Right	53.9%	7.0	91.0%	13.7
Ffordd Cefyn-Yr-Hendy	Left / Right	53.5%	9.3	45.3%	7.0
A4119 (S)	Ahead / Left	72.2%	9.4	89.8%	32.7
A4119 (S)	Ahead	66.5%	2.0	83.6%	11.2
Junction 3: School Road / A4119					
A4119 (N)	Ahead	56.5%	14.3	54.3%	12.3
A4119 (N)	Right / Ahead	54.2%	13.8	50.9%	11.2
School Road	Left / Right	87.5%	17.2	96.9%	14.4
A4119 (S)	Ahead / Left	89.2%	32.6	100.3%	70.4
A4119 (S)	Ahead	80.6%	27.0	83.0%	32.6
		PRC = 0.9%		PRC = -11.4%	

6.6.13. It can be seen from the above that proposed development Option 2 would also have a minimal impact on the operation of the junctions assessed.

6.6.14. The results of the capacity assessment undertaken identify that traffic associated with both of the proposed development options would have a minimal impact on the operation of the network of signalised junctions on the A4119 to the west of the development site. It is evident that traffic associated with local committed developments have a much greater impact on the operation of the junctions than the proposed development.

6.6.15. The findings of this assessment have highlighted that the A4119 is a busy corridor, and this is most apparent during commuter peak hours. This is expected given that the A4119 provides a connection to Cardiff and the M4 motorway.

6.6.16. As a result of the above, it has been demonstrated that neither of the two proposed development options would have a significant impact on the operation of the local highway network.

7. Summary and Conclusion

7.1. Summary

7.1.1. Pell Frischmann has been commissioned by Talbot Green Developments Ltd (the Client) to provide transport planning and highways advice in support of a proposed development of land at Mwyndy, east of the A4119 in Rhondda Cynon Taf.

7.1.2. This Transport Assessment (TA) has been prepared in order to summarise the transport characteristics of the local transport network and provides a review of the potential impact that developing the area of land identified as the 'Site' may have on the operation of the local highway network.

7.1.3. The site forms the eastern extent of the Mwyndy / Talbot Green allocation site, Local Development Plan Allocation SSA 8, and is located on the land to the south of the Cefyn-y-Parc Cemetery. The allocation consists of the construction of 500 dwellings, 15 hectares of employment land, 23,400sqm retail floor space, 10,000sqm of leisure floor space, a primary school, library/community facility and amenity space.

7.1.4. The proposed development is for an employment scheme consisting of two different options as follows:

- Option 1: Erection of a 9,980sqm Class B1c light industrial building with associated access, parking, drainage, landscaping, services and utilities.

- Option 2: Erection of a 21,490sqm Class B8 data centre with associated access, parking, drainage, landscaping, services and utilities.

7.1.5. Access to the site, for both development options, is to be by way of a simple priority junction located on Mwyndy Cross, approximately 140m north of the customer access to Arthur Lewellyn Jenkins. Vehicle access to the site is to be delivered in a single location for security purposes. The proposed access strategy includes a simple priority junction located on Mwyndy Cross and a new access road leading to the parking and servicing areas within the site.

7.1.6. The internal site layouts for each of the two development options have been designed to confirm that a 16.5m articulated HGV will be able to enter and exit the site in a forward gear when servicing. The proposed access has been designed to accommodate the vehicle tracking requirements of a 16.5m articulated vehicle including tapered junction radii and a 7.5m wide carriageway.

7.1.7. Pedestrian access will be provided from footways on either side of the site access junction Mwyndy Cross and along the internal access road, whilst cyclists can also access the site using the main vehicular entrance.

7.1.8. As part of the development proposal PROW ANT/298/1 is to be realigned. As part of the realignment a separate new footway link will be provided on the eastern boundary to provide a connection between the existing concertina fence and gate to the footway proposed along the eastern side of the new access road.

7.1.9. An uncontrolled pedestrian crossing facility with dropped kerbs and tactile paving is proposed across the new access road to the south of the eastern PROW connection. This will enable pedestrians to travel along the footway on the northern side of the new access road and route north along the footway on the eastern side of Mwyndy Cross. This facilitating a connection to PROW ANT/318/1 that runs east-west along the southern edge of the cemetery, in addition to the route towards Llantrisant to the north.

7.1.10. A review of highway collision data has concluded that all collisions in the vicinity of the site appear to be as a consequence of a lack of awareness or poor observation from road users. It is therefore concluded that the proposed development is unlikely to introduce any new safety concerns on the local highway network.

7.1.11. A total of 89 car parking spaces are proposed under development Option 1, in addition to 10 motorcycle parking spaces. Of the 89 car parking spaces provided, 9 will be accessible spaces for the mobility impaired and 10 will have electric vehicle charging (EVC) provision in accordance with the Welsh Government's Future Wales Planning Policy Plan 2040, which requires a minimum of 10% of the car parking spaces to have EVC provision.

7.1.12. A total of 100 car parking spaces are proposed under development Option 2, in addition to 10 motorcycle parking spaces. Of the 100 car parking spaces provided, 5 will be accessible spaces for the mobility impaired and 10 will have electric vehicle charging (EVC) provision in accordance with the Welsh Government's Future Wales Planning Policy Plan 2040.

7.1.13. The proposed cycle parking provision is the same for both development options, with 5 short stay Sheffield style cycle stands (10 spaces) and a covered cycle storage facility to accommodate 24 cycles as long stay provision proposed.

7.1.14. The proposed parking provision is in accordance with the RCTCBC parking standards for each of the two development options.

7.1.15. A trip generation exercise has been undertaken to confirm the scale of traffic forecast to be generated by each of the two proposed development options. The trip analysis and subsequent capacity assessment undertaken account for higher floor areas for each of the two development options, therefore resulting in a robust assessment.

7.1.16. Junction capacity assessment has been completed for the two existing signalised junctions on the A4119 to the west of the development site for a forecast year of 2030. This accounting for background traffic growth associated with local committed developments.

7.1.17. The results of the capacity assessment undertaken confirm that traffic associated with both of the proposed development options would have a minimal impact on the operation of the network of signalised junctions on the A4119 to the west of the development site. It is evident that traffic associated with local committed developments have a much greater impact on the operation of the junctions than the proposed development.

7.1.18. It has been demonstrated that neither of the two proposed development options would have a significant impact on the operation of the local highway network.

7.2. Conclusion

7.2.1. In light of the findings of this Transport Assessment, it is concluded that the two proposed development options for the site are acceptable from a traffic and transport perspective.

Appendix A – Site Masterplans

PROPOSED SITE PLAN

DATA CENTRE - Ground Floor 59,000 AOD
Proposed Site Plan
1:500 @ A0

Rev	Status	Date	Check	Description
P02	S0	27/01/26	BE	Planning application
P01	S0	18/12/25	MH	PAC Issue

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Project
Mwyndy (Employment Development Site)

Title
Data Centre - Site Plan Proposed

Job No	Scale at A0	Classification	Status Revision
4599	1 : 500		S0 P02

Project Code - Originator - Functional Breakdown - Spatial Breakdown - Form - Discipline - Number
MEDS-HMA-ZZ-ZZ-D-A-90001

SCALE 1:500
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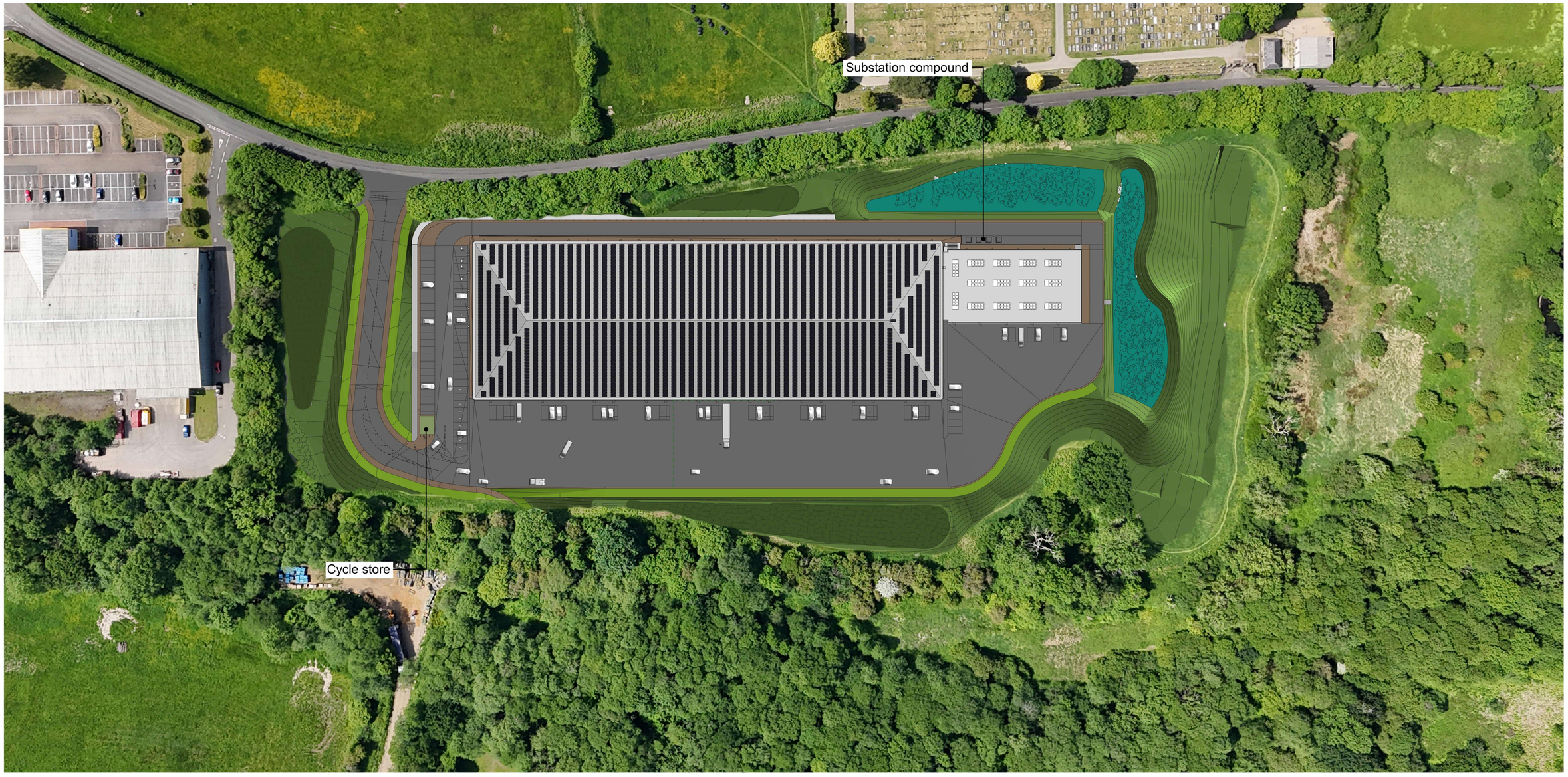

PROPOSED SITE PLAN

LIGHT INDUSTRIAL - Ground Floor 59,000 AOD
Proposed Site Plan
1:500 @ A0

Rev.	Status	Date	Check	Description
P02	S0	27/01/26	BE	Planning application
P01	S0	18/12/25	MH	PAC Issue

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Project
Mwyndy (Employment Development Site)

Title
Light Industrial - Site Plan Proposed

Job No.	Scale at A0	Classification	Status Revision
4599	1 : 500		S0 P02

Project Code · Originator · Functional Breakdown · Spatial Breakdown · Form · Discipline · Number
MEDS-HMA-ZZ-ZZ-D-A-90001

SCALE 1:500
5 0 5 10 15 20 25
m

Appendix B – Site Access Arrangements