

**PROPOSED HYDROGEN PRODUCTION FACILITY
CENTRAL AVENUE, BAGLAN, NEATH PORT TALBOT**

Transport Statement

March 2025

Proposed Hydrogen Production Facility
Central Avenue, Baglan, Neath Port Talbot
Transport Statement

Document Control Sheet

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1.0 INTRODUCTION

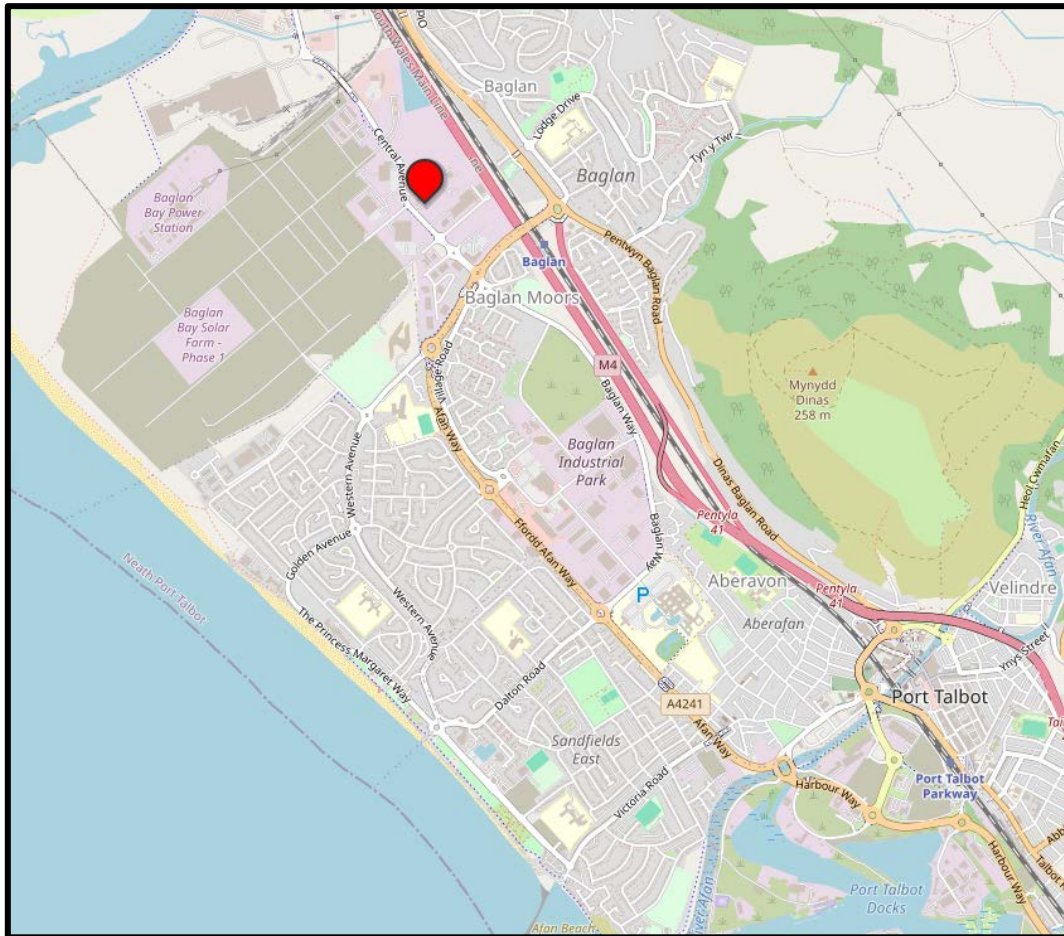
1.1 Appointment of Connect Consultants

- 1.1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by Sirius Planning Limited on behalf of Protium Green Hydrogen Supply Limited (The Applicant) to prepare a Transport Statement in support of the planning application for a Hydrogen Production Facility off Central Avenue, Baglan, Port Talbot.
- 1.1.2 This Transport Statement ('Statement') has been prepared in following informal pre-application discussions with the Highways Department of Neath and Port Talbot Borough Council (The Council).

1.2 Site Location

- 1.2.1 The proposal Site (herein referred to as 'the Site') is located off Central Avenue, Port Talbot, SA12 7BR.
- 1.2.2 The location of the Site is shown at Figure 1.1 below.
- 1.2.3 The Hydrogen Production Facility (the Proposed Development) will be located in within a existing industrial estate, on an area that predominately comprises an existing flat hardstanding used for open storage.
- 1.2.4 The Site currently is used for the storage of containers and construction materials.
- 1.2.5 The Site is located to the northeast of Baglan Bay Power Station and Baglan Bay Solar Farm Phase 1, to the east of the River Neath, to the southwest of the M4 and to the northwest of Baglan Moors.
- 1.2.6 Central Avenue connects to the A4241 and the M4, a major motorway running from London to Swansea, at Junction 41 (Baglan Interchange), c.2km to the southeast of the Site.

Figure 1.1 – Site Location Plan



Source: OpenRouteService. N.B. The Site location is denoted by the red pin.

- 1.2.7 The Site is bound to the northeast by E.G. Lewis Group (that provide engineering services), to the southeast by a private access road (that provides access to the Site), adjacent to Hi-Speed Tyres and Exhausts Sites and SCK Group Ltd, to the southwest by a green corridor and then Central Avenue, and to the northwest by Celtic Vacuum (a waste water and sewage treatment company).
- 1.2.8 Figure 1.2 below identifies the context of the Site in relation to the local area.

Figure 1.2 – Site in its Local Context



Source: Google. N.B. the approximate Site boundary is denoted by a red line.

1.2.9 The Proposed Development is shown on the plan provided at Appendix 1.

1.2.10 The Proposed Development will consist of: -

- An Electrolytic Hydrogen Production Facility (HPF) and associated compression and storage.
- A Hydrogen Tube-Trailer Filling Station.

1.2.11 A detailed description of the Proposed Development can be found in Chapter 3 of the Planning Statement.

1.2.12 The Proposed Development will produce up to 960 kgs of green hydrogen per day, which will be transported offsite to regional customers. It is estimated that the HPF will abate approximately 3,000 tonnes of CO₂ per year.

1.2.13 The Proposed Development will be accessed via the private existing access from Central Avenue. This is shared between the Site and the rear accesses serving the adjacent SCK and Hi-Speed Tyre Sites.

1.2.14 The main site access points and parking for SCK Group and Hi-Speed Tyre are provided from Sirius Drive.

1.2.15 The Local Planning Authority and Highway Authority is Neath Port Talbot County Borough Council (NPTC).

- 1.2.16 The Applicant has engaged in an informal pre-application consultation with the Local Planning Authority via a Microsoft Teams meeting on the 14th January 2025. Further subsequent emails have been shared between the Applicant and the Highway Authority in early March.

1.3 Planning History

- 1.3.1 The Site is currently used for the storage of containers and the storage and distribution of construction materials.
- 1.3.2 A planning application (local planning authority reference 2001/1250) was submitted to NPTC in October 2001 for a “*contractor’s site office and storage compound*”. This was approved in November 2001.
- 1.3.3 Another planning application (local planning authority reference 2003/0328) was submitted to NPTC in March 2003 for an “*extension of contractors site office*”. This was approved in April 2003.

1.4 National and Local Transport Planning Policy

Planning Policy Wales, Edition 12, February 2024

- 1.4.1 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 for Wales.
- 1.4.2 The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation and resultant duties such as the Socio-Economic Duty.
- 1.4.3 Chapter 4 of the PPW *Active and Social Plans* sets out at paragraph 4.1.8 that,
- “The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling, and public transport. Delivering this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the Well-being of Future Generations Act.”*

- 1.4.4 Paragraph 4.1.53 states: -

“Local authorities will need to ensure that their parking standards reflect local transport provision, are adopted by individual authorities as supplementary planning guidance, and are kept under review. Parking standards should be applied flexibly and allow for the provision of lower levels of parking and the creation of high-quality places.”

- 1.4.5 Paragraph 4.1.56 relates to the production of Transport Assessments: -

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

Planning applications for developments, including changes of use, falling into the categories identified in TAN 18: Transport must be accompanied by a Transport Assessment. In addition, in areas where the transport network is particularly sensitive, planning authorities should consider requiring Transport Assessments for developments which fall outside of the thresholds set out in TAN 18.

Transport Assessments can be required for any Proposed Development if the planning authority considers that there is a justification or specific need. Transport Assessments provide the basis for negotiation on scheme details, including the level of parking, and measures to improve walking, cycling, and public transport access, as well as measures to limit or reduce levels of air and noise pollution. They should cover the transport impacts during the construction phase of the development, as well as when built and in use.

Transport Assessments also provide an important basis for the preparation of Travel Plans. Further guidance on Transport Assessments and Travel Plans is contained in TAN 18."

- 1.4.6 In relation to the Proposed Development Chapter 5 *Energy* sets out the following at paragraph 5.7.1: -

"The Welsh Government's highest priority is to reduce demand wherever possible and affordable, low carbon electricity must become the main source of energy in Wales. Renewable electricity will be used to provide both heating and transport in addition to power. The future energy supply mix will depend on a range of established and emerging low carbon technologies, including biomethane and green hydrogen."

Planning Policy Wales, Technical Advice Note (TAN) 18: Transport, March 2007

- 1.4.7 TAN18 states the following in relation to traffic management at Paragraph 5.15 (this is relevant to the Construction Traffic Management Plan): -

"Well designed and implemented traffic management measures can help to secure planning objectives in a number of ways, including:

- 1. Reducing community severance, noise, local air pollution and traffic accidents;*
- 2. Promoting safe walking, cycling and public transport;*
- 3. Improving the attractiveness of urban areas by helping to avoid or manage congestion;*
- 4. Controlling on street parking (including resident parking schemes) in areas of high parking demand;*
- 5. Promoting safer road conditions leading to improved opportunity for children's safety and play; and*
- 6. Promoting safer road conditions in rural areas and reducing the impact of roads on the environment whilst maintaining access for rural businesses."*

Neath Port Talbot Local Development Plan 2011 to 2026 (January 2016)

- 1.4.8 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications are determined in accordance with the provisions of the Adopted Development Plan unless material considerations indicate otherwise. The Site falls within the administrative boundary of Neath Port Talbot County Borough Council.
- 1.4.9 The adopted Development Plan is the Neath Port Talbot Local Development Plan which covers the period 2011 to 2026 and was adopted in January 2016. The plan provides the basis for decisions on land use planning in the County Borough, up to 2026.
- 1.4.10 Under the adopted proposals map the Site is designated as within an Existing Employment Area (EC2) and within an area safeguarded for Minerals (M1).
- 1.4.11 Policy SP20 and TR2 relate to highways. A copy is provided below: -

Policy SP20

"Transport Network

The transport system and infrastructure will be developed in a safe, efficient and sustainable manner through the following measures: -

- 1. Implementing key transport projects and supporting schemes identified in the Joint Transport Plan;*
- 2. Promoting connectivity and access to public transport through improving bus and rail facilities;*
- 3. Supporting enhancements to the walking and cycling network;*
- 4. Promoting Park and share schemes along key highway routes;*
- 5. Promoting efficient use and links to the transport network through the identification of a road hierarchy;*
- 6. Restricting development which would have an unacceptable impact on highway safety;*
- 7. Requiring development proposals to be designed to provide safe and efficient access and promote sustainable transport;*
- 8. Requiring appropriate parking provision;*
- 9. Facilitating movement of freight by means other than road."*

Policy TR 2

"Design and Access of New Development

Development proposals will only be permitted where all of the following criteria, where relevant, are satisfied:

- 1. The development does not compromise the safe, effective and efficient use of the highway network and does not have an adverse impact on highway safety or create unacceptable levels of traffic generation;*
- 2. Appropriate levels of parking and cycling facilities are provided and the access arrangements for the Site allow for the safe manoeuvring of any service vehicles associated with the planned use;*

3. The development is accessible by a range of travel means, including public transport and safe cycle and pedestrian routes;

4. Transport Assessments and Travel Plans are provided for developments that are likely to create significant traffic generation."

Joint Transport Plan for South West Wales

- 1.4.12 The Regional Transport Plan is the result of joint working between the four local authorities (Carmarthenshire, Neath Port Talbot, Swansea and Pembrokeshire) in south west Wales. It replaces the individual local transport plans previously adopted by the 4 councils. As well as acting as a bidding document for major transport schemes, it will shape transport policy in the region for the period 2015 -2020 and beyond.
- 1.4.13 The following is identified within the plan and will include the Site due to its proximity to the M4 J38.

Scheme Name	Description of Scheme	Priority	Local, regional or national significance
The Hydrogen Highway	Provision and development of hydrogen fuelling stations along the M4 corridor to complement the ongoing development of hydrogen transport technology associated with research and development in the local Universities	9	National
Bus corridor improvements at: - Port Talbot to Swansea - Margam to Port Talbot - Port Talbot to Neath - Neath to Swansea via Fabian Way	Improvements to facilities, bus priorities and information on strategic bus corridors to provide improved connectivity between communities, amenities and strategic employment sites.	2	Regional

1.5 Car Parking Policy

- 1.5.1 The parking standards applicable to the Proposed Development are set out in the NPTC Local Development Plan 2011-2026 Parking Standards Supplementary Planning Guidance adopted in October 2016.

1.6 Report Overview

- 1.6.1 The remainder of this Statement is divided into five further sections, which are as follows: -

Section 2.0 Site Transport and access Context

- 1.6.2 This section of the Statement provides details of the Site context, including its accessibility by all relevant transport modes.

Section 3.0 Proposed Development

- 1.6.3 The various components of the Proposed Development proposal, including the Site access arrangements and parking provision, are described within this section of the Statement.

Section 4.0 Traffic Assessment

- 1.6.4 This Statement section provides an assessment of the vehicular attraction of the Proposed Development and its traffic effects.

Section 5.0 Junction Capacity Assessment

1.6.5 The results of the traffic assessment have been used to inform junction capacity assessment, and the methodology and results are outlined in this section of the Statement.

Section 6.0 Summary and Conclusions

1.6.6 A summary and the conclusions of the Statement are provided in this section.

2.0 SITE TRANSPORT AND ACCESS CONTEXT

2.1 Introduction

- 2.1.1 This section of the Report considers the accessibility of the Site in terms of a range of transport modes.

2.2 Pedestrian Access

- 2.2.1 The Department for Transport's (DfT) document titled 'Manual for Streets' dated 2007 provides guidance in relation to walk distances. Section 4.4 gives the following advice: -

"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot".

- 2.2.2 The Chartered Institution of Highways & Transportation (CIHT) document 'Planning for Walking' (April 2015) reiterates the advice presented in 'Manual for Streets', Section 6.4 of 'Planning for Walking' states the following:

"Walking neighbourhoods are typically characterised as having a range of facilities within 10 minutes' walking distance (around 800 metres). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating. Developers should consider the safety of the routes (adequacy of surveillance, sight lines and appropriate lighting) as well as landscaping factors (indigenous planting, habitat creation) in their design."

- 2.2.3 Furthermore, 'Planning for Walking' indicates that approximately 80% of journeys shorter than 1 mile (1.6km) are made wholly on foot.
- 2.2.4 Table 3.2 of The Institute of Highways and Transportation (IHT) guidance document titled 'Providing for Journeys on Foot' identifies a maximum walk distance of 2.0km for commuter, school and sightseeing walk trips, 800m for town centre walk trips and 1.2km for trips elsewhere.
- 2.2.5 The actual distance that people will be prepared to walk will vary depending on the trip purpose and other factors such as the presence of road crossings, terrain, and the attractiveness of the environment.
- 2.2.6 Based on walking distances of 800m and 2km, the indicative walking catchments of the Site are shown at Figure 2.1 below.

Figure 2.1 – Indicative 2km Walk Catchment



Source: OpenRouteService.

- 2.2.7 Residential dwellings in Baglan (north) and Sandfields West (south) are within the 2km walk catchment of the Site.
- 2.2.8 Central Avenue is flanked by a footway/cycleway on the southwestern side and by a segregated footway on the northeastern side, connecting the Site to the local pedestrian network.
- 2.2.9 Uncontrolled refuge island crossings are provided on Central Avenue.
- 2.2.10 A roundabout c.70m east of the Site (Sirius Drive / Central Avenue) includes refuge island crossings on both sides of Sirius Drive. The western crossing allows cycles and pedestrians to cross.
- 2.2.11 A roundabout c.160m east of the Site (Talbot Gateway / Central Avenue / Seaway Drive) also includes refuge island crossings on crossings Seaway Drive and Central Avenue north. The Seaway Drive crossing again allows cycles and pedestrians to cross.
- 2.2.12 A roundabout c.300m southeast of the Site (A241 / Central Avenue) has a pedestrian/bicycle overbridge c.20m south across the A241 (south), and a controlled pedestrian crossing c.20m west across Central Avenue (west). This junction connects to Baglan and Sandfields.

2.2.13 In light of the local pedestrian facilities, the Site is connected to the local pedestrian network with opportunities for staff to walk to work. Walking also provides an opportunity for trips to the Site as part of a combined journey.

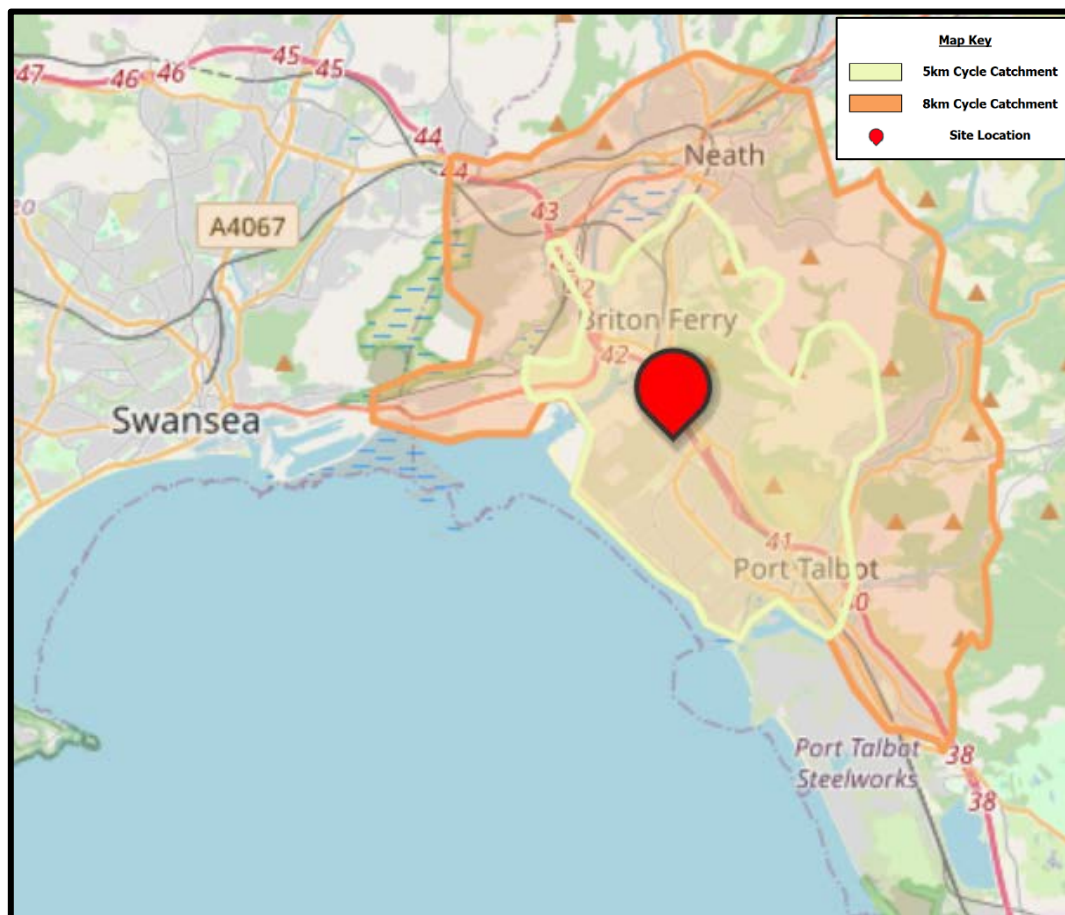
2.3 Access by Cycling

2.3.1 The 2023 National Travel Survey table NTS0303 identifies average journey lengths by cycle in England of c.4.8km. The CIHT document titled 'Planning for Cycling' (October 2014) indicates that 80% of cycling trips are up to five miles (8km) and 40% are less than two miles (3.2km). This suggests that cycling can offer an alternative to car travel particularly for trips of less than 8km.

2.3.2 Indicative cycle catchments are shown at Figure 2.2, being a 5km catchment (representing the 4.8km NTS average cycling distance) and an 8km catchment (being the distance of 80% of cycle trips).

2.3.3 An indicative 5km and 8km cycle catchment is shown at below.

Figure 2.2 – Cycle Catchment Area



Source: OpenRouteService.

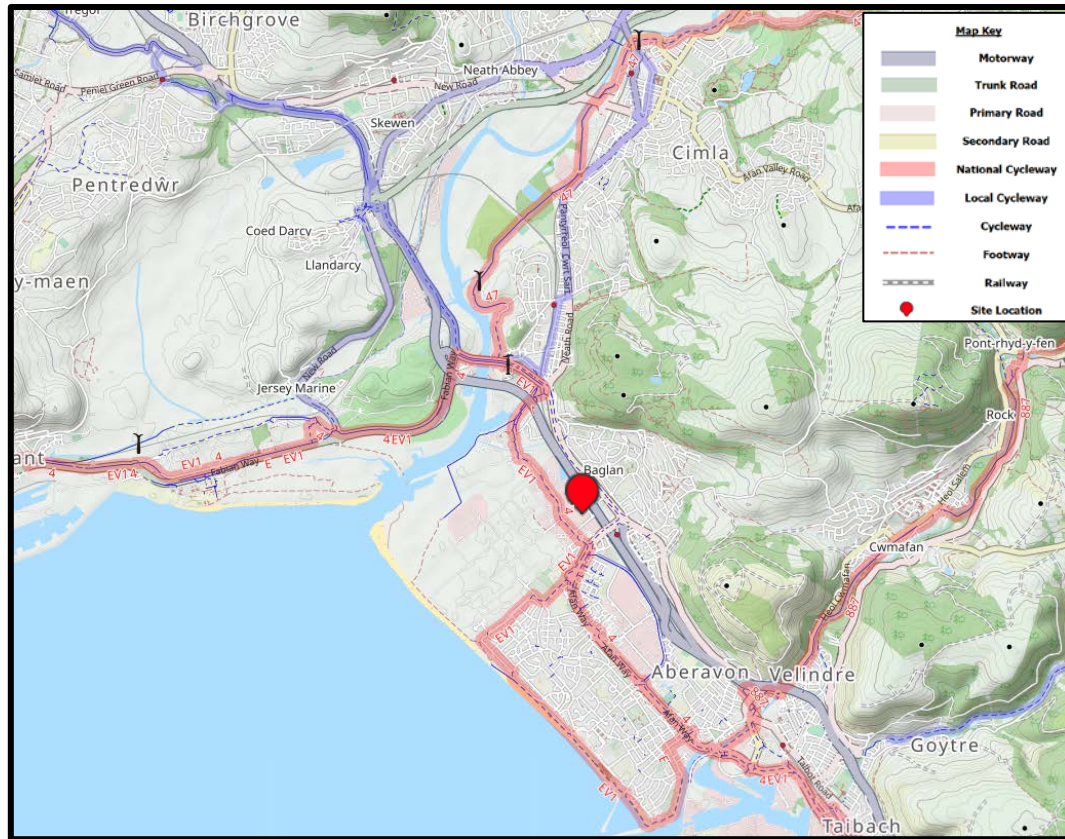
2.3.4 The 5km cycle catchment includes all of Baglan, Sandfields, Port Talbot, and Briton Ferry.

2.3.5 The 8km cycle catchment includes all of Neath.

2.3.6 There is therefore a significant local population within cycling distance of the Site.

2.3.7 Figure 2.3 below, shows a cycle map for Baglan and the surrounding areas taken from Open Street Map, showing local and national cycle ways in the area.

Figure 2.3 – Local Cycle Map



Source: OpenStreetMap.

2.3.8 As detailed above a footway / cycleway is present on the western side of Central Avenue.

2.3.9 National Cycle Route EV1 and EV 4 run along the Central Avenue, providing a cycle route to Briton Ferry and Neath in the northwest bound direction; in the southeast bound direction EV1 provides a cycle route to Sandfields and 4 provides a cycle route to Port Talbot.

2.3.10 The majority of the 5km cycle catchment is therefore accessible to National Cycle Network Routes EV1 and EV 4.

2.3.11 There are also local cycle routes to Baglan, the nearest town to the Site.

2.3.12 Considering that the roads local to the Site are urban in character, that the local topography is generally gentle, and the presence of cycle infrastructure, there are realistic and viable opportunities for staff to make trips by cycle.

2.4 Access by Bus

2.4.1 The publication 'Planning for Public Transport in Developments' produced by the Institution of Highways and Transportation (IHT) specifies that new developments should be located within 400m of the nearest bus stop.

2.4.2 The nearest bus stops to the Site are located on Central Avenue c.60m walking distance from the Site.

- 2.4.3 The bus stops are served by the No.87 service. The No. 87 provides a route to Neath (westbound) and Margam (eastbound) every 30 minutes.
- 2.4.4 Figure 2.4 below shows the bus stop locations and the pedestrian routes to and from the Site.

Figure 2.4 – Bus Stop Locations



Source: Google Earth.

- 2.4.5 Having regard to the proximity of the bus stops, the frequency of buses and the areas that the existing local buses serve, the Site is considered to be accessible by public transport.

2.5 Access by Rail

- 2.5.1 Baglan Station is operated by Transport for Wales regional trains with hourly trains between Swansea and Cardiff Central. There are also trains to Pembroke Dock every two hours from 07:30-15:30 and trains every hour to Carmarthen from 06:30-19:30.
- 2.5.2 The station is approximately 800m from the Site, via Central Avenue and the A4241. It is therefore feasible that some longer journeys to/from the Site can be made by train, with the connection between the station and the Site being made by a c.12-minute walk.

2.6 Vehicular Access

- 2.6.1 The Proposed Development will be accessed via the existing private access road off Central Avenue. This private access road is shared with rear access to the adjacent SCK Group and Hi-Speed Tyre Sites. However, principal access to these premises is from Sirius Drive.
- 2.6.2 Central Avenue south eastbound connects to the A4241 which connects to the A48 and the M4.

- 2.6.3 Central Avenue north westbound connects to Brunel Way which connects to the A48 and the A474.
- 2.6.4 The A4241 connects Port Talbot to Sandfields and Baglan.
- 2.6.5 The A48 is a trunk road running from Gloucester to Carmarthen.
- 2.6.6 The M4 motorway provides routes from London to Swansea.
- 2.6.7 Figure 1.1 and Figure 1.2 above show the Site in its local highway context.
- 2.6.8 Overall, the Site has a prominent location in relation to the local road network from which it is readily accessible.

2.7 Road Safety Review

- 2.7.1 Publicly available official collision records include collisions which resulted in a personal injury and which were reported to the police. The data does not include details of damage-only collisions or those which were not reported to the police.
- 2.7.2 Personal-injury collisions are classified by the police as one of either 'Slight', 'Serious' or 'Fatal'. Where more than one personal injury occurs, the classification is determined by the most serious. A description of each classification is provided in the DfT publication Instructions for the Completion of Road Accident Reports dated October 2004, summarised below:

Slight:

- Sprains, not necessarily requiring medical treatment
- Neck whiplash injury
- Bruises
- Slight cuts
- Slight shock requiring roadside attention.
- (Persons who are merely shaken and who have no other injury should not be included unless they receive or appear to need medical treatment).

Serious:

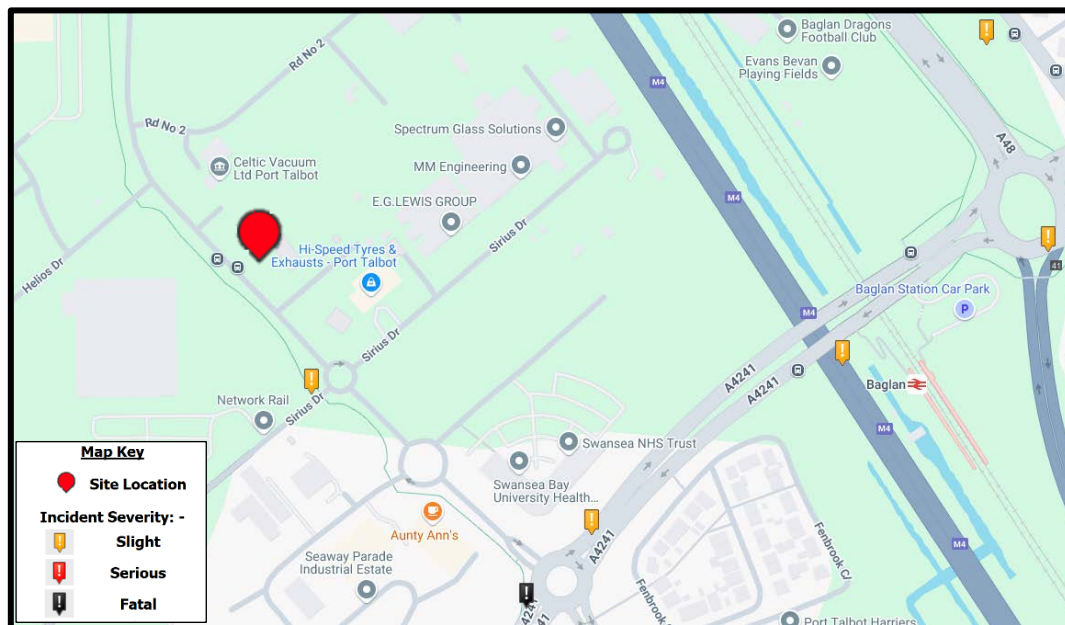
- Fracture
- Internal injury
- Severe cuts
- Crushing
- Burns (excluding friction burns)
- Concussion
- Severe general shock requiring hospital treatment
- Detention in hospital as an in-patient, either immediately or later
- Injuries to casualties who die 30 or more days after the accident from injuries sustained in that accident.

Fatal:

- 'Fatal' injury includes only those cases where death occurs in less than 30 days as a result of the accident. 'Fatal' does not include death from natural causes or suicide.

- 2.7.3 Personal injury collision data has been obtained from Crashmap for the most recent five-year period between 2019-2023 (the Study Period). The locations and levels of severity of the recorded collisions are shown at Figure 2.5 below (The Study Area).

Figure 2.5 – Local Collision Map



Source: CrashMap.

- 2.7.4 The collision data indicates no collisions have been recorded at the Site access or anywhere on Central Avenue in the past five years.
- 2.7.5 1 slight collision has occurred on Sirius Drive in 2019. Another slight incident has occurred on the A4241 in 2023. A slight incident also occurred on the roundabout with Sunny Mount, The A48, the M4 Junction 41 slip road, the A4241, and the A48 in 2022.
- 2.7.6 1 fatal collision has occurred on the A4241 in 2019.
- 2.7.7 Given that the incidents have been recorded at different locations within the Study Period, this does not imply a pattern which can be attributed to road layout deficiency, nor one which would be worsened by the Proposed Development.

2.8 Section Conclusion

- 2.8.1 The Site is surrounded by a pedestrian network that includes pedestrian facilities (e.g. footways) with good opportunities for staff to make their journeys by foot.
- 2.8.2 The area local to the Site is conducive to cycling with good opportunities for staff to make their journeys by bike.
- 2.8.3 The bus stops local to the Site provide access to / from a variety of destinations, with frequent services.
- 2.8.4 Baglan Station is within walking distance of the Site; some longer journeys to/from the Proposed Development could be made by train.

-
- 2.8.5 The Site also has a prominent location relative to the local highway network, and the recent local collision records indicate that there is no existing road safety problem in the vicinity of the Site.
- 2.8.6 Overall, the Site has a good level of accessibility by all relevant transport modes, thereby complying with national and local transport planning policy.

3.0 PROPOSED DEVELOPMENT

3.1 Development Proposals

3.1.1 The Proposed Development is shown on the plan provided at Appendix 1.

3.1.2 The proposed hydrogen production facility will consist of: -

- An Electrolytic Hydrogen Production Facility and associated compression and storage.
- A Hydrogen Tube -Trailer (HTT) Filling Station.

3.1.3 The HPF will produce up to 960 kgs of green hydrogen per day, which will be transported offsite to regional customers. It is estimated that the hydrogen produced will abate approximately 3,000 tonnes of CO₂ per year.

3.2 Proposed Site Access Arrangements

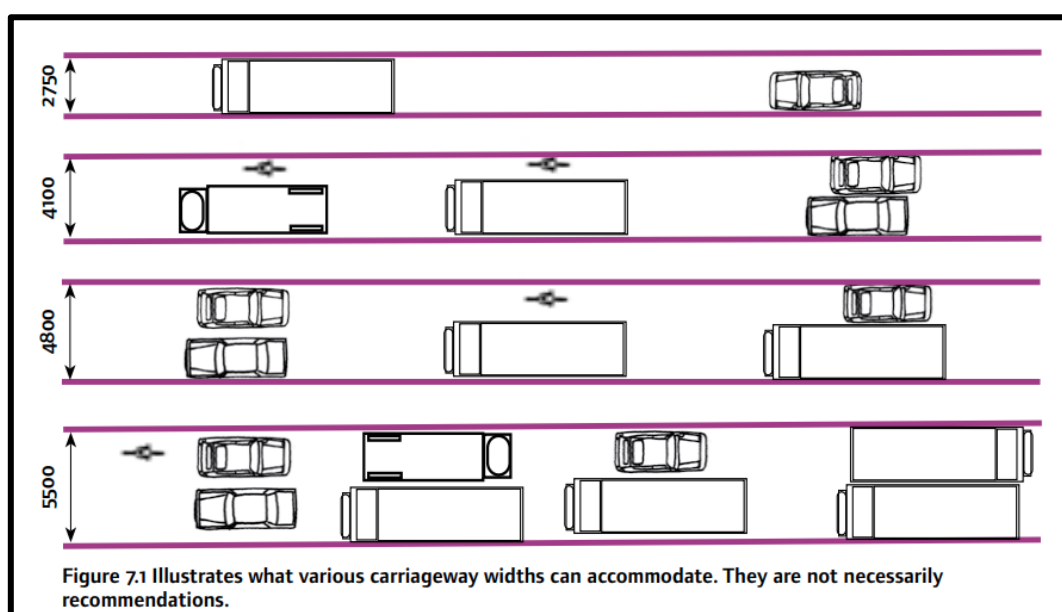
3.2.1 The Site will be accessed (during construction and operational phases) via the existing priority access junction from Central Avenue. Vehicles will approach the Site from both the northwest and the southeast on Central Avenue.

3.2.2 The carriageway width on Central Avenue is c10m with the access junction benefiting from a c3.45m ghost island right turn lane. The access junction is a standard bell-mouth junction with white line markings.

3.2.3 The internal private access road is fairly narrow at c4.5m in width (from its connection with Central Avenue for the first 45m), it then widens to c7.5m in width for approximately 40m adjacent to the Site, before reaching the access double gates, which are approximately 13.8m wide.

3.2.4 Manual for Streets (MfS) provides the following diagram in relation to vehicles that can pass at various road widths.

Figure 3.1 – MfS Passing Widths



Source: MfS

- 3.2.5 Based on the above, two cars will be able to pass at low speed along the Site access road (the speed limit will be 10mph), however it is too narrow for HGVs to pass. For HGVs the access road will operate as one-way, given the traffic attraction detailed later in this Statement, this is considered appropriate.
- 3.2.6 HGVs waiting to leave the Site, will have good forward visibility of HGVs entering the Site (see Figure 3.2), and so will wait for vehicles to travel through the narrow section before arriving at the wider section. The tracking drawing (no. PRO1013/01/90) shows that a HTT can wait in the wide section while another HTT travels past the narrow section and then enters the Site.
- 3.2.7 Internal signage at the entrance/exit to the Site will direct drivers to give way to on-coming vehicles and speed limit signs will indicate a speed limit of 10mph. To maintain visibility, tree branches that intrude into the line of visibility for vehicles entering and exiting the Site will be inspected by staff and branches trimmed if necessary (refer to Chapter 4 of the Planning Statement for further details). The access and egress protocols will be communicated to all HTT drivers on a regular basis to ensure compliance with Site Speed Limits and access / egress protocols. A Delivery Management Plan has been developed to ensure that conflict between HTT arriving and exiting the Site does not occur (see below paragraph 3.4.1).

Figure 3.2 – Internal Site Forward Visibility



Source: Google Earth

- 3.2.8 Resurfacing of the private access road within the planning application boundary is proposed, however this work is out with this Planning Application and permitted under permitted development rights.

3.2.9 The access gates to the Proposed Development will remain and open inwards. The access has a width of approximately 13.8m and be able to accommodate two HTTs passing one another.

3.2.10 Non-car access will also be provided on-site as shown on the plan at Appendix 1.

Construction Traffic

3.2.11 The maximum vehicle size for construction vehicles to the Site will be articulated vehicles of 16.5m in length.

3.2.12 The majority of the key items of plant are already stored on the Site but this has been ignored to provide a worst-case assessment.

3.2.13 The deliveries will be scheduled to arrive within a set timeslot to avoid school commute hours when possible.

3.2.14 Signage will be installed along the private access to direct vehicles and avoid conflicts.

3.2.15 HGV vehicle movements will be restricted to only 4 movements per day.

3.2.16 A delivery co-ordinator will be nominated to manage the Delivery Management Plan.

Operational Traffic

3.2.17 Hydrogen Tube Trailers will arrive and depart the Site via the existing access junction from Central Avenue.

3.2.18 All raw materials including the water for electrolysis, is already provided on-Site via a mains connection. There will be low levels of other consumables.

3.2.19 As with 3.2.13 the arrival and departure of the HTTs will be timed to avoid the school commute hours when possible and will be managed to these times through the Delivery Management Plan.

3.2.20 HTTs will turn around onsite using a manoeuvring servicing yard located on the southeast area of the Site (refer to drawing no. PRO1013/01/05) to reverse into the hydrogen refuelling to be refilled. The tracking drawing no. PRO1013/01/90 shows that HTTs will be able to pass one another through the Site access gates. The safe manoeuvring of HTTs will be under the control of the delivery co-ordinator. Cones will be placed across the entrance gates whilst an HTT is manoeuvring to halt the access of cars into the Site whilst a manoeuvre is taking place.

3.2.21 Once filled, the HTTs will leave in a forward gear to the Site entry/exit gates which open inwards.

3.2.22 Swept Path Analysis of a 16.5m articulated vehicle, illustrating internal traffic movements to / from the refuelling bays is presented at Appendix 2.

3.3 Construction (Delivery and Installation) Programme

3.3.1 There will be minimal construction as part of the Proposed Development, the construction phase will consist of the delivery of the key items of plant and balance of plant and placing them in accordance with the detailed engineering layout followed by the pipe/electrical connections.

- 3.3.2 The main components of the Proposed Development comprise of an electrolyser, a compressor and cooling system which are shipped either as containers or assembled skids, designed for ease of integration. As referred to above, the majority of the main components are already stored on the Site.
- 3.3.3 The plant and equipment will be delivered to the Site in a range of vehicle types, primarily flatbed lorries. The containers will be lifted into position by crane and secured.
- 3.3.4 The construction period is expected to last between three to six months with commissioning taking place concurrently during the last three months.

3.4 Delivery Management Plan

- 3.4.1 A Delivery Management Plan is provided at Appendix 3. The Delivery Management Plan will cover the Construction, operation and decommissioning phases of the Proposed Development.
- 3.4.2 All external contractors will be required to familiarise themselves with the Delivery Management Plan as a condition of their appointment. As part of site induction they will be given a tool box talk.

3.5 Car and Cycle Parking

- 3.5.1 The Site will provide the following parking spaces once operational: -
- 4 marked parking spaces for cars and vans.
 - Cycle parking with 5 bicycle parking spaces.
- 3.5.2 The above parking is considered to be an adequate provision based on the hydrogen production capacity of the HPF and staffing numbers which are set out later in this Statement.

Car Parking Standards

- 3.5.3 The parking standards applicable to the Proposed Development are set out in the NPTC Local Development Plan 2011-2026, Parking Standards Supplementary Planning Guidance adopted in October 2016.
- 3.5.4 Given the Site's suburban location, the Zone 4 standards apply. There are no specific standards for hydrogen production facilities, however, the following industrial standards are provided.

Figure 3.3 – Parking Standards

Type of Development	Operational	Non-Operational
Small Industry (< 100m ²)	1 van space	1 space
Small Industry (< 235m ²)	1 van space	2 spaces
Industry	See Note 5	1 space per 80 m ²
Highly Technical Industry	See Note 5	1 space per 20 m ²

- 3.5.5 Section 3.3.5 of the standards states that they relate to gross floor areas (i.e. including external walls), and therefore they apply to buildings only, including office and welfare (as opposed to containers).
- 3.5.6 During construction 5 cars and 5 vans are envisaged per day for construction staff. The staff vehicles will be accommodated within the Site using informal parking. Staff will not be able to park anywhere on the Site – this will be established by the delivery co-ordinator to facilitate smooth ingress / egress.
- 3.5.7 Once fully operational, 3 cars and 2 vans are expected at the Site over three rotating shifts a day. Parking for the staff members will be provided in the 4 no. car parking bays as shown on the plan no. PRO1013/01/03 (Site Layout Plan).

Disabled Parking

- 3.5.8 Section B.9 of the parking standards states that *“For car parks associated with existing employment premises - 2% of the total car park capacity, with a minimum of one space”* should be provided.
- 3.5.9 As there is only envisaged to be few vehicles needed for maintenance and operation, no designated disabled parking bays are proposed.

Cycle Parking

- 3.5.10 5 cycle bays will be provided within a secure shelter (refer to drawing PRO1013/01/21 for locations and elevations).

3.6 Section Conclusion

- 3.6.1 The Proposed Development will be accessed via the existing access from Central Avenue. The private access road will be re-surfaced and signage provided to give priority to incoming HGVs. The Delivery Management Plan will ensure that HTT access and egress and other vehicle movements are monitored and controlled to avoid conflict on the private access road during the construction, operation and decommissioning phases of the Proposed Development.
- 3.6.2 Swept path analysis shows that the access arrangements and layout of the Proposed Development are suitable for the largest vehicles that are expected to use the Site.
- 3.6.3 The proposed on-site parking will be provided in accordance with the local parking standards, and will meet operational demand.

4.0 TRAFFIC ASSESSMENT

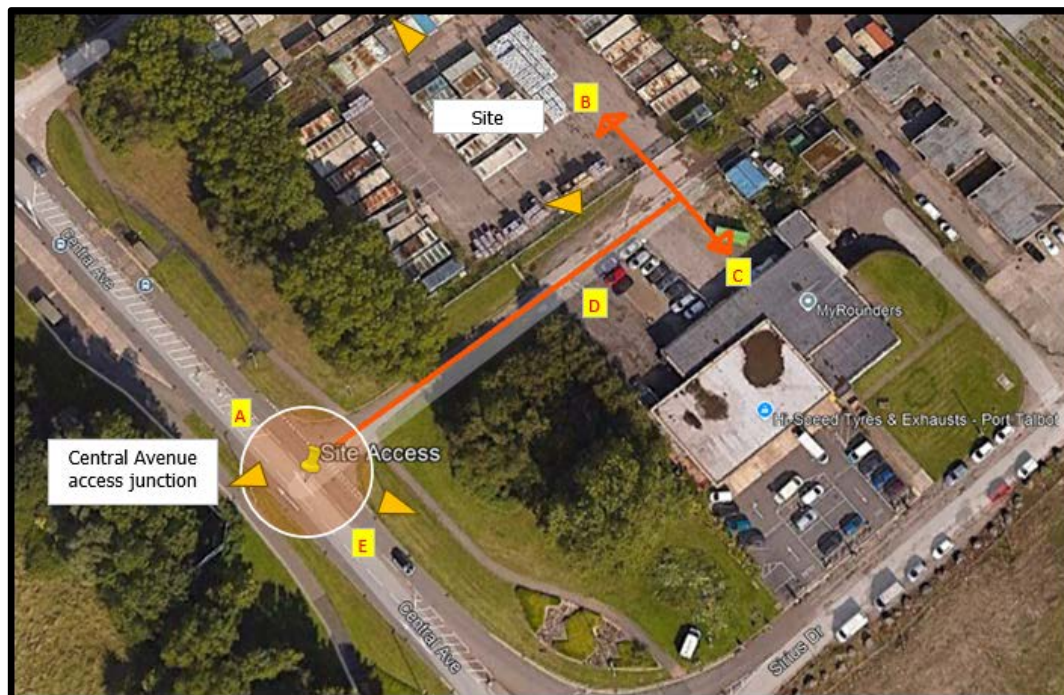
4.1 Introduction

- 4.1.1 The following traffic analysis considers first the baseline position of the traffic attraction of the existing uses on the Site, and second the traffic attraction of the Proposed Development.
- 4.1.2 It includes the construction and operational trip attraction of the Proposed Development.

4.2 Existing Site Trip Attraction

- 4.2.1 The pertinent question relating to the traffic effect of the Proposed Development is whether the proposal will result in significantly more traffic than the existing uses on the Site, and if so, whether there would be an unacceptable impact on highway safety or whether the impact on the road network would be severe.
- 4.2.2 The Site is currently used for storage and distribution of construction materials and containers, assumed to be permitted under B8 industrial use.
- 4.2.3 It is feasible that instead of the Proposed Development, the Site could be refurbished and become fully occupied within its extant planning permission, i.e., without needing planning approval. In that case, the Site could potentially attract more traffic movements than it does at present.
- 4.2.4 The Central Avenue Site access serves the Proposal Site and rear accesses to the adjacent SCK Group and Hi-Speed tyre Sites.
- 4.2.5 Vehicle turning-count surveys were undertaken at the Central Avenue access junction and the private access road with SCK Group and Hi-Speed Tyres on Tuesday 4th March 2024. This survey date can therefore be considered to be a 'neutral' time of year. The survey company have indicated that *"There were no incidents likely to affect the outcome of the surveys"* and that the weather was dry.
- 4.2.6 A plan showing the survey location is provided at Figure 4.1 below.

Figure 4.1 – Survey Location



Source: Google Earth. N.B. the survey cameras are denoted by the orange triangles.

- 4.2.7 The turning-count surveys recorded the vehicle movements at the junctions between the hours of 07:00 and 19:00 in order to capture the AM and PM peak periods and daily traffic attraction.
- 4.2.8 The turning-count surveys recorded the weekday AM peak hour of total vehicle movements as 07:45-08:45, and the weekday PM peak hour as 16:00-17:00.
- 4.2.9 A summary of the surveyed vehicle movements at the Central Avenue junction access is provided at Table 4.1 below.

Table 4.1 – Central Avenue Junction Flows

	Central Avenue Northbound			Central Avenue Southbound			Site Arrivals from South			Site Departures to South			Site Arrivals from North			Site Departures to North		
	Total Flows	HGVs	%age HGV	Total Flows	Total Flows	HGVs	%age HGV	Total Flows	HGVs	%age HGV	HGVs	%age HGV	Total Flows	HGVs	%age HGV	Total Flows	HGVs	%age HGV
AM Peak	302	15	5%	415	22	5%	2	0	0%	2	0	0%	2	1	50%	0	0	0%
PM Peak	330	9	3%	313	14	4%	4	0	0%	1	0	0%	3	3	100%	3	3	100%
Daily	2,885	152	5%	2,963	186	6%	12	4	33%	20	4	20%	7	4	57%	7	4	57%

- 4.2.10 Based on the above, the Site traffic is a tiny proportion of the traffic using Central Avenue.

4.2.11 A summary of the surveyed vehicle movements into the Proposed Development area from the private access road are shown in Table 4.2 below.

Table 4.2 – Proposal Site Flows

	Arrivals			Departures			Total			
	Cars / Vans	HGVs	%age HGV	Cars / Vans	HGVs	%age HGV	Cars / Vans	HGVs	%age HGV	Total Vehicles
AM Peak	3	1	25%	1	0	0%	4	1	20%	5
PM Peak	0	0	0%	0	1	100%	0	1	100%	1
Daily	5	5	50%	5	5	50%	10	10	50%	20

4.2.12 As shown above, the Site currently attracts 10 car/van movements per day, and 10 HGV movements per day.

4.2.13 During the peak hours the surveyed trip attraction is negligible.

4.3 Proposed Development Construction Trip Attraction

4.3.1 Table 4.3 below illustrates the anticipated maximum vehicle attraction per day during the construction phase of the Proposed Development. The numbers account for construction worker movements and deliveries to the Site over a three to six-month construction period. This includes cranes for the installation of the main HPF components.

4.3.2 The numbers have been supplied by the Applicant and are based on a daily average of 5 cars, 5 vans, and 2 HGV trips (for deliveries) to the Site during the construction period. As referred to above the majority of the main components that make up the HPF are already on the Site, but this has been ignored to provide a robust assessment of construction traffic.

4.3.3 It should be noted that this is the maximum number and vehicle movements will vary depending on the construction activities on the Site at any one time.

Table 4.3 – Construction Vehicle Movements

	Cars			Vans / LGV's			HGVs			Total		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Vehicles per day	5	5	10	5	5	10	2	2	4	12	12	24

4.3.4 The daily traffic attraction during construction is therefore negligible. Trips will be aimed to avoid peak hours wherever possible.

4.3.5 The above construction trip attraction is negligibly higher than the current daily trip attraction, the number of HGVs is however lower.

- 4.3.6 It should be noted that a worst-case scenario has been provided and construction trip activity will be dependent on activities on site.

4.4 Proposed Development Operational Trip Attraction

- 4.4.1 Table 4.4 below illustrates the anticipated maximum vehicle attraction per day during the operational phase of the Proposed Development. The numbers account for Site operatives, deliveries, and any required material removal from Site.
- 4.4.2 The numbers have been supplied by Sirus within their Planning Statement and are based on a daily average of 3 cars, 2 vans, and 4 HGV trips to the Site.

Table 4.4 – Operational Vehicle Movements

	Cars			Vans / LGV's			HGVs			Total		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Vehicles per day	3	3	6	2	2	4	4	4	8	9	9	18

- 4.4.3 The daily traffic attraction during operation is therefore also negligible. Trips will be aimed to avoid peak hours wherever possible.
- 4.4.4 The above operational trip attraction is lower than the current daily trip attraction, the number of daily HGVs is also lower.

4.5 Net Development Effect

- 4.5.1 The net development effect is shown at Table 4.5 below.

Table 4.5 – Net Development Effect

Construction Traffic									
	Cars / Vans / LGV's			HGVs			Total		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Vehicles per day	+5	+5	+10	-3	-3	-6	+2	+2	+4
Operational Traffic									
	Cars / Vans / LGV's			HGVs			Total		
	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Vehicles per day	0	0	0	-1	-1	-2	-1	-1	-2

4.5.2 As detailed above, the Proposed Development will result in a daily increase of 4 cars/vans during the short-term construction phase of the HPF. This is a negligible increase and based on a worst-case scenario in terms of maximum number of vehicle movements varying through the construction phase based on construction activities on site. A reduction in HGVs will be experienced.

4.5.3 The above operational trip attraction is lower than the current daily trip attraction, the number of daily HGVs is also lower.

4.6 Access Road Width

4.6.1 As detailed above, the Proposed Development will result in a daily increase of 4 cars/vans during the construction phase of the development. This is a negligible increase. A reduction in HGVs will be experienced.

4.6.2 As detailed at Section 3.2, two cars/small vans will be able to pass at low speed along the private access road without any widening.

4.6.3 A reduction in the Site trip attraction, including the number of HGVs will occur once the HPF is operational.

4.6.4 There is therefore no reason to widen the private access road, as the likelihood of HGVs needing to pass is low, and even lower than existing. Further, in regard to HGV traffic, the Applicant has developed the Delivery Management Plan that will ensure that conflict between HGVs accessing and leaving the Site will not arise and this represents a significant improvement to the management of HGV traffic currently using the Site.

4.7 Section Conclusions

- 4.7.1 The assessment shows that the potential increase to traffic as a result of the Proposed Development will result in a negligible increase in cars/vans during the construction phase and a reduction overall during the operational phase.
- 4.7.2 The number of HGVs accessing the Site will also reduce and so widening of the private access road is not required. A Delivery Management Plan (provided in Appendix 3) will be implemented to reduce the likelihood of HGVs meeting each other on the narrow section of the private access road. There is good visibility from the access gates to the ghost island right turn lane and this will be further improved through localised branch trimming. Signage will be provided at the site entrance to direct HTT leaving the Site to give priority to incoming HTTs. A speed limit of 10mph will be set for all Site traffic using the private access road.
- 4.7.3 The Applicant has also developed a Delivery Management Plan that will control traffic movements during the construction, operational and decommissioning phases of the Proposed Development to ensure that Site movements on the Site and the private access road are safe and managed.
- 4.7.4 The planning application therefore accords with adopted local policy.

5.0 JUNCTION CAPACITY ASSESSMENT

5.1 Introduction

- 5.1.1 The assessment in Section 4.0 identifies that the net traffic effect of the proposed development is negligible at the Central Avenue / Site Access junction.

5.2 Capacity Analysis

- 5.2.1 Given the negligible peak hour traffic effect of the Proposed Development no junction capacity testing has been undertaken.

5.3 Effect on Road Safety

- 5.3.1 Section 2.7 reviews the collision records from the most recent five years available. It concludes that there does not appear to be any particular pattern of collisions.
- 5.3.2 The effect of the Proposed Development traffic is not likely to materially worsen the occurrence or materially affect the pattern of collisions on Central Avenue.
- 5.3.3 There is expected to be only a negligible development traffic impact at the Site Access and so there is expected to be a negligible effect on road safety.

5.4 Section Conclusions

- 5.4.1 Given the negligible development effect, no junction capacity testing has been undertaken.
- 5.4.2 There does not appear to be any particular pattern within the recent collision records, and the effect of the Proposed Development traffic is not likely to materially worsen the occurrence or materially affect the pattern of collisions in the vicinity of the Central Avenue Access Junction.
- 5.4.3 Overall, the scale of residual impact cannot be considered to be severe when viewed in the context of the Neath Port Talbot Local Development Plan 2011 to 2026 (January 2016) Policy TR 2.
- 5.4.4 Overall, the traffic effect of the Proposed Development is acceptable.

6.0 SUMMARY AND CONCLUSIONS

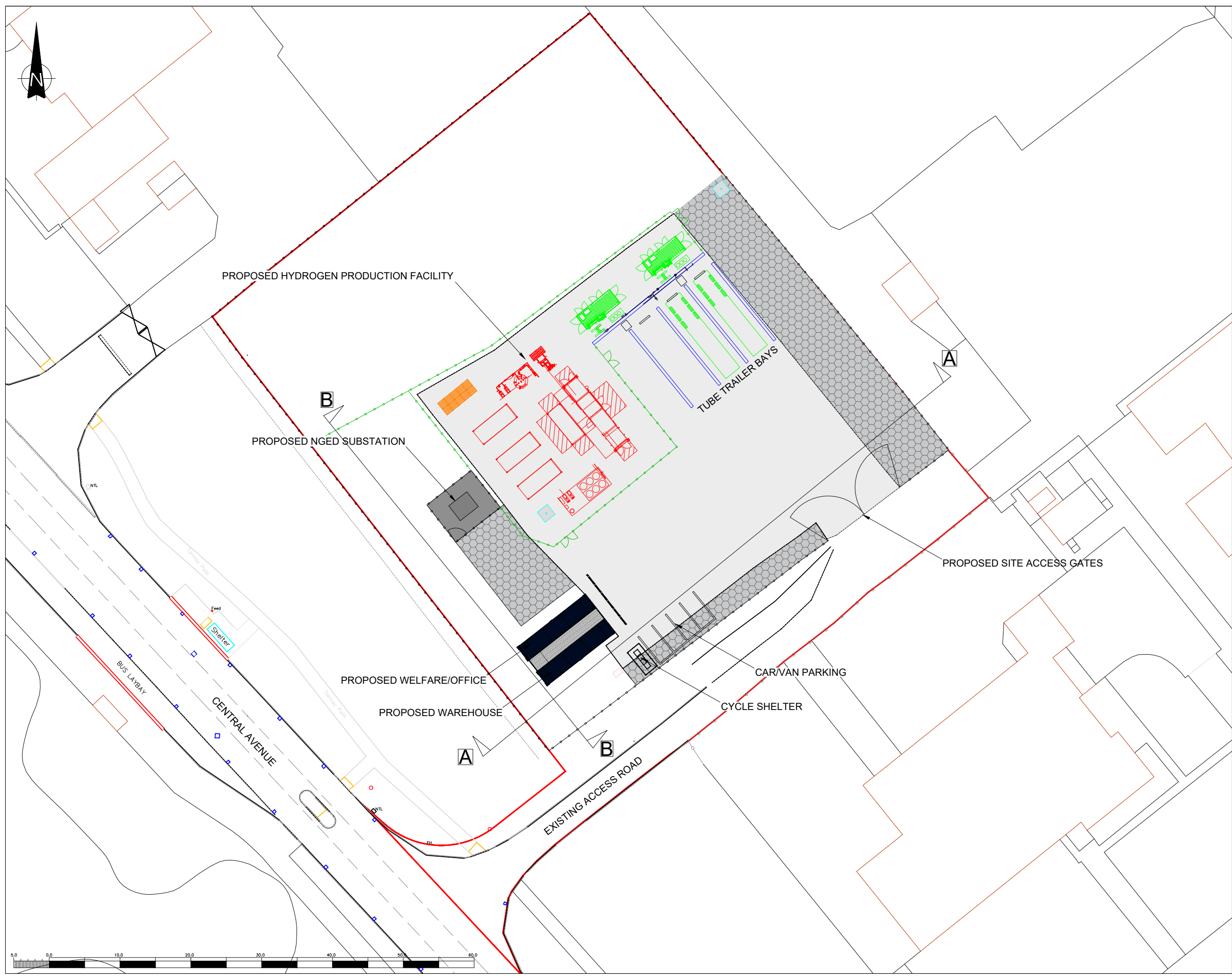
6.1 Summary

- 6.1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by Sirius Planning Limited on behalf of Protium Green Hydrogen Supply Limited (The Applicant), in relation to a proposed Hydrogen Production Facility at Central Avenue, Baglan, Port Talbot.
- 6.1.2 The Proposed Development is for a hydrogen production facility consisting of: -
- An Electrolytic Hydrogen Production Facility and associated compression and storage
 - A Hydrogen Tube-Trailer Filling Station (3 bays).
- 6.1.3 The Proposed Development will produce up to 960kgs of green hydrogen per day, which will be transported offsite to regional customers. It is estimated that the hydrogen produced by the HPF will abate approximately 3,000 tonnes of CO₂ per year.
- 6.1.4 The Site is surrounded by a pedestrian network that includes facilities, but there is a limited residential catchment within walking distance.
- 6.1.5 The area local to the Site is conducive to walking and cycling, with good opportunities for staff to make their journeys by foot and by cycle.
- 6.1.6 The bus stops local to the Site provide access to / from a variety of destinations, with frequent services.
- 6.1.7 Baglan Station is also within walking distance of the Site; some longer journeys to/from the Proposed Development can be made by train, with the connection between the station and the Site being made by foot.
- 6.1.8 The Site has a prominent location relative to the local highway network, and the recent local collision records indicate that there is no existing road safety problem in the vicinity of the Site.
- 6.1.9 Overall, the Site has a good level of accessibility by all relevant transport modes.
- 6.1.10 The Proposed Development will be accessed via the existing private access road from Central Avenue.
- 6.1.11 Swept path analysis shows that the access arrangements and layout of the Proposed Development are suitable for the largest vehicles that are expected to use the Site, an HTT.
- 6.1.12 The proposed on-site parking will be sufficient.
- 6.1.13 The assessment shows that the potential increase to traffic will be negligible during construction and operational phases. It should be noted that the Site is permitted for a B8 use which could generate more vehicle movements than those being proposed.

6.2 Conclusions

- 6.2.1 Overall, the scale of residual impact cannot be considered to be severe.
- 6.2.2 The Proposed Development is shown to satisfy local policy and there are therefore no highways and transport reasons to refuse this planning application.

APPENDIX 1 – SITE LAYOUT



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NOTES

1. SEE DRAWING NUMBER PRO1013/01/06 FOR SECTIONS

KEY

- PLANNING APPLICATION BOUNDARY
- EXISTING 1.8m HIGH HERAS FENCE
- EXISTING 2.4m HIGH PALISADE FENCE
- PROPOSED 2.4m HIGH PALISADE FENCE
- PROPOSED ARMCO BARRIER
- EXISTING TARMAC
- PROPOSED CONCRETE
- EXISTING PERMEABLE AREAS

REV	DESCRIPTION	DATE	BY

CLIENT

PROTIUM

sirius Planning

4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

JOB TITLE

RE PLANT, PORT TALBOT
PROPOSED HYDROGEN
PRODUCTION FACILITY

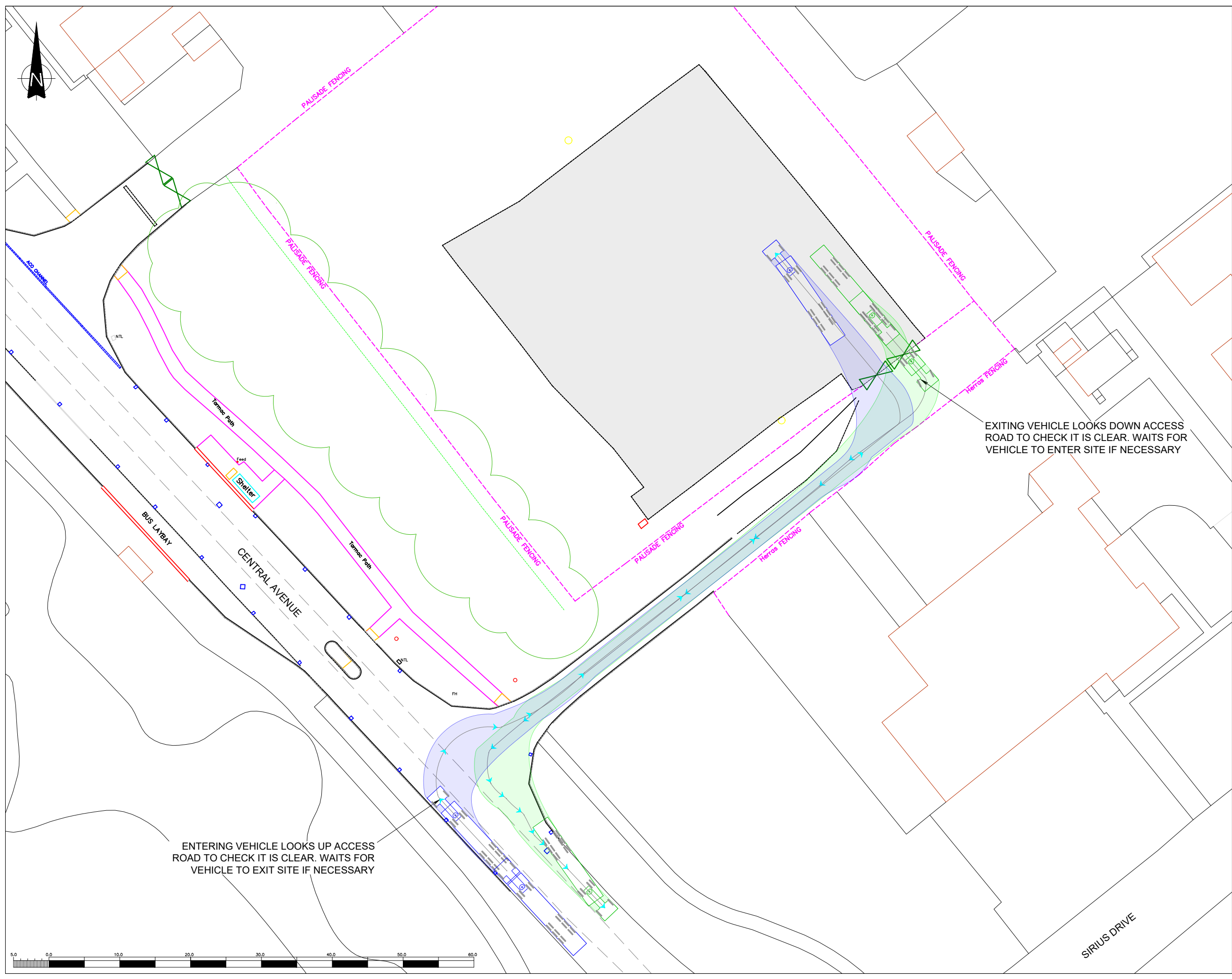
DRAWING TITLE

PROPOSED SITE LAYOUT

DRAWN	DATE	APPROVED	DATE
S.T	31/3/2025	F.W	31/3/2025

SCALE	SHEET	DRAWING NUMBER	REVISION
1:500	A3L	PRO1013/01/03	0

APPENDIX 2 – SWEPT PATH ANALYSIS



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NOTES

KEY

REV	DESCRIPTION	DATE	BY

CLIENT

PROTIUM

sirius Planning

4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

JOB TITLE

RE PLANT
PORT TALBOT

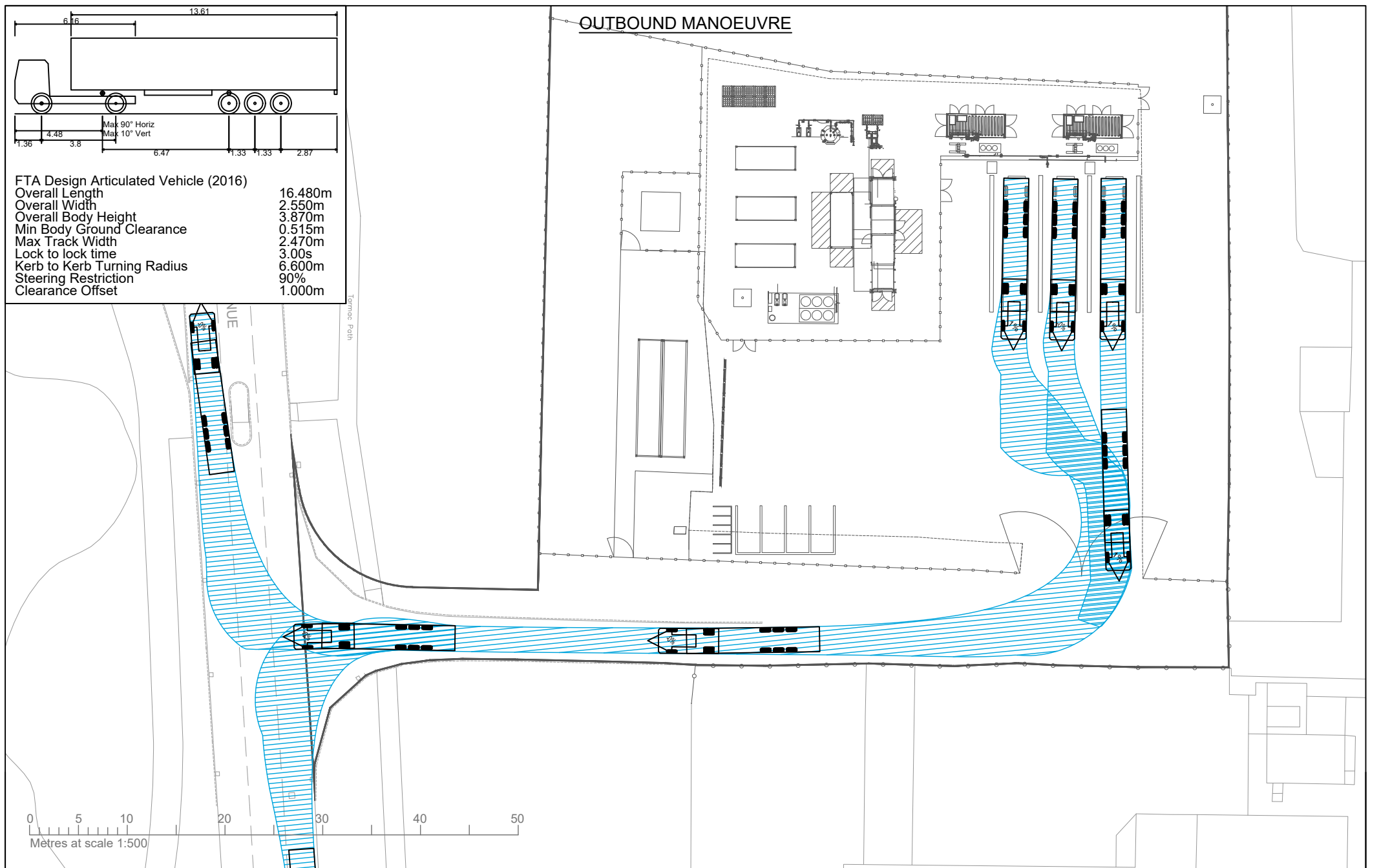
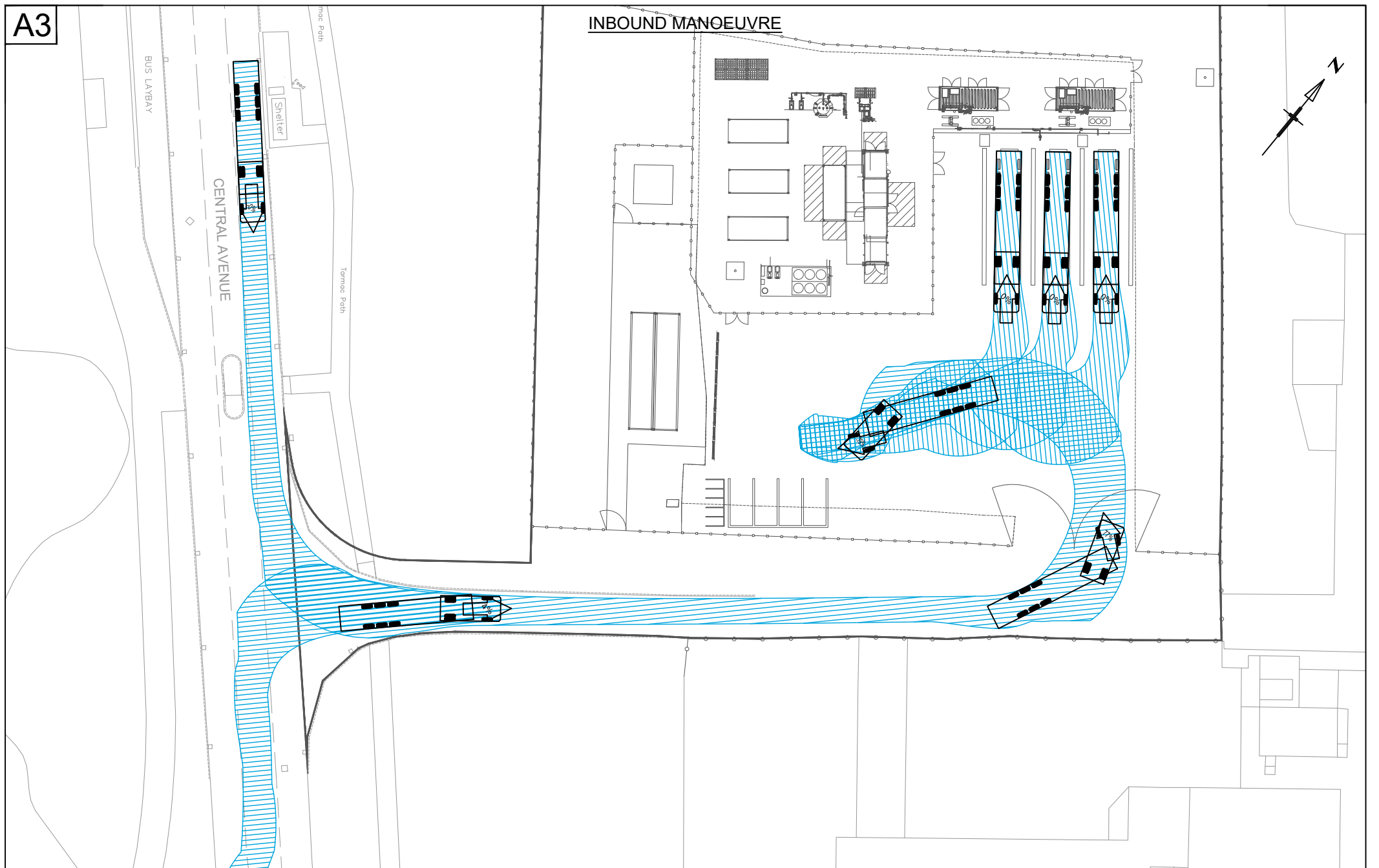
DRAWING TITLE

PROPOSED SITE LAYOUT

DRAWN	DATE	APPROVED	DATE
S.T	28/3/2025	D.B	28/3/2025

SCALE	SHEET	DRAWING NUMBER	REVISION
1:500	A3L	PRO1013/01/90	0

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		SIRIUS PLANNING		1:500	MARCH 2025	
		project		drawn by	checked by	
		PROPOSED DEVELOPMENT PORT TALBOT, CENTRAL AVENUE		T.A.S	R.H.L	
		title	drawing number			
		SWEPT PATH ANALYSIS FTA DESIGN ARTICULATED VEHICLE	250541-TR001			
			status	rev.		
			PLANNING			

APPENDIX 3 – DELIVERY AND SERVICING PLAN



Operational Delivery Management Plan

Pioneer 2 Planning Application

MARCH 2025

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

Revision History

Date	Revision	Reason for Issue	Prepared by	Checked by	Approved by	QA by
07/03/2025	00	Internal Review	PD	WS	NB	NB

Abbreviations

Abbreviation	Description
HPF	Hydrogen Production Facility
HTT	Hydrogen Tube Trailer
HTTFS	Hydrogen Tube Trailer Filling Station

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

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1 INTRODUCTION

1.1 STATEMENT PURPOSE

This Operational Delivery Management Plan has been prepared by Protium Green Hydrogen Supply Limited (PGHS Ltd.) for Pioneer 2, a development proposal (collectively referred to as the Proposed Development) consisting of the following elements:

- An Electrolytic Hydrogen Production Facility (HPF) and associated compression and storage.
- A Hydrogen Tube-Trailer Filling Station (HTTFS).

On the 14th of January 2025, Protium met with Nicholas Waters and Matthew Griffiths of Neath Port Talbot Council to discuss site access at the Proposed Development. During this meeting, Protium proposed a traffic management system for Hydrogen Tube Trailers (HTTs) arriving and leaving the Site. This Operational Delivery Plan forms an Appendix to the Transport Statement attached to the Planning Statement and following planning award it will form a standalone document that will be retained within the Site file and used on a day to day basis to manage traffic flows to and from the Site..

Following this meeting, an abridged Transport Statement was issued to Matthew Griffiths and Nicholas Waters, detailing the Site access proposals. Nicholas Waters later confirmed in his response (24th of February 2025) that the proposed traffic management plan could be accepted in principle, subject to the submission of an Operational Delivery Management Plan. Therefore, the purpose of this Statement is to stratify this request by addressing the following key topics:

- **Delivery Timeslots** - The site is accessed off a Safe Route to School and therefore deliveries should avoid times of school commute.
- **Commercial Deliveries** - How commercial deliveries will be managed to avoid any commercial delivery vehicle waiting on the public highway.
- **Internal Routing** – The route delivery vehicles will take within the site, ensuring they can enter and exit in a forward gear.
- **Service Yard Management** - How delivery vehicles will be managed in the service yard area.
- **Parking and Holding Areas** – Allocation of offsite parking/holding areas should two vehicles arrive at the site outside of their permitted slot
- **Site Coordinator** - Nomination of a coordinator to operate and control the Delivery Management Plan.

Full details of the Proposed Development and a Site description are provided in the planning statement and accompanying appendices so will not be repeated here.

This Delivery Management Plan has been developed alongside and has been informed by the Transport Statement that accompanies the Planning Application. As a result, the approach to the management of vehicle's accessing the Site has changed particularly as traffic data has not been obtained for the private access road and the access junction with Central Avenue. The findings of the Transport Statement are that additional HTT movements can be accommodated at the Site based on the number of HGV' s that are currently using the Site and the number of vehicles that the Site would generate in the event that it was used for more intensive B8 industrial uses that would not require a bespoke planning permission

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

2 SITE OPERATION

The levels of traffic generated by the Proposed Development are detailed below

2.1 HOURS OF OPERATION

Once commissioned the HPF will run for twenty-four hours, seven days a week, except during shutdown periods. There will be two planned shutdown periods annually.

2.2 OPENING HOURS – HYDROGEN TUBE TRAILERS

Hydrogen Tube Trailers will be able to access the Site on a twenty-four-hour basis. However, HTT movements to and from the site will only be scheduled for before 08.00, between 10:00 and 14:00, and after 15:30, in order to avoid peak traffic periods.

2.3 OPENING HOURS – COMMERCIAL VEHICLES

The Site will only be available for routine deliveries of consumables and spares for example between the hours of 07.00 am to 19.00. Commercial deliveries will typically be pre notified to ensure that vehicles do not arrive when HTTs are expected to leave or when there is due to be a change in shifts.

2.4 STAFF MOVEMENTS

The Site will be staffed on a three shifts per day basis typically between 07:45 and 17:00.

2.5 VEHICLE MOVEMENTS

2.5.1 Construction Phase

Table 1 below illustrates the anticipated maximum vehicle generation per day during the construction phase of the Proposed Development. The numbers account for construction worker movements and deliveries to site over a six-month construction period.

Vehicle Movements Per Day	Cars	Vans / SGVs	HGVs	Total
Construction Phase (Six Months)	10	10	4	24

Table 1: Number of Vehicle Movements Per Day - Construction Phase

An anticipated maximum of 24 trips per day will be required during the construction phase,

2.5.2 Operational Phase

Table 2 below shows the anticipated maximum vehicle movements per day in the operational phase of the Proposed Development. The numbers account for site operatives, deliveries and any required effluent removal from site.

Vehicle Movements Per Day	Cars	Vans / SGVs	HGVs	Total
Operational	6	4	8	18

Table 2: Number of Vehicle Movements Per Day - Operational Phase

A maximum of 18 trips per day will be generated during the operational phase of the Proposed Development. Further information is provided in the Transport Statement attached to the Planning Statement.

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3 DELIVERY MANAGEMENT PLAN

3.1 DELIVERY COORDINATOR

A dedicated Delivery Coordinator will be appointed to oversee and enforce the Delivery Management Plan, ensuring smooth and efficient site operations. Their responsibilities will include scheduling and managing delivery slots, maintaining clear communication with drivers and logistics partners, monitoring compliance with the plan, and promptly addressing any unplanned delivery issues to minimise disruptions.

The Delivery Coordinator will monitor speeding incidents, and drivers found to be speeding will be addressed accordingly. Records of these instances will be maintained, and if speeding persists, appropriate disciplinary action will be implemented. The Delivery Coordinator will also ensure that visibility between the top and bottom of the access road remains unobstructed. A visual inspection of the access road will be made every day to ensure sight lines are maintained. If any reduction in visibility is noted, necessary action will be taken to trim or lop any branches on the southern end of the woodland plantation (tree line along the southwestern boundary of the Site).

3.2 DELIVERY SCHEDULING

Deliveries to the Site will be carefully managed through a pre-scheduled allocation of time slots to minimise disruption and ensure efficient operations. No deliveries will be scheduled during peak drop-off and pick-up periods. Instead, deliveries will be restricted to designated hours outside of these times, specifically before 08:00, between 10:00 and 14:00, and after 15:30 as referred to above. This approach is intended to reduce traffic impacts and ensure that conflicts along the private access road are avoided. The Delivery Coordinator will remain in contact with all HTTs to ensure that any deviations to planned time slots are managed to avoid conflict on the private access road.

3.3 TRAFFIC & WAITING MANAGEMENT

Commercial deliveries will be carefully managed to prevent conflict on the private access road. Commercial deliveries will be given a specific time slot to arrive at Site that avoids the planned arrival/departure of HTTs. Upon arrival at the Site drivers will be required to report to the Delivery Coordinator and their vehicles will be directed to an appropriate holding area within the Service Yard to avoid disrupting the normal operation of the Hydrogen Filling Station. Wait times will be minimised where possible.

3.4 ONSITE VEHICLE ROUTING & FORWARD GEAR ENTRY/EXIT

HTTs will enter the HPF service yard in a forward gear and pass beyond the tube trailer bays. Each driver will be informed which of the tube trailer bays they are required to access before they arrive at the Site by the Delivery Coordinator to avoid wait times in the Service Yard. HTTs will then reverse into the designated bay under the supervision the Delivery Coordinator. While HTT are reversing cones will be placed across the access gate to prevent conflicts with vehicles entering the Site. Incoming vehicles will be able to wait outside the Site entrance in the wider lower section of the access road so as not to block the access for other users.

3.4 SERVICE YARD MANAGEMENT

The Service Yard will feature clearly marked unloading zones to facilitate efficient vehicle turnaround and minimise delays. The Delivery Coordinator will guide HTTs to their designated delivery bay, ensuring smooth and coordinated movements. The Service Yard will include safety barriers and clear walkways on Site to ensure the safety of personnel on the Site.

3.5 SIGNAGE & ACCESS CONTROL

A comprehensive signage scheme will be implemented along the private access road to ensure the safe and efficient movement of HTTs. Clear signage will be installed at the exit gates and on the private access road to notify HTT drivers that HTTs and other vehicles entering the Site are to be given priority over those exiting the Site. A waiting area will be marked immediately outside of the site gates where HTT's will be required to hold position in the unlikely event that a HTT or other vehicles is entering the site.

The Applicant will engage with the other users of the access road so that they are aware of this Delivery Plan and that all users can use the private access road safely. The Delivery Co Ordinator will keep other users of the private access road updated regarding vehicles movements and ensure there are lines of communications between all users.

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3.6 STAFF TRAINING

New staff will be trained in the operation of this Delivery Plan by the Delivery Co Ordinator to ensure all Site operatives are aware of how the Delivery Plan is to be applied, and it will form part of the new staff site induction. This will provide redundancy in the event that the Delivery Co Ordinator is ever unavailable. It will be the responsibility of the site manager to record that the induction includes the operation of the Delivery Plan. New staff will be supervised until considered competent to manage the Delivery Plan.

3.7 HTT TRIP RESTRICTION COMPLIANCE

HTT arrivals will be restricted to a maximum of 4 per day to minimise conflict on the private access road. A log of all HTT arrivals and departures will be maintained to ensure compliance with this restriction. Any deviations from the agreed conditions will be documented, reported, and managed appropriately. Any instances where the Delivery Plan fails to operate effectively will be recorded and the matter investigated by the Site Manager. If required HTT drivers will be given refresher training to ensure that the requirement and operational procedure within the Delivery plan is understood and complied with. A record of all training will be maintained in the training log for each employee.

3.8 HTT MANAGEMENT

HTT'S will be managed to avoid them returning to the Site in the unlikely event that the Site is unavailable and when arrivals times would put them in conflict with other HTTs or staff commercial movements. Due to the nature of hydrogen supply and the tonnages that will be supplied to customers, HTT's will be able to remain at the customers site rather than return when the Site is closed or if their scheduling would put them in conflict with HTT's that are schedule to leave the Site. This gives the Delivery Co Ordinator significant control and flexibility over when HTT's return to Site and will allow conflict on the private access road to be avoided.

Protium will receive notice of when customers require additional supplies of Hydrogen so the scheduling of vehicles, their delivery routes and delivery times will be managed by the Delivery Co Ordinator.

4 CONCLUSION

This Operational Delivery Management Plan has been developed to address the concerns of NPTC highways department as a result of the limited width of the private access road that provides access to the Site. In order to minimise vehicles entering and leaving the site meeting on the restricted width section of the private access road, HTT's will be scheduled to arrive by the Delivery Co Ordinator to avoid peak times on Central Avenue particularly during school drop off and collection times.

The delivery Co Ordinator will manage scheduling and will be responsible for the coordination of HTTs movement in the Sites Service yard to ensure that HTT arrive and enter their designated filling bay quickly and efficiently. Vehicle numbers have been established based on the max tonnage of hydrogen that can be produced by the Proposed Development and have been established by the Trasport Statement of which this Delivery Plan is an Appendix.

The Delivery Co Ordinator will schedule all HTTS arriving and those exiting the Site sop that conflicts on the private access road are avoided. The Delivery Co Ordinator will be in contact with all HTT drivers to ensure any changes to scheduling or delays en-route are accounted for and scheduling updated as a result. Should HTTS need to remain at the customers site then this will be communicated to the HTT drivers and the customer.

Staff will be trained in the operation of the Delkivery Plan, so they remain familiar with it. Further there will be ongoing review to ensure that the Delivery Plan is applied correctly, that any failures in procedures are identified recorded, and the Delivery Plan/staff training is addressed to avoid future occurrences as with any Site operational procedures.

This Operational Delivery Plan ensures that Pioneer 2 can operate safely and that HTT and HGV do not meet on the private access road. The structured approach to scheduling, traffic management, and compliance monitoring will facilitate smooth operations while maintaining safety and regulatory compliance.



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