



Pennant Walters Ltd

Construction Traffic Management Plan

Appendix 12B: Outline Construction Traffic Management Plan

November 2025



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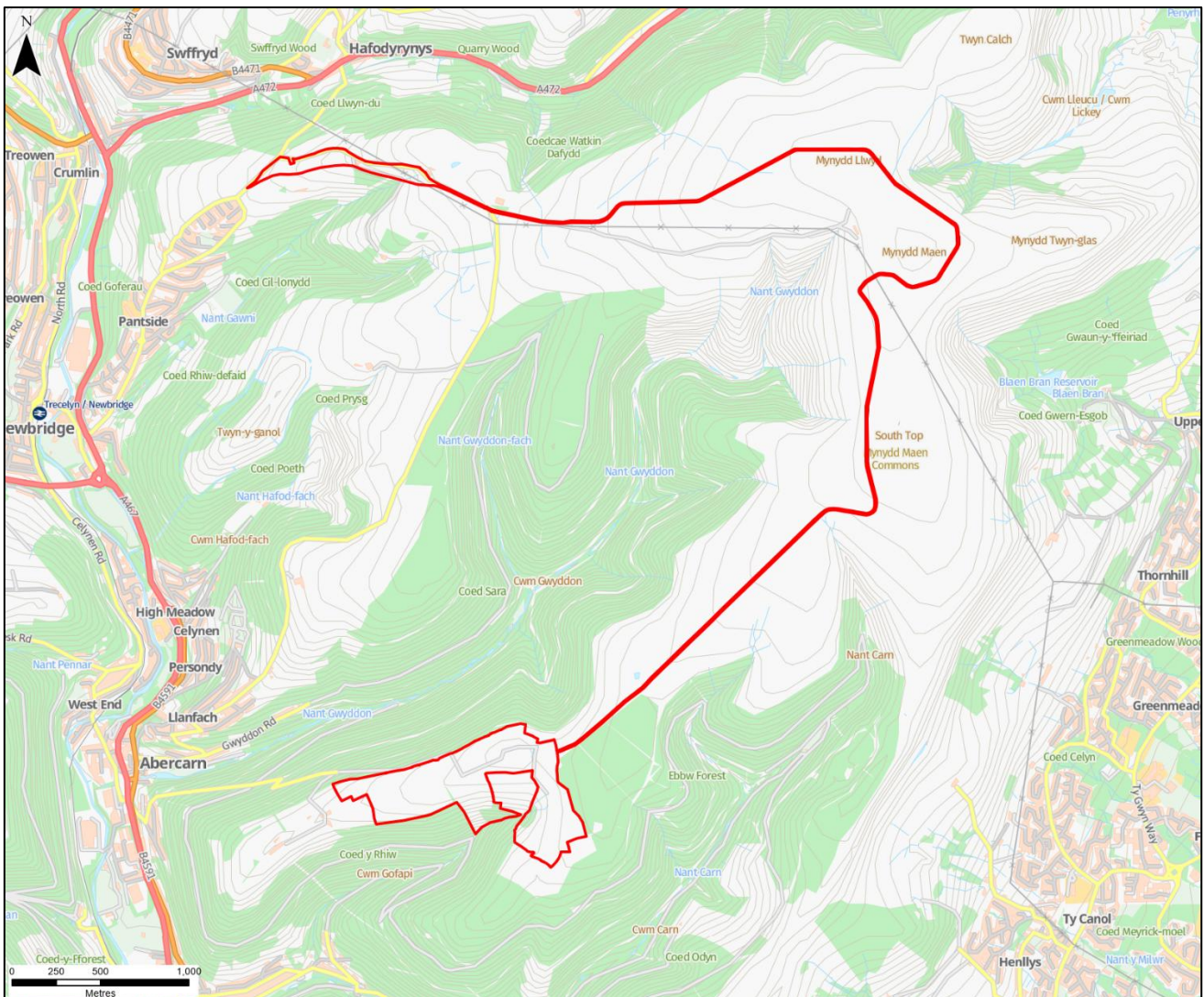
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1 Introduction

1.1 Overview

- 1.1.1. WSP UK Limited has been appointed by Pennant Walters Limited to develop an Outline Construction Traffic Management Plan (OCTMP) for the proposed construction of a wind farm of up to three turbines within Rhyswg Wind Farm, also referred to as ‘the Proposed Development’.
- 1.1.2. The Proposed Development is located on elevated ground to the east of Abercarn (the ‘Site’). The Draft ES and this OCTMP, assumes that an access to the Site from the highway will be facilitated as part of the adjacent Mynydd Maen Wind Farm (Reference: DNS/3276725) development which connect to the public highway at an unclassified road. The location of the Proposed Development is shown in Plate 1-1.

Plate 1-1: DNS Planning Application showing access between Site and Public highway.



- 1.1.3. This OCTMP presents the proposed construction traffic and Abnormal Indivisible Load (AIL) routes and proposed measures/mitigation from the effects of construction traffic. Potential routes for traffic generated by the Proposed Development include elements of the Strategic Road Network (SRN) including the A4042 and the M4; these roads within the scope of the project are the responsibility of South Wales Trunk Road Agent (SWTRA) within Wales. Connecting the SRN and the Site are several local highway network roads which could also be used. The A4046 and a section of the A467 are the responsibility of Torfaen County Borough Council (TCBC) other sections of the A467 between Crumlin and M4 junction 28 are the responsibility of Caerphilly County Borough Council (CCBC). See **Section 3** for further details.
- 1.1.4. All relevant highway authorities will be contacted as part of the consultation of the Proposed Development in order to gain feedback on the suitability of the proposed construction and abnormal load access routes and proposed traffic management measures.
- 1.1.5. Following agreement of the construction access routes and traffic management measures, Pennant Walters Ltd would be responsible for arranging all permits/licenses necessary to make any changes to public highways or Public Rights of Way (PRoWs).
- 1.1.6. At this stage of the project, the adopted construction programme, details of the appointed site contractor, the general construction materials suppliers and the origin of the wind turbine components are not currently available. Assumptions have been made with regard to the timing of works and likely routes to the Site, which will be confirmed once the aforementioned service providers have been appointed. As a result, this OCTMP is a working document which sets out the principles by which traffic travelling to the Site should be managed, but it will require to be finalised following the appointment of the Principal Contractor and relevant suppliers.

1.2 Purpose of this Report

- 1.2.1. This OCTMP identifies measures which could be implemented to provide mitigation for the traffic generated during the works programme to ensure the likely impact on existing road users could be minimised through a combination of management and mitigation measures contained within this document.
- 1.2.2. The primary objectives of this OCTMP therefore are to:
- Ensure the movement of people and materials in a safe, efficient, timely, and sustainable manner;
 - Keep construction traffic to a minimum during peak network periods to reduce the impact on the highway network;
 - Ensure that the impact and disruption on local communities is minimised;
 - Minimise vehicle trips where possible; and
 - Limit the impacts on the natural and built environment.

1.3 Reprt Structure

- 1.3.1. The remainder of this report is structured as follows:
- Section 2: Project description;



- Section 3: Access routes;
- Section 4: Policies, Procedures, and due Process;
- Section 5: Traffic management measures; and
- Section 6: Management Structure.

1.4 Consultation

- 1.4.1. All relevant highway authorities and stakeholders will be consulted on the scope and proposals related to HGVs movements and Abnormal Indivisible Load (AIL) delivery routes during the statutory consultation process. Responses received will be used to further develop this OCTMP. A summary of the relevant responses received and confirmation of how these will be addressed, will be captured and presented in this section.

2 Project Description

2.1 Overview

- 2.1.1. The Proposed Development is to construct and operate a wind farm of up to three turbines and associated infrastructure including access tracks, foundations, cabling and substation.
- 2.1.2. The construction period for the wind farm is expected to last approximately 98 weeks (22 months). The construction process will consist of the following principal activities:
- upgrading of existing tracks and construction of new access tracks and passing places inter-linking the turbine locations and substation; this will require importing suitable roadstone;
 - potential remedial works to the public highway to facilitate delivery of turbines which will be confirmed following discussion with the Highways Authority(s);
 - formation of site compounds including hardstanding and temporary site office facilities;
 - construction of crane hardstanding areas to facilitate erection of turbines;
 - construction of turbine foundations and transformer bases where required by the selected turbine;
 - construction of a site substation and transformer building;
 - excavation of trenches and cable laying adjacent to site roads;
 - connection of on-site distribution and signal cables; and
 - delivery and erection of wind turbines.
- 2.1.3. Many of these operations will be carried out concurrently to minimise the overall length of the construction programme. In addition, the Proposed Development will be phased as such that at different parts of the Site, the civil engineering works will be continuing whilst the wind turbines are being erected.

2.2 Project Timescales

- 2.2.1. The current timescales for the project are based on an expected site mobilisation and start date of April 2029 and the main works are proposed to start in June 2029. The project completion date is expected to be January 2031.

2.3 Vehicle Classification

- 2.3.1. A number of vehicle types are expected to be used during construction, as outlined in **Table 2.1** below,

Table 2. 1 Typical Construction Vehicle Classification

Lights (LGVs)	Medium (MGVs)	Heavy (HGVs)	Abnormal Load Transporter
Car	15t & 9T Excavator	40 Tonne Truck	Wind turbine blade transporter
Van	Winch Tractor	Low Loader	Wind turbine tower transporter
4x4 Site Vehicle	Tractor and Trailer	Flatbed Truck	Transformer transporter
4x4 Transit	10 Tonne Truck c/w Hiab	Concrete Wagon	250t Crane
Welfare Vehicle	Merlo 40/30	60t Crane	

2.3.2. The vehicles and specifications provided above have been identified based on similar projects by scale and type. These assumptions are subject to final confirmation following appointment of the Principal Contractor.

2.4 Traffic Generation

2.4.1. Where possible, construction operations would be carried out concurrently, thus minimising the overall length of the construction programme. An indicative 98 week (22 months) construction programme (commencing in 2029) has been assumed for the purposes of this assessment.

Wind Farm

2.4.2. As a worst-case scenario, it is assumed that 100% of aggregates will be sourced from off-site via road. **Table 2.2** shows the predicted traffic generation during construction of the wind farm.

Table 2. 2 Predicted traffic generation during construction phase - wind farm

ACTIVITY	Total Loads	Total Trips (Two way)
Site Mobilisation		
Delivery of Plant and Equipment	30	60
Construction Compound		
Delivery of Compound General Equipment	20	40
Track and Hardstanding Areas		
Delivery of Road Stone for Access Tracks	1574	3149
Delivery of Road Stone for Areas of Crane Operation	520	1040
Turbine Foundations		

Delivery of Backfill Stone for Turbines	30	60
Delivery of Concrete for Turbines	213	426
Substation Construction		
Delivery of Road Stone for Substation	16	32
Delivery of concrete for substation	6	12
Trenches and Cabling		
Delivery of Sand for cable trench	57	114
Turbine Delivery and Install		
Delivery and Removal of Mobile Crane	24	48
Delivery of Turbines	30	60
Site Restoration Turbine Fit and Commission		
Removal of Plant and Equipment - phases throughout construction	30	60
Removal of Plant and Equipment and Commission Equipment	30	60
Total	2,580	5,160

Construction Traffic Distribution

- 2.4.3. Based on the construction program there would be a peak of 50 HGV movements two-way (25 in, 25 out) during a 12-hour weekday. This peak is predicted to occur during month 10 (January 2030) and therefore only for 4 weeks of the total 22-month construction programme.
- 2.4.4. The final construction route is subject to agreements to source of aggregate, route selection identified by the appointed contractor and agreement by relevant local highways authorities. For the purposes of the Traffic and Transport assessment presented in the Draft ES, it has been assumed that construction traffic would be distributed using a 50% split between Trefil Quarry and Hafod Quarry. This results in 25 HGVs routing northbound along the A467 and the A4046 to Trefil Quarry and 25 HGVs routing southbound on the A467 towards Hafod quarry.
- 2.4.5. **Table 2.3** shows the worst-case distribution of the construction traffic (two-way) on the local road network.

Table 2. 3 Predicted peak construction traffic on local roads

Local road	Total loads
A4046, (Ebbw Vale) - (North of Central Avenue)	25
A467, (Swffryd) - (North of Central Avenue)	25
A467, (Pantside) - (South of Central Avenue)	25

2.5 Working Hours

- 2.5.1. At this stage, subject to caveats noted in **Chapter 4: Development Description**, it is assumed that normal working hours would be 07:00 to 19:00 hours Monday to Friday and 07:00 to 13:00 hours on Saturday. No work will be undertaken on a Sunday.

3 Access Routes

3.1 Introduction

- 3.1.1. The following considerations have been used to develop a construction vehicle routing strategy:
- Use of the shortest route available from the location of the access point to the Strategic Road Network (SRN);
 - Use of a sliding scale approach with regards to route assignment and road classification, utilising the 'A' classified highway network as far as practicable, before resorting to lower classifications of highway only if absolutely necessary;
 - Avoid single carriageway highways where alternatives are available; and
 - Avoid settlements and sensitive receptors where possible.
- 3.1.2. Construction traffic routes selected are presented in **Section 3.3** and are based on providing a route between local quarries to the Proposed Development.

3.2 Site Access

- 3.2.1. The Proposed Development is located on raised ground east of Newbridge with limited access to the Public Highway. Directly adjacent to the Proposed Development site, two wind farms are proposed, Mynydd Maen Wind Farm (Reference: DNS/3276725) and Trecelyn Wind Farm (Reference: DNS CAS-02114-J9X4S6). Proposals within the adjacent Mynydd Maen wind farm application include the provision of a site access point on an Unclassified Road, upgrades to existing access tracks to accommodate site traffic and the provision of new access tracks to accommodate access to all areas of the proposed Mynydd Maen site.
- 3.2.2. Proposals within the Trecelyn Wind Farm development include providing a bypass road of the Old Pant Road/Unclassified Road junction for Abnormal Load delivery vehicles. As part of the Proposed Development, an offline access track is proposed from Old Pant Road provided to a point on the Unclassified Road some 340m west of the proposed Mynydd Maen access. This would allow Abnormal Load delivery vehicles to avoid constrained locations on the Unclassified Road between Old Pant Road and the point of access to the Mynydd Maen development.
- 3.2.3. Whilst the timetable for the adjacent Mynydd Maen and Trecelyn wind farm developments are unclear. It is assumed that access proposals within the adjacent developments will be constructed before works begin on the Proposed Development (Rhyswg Wind Farm). As such, it is assumed that the proposed access tracks for the adjacent Mynydd Maen wind farm scheme and mitigation will be utilised along with the offline access track provided to the south of the Unclassified Road and at the Old Pant Road/Unclassified Road junction (proposed as part of the Proposed Development).

- 3.2.4. The proposed access is detailed within the Mynydd Maen Wind Farm application (DNS/3276725), where Figure 3.7 of the Design and Access Statement¹ and section 10.12 of Volume 2 Chapter 10² of the Environmental Statement present the access design. The Mynydd Maen access and access tracks into the site have been designed to accommodate the swept path of Abnormal Load delivery vehicles, 215m visibility splays are also provided within the design at the access bellmouth.

3.3 Route Options for Construction HGVS

- 3.3.1. For the purposes of assessment, it is assumed that construction materials would be sourced from the two local quarries identified below, located south and north of the Site respectively:
- Route 1: Hafod Quarry, Abercan, Newbridge (directly to the south of the Site); and
 - Route 2: Trefil Quarry (to the North of the Site via the A467 and A4046).
- 3.3.2. Route 1 to Hafod quarry would require construction traffic to route to the A467 via Old Pant Road and Central Avenue then head southbound on the A467 to the roundabout with the B4591 and Coed Celyn Road. Construction vehicles would be required to route via the B4591, Brook Street and Lower Brook Street to the access into the Hafod Quarry site.
- 3.3.3. Route 2 to Trefil Quarry would require construction traffic to route to the A467 via Old Pant Road and Central Avenue then head northbound on the A467 to the A4046 at Aberbeeg. Construction traffic would continue on the A4046 through Cwn and Ebbw Vale to Bryn Serth Road where access to the existing tracks to Trefil Quarry can be accessed via Crown Avenue adjacent to Crown Business Park.
- 3.3.4. Quarry locations and routing options are presented in **Figure 12.2 of Chapter 12: Traffic and Transport** in the Draft ES.

LOCAL Road Network

Unclassified Road

- 3.3.1. The Unclassified Road included within the scope of this assessment includes a section of highway between Old Pant Road and the proposed access provided for the Mynydd Maen Wind Farm site, anticipated to be used for access to the Site. The road is subject to the National Speed limit and is rural in nature. The carriageway width is typically 3m wide and constraints including hedgerow and dry-stone walling are located in proximity to the edge of the carriageway at various sections of the road. A cattle grid is located adjacent to an agricultural property.

Old Pant Road

- 3.3.2. Old Pant is a single carriageway road which is approximately 6m in width. The road routes between an Unclassified Road and Central Avenue in a northeast/southwest alignment. Between the site access and residential properties at Panside, the road is subject to the National Speed Limit. Where

¹ RES Limited. (2024). Environmental Statement, Volume 3, Figure 3.7 (Online) Available at: <https://planningcasework.service.gov.wales/case/CAS-01313-C6S0N8> [Accessed October 2025].

² RES Limited. (2024). Environmental Statement, Volume 2, Chapter 10 (Online) Available at: <https://planningcasework.service.gov.wales/case/CAS-01313-C6S0N8> [Accessed October 2025].

Old Pant Road passes through residential areas through Panside to Central Avenue the road is subject to a 20-mph speed limit.

- 3.3.3. Throughout the residential section of Old Pant Road streetlighting is provided and footways are located on both sides of the carriageway. Residential properties and driveways front onto the road and bus stops are located intermittently along the road. A short section of Old Pant Road routes along the eastern boundary of Panside Primary School, this section is subject to traffic calming measures which are provided within the carriageway including speed humps and a buildout with priority control of traffic.

Central Avenue

- 3.3.4. Central Avenue is a single carriageway road approximately 6m wide, subject to a 20mph speed limit and approximately 620m long in a south to north alignment from A467/Central Avenue junction to Central Avenue/ Old Pant Road roundabout. There is streetlighting and footways on both sides of the road. For the majority of its route, Central Avenue is fronted by residential properties on either side of the road accessed through dropped kerb driveways and private accesses. There are buildouts at sections along the road and on street-parking provisions. There are two southbound bus stops are provided approximately 70 meters and 265m from A467 Pant Road/ Central Avenue junction.

A467

- 3.3.5. Within the scope of assessment, the A467 routes in a north/south alignment between Junction 28 of the M4 and the A467/A4046/B4471 junction at Aberbeeg. The road is a dual carriageway between Junction 28 of the M4 and the A467/B4251 junction at Crosskeys and is a single carriageway for the remaining route through Abercarn, Newbridge and Crumlin to Aberbeeg. The road is subject to various speed limits along its route but is predominantly subject to the National speed limit along the dual carriageway section. The speed limit on the single carriageway section is reduced to 20mph within Newbridge. Footways are provided intermittently along the A467, predominantly at locations with settlements.

A4046

- 3.3.6. The A4046 is a single-carriageway road. The A4046 has a north-west/south-east orientation and passes through multiple settlements to the north of the Site including Cwm, Waun-Lwyd and Ebbw Vale. It forms a roundabout junction with the A467/B4471 at its southern extent in Aberbeeg. The A4046 is a key road for accessing the A465 to north and M4 to south and operates under the national speed limit in the vicinity of the site access. The speed limit varies on the A4046 by location (20mph/30mph/40mph/60mph).
- 3.3.7. Footways and street lighting are in place at various locations including Cwm, Waun-Lwyd and Ebbw Vale. Through Waun-Lwyd and Ebbw Vale there are signalised pedestrian crossings and multiple bus stops in place.

Brook Street

- 3.3.8. Brook Street is a single-track unmarked road that served as an access to Hafod Quarry and as a PRow, the northern extent of the road is used exclusively by the Quarry operator. Several Restricted Byways are accessed by Brook Street and wayfinding signs positioned at the left-hand side of the carriageway indicate access to RBW: 339, 338, 328 and 325. At its southern extent Brook Street has traffic calming signs indicating children's movements and a 30mph speed limit.
- 3.3.9. For the majority of the route there are no footways along this street and industrial land use along its length.

Strategic Road Network

- 3.3.10. The Strategic Road Network (SRN) comprises the routes of national strategic importance (motorways and trunk roads).
- 3.3.11. The A4042 and M4 are the strategic roads in the vicinity of the Site, and within Wales are maintained by the South Wales Trunk Road Agent. The M4 is a long-distance route between Swansea and London. The A4042 provides a north-south connection between Newport and the A465 Heads of Valleys Road.

3.4 Routes for Abnormal Roads

- 3.4.1. It is assumed that as the nearest port which can accommodate the delivery of turbine components is the Port of Swansea. It is expected that the Port of Swansea will be used to import all the required turbine components for this project. The Port has accommodated delivery of wind turbine components for other projects within South Wales and is well connected to the SRN with a connection to junction 42 of the M4 via the A483.
- 3.4.2. Based on the AIL access study (**Appendix 12A**), the identified route from Swansea Docks includes the following roads:
- Swansea Docks to Baldwins Crescent;
 - Baldwins Crescent to the A483;
 - A483 to A483/Ffordd Amazon/ Ashleigh Terrace Roundabout;
 - A483 to M4 junction 42;
 - M4 junction 42 to M4 junction 28 onto the A467;
 - A467 to Central Avenue;
 - Central Avenue to Old Pant Road;
 - Old Pant Road onto Unclassified Road; and
 - Site access.
- 3.4.3. The AIL access study (**Appendix 12A**) presents the outcomes of Route Survey Report undertaken by Pell Frischmann which identified the AIL delivery route from Swansea Docks. The Route Survey Report has identified mitigation requirements along the identified delivery route.

4 Policies, Procedures, and Due Process

4.1 Normal Loads

- 4.1.1. Relevant highway authorities will be consulted in relation to this OCTMP, their responses will then be added in **Section 1.4**. Any post-submission actions identified in the consultation process will be considered and actioned where appropriate in due course.

4.2 Abnormal Loads

- 4.2.1. The following is a review of current procedures for the movement of abnormal loads by road. A review of these procedures will be undertaken by the appointed haulage contractor and Pennant Walters Ltd prior to the delivery of the turbines to ensure that the correct procedures are followed, and approvals obtained. Key to the successful management will be early and continuous communication with all relevant local highway authorities.
- 4.2.2. An 'abnormal indivisible load' is defined in the Road Vehicles (Authorisation of Special Types) (General) Order 2003³ as a load that cannot, without undue expense or risk of damage, be divided into two or more loads for the purpose of being carried on a road and that:
- On account of its length or width, cannot be carried on a motor vehicle of category N3 or a trailer of category O4 (or by a combination of such vehicles) that complies in all respects with Part 2 of the Construction and Use Regulations; or
 - On account of its weight, cannot be carried on a motor vehicle of category N3 or a trailer of category O4 (or by a combination of such vehicles) that complies in all respects with Authorised Weight Regulations (or if those Regulations do not apply, the equivalent provisions in Part 4 of the Construction and Use Regulations); and Part 2 of the Construction and Use Regulations.
- 4.2.3. The approved haulage contractor will be required to consult with the appropriate authorities in order to ensure that all relevant permissions are obtained prior to the transportation of any abnormal loads. The responsibility for ensuring that a route is suitable for the transportation of abnormal loads and ensuring the correct notifications are given rests with the haulier.

4.3 Welsh Government

- 4.3.1. As part of the DNS application process, The Welsh Government, as highway authority for the Strategic Road Network in Wales, will provide comment on Abnormal Load routeing proposals and ultimately consider the proposals for approval. Standard planning conditions set out by the Welsh Government as highway authority are provided within the "pulling together" best practice for transporting abnormal load deliveries in Wales, Procedures and Advice Guide (PAG). The standard planning conditions have also been provided directly to the applicant within scoping direction. To allow the Welsh government screen the proposed abnormal load delivery route an Abnormal Load

³ The Secretary of State for Transport. (2003). The Road Vehicles (Authorisation of Special Types). (online) Available at: <https://www.legislation.gov.uk/ukSI/2003/1998/contents/made> . (Accessed October 2025).



Access Study has been prepared (**Appendix 12A**) with provides details regarding the proposed delivery route and outline vehicle specifications. As per requirements within the Pulling together PAG, once appointed, a haulier will screen the full delivery route with the specifications of the final vehicle arrangements.

4.4 South Wales Trunk Road Agent

4.4.1. South Wales Trunk Road Agent (SWTRA) acts as an agent to the Welsh Government and is responsible for maintaining the trunk roads in South Wales. SWTRA also suggests consultation with the police, other highways authorities, bridge and structure owners.

4.4.2. Details of the notification procedures are available at:

- <https://traffic.wales/swtra-street-works-and-abnormal-loads>

4.5 South Wales Police

4.5.1. South Wales Police (SWP) helps to assure the road safety during abnormal load transportation on the roads within South Wales.

4.5.2. Abnormal loads are usually not allowed to travel in South Wales during:

- 07.00 to 09.30 Monday to Friday;
- 16.30 to 19.00 Monday to Thursday;
- 15.00 to 19.00 Friday; and
- hours of darkness.

4.5.3. Information related to notification is available at:

- <https://www.south-wales.police.uk/tua/tell-us-about/avl/v2/what-is-abnormal-load/>

5 Traffic Management Measures

5.1 Local Highway Issues and Constraints

General construction Traffic

5.1.1. WSP undertook a desktop route audit in October 2025 to identify and review local highway issues and constraints for general construction traffic. This included the identification and review of the following potential constraints:

- Height restrictions;
- Weight restrictions;
- Road classification;
- Road layout;
- Existing pedestrian crossing facilities;
- Existing traffic calming features;
- Sensitive receptors adjacent to the highway network;
- Visibility constraints;
- Restricted access;
- Speed limits and traffic speeds;
- Congestion;
- Gradient changes; and
- PRowS.

5.1.2. Based on the criteria above the following issues have been identified for access for general construction traffic:

- A section of traffic calming exists along Old Pant Road outside Panside Primary School. Traffic calming includes a build out with priority control, speed humps and road markings.
- Central Avenue and Old Pant Road route through the Panside which is a predominantly residential area. There is evidence of on-street parking at locations along Central Avenue and Old Pant Road.
- Route 2 to Trefil Quarry requires construction vehicles to travel through a more sensitive section of the A4046 through Ebbw Vale.

5.1.3. Mitigation measures to minimise the impact of construction vehicles are provided within **Section 5.2**.

Abnormal Load delivery Route

- 5.1.4. Constraints and pinch points for the preferred AIL delivery route have been identified within a Route Survey Report (RSR) prepared by Pell Frischmann, the RSR is appended to the AIL study (**Appendix 12A**). The RSR identifies requirements for physical mitigation measures at identified pinch points and summarises suggested actions to be undertaken prior to the start of Abnormal Load Deliveries. Suggested actions include;
- A review of axle loading on structures along the entire access route with the various road agencies is undertaken immediately prior to the loads being transported in case of last-minute changes to structures;
 - A review of height clearances with utility providers and the transport agencies along the route to ensure that there is sufficient space to allow for loads plus sufficient flashover protection (to electrical installations)
 - That any verge vegetation and tree canopies which may foul loads are trimmed prior to loads moving;
 - A review of height clearances with utility providers and the transport agencies along the route to ensure that there is sufficient space to allow for loads plus sufficient flashover protection (to electrical installations)
 - That any verge vegetation and tree canopies which may foul loads are trimmed prior to loads moving;
 - That a review of potential roadworks and or closures is undertaken once the delivery schedule is established in draft form; and
 - That a condition survey is undertaken to ascertain the extents of road defects prior to loads commencing to protect the developer from spurious damage claims.
- 5.1.5. Physical mitigation measures have been identified within the RSR by swept path analysis and they include the provision of road widening/overrun areas outside the carriageway and clearance of street furniture, vegetation and other obstacles.
- 5.1.6. It is expected that as part of the consultation process vehicle specifications regarding abnormal load vehicle weight, vehicle length, vehicle width and vehicle height will be provided to the Welsh Government Highways to allow the delivery route within the scope of the Strategic Road Network to be screened for suitability.
- 5.1.7. The residual suggested actions included within the RSR will be within the scope of the appointed haulier to undertake before deliveries are to commence. Consultation with the relevant local highway authority will be taken to ensure that the delivery schedules, the proposed delivery route and any mitigation measures are agreed before deliveries commence.

5.2 Mitigation Measures

- 5.2.1. To minimise the impact of construction traffic on the local road network and local communities surrounding the Proposed Development, this section sets out mitigation measures which are proposed as part of this OCTMP.
- 5.2.2. Mitigation measures which are additional to this section include construction traffic routing strategies which are set out in **Section 3**. These routing strategies are the principal measures to manage the

impacts of construction traffic. However, there are other mitigation solutions that could be implemented to reduce the impacts on the local highways network and local users. A summary of the potential measures included in this OCTMP is set out below.

Access

- 5.2.3. As per **Section 3.2**, final access arrangements are to be determined. It is expected that access will be taken via an offline access track between Old Pant Road and the unclassified road before using access tracks provided for adjacent the adjacent Mynydd Maen Wind Farm. Additional upgrades to existing tracks and provision of new access tracks will further be provided to accommodate access to the proposed WTG locations within the Site.

Adjustment to Existing Highway Layout for Abnormal Load Delivery

- 5.2.4. The AIL access study has identified the need for temporary measures along the AIL delivery route between Swansea Docks and the Site access. The details of the pinch points identified and required mitigation measures can be found in the AIL access study (**Appendix 12A**).

Banksmen

- 5.2.5. Where it is appropriate/necessary to do so banksmen will be used to manage construction traffic. It is expected that primarily this will be to manage traffic, with the aid of escort vehicles, as Abnormal Load delivery vehicles negotiate pinch points and other constrained sections of highway.

Vehicle Escorts

- 5.2.6. The SWP and SWTRA and Welsh Government Highways will be consulted with regards to vehicle escorts.
- 5.2.7. The SWP will be involved with vehicle escorts upon a specific request from the haulier or where it is deemed that a load, due to its size or other extenuating circumstances, necessitates a Police escort.

Dilapidation Survey

- 5.2.8. Dilapidation surveys will be required at the start and end of the construction programme to assess any damage to the highway caused by the construction traffic on the proposed routes. Dilapidation surveys are expected to be carried out by an independent engineering consultant appointed by Pennant Walters Ltd who will work in conjunction with the relevant parties.

Working Hours and Timing of Movements

- 5.2.9. The proposed core working hours for construction activities will be developed between Pennant Walters Ltd and the appointed contractor. All construction activities will be limited to the core working hours to limit the effect of construction activities on the local highway network and the surrounding community.

- 5.2.10. In the interests of road safety and reducing possible nuisance, traffic movements during the following periods will be avoided:
- no construction activities on Sundays;
 - no construction activities on Bank Holidays;
 - no construction activities outside the hours of 07:00 to 19:00 Mondays to Fridays; and
 - no construction activities outside the hours of 07:00 to 13:00 on Saturdays.
- 5.2.11. All relevant parties involved in making deliveries to the Site would be informed of these restrictions, whilst for other contractors making regular deliveries these restrictions will form part of their contractual obligations. This would be reinforced in the Principal Contractor's site induction and regular talks for site operatives.

Route Timing and Enforcement

- 5.2.12. Timing restrictions for deliveries can assist in ensuring that construction vehicles avoid peak periods in sensitive areas such as schools, and where necessary, areas that experience congestion.
- 5.2.13. Contractual arrangements with all appointed hauliers will set out the enforcement/disciplinary procedures in the event HGV drivers do not abide by the preferred routes or any timing restrictions.
- 5.2.14. Road space along the abnormal load haulage routes will be booked in advance in compliance with the New Roads and Street Works Act 1991 (NRSWA). This will be undertaken as a precautionary measure to ensure that all haul roads are free of planned road works.

Route Signage

- 5.2.15. Temporary signage will be installed along the construction route advising construction traffic of the correct route to the Site. In addition, and in the interests of road safety, the signage will also assist in advising other road users to be aware of construction vehicles. All new signage will be in accordance with the 2016 Traffic Sign Regulations and General Direction (TSRGD).
- 5.2.16. Construction traffic will not be allowed to enter the Site until the relevant local highway authority has agreed on the signage strategy and design and received a confirmation in writing that the required signage is in place.

Public Information

- 5.2.17. Providing detailed information to local residents and interested groups is a key part of the construction of any wind farm. To ensure that local residents are given the opportunity to obtain information about the project and offer their views and suggestions, the developer will undertake a variety of engagement methods.

Wheel Cleaning/Street Cleaning

- 5.2.18. In the interests of public safety, preventative measures to minimise any mud and debris deposited onto the Local Road Network will be operated on site and at the Site access. The Principal Contractor will arrange activities on site that minimise the carriage of mud and debris and shall



provide, maintain, enforce and monitor the performance and proper use of cleaning facilities. The Principal Contractor shall promptly arrange street cleaning equipment either through the Local Highway Authority or directly when any significant mud and debris is carried onto public roads.

Vehicle Livery/Identification

- 5.2.19. To assist in enforcing the CTMP, vehicle livery/identification will be added to contract vehicles making regular deliveries to the Site, thereby showing that they are associated with the development. This could simply be in the form of a board displaying the name of the wind farm development and/or Pennant Walters Ltd. An example of such livery/identification is to be submitted to the local planning authority for approval prior to the start of construction. No such construction vehicle will be allowed to enter the Site unless it is displaying approved livery/identification.

Construction Environmental Management Plan

- 5.2.20. A separate Outline Construction Environmental Management Plan (CEMP) has been prepared and will be submitted to Caerphilly County Borough Council (and other relevant highways authorities as relevant). The CEMP will include measures to control dust and debris resulting from the movement of HGVs.

Prow Management

- 5.2.21. It has been identified that there are eight Restricted Byways and one Footpath which are located within the Site and could be affected by the Proposed Development. Onsite PRow are identified within **Figure 12-4 of Chapter 12: Traffic and Transport** of the Draft ES.
- 5.2.22. All locations where construction access tracks cross the existing PRow will have appropriate warning signage, which will advise of dates and hours of working. Along the access roads, appropriate signage will be erected to alert drivers of upcoming locations where there is an interface between construction traffic and Public Rights of Way.
- 5.2.23. However, during certain periods during the construction programme, it may be necessary to adopt active management measures with contractor staff patrolling key crossing points during periods of high construction activity. The need for active management on certain routes will be identified within the construction programme which will take into account delivery timescales and movements of plant and machinery. The need for active management will be subject to specific risk assessments prepared by the Principal Contractor when analysing impacts of any construction activities which may bring PRow users into proximity with construction traffic.
- 5.2.24. PRow users may have to wait for a short period of time whilst the PRow is in use by the construction team. Users will be advised when works are completed, and it is safe to continue.
- 5.2.25. Further measures for the management of PRow during construction are contained in **Appendix 4A: Construction Environmental Management Plan**.



Information Packs and Communications

- 5.2.26. Information packs will be provided to all contractors which will form part of the contractual agreement between the contractors and Pennant Walters Ltd. The information pack will contain the details of the following CTMP requirements:
- Construction routes;
 - Non-compliance guidance;
 - Complaints procedure;
 - Site Internal Road Layout;
 - CTMP protocols and Code of Good Practice;
 - Guidance on standard communication procedures between contractors and site management; and
 - CTMP contacts (emergency and non-emergency).
- 5.2.27. Information packs will be shared with the relevant local road authority(s) ahead of any construction works.
- 5.2.28. Given the rural location of the Site in relation to the public transport network, the opportunity for contractors to travel to work by public transport is not considered a viable choice. The distance of the Site from the established cycle network and lack of footway connections to local amenities and establishments also means that travel by alternative sustainable modes is unlikely to be chosen by contractors. However, car-sharing is something that can be promoted by the contractors. To identify and support this, the Site's travel information pack will include information relating to a car-sharing club.

Fleet Operator Registration Scheme

- 5.2.29. The Fleet Operator Registration Scheme (FORS Homepage - FORS - Fleet Operator Recognition Scheme (fors-online.org.uk) is a voluntary accreditation scheme to improve the quality, safety and environmental protection surrounding Fleet vehicles.
- 5.2.30. FORS strives for continuous improvement in the supply chain. Those who are FORS accredited operators also comply with CLOCS (Construction Logistics & Community Safety).
- 5.2.31. The contractor should be registered with the scheme as a FORS Specifier and should require companies who are contracted to them to supply fleet services in the transportation of goods to and from the Site to be FORS Silver as a minimum. This will apply to sub-contractors as well.

6 Management Structure

6.1 Introduction

- 6.1.1. This section reviews the management structure that will oversee the CTMP. It is important that a strong management structure is in place to ensure the CTMP objectives are met, and that continued monitoring and review of the CTMP is maintained.
- 6.1.2. A Transport Coordination Officer (TCO) will be appointed by the contractors to implement the CTMP (approved by the relevant local planning authorities in consultation with all relevant highway authorities). The TCO will be appointed prior to commencement of the works and will have the following transport related responsibilities:
- Monitor contractor obligations with regards to the CTMP;
 - Liaise with and report to relevant highways authorities about mitigation and any remedial measures, if required;
 - Update the CTMP as required; and
 - Resolve issues and problems through the liaison with relevant stakeholders.

6.2 Monitoring and Review

- 6.2.1. The TCO appointed by the contractors will undertake monitoring as necessary to ensure compliance with the requirements of the CTMP and this will include the maintenance of records and traffic management measures.
- 6.2.2. The contractor will ensure that a suitable, qualified, member of staff is employed to conduct surveys and monitor construction vehicle activity at specific locations along the construction route network to ensure adherence to the CTMP. This will include the monitoring of construction vehicles on the local road network and speed enforcement monitoring.
- 6.2.3. The TCO will monitor and review the CTMP. These reviews are required to ensure that the CTMP delivers on the commitments and achieves the agreed goals as set out in this document.

6.3 Compliance

- 6.3.1. As part of the CTMP a series of mechanisms will be established to provide all parties with a clear understanding of the enforcement procedures that will be applied if the requirements contained within this CTMP are not achieved. It is anticipated that these mechanisms will be determined at a later stage and will include:
- Risk Assessment Method Statement (RAMS) procedures – The contractor, through the TCO, will implement the CTMP, adhere to the requirements and meet the goals through management practices. This will include site inductions for contractors, briefing on the obligations of standards, induction and adherence to RAMS procedures, DMS briefing, driver inductions and compliance guidance;



- Contractual conditions – to be employed as part of the CTMP compliance methodology and will be built into the contractor’s contract, this will be subject to a performance review by Pennant Walters Ltd; and
- Actions – To be employed if the commitments of the CTMP are breached.

6.4 Enforcement and Corrective Measures

- 6.4.1. The TCO will ensure that appropriate measures are taken to ensure that contractor behaviour and performance is monitored and where appropriate corrective measures are taken to resolve, redress and enhance service performance which is in breach of the standards within the CTMP.



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