



Construction Traffic Management Plan

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Project Name: Coedlan Goffa Hafod y Bwch Commemorative Woodland

Site Address: Hafod House Farm, Hafod, Ruabon, Wrexham, LL14 6HF

Planning Application number: P/2023/0136 (Granted)

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1.0 EXECUTIVE SUMMARY

1.1 Purpose and scope of the Construction Traffic Management Plan (CTMP)

This Construction Traffic Management Plan (CTMP) provides the framework in which the movement of traffic to and from the Commemorative Woodland site will be managed during the construction phase. This CTMP primarily concerns avoiding hazards and managing risks related to essential vehicle movements. This CTMP is submitted to discharge planning condition 3 “No part of the development shall commence until a Construction Traffic Management Plan including provisions for contractor parking has been submitted to and approved in writing by the Local Planning Authority and the Plan as is approved has been fully implemented.”

1.2 Description of the Commemorative Woodland scheme and site

The Hafod y Bwch Commemorative Woodland is one of only three Welsh Government funded national schemes. The woodland will stand as a living memorial to those who have sadly lost their lives during the Covid-19 Pandemic. Planning permission has been granted (P/2023/0136) for the overall scheme and a Natural Resources Wales (NRW) Development / EPS licence application has been submitted. The 9.5ha woodland site is in a peri-urban location, being situated on the eastern edge of Johnstown and to the south of Wrexham. The site is located between the Hafod road and the A483 bypass road, which is a short (600m) distance from the trunk road to the site. The area surrounding the site has a small number of residential properties and mitigations will be taken to minimise disruption to local residents. The fields (owned by the National Trust) that constitute the main development site are stand alone and are not associated with a farm or farmhouse, so there would be no conflict with farm vehicles or farming activities.

1.3 Programme of works

The hardworks programme consists of constructing footpaths, pond / scrape excavations, bench and bike rack installations, and creating an unattended highways crossing. The works are expected to start at the end of November or early December 2023 and finish in February 2024. These already approved ‘light touch’ and small-scale hardworks only represent circa 4% of the total site area of 9.5ha. Consequently, the hardworks create a need for a small number of essential delivery vehicle visits to the site and construction vehicle movements within it.

1.4 Delivery and construction vehicular Impacts

It is anticipated that there will be an average of up to 25 deliveries to site each week during the construction of the paths and active travel link (a circa six-week programme). There will be a further 2 or 3 deliveries (to be scheduled) for the benches and bike racks. This delivery vehicle traffic volume represents only a circa 1% increase to the current traffic volume measured on the Hafod Road. The movement of the construction vehicles on site will be restricted to the routes of the footpaths and to the area where the ponds will be excavated (north-eastern area of site).

1.5 Haulage Route

Delivery vehicles will access the site from the Hafod Road, which connects at its southern end with the B5426 Bangor Road. The site is located just 600m from junction 2 of the A483, meaning that the delivery vehicles to the site will use the strategic highway network and avoid impacting on nearby residential and other sensitive areas.

1.6 Construction traffic management and mitigations

A Site Manager is responsible for the construction and Works Supervisors will oversee all site deliveries and ensure that construction vehicles adhere to the designated site transport routes. Working and delivery restrictions have been instated to minimise disruption to local residents – the light touch development works will not generate significant noise nor dust. Dirt being transferred onto the Hafod Road has been negated by using high-density polyethylene (HDPE) panels for delivery vehicles. In addition, construction vehicles will be stored on the main site and access a temporary material store also on the main site. There is no public access onsite which mitigates the risk of the public encountering construction vehicles. The site will remain closed during construction and will only be open to the public in March 2024.

2.0 INTRODUCTION

2.1 Purpose and scope of the Construction Traffic Management Plan

This Construction Traffic Management Plan (CTMP) provides the framework in which the movement and type of both construction and delivery traffic to and from the Commemorative Woodland site at Hafod House Farm, Hafod will be managed during the construction phase of the scheme. This CTMP primarily concerns avoiding hazards and managing risks related to the essential need of material delivery and construction vehicle movements to undertake the scheme's approved development works.

2.2 Description of the Commemorative Woodland Scheme

2.2.1 Overview

The Hafod y Bwch Commemorative Woodland is one of only three Welsh Government funded national schemes. The woodland will stand as a living memorial to those who have sadly lost their lives during the Covid-19 pandemic. The woodland will have a theme of 'resilience' and will play an important role in supporting nature's recovery and our fight against the climate crisis. The tree species chosen will be able to adapt to the threats of pests, diseases and a changing climate, and alongside other vital habitats for wildlife such as ponds, hedgerows and meadows will also increase biodiversity.

The 9.5ha woodland site has been planted with around 13,500 trees (not subject to planning application P/2023/0136) and the hardworks (footpaths, pond excavations, benches, bike racks, and unattended highways crossing) are expected to start at the end of November or early December 2023 and finish in February 2024. These already approved 'light touch' and small-scale hardworks only represent circa 4% of the total site area of 9.5ha. Consequently, the hardworks to be undertaken create a need for a small number of essential delivery vehicle visits to the site and construction vehicle movements within it. There is no public access within the commemorative woodland site during the construction stage (the site will only be opened to the public after completion of the works), which mitigates the risk of the public encountering construction vehicles. The gates to the site will also be chained and padlocked while the site is unattended.

2.2.2 Construction Activities, Plant, and Construction Vehicle Movements

Construct circa 5122m² of footpath using an 8-13 tonne standard tracked excavator and a 10 tonne dumper truck, by excavating to a depth of 200-300 mm, lining the formation tray with a geotextile membrane and infilling with a depth of 150mm of 10-80mm crushed stone (DTp Type 1 sub-base) and topping of a 25 millimetre deep surface layer of fine scalping's (6 millimetres to dust quarry whinstone) that will be compacted to refusal. Excavate circa 1180 cubic metres of soil to create ponds, where all the won material will be used on site to increase the sustainability of the development.

Summary of Construction Vehicle Movements:

- Expected circa 30 days (weather dependent) of continuous use of the 8-13 tonne tracked excavator and 10 tonne dumper truck within the day and time restrictions stated in section 5.3.1.
- 30 days of continuous 4x4 vehicle access to site (transportation for the ground workers) – these two vehicles will be parked on the hardstanding area (part of granted planning permission) on the southern boundary of the site – the location of the hardstanding is shown in Figure 6.
- Dumper truck access working throughout site to bring stone from an onsite material storage location (south-west corner as shown in Figure 6) to path and hardstanding areas.

- The construction vehicles (excavator and dumper truck) will be brought to site on a trailer, and they will be kept on site until the hardworks have been completed. The movement of the construction vehicles on site will be restricted to the routes of the footpaths and the temporary access route as shown in Figure 1. Vehicle movements are constrained to these areas since they relate to the construction areas and will also minimise soil compaction within the site.



Figure 1 Plan of the location of vehicle movement routes across the site.

2.2.3 Delivery Vehicle Activities and Movements

The main type of vehicle expected to deliver to site is an 8-wheel rigid tipper (20 tonnes). Crushed stone and scalping material will be imported to site during construction with a total of 100 to 150 tipper lorry loads expected. This equates up to approximately 25 loads per week on average.

2.3 Site location and description

2.3.1 Location

The 9.5ha woodland site is in a peri-urban location, being situated on the eastern edge of Johnstown and to the south of Wrexham. The site is located between the Hafod road and the A483 bypass road providing a short and easy access from the trunk road to the site. The site is located to the east of Hafod Road, west of the A483 and to the southeast of the existing Bonc yr Hafod Country Park. The site is approximately 2.5km east of Johnstown, 3km north of Ruabon, 4km east of Rhosllanerchrugog and 5km south of Wrexham.

The map in Figure 2 indicates the red line boundary of the site within its wider spatial context.



Figure 2 Map indicating the red line site boundary within its wider spatial context.

The map in Figure 3 shows the relationship of the site to its immediate surrounding landscape. The dotted redline boundary in Figure 3 is land owned by the Trust but not included in the woodland scheme. As can be seen from Figure 3, the area surrounding the site has a small number of residential properties and the traffic routing and assessment to the site is made in section 3.0.

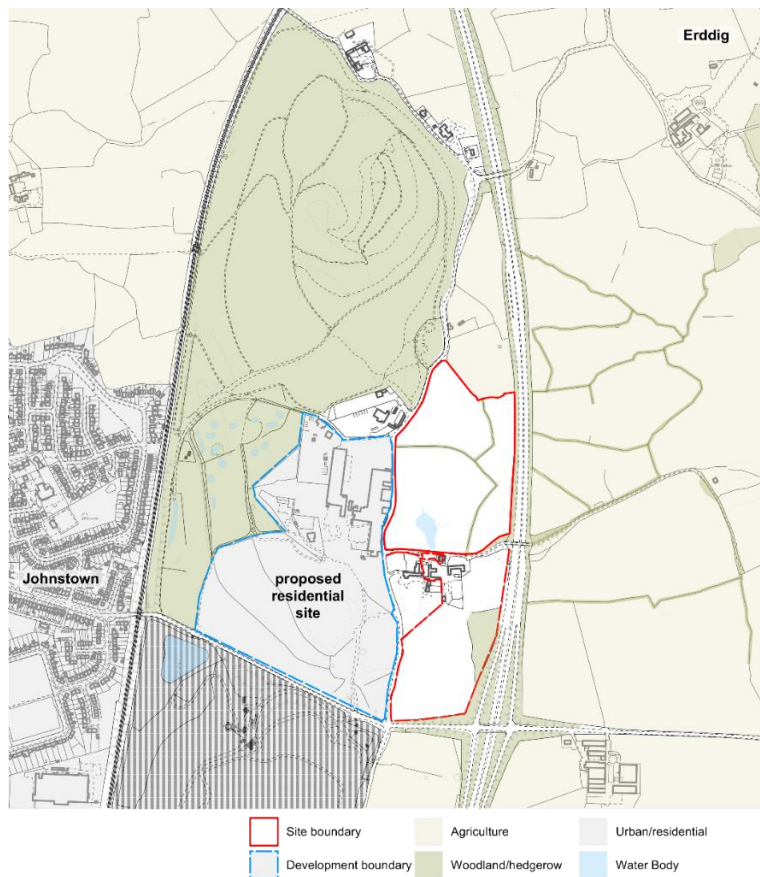


Figure 3 Map showing the site relative to its surrounding landscape and land use.

2.3.2 Site characteristics

The fields (owned by the National Trust) that constitute the main development site are stand alone and are not associated with a farm or farmhouse, and as such have been managed as agricultural land (grazing and haylage) on a Farm Business Tenancy for many years. All the fields are agriculturally improved and are not species rich, having been identified as having limited value for biodiversity (prior to the tree planting). The site has a largely level topography and the line of sight across the site is good as shown in Figure 4 (view from the northern site boundary looking south) and Figure 5 (view from the centre of the site looking towards the ephemeral pool and southern boundary). There is a track that runs adjacent to the southern boundary of the site that is owned by the National Trust.

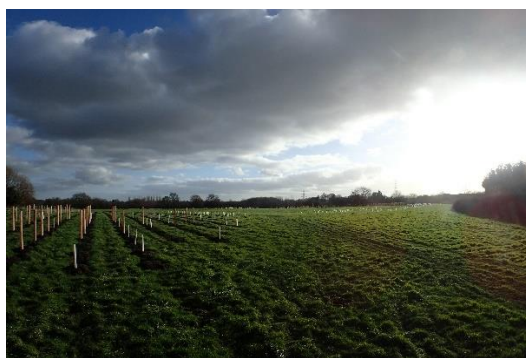


Figure 4 View from the northern boundary



Figure 5 View to southern boundary

2.3.3 Haulage Route to site

Delivery vehicles will access the site from Hafod Road, which connects at its southern end with the B5426 Bangor Road. The site is located just 600m from junction 2 of the A483 meaning that the delivery vehicles to the site will use the strategic highway network and avoid impacting on nearby residential and other sensitive areas.

3.0 TRAFFIC ROUTING AND ASSESSMENT

3.1 Site access assessment (delivery)

Delivery vehicles will exit the A483 at junction 2 and will enter the Hafod road from the B5426 Bangor Road. The Hafod Road is a single carriageway road. It varies in width, being around 6m to 7m wide at the southern end of the site and around 5m at the northern end of the site. Hafod Road is subject to a derestricted speed limit. The delivery vehicles to the site will be using the wider section of the Hafod road at the south. There is generally a narrow grass verge on both sides of the carriageway, but there is an absence of footway over most of its length. Hafod Road provides access to a small number of residential properties, a care home, tile and concrete suppliers located at a former Hafod Tileries site, and the Bonc yr Hafod Country Park.

A traffic survey of the Hafod Road was undertaken by the National Trust's Highways Engineer (Acstro Limited) on 4th July 2022 and a summary of the results are shown in Table 1. Detail of the traffic survey is available in "PLN Transport Assessment Report- Web - TRANS STATEMENT" which was submitted on 11th April 2023 as part of the scheme's now granted planning permission (P/2023/0136).

Table 1 Summary of results from the Hafod Road Traffic Survey (by Acstro Limited)

Direction	Average Daily Traffic Volume	Mean Speed	85th Percentile Speed
Northbound	170	22mph	26mph
Southbound	179	21mph	26mph
Two-way	349	-	-

As stated in section 2.2.3 of this report, it is anticipated that there will be an average of up to 25 deliveries to site each week during the construction of the paths and active travel link. This delivery vehicle traffic volume represents only a 1% increase to the current traffic volume on the Hafod Road. There will be a further 2 or 3 deliveries for the benches and bike racks.

The construction material (DTp Type 1 and scalplings 6 millimetres to dust quarry whinstone) will be delivered to the south-west corner of the site being accessed by the Hafod road and southern track as indicated by the plan in Figure 6. The temporary storage area (circa 40 m x 30 m) will be accessed by an approximate 10m length of high-density polyethylene (HDPE) panels. The temporary storage area will consist of a layer of Terram Geotextile membrane over which approximately 50mm depth of DTp Type 1 will be placed and compacted. The temporary storage area will be removed once the construction works have completed.

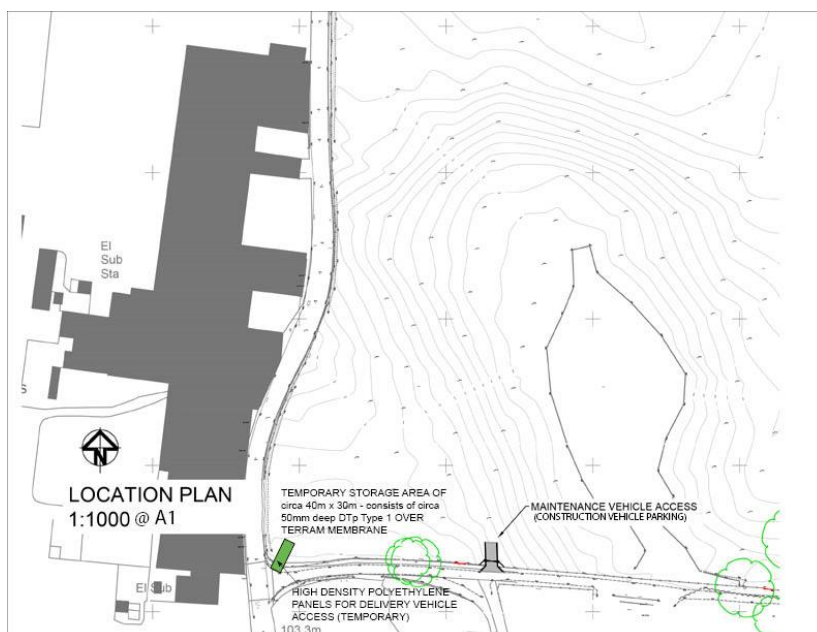


Figure 6 Location of the temporary material storage area (south-west corner of site)

3.2 Internal site access / tracks (construction)

Since the nature of the hardworks primarily concerns the construction of paths and the excavation of ponds there will be limited noise associated with the works. Noise will be primarily restricted to the movements / activities of the excavator and dumper truck – the impact of construction noise is mitigated through constrained working hours as indicated in section 5.2.1.

Now that the works will be undertaken during the winter months (2023-24) no dust is expected to be generated from the works nor construction vehicle movements across the site. The site manager will be responsible for ensuring that all internal vehicular access is constrained to the path network and other designated areas.

4.0 CONSTRUCTION TRAFFIC MANAGEMENT

4.1 Programme

4.1.1 Pre-construction

While planning permission has been granted (P/2023/0136) for the overall scheme a NRW Development / EPS licence needs to be granted before any works can commence onsite. Furthermore, a Deed of Easement and Works needs to be agreed with Wrexham County Borough Council (WCBC) before works can commence within the Country Park car park. Permission for a second planning application P/2023 /0485 submitted to WCBC for Interpretative signage (under advertising regulations) was granted on 13th November 2023.

The proposed signage for the scheme are part of the National Trust's standard suite of products and their installation will be one of the last construction activities undertaken as shown in Table 2.

4.1.2 Construction

The three main construction elements of the scheme are as follows:

Internal paths - a total of approximately 1527 m (linear metres) with a total surface area of 2748 m². The paths are to be 1.8 m wide and will be formed by excavating to a depth of 200-300mm, lining the formation tray with a geotextile membrane and infilling with a depth of 150mm of 10-80mm crushed stone (DTp Type 1 sub-base) and topping of a 25 mm deep surface layer of fine scalping's (6 millimetres to dust quarry whinstone) that will be compacted to refusal. The excavated topsoil from the formation tray will be used to create a verge to support the path edge.

Active Travel Link - a total of approximately 591 m (linear metres) will be constructed with a total surface area of approximately 1773 m². The active travel link would be 2.5 m wide. It would be constructed in the same way as the internal paths, using the same materials. The construction of the active travel link is part of the pathworks indicated in the programme (Table 2).

Ponds - three ponds / scrapes will be excavated that extend to surface areas of 0.02 ha, 0.04 ha and 0.08 ha and they will be naturalistic ponds with no liners. The depths of waterbodies will vary having maximum depths between 0.5 m and 1.5 m. The excavated material will be used to form bee banks adjacent to the ponds and the remaining excavated material will be used to form mounds / features within the site – separate earthworks drawings have been submitted to Wrexham County Borough Council for their consideration (to discharge planning condition 4).

Table 2 – High-level programme for the commemorative woodland construction works.

Commemorative Woodland - outline construction prog.	Oct. 2023	Nov. 2023	Dec. 2023	Jan. 2024	Feb. 2024	Mar. 2024
NRW Development licence in place		◆				
Pond Excavations and bee banks						
Pathworks						
Hard standings for benches, maint. vehicles, and bike racks						
Deed of easement and works in place			◆			
Remove hedge and fencing						
Crossing and visual splay creation (cutting back verges)						
Installation of new gates and bike barriers (active travel)						
Infill tree planting and new hedges (including fencing)						
Installation of bike racks						
Fencing for ecology area (new pond) and perimeter works						
Planning Permission in place for Interpretative signage			◆			
Interpretative signage install						
Bird and bat boxes						
Bench / perch installations						
Scheme completion						◆
Launch event and marcomms						

4.2 Construction Parking

There will be two construction vehicles (4x4 pickups) that will be parked on the hard standing area (approved as a part of the planning application P/2023/0136) as shown in Figure 6. These vehicles will be used by the ground workers and supervisor to travel to site. The 8-13 tonne tracked excavator and 10 tonne dumper truck will be stored onsite in the material storage area when not in use – these vehicles will be parked on the high-density polyethylene (HDPE) panels.

5.0 MITIGATIONS

5.1 Site Manager and Works Supervisors

The site manager and main contractor for the construction of the scheme is:

Ben Banks
Pryor Rickett Silviculture
2 The Oil Mill,
Brampton Bryan,
Bucknell, SY7 0EW.
Tel: 07741 242204

The contact details of the site manager will be given to the local residents who will contact him in the first instance with any questions or concerns during the construction phase. The two sub-contractors will not be working onsite at the same time and contact details are:

1) Works supervisor and safety co-ordinator – pathworks and pond excavations

Gary Brown
Agri/forestry services
Tyngwndwn Chapel House,
Felinfach,
Lampeter, SA48 8BE.
Tel: 07870 211 517

2) Works supervisor and safety co-ordinator – civils (highways crossing)

Lee Coates
M Coates and Partners,
Glendale,
Trefeglwys,
Newtown,
Powys, SY17 5PN.
Tel: 07786 011093

The site supervisors will manage the delivery of all construction materials and the delivery vehicle drivers will telephone the site supervisors in advance of their arrival. The site supervisors will also be responsible for ensuring that the construction vehicle movements are restricted to the route of the path network and other temporary designated routes and that all works are undertaken safely.

5.2 Site Safety

A pre-construction commencement meeting will be held onsite with the main contractor, sub-contractors, and the National Trust / landowner Project Manager – the meeting will include discussion concerning the safe management of delivery and construction vehicles.

5.3 Delivery and site traffic movements

5.3.1 Working and delivery restrictions

- 08:00 to 17:00 on Monday to Friday
- 08:00 to 13:00 on Saturdays
- No working or deliveries on Sundays or Public Holidays

All local residents adjacent to the site will receive a letter from the National Trust in advance of the construction work commencement – an overview of the mitigations to minimise impacts associated with delivery and construction vehicles will also be provided. The local residents were also provided with details of the scheme before it was submitted to Wrexham County Borough Council's planning department.

5.4 Minimise Dirt on Road

Heavy duty 40mm thick high-density polyethylene (HDPE) panels of 3m x 2.5m will be used to form a short 10m long roadway (from the track on the southern boundary) to the temporary storage area in the south-west corner of the site. This will prevent the delivery vehicles from coming into contact with mud and it will also minimise compaction to the soil in this area. The tracked excavator and 10 tonne dumper truck will remain onsite and will not need to travel on the road, preventing the spread of dirt. When the hardworks are undertaken in the car park area of the Country Park, the tracked excavator and dumper truck will be transported by trailer to this area.

If dirt was inadvertently transferred onto the Hafod road during construction a vehicle mounted road brush will be used to remove the dirt / debris.

5.5 No site public access

The site has no public access which negates the need to separate the construction vehicles from the public. No National Trust staff (with the exception of the project manager) will be onsite during the construction phase. The National Trust project manager will contact the site manager in advance of attending site and report to the site supervisor on arrival. When the site is unattended the gates will be chained and padlocked. These measures mitigate the risk of non-construction personnel encountering construction vehicles. The site will only be open to the public from March 2024.