



Kronospan North Access Road

Woodland Management Plan

Prepared for



Kronospan

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CONTENTS

1.0	INTRODUCTION	1
2.0	BACKGROUND.....	2
3.0	THE PURPOSE OF THE WMP.....	4
3.1	Overview.....	4
3.2	Aims and Objectives	4
3.3	Extent and Duration	4
3.4	Roles and Responsibilities	5
4.0	SURVEY REQUIREMENTS	6
4.1	Engineering Surveys.....	6
4.2	Arboricultural Surveys.....	6
4.3	Ecological Surveys.....	7
5.0	PROPOSED WORKS	9
5.1	Schedule of Works.....	9
5.2	Planting, Implementation and Management Specification	10
5.3	Physical Habitat Creation Measures	13
5.4	Provision and Approval of Costs Payable to Glandŵr Cymru	14
6.0	MONITORING AND REVIEW	15

FIGURES

Figure 1 – Extent of Proposed Woodland Management Plan



1.0 INTRODUCTION

- 1.1.1 This Woodland Management Plan (WMP) has been prepared to guide the future management of woodland within the Glandŵr Cymru (the Canal & River Trust in Wales) landholding along the Llangollen Canal immediately west of the Kronospan Facility in Chirk.
- 1.1.2 The WMP has been prepared on behalf of Kronospan. The implementation of the measures set out in the WMP are governed by a Unilateral Undertaking between Kronospan and Glandŵr Cymru.



2.0 BACKGROUND

- 2.1.1 In December 2022, a planning application (ref: P/2022/1080) was made by Kronospan to Wrexham County Borough Council (WCBC) in relation to a proposed new northern access road and a series of related ancillary development (the Proposed Development) at the Kronospan Facility in Chirk.
- 2.1.2 As part of pre-application consultation, a short presentation and subsequent meeting in the field was held with several stakeholders, including Glandŵr Cymru, in order to introduce the proposal. The field meeting included a walk along the Llangollen Canal towpath within the Glandŵr Cymru landholding.
- 2.1.3 A draft planning application was submitted to WCBC in October 2022 to satisfy the pre-application consultation requirements set out by The Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2012.
- 2.1.4 One of the outcomes of consultation on the draft application was the request by Glandŵr Cymru for a woodland management plan covering the Glandŵr Cymru landholding along the Llangollen Canal. A commitment to provide such a plan was subsequently made by Kronospan in the planning application.
- 2.1.5 Following the submission of the planning application a formal consultation response was received from Glandŵr Cymru (dated 27 Jan 2023). This reiterated the need for a woodland management plan to be prepared.
- 2.1.6 Further consultation was then carried out via a meeting with Glandŵr Cymru in March 2023. This focussed on discussions as to what might be included within the WMP. It was agreed that a Draft WMP would be produced by Kronospan in order to inform further discussions.
- 2.1.7 Following review of comments from other consultees, the design of the Proposed Development was revised, and amended versions of several of the documents and drawings included in the December 2022 planning application were submitted to WCBC in July 2023. A further design change was submitted to WCBC in September 2023. None of the changes to the design affected the preparation of the Draft WMP, nor will they have any bearing upon the future management of woodland within Glandŵr Cymru's landholding.



- 2.1.8 As such, the Draft WMP was submitted to Glandŵr Cymru for comment in October 2023. Following receipt of comments and further information provided by Glandŵr Cymru, the present document, i.e. the final WMP has been prepared.
- 2.1.9 The final WMP was submitted to WCBC in September 2024. Comments were received from the WCBC Arboricultural Officer in February 2025, and the Final WMP has been revised to reflect those comments.



3.0 THE PURPOSE OF THE WMP

3.1 Overview

- 3.1.1 The overarching purpose of the WMP is to guide Glandŵr Cymru's woodland management operations, with a view to ensure a healthy, balanced woodland providing for a range of wildlife and visual interest, and a safe environment for users of the canal. The requirement for a WMP and details of what it should contain are specified in the Unilateral Undertaking between Kronospan and Glandŵr Cymru.
- 3.1.2 The WMP does not include details relating to the costs of implementing the proposed works, nor any funding mechanism. All financial matters would be agreed separately between the two parties.

3.2 Aims and Objectives

- 3.2.1 More specifically, the aims and objectives of the WMP are as follows:
- i) Manage the woodland (including individual trees and tree belts) within Glandŵr Cymru ownership to ensure its long-term viability.
 - ii) Maintain and enhance the nature conservation value of the woodland.
 - iii) Maintain and enhance the heritage value of the Pontcysyllte Aqueduct and Llangollen Canal World Heritage Site, and Pontcysyllte Aqueduct and Canal Scheduled Monument.
 - iv) Ensure woodland management (including management of individual trees and tree belts) maintains the integrity of canal structures.
 - v) Ensure woodland management (including management of individual trees and tree belts) does not adversely affect navigation, or public access to the canal towpath.

3.3 Extent and Duration

- 3.3.1 The proposed extent of land to be included in the WMP is illustrated on Figure 1. This comprises all land within Glandŵr Cymru's ownership between the northern portal of Chirk Tunnel and the southern portal of Whitehouses Tunnel.



- 3.3.2 The duration of the WMP would run for a period of twenty-five years. This would commence from the date the Unilateral Undertaken is signed by both parties, or as otherwise agreed by both parties.

3.4 Roles and Responsibilities

- 3.4.1 The responsibility for producing the WMP and funding its implementation would lie with Kronospan.
- 3.4.2 The actual implementation of works, including the undertaking of any surveys required, would be the responsibility of Glandŵr Cymru.



4.0 SURVEY REQUIREMENTS

4.1 Engineering Surveys

- 4.1.1 Initial discussions with Glandŵr Cymru raised the issue of potential damage to the structural integrity of the Llangollen Canal (including the associated earthworks) that could be caused by tree roots.
- 4.1.2 As such there is a need to understand if/how any of the existing vegetation cover within the extent of the WMP is affecting structural integrity of the Canal, and any potential for any harm to structural integrity to be caused by any management/maintenance works, including any new planting.
- 4.1.3 Regular surveys are carried out by Glandŵr Cymru's Asset Engineers, and any issues raised in these should be factored into woodland management where necessary. The outcomes of the structural surveys should be summarised as part of the Annual Update Report discussed in Section 6.0, and any changes to the agreed management regime should be identified.

4.2 Arboricultural Surveys

- 4.2.1 In addition to the engineering surveys, it is also necessary to understand the condition of existing vegetation cover within the extent of the WMP. Identification of dying trees, or trees that are otherwise in poor condition will:
 - i) Identify potential risk to the health and safety of canal users (including users of the towpath).
 - ii) Identify potential impacts upon access along the canal and towpath.
 - iii) Identify potential damage to property.
 - iv) Identify all veteran and ancient trees.
 - v) Identify the implications of ash dieback (*Hymenoscyphus fraxineus*) upon the tree cover within the WMP area.
 - vi) Inform potential management, felling and replanting strategies.
- 4.2.2 Surveys will be carried out by an arboriculturist at a minimum frequency of once every two years. The surveys will be undertaken in accordance with Glandŵr



Cymru's specification for arboricultural surveys, and their standard for tree risk management.

- 4.2.3 Issues identified as part of the arboricultural surveys should be summarised as part of the Annual Update Report discussed in **Section 6.0**, and any changes to the agreed management regime should be identified.

4.3 Ecological Surveys

- 4.3.1 An annual walkover survey of the land within the extent of the WMP would be undertaken at regular intervals by a suitably experienced ecologist. The purpose of this would be to identify any ecological issues that would need to be taken into account. This process may flag up the need for more detailed or targeted surveys.

- 4.3.2 It is anticipated that the purpose of surveys would include, but not necessarily be limited to the following:

- i) Identify the presence of any invasive species that may need to be removed.
- ii) Identify the potential for any protected species to be present.
- iii) Identify the potential for any ecological enhancements that could be incorporated into the works.

- 4.3.3 Glandŵr Cymru's existing approach to ecology surveys is to undertake these on a reactive basis reflecting specific projects or issues. The results of recent surveys/existing ecological records are summarised below:

- i) Bat emergence survey at Chirk Tunnel (2021). Evidence found of bats roosting in the northern and southern portals. Species include:
 - a) Lesser Horseshoe Bat.
 - b) Soprano Pipistrelle Bat.
 - c) Daubenton's Bat.
 - d) Noctule Bat.
 - e) The survey also identified a weasel swimming in the Canal.
- ii) Record of Lesser Horseshoe Bats roosting in Chirk Tunnel (2010).
- iii) Record of Otter spraint towards the southern boundary of the WMP area (2010).



- 4.3.4 Based on the above, it appears that ecological interest may be greater towards the south of the WMP area, at the Chirk Tunnel portals and the wooded cuttings to the north of the Tunnel. The walkover survey would verify this and identify further areas of interest.
- 4.3.5 Issues identified in the walkover survey, and any further surveys, should be summarised as part of the Annual Update Report discussed in **Section 6.0**, and any changes to the agreed management regime should be identified.

5.0 PROPOSED WORKS

5.1 Schedule of Works

5.1.1 The schedule of works set out below provides a breakdown of key tasks that are considered likely to be required as part of woodland management, and the timescales within which these would be carried out. As the surveys identified in Section 4.0 are undertaken and reported, this will enable a more targeted schedule to be drawn up, which will in turn assist with Glandŵr Cymru developing a detailed programme of works.

Table 1 – Schedule of Works (indicative)

Work Element	Description	Timescale
1: Engineering Survey	Structural survey of the Canal. Reporting of survey outcomes	As specified by Glandŵr Cymru Asset Engineers
2: Arboricultural Survey	Arboricultural survey of the WMP land. Reporting of survey outcomes	Minimum frequency, once every two years
3: Ecological Walk-over Survey	Walk-over survey of the WMP land. Reporting of survey outcomes.	Annually, with timings as recommended by ecologist
4: Other ecological surveys	As required following the outcomes of Item 3	As necessary and reflecting best practice in relation to the target of the individual survey
5: Tree felling	As required following the outcomes of Item 2.	Outside of bird nesting season (which is 1 st March-31 st August inclusive)
6: Tree planting	If recommended following the outcomes of Items 2 and 3.	November-April when weather conditions allow
7: Vegetation management	If recommended following the outcomes of Items 2 and 3; or Where necessary for the health and safety of canal and towpath users, and/or to maintain navigation	As required and having regard to any ecological constraints.
8: Installation of physical habitat creation measures	If recommended, following the outcomes of Item 3.	As required and having regard to any ecological constraints.
9: Health and Safety matters	Identification, reporting and recording of all issues retaining to health and safety of visitors	As specified by Glandŵr Cymru; and via all work required by Items 1-8

5.2 Planting, Implementation and Management Specification

- 5.2.1 The planting mix set out below, and the specification for implementation and subsequent management reflects schemes agreed with WCBC in relation to other planning applications for development at the wider Kronospan site, including in locations close to the Canal corridor, and also reflects comments received from the WCBC Arboricultural Officer.

Planting Mix

Table 2 – Woodland Planting Mix

Species	Common Name	%	Size	Spacing
<i>Quercus robur</i>	Oak	22.5	1+1 40-60cm BR	1.5m centres
<i>Alnus glutinosa</i>	Alder	12.5	1+1 40-60cm BR	1.5m centres
<i>Salix alba</i>	White Willow	5	1+1 40-60cm BR	1.5m centres
<i>Betula pendula</i>	Silver Birch	10	1+1 40-60cm BR	1.5m centres
<i>Corylus avellana</i>	Hazel	10	1+1 40-60cm BR	1.5m centres
<i>Crataegus monogyna</i>	Hawthorn	17.5	1+1 40-60cm BR	1.5m centres
<i>Salix caprea</i>	Goat Willow	12.5	1+1 40-60cm BR	1.5m centres
<i>Prunus avium</i>	Wild Cherry	5	1+1 60-80cm BR	1.5m centres
<i>Castanea sativa</i>	Sweet Chestnut	5	1+1 40-60cm BR	1.5m centres
All plants to be of certified local provenance (seed zone 403) subject to availability				

Implementation

- 5.2.2 All plant material shall consist of healthy stock with well-balanced branch structures and well-developed fibrous root systems. Planting generally shall accord with CPSE 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part III, paragraphs 6.2 to 6.6.
- 5.2.3 Plant handling, storage and transport shall accord with CPSE 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0, and 4.0.
- 5.2.4 Planting shall accord with *BS8545:2014 Trees from Nursery to Independence in the Landscape*.
- 5.2.5 Planting will be into existing and undisturbed ground, and no soil spreading is proposed.



- 5.2.6 All vegetation shall be trimmed to ground level prior to planting.
- 5.2.7 All plants shall be notch planted, in single species groups of 3-5, at the spacings stated above.
- 5.2.8 Lightly firm soil around plants and fork and/or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows. Immediately after planting and prior to mulching, water all planting areas thoroughly to field capacity, without damaging or displacing plants or soil.
- 5.2.9 All new planting shall be protected from vermin damage using suitable tree guards, or tree spirals. These guards/spirals shall be adequately staked.

Establishment Maintenance

- 5.2.10 Any tree planting that fails to become established during the first five years after planting, shall be replaced with equivalent plants to match size of adjacent or nearby plants of same species or match original specification, whichever is the greater. This shall include all specimens subject to theft and/or malicious damage.
- 5.2.11 An area of 500mm diameter around all new planting stock shall be maintained weed free until the canopy of the planting has sufficiently closed to reduce weed competition (approximately 3-5 years). This shall be achieved through the use of an appropriate non residual non-glyphosate-based herbicide, or via hand pulling.
- 5.2.12 All tree guards/spirals and stakes shall be removed when no longer required (typically after approximately 3-5 years) and disposed of off-site. If biodegradable guards/stakes are used, these may be left in-situ.

Long-term Management

Weed Control

- 5.2.13 The presence of invasive/injurious plants and other undesirable species shall be noted as part of regular monitoring by Glandŵr Cymru.
- 5.2.14 Where species-specific actions are required, these shall be specified by Glandŵr Cymru and recorded in the Annual Update Report. Control of such species shall be undertaken in accordance with recognised best practice for that species.



- 5.2.15 More generally, should invasive/injurious plants and other undesirable species become established, these shall be spot treated with herbicide or removed by hand. The use of selective herbicides in areas of species-rich grassland should be avoided. Other solutions that may be considered include a localised cutting regime, depending on species and extent of infestation, and taking into account the need to respect other management objectives.

Woodland Management

- 5.2.16 Woodland areas shall be managed to enable the development of a diverse structure in the longer-term, and to provide replanting to combat the effects of Ash dieback.
- 5.2.17 Existing woodland and areas where new planting has become established, shall be managed on a minimum intervention basis. Selective thinning of weaker specimens shall be undertaken at the discretion of Glandŵr Cymru following the programmed arboricultural and ecological surveys. The aim of any thinning shall be to diversify the structure of woodland by removing weaker specimens creating space for the remaining trees to flourish and creating small open areas where natural regeneration of vegetation can occur.
- 5.2.18 Woodland management shall protect veteran and ancient trees, and their immediately surrounding soil environment.
- 5.2.19 The need for thinning shall be determined every five years, commencing in the first year of the WMP.
- 5.2.20 Trees noted as being infected with Ash die-back (*Hymenoscyphus fraxineus*) should be classified in accordance with industry guidance classification levels of 1, 2, 3 or 4, and managed according to industry best practice, with risk and habitat retention as priorities. Glandŵr Cymru should ensure that they follow industry best practice and guidance that is current at the time the infection is noted.
- 5.2.21 Any tree work should be timed to avoid the bird nesting season (March to August inclusive) and with consideration for any other protected species identified as part of regular ecology surveys (e.g., roosting bats).



- 5.2.22 Any arisings from woodland management, i.e. cuttings from thinning, shall be removed offsite (retained arisings can hinder the inspection of the canal cuttings).

5.3 Physical Habitat Creation Measures

- 5.3.1 Following the ecological surveys set out in Section 4.3, it may be determined that physical habitat creation measures would be provided at locations within the WMP land. Specific requirements will be determined following the surveys. The details set out below reflect details agreed with WCBC as part of other planning applications at the wider Kronospan site.

i) Bird nesting boxes:

- a) Great tit/tree sparrow nest box (<https://www.barkboxes.co.uk/product/great-tit-tree-sparrow/>).
- b) Starling box (<https://www.barkboxes.co.uk/product/starling-box/>).
- c) Branch stub (<https://www.barkboxes.co.uk/product/branch-stub/>).
- d) Open fronted nest box (<https://www.barkboxes.co.uk/product/open-fronted-nest-box/>).

ii) Bat roost boxes

- a) Large Twin Crevice (<https://www.barkboxes.co.uk/product/large-twin-bat-box/>).
- b) Kent Type Twin Crevice (<https://www.barkboxes.co.uk/product/kent-type-twin-crevice/>).
- c) Bat Chamber (<https://www.barkboxes.co.uk/product/standard-bat-box/>).

iii) Insect hotels

- a) Clay and Reed insect nest (<https://www.nhbs.com/schwegler-clay-and-reed-insect-nest>).
- b) WoodStone Insect Block (<https://www.birdfood.co.uk/woodstone-insect-block-grey>).
- c) Insect Maisonette (<https://www.birdfood.co.uk/insect-hotel-capri>).

- 5.3.2 Any and all structures should be added to locations specified by a suitably experienced ecologist. Monitoring and maintenance inspections should be carried out by a suitably experienced ecologist.



5.4 Provision and Approval of Costs Payable to Glandŵr Cymru

- 5.4.1 At least eight weeks prior to the planned implementation of any works set out in this document, Glandŵr Cymru is to issue a fee proposal to Kronospan (with a minimum of two separate quotes from two separate service providers) for approval. The quotes are required to be identical in scope as far as is practicable, with a preference indicated by Glandŵr Cymru. This is to ensure the scope of works is appropriate and that the requisite value can be realised in the delivery of services.
- 5.4.2 Provided the fee proposals are acceptable (in terms of scope and cost), Kronospan is to issue its acceptance to Glandŵr Cymru within two weeks of receipt.



6.0 MONITORING AND REVIEW

- 6.1.1 A Site inspection would be held every two years during the summer to review management successes/failures gauged against the aims and objectives outlined in the WMP, and to make any adjustments to the management/maintenance regime that the findings of such inspections indicate would be appropriate.
- 6.1.2 Attendees would be representatives of Kronospan and Glandŵr Cymru. Any modifications to management would be made in agreement by both parties.
- 6.1.3 An Update Report would be appended to the WMP following each Site inspection and would summarise any observations made during the Site inspection, any other observations made during the ongoing works, results of all surveys and monitoring, and any agreed changes to management and maintenance operations. It is envisaged that this would be a relatively brief document.
- 6.1.4 Every five years, the WMP would be updated to reflect any changes made as part of the ongoing management and maintenance operations. This would include the preparation of a new schedule of works to cover the subsequent five-year period, as well as a summary of the Update Reports for the previous five years.

