KRONOSPAN, CHIRK

NORTH ACCESS ROAD INTO THE KRONOSPAN FACILITY, LORRY PARK, WEIGHBRIDGES AND WEIGHBRIDGE BUILDING, WEIGHBRIDGE CAR PARK AND FACILITIES BLOCK, ROUNDWOOD STORAGE AREAS, 132KV SUBSTATION, AND ANCILLARY WORKS

ENVIRONMENTAL STATEMENT
NON-TECHNICAL SUMMARY

REV A - JULY 2023

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1.0 NON-TECHNICAL SUMMARY

1.1 Introduction

Background

1.1.1 This Environmental Statement (ES) has been prepared to accompany a planning application made by Kronospan Limited to Wrexham County Borough Council (WCBC) for planning permission for the construction and operation of a north access road into the Kronospan Facility, lorry park, weighbridges and weighbridge building, weighbridge car park and facilities block, roundwood storage areas, 132kV substation, and ancillary works (the Proposed Development) on land immediately north of the existing Kronospan facility, Holyhead Road, Chirk (hereafter referred to as the Site). The location of the Proposed Development is illustrated on **Figure 1.1**.

1.1.2 This ES presents the findings of the Environmental Impact Assessment (EIA) of the Proposed Development. The ES has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (the EIA Regulations), and in accordance with these Regulations, it assesses the likely significant effects of the Proposed Development on the environment during its construction and operation.

Need and Benefits of the Proposed Development

1.1.3 Kronospan has invested significantly in the Chirk manufacturing site in recent years to deliver environmental benefits and maintain the future sustainability and viability of this major regional employer.

1.1.4 As Kronospan looks to the future the Company recognises that further investment is required to meet its Vision 2025 ambitions which are to deliver:

- Economic sustainability – delivering a profitable and growing business.
- Environmental improvement – reducing our impact and supporting UK Net Zero targets through production of sustainable products and operations.
- Social benefit – maximising the value of our teams and developing our role in the community.

1.1.5 One of the key constraints limiting the operational efficiency of the Site is the fragility of the local electricity distribution network. The constrained supply of electricity from grid also limits the ability of the business to decarbonise. The proposed new 132kV substation would allow a connection to be made to the nearby strategic high voltage electricity line which runs from Oswestry to Legacy, Wrexham. This brings with it several benefits to local community by reducing the demand on the local network, mitigating the potential for local network failure, improved reliability for other businesses and community facilities and enhancing the opportunity for EV charging and provision of local renewable energy in Chirk. Removing reliance on the local distribution network would mean that Kronospan has a dependable power supply which will improve the operational efficiency of the Site, reduce the current dependence on the onsite fossil fuel-based generation facilities and enable the deployment of renewable technologies such as on-site PV electricity generation.

1.1.6 The provision of the north access road is something which has been requested by the local community for several years. The constraints which previously prevented the delivery of this have now been removed and Kronospan has developed a proposal which would remove approximately 750 two-way heavy goods vehicles (HGV) movements from the residential section of Holyhead Road over a 24-hour period (approximately 600 two-way movements during the daytime period, and approximately 150 two-way movements during the night-time period). This will have a variety of amenity and social benefits to the local community as well as improving the logistics arrangement at the Site.

1.1.7 In conclusion, the Proposed Development would provide enhanced facilities which would help maintain the future viability of the business at the site in Chirk. The investment would ensure the business can continue meet customer demands in a competitive manufacturing environment, as well as delivering numerous environmental and social benefits. This investment would help to safeguard the significant direct and indirect employment opportunities supported by the business and the wider local and regional economic benefits which result from a major manufacturing business such as Kronospan.

Pre-Application Advice

1.1.8 A request for pre-application advice was submitted to WCBC on 14 February 2020 for the development of a new private road leading from Holyhead Road to the existing Kronospan Facility. A subsequent request for pre-application advice was submitted to WCBC on 02 November 2021 for the Proposed Development (minus the proposed roundwood storage areas).

1.1.9 WCBC provided responses to the above on 07 January 2021 which included reference to the following key planning issues:

- The potential benefits of removing some vehicles from Holyhead Road in respect of traffic also residential amenity is acknowledged.
- Inappropriate development in the Green Wedge.
- Urban development intrusion into the rural landscape (with regards landscape and heritage designations).
- Impact assessment reports for ecology, arboriculture, landscape and views, air quality, heritage, and transport are required
- It is unclear if economic or other benefits arise from the development to sufficiently outweigh the concerns set out above.
- It is acknowledged that policy EM4 of the Local Development Plan (LDP) would permit employment development outside of settlements limits by way of extensions to existing employment sites. The policy requires it to be demonstrated that the there are no suitable alternatives, and that the development forms a logical extension to the existing settlement limit.
- Further information required about alternative locations to demonstrate that this is the only suitable location for the development.

1.1.10 The above issues are addressed in the planning application, notably the ES, the Planning Statement (and its appendices), and the Design and Access Statement.

Pre-Application Consultation

1.1.11 In accordance with The Town and Country Planning (Development Management Procedure) (Wales) (Amendment) Order 2012 (DMPO 2012),

and subsequently amended in 2016 (DMPO 2016), the Applicant has undertaken public consultation prior to submission of the planning application.

1.1.12 The Pre-Application Report that accompanies the application provides details as to how the consultation was conducted and how consultation responses were addressed (including any changes to the design of the Proposed Development and other changes to the application).

Assessment Team and Competence

1.1.13 The ES was compiled and coordinated by AXIS, a planning and environmental consultancy based in Flintshire. A team of specialist consultants has provided expert assessment in respect of some of the topic chapters (see **Section 1.2** below for further details).

1.2 EIA Methodology

Introduction

1.2.1 EIA is the process of identifying, evaluating, and mitigating the likely significant environmental effects of a development. Early identification of significant effects enables appropriate mitigation to be incorporated into the design of development to avoid, reduce or offset those effects.

Methodology

1.2.2 The approach to EIA is not standardised, but there are established and recognised approaches set out by professional institutions about methods to be used for the assessment of environmental effects.

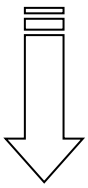
1.2.3 Each topic chapter within the ES follows the same broad structure for ease of reference, which is:

- Introduction
- Planning Policy, Legislation, and Guidance
- Assessment Methodology
- Baseline Environment
- Development Design and Impact Avoidance Measures.
- Assessment of Potential Effects
- Inter-relationship of Potential Effects
- Mitigation, Monitoring and Enhancement
- Summary of Potential Residual Effects
- Cumulative Effects
- Conclusions

1.2.4 The ES differentiates between those effects that may potentially result from construction activities, and effects that would result from the presence of the Proposed Development once operational.

Development Design, Impact Avoidance and Mitigation

1.2.5 Mitigation measures can be used to reduce or avoid any adverse effect. This approach is often referred to as the mitigation hierarchy with mitigation being selected as high up the hierarchy as possible.



Avoid

Reduce

Remediate

Offset/Compensate

1.2.6 Many of the mitigation measures within the Proposed Development have been 'embedded' into the Proposed Development because of decisions made during the evolution of its design.

1.2.7 Where required, additional mitigation, compensation or enhancement measures are proposed to prevent, reduce, or offset adverse effects which hare unavoidable through design, or to provide benefits to the scheme/local environment.

Significance Criteria

1.2.8 The level (or significance) of the effect of the Proposed Development is, in general, derived by considering the magnitude of the impact and the sensitivity of the receptor.

1.2.9 There are several factors that need to be taken into account when establishing the type and magnitude of an impact, including:

- the scale/degree of change from baseline
- whether it is temporary or permanent, and if temporary the likely duration (i.e. short-term, medium-term or long-term);
- whether it is direct or indirect;
- extent or spatial scale of the effect;
- duration of the effect;
- whether the effect is reversible; and
- probability/likelihood of the effect.

1.2.10 Similarly, the sensitivity of a receptor is reflective of several elements dependent on the environmental topic and effect being assessed, these may include:

- designation and legal status;

- quality;
- rarity; and
- ability to adapt to change;

1.2.11 The level (significance) of the effect is then defined relevant to each environmental topic. Standard terms are used wherever possible to classify effects throughout the ES (major, moderate, minor and negligible), and effects are also described as being adverse, neutral or beneficial.

1.2.12 Generally, the classification of an effect is derived using the matrix (or variations of) shown in **Table 1.1**.

Table 1.1: Classification of Effects

Magnitude of Impact	**Sensitivity/Importance of Receptor**			
	High	**Medium**	**Low**	**Very Low**
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Negligible
Low	Moderate	Minor	Negligible	Negligible
Very Low	Minor	Negligible	Negligible	Negligible

Cumulative Effects

1.2.13 The assessment of cumulative impacts encompasses the effects of the Proposed Development in combination with:

- approved development under construction;
- approved development, awaiting implementation; and
- proposals awaiting determination within the planning process with design information in the public domain.

1.2.14 The list of Kronospan schemes to be considered in the cumulative assessment is set out below and also shown at **Figure 2.1** and **Figure 2.2**.

- North East Warehouse
- Log Delivery System and Chipping and Flaking System
- Raw Board Storage
- Oriented Strand Board (OSB) Facility
- Covered Loading Yard
- Engineering Stores
- Silos and Extension to Chip Preparation Building
- Indicative 132kV underground cable route between proposed 132kV substation and existing Legacy/Oswestry overhead line

Structure of the Environmental Statement

1.2.15 **Volume 1 (Main Report)** introduces the project and details the technical assessments that have been undertaken to determine the likely impacts of the project. The Chapters of the Main Report are as follows (competent specialist name in brackets):

- ES Chapter 1.0: Introduction (AXIS).
- ES Chapter 2.0: EIA Methodology (AXIS).
- ES Chapter 3.0: Alternatives (AXIS).
- ES Chapter 4.0: Description of the Proposed Development (AXIS).
- ES Chapter 5.0 Landscape and Visual Effects (AXIS).
- ES Chapter 6.0 Historic Environment (Archaeology Wales).
- ES Chapter 7.0 Biodiversity and Nature Conservation (Avian Ecology).
- ES Chapter 8.0 Noise and Vibration (NVC).
- ES Chapter 9.0 Summary of Residual Effects (Various).

1.2.16 A series of **Illustrative Figures (Volume 2)** are provided, which illustrate the Proposed Development and provide graphical information to support each of the technical assessments.

1.2.17 A series of **Technical Appendices (Volume 3)** are provided that include details of the methodology and information used in the assessment, detailed technical schedules and, where appropriate, raw data.

1.3 Alternatives

Introduction

1.3.1 The EIA Regulations state that the ES must include a description of the reasonable alternatives studied by the applicant.

Initial Design Considerations

Location of the Proposed Development

1.3.2 The relative density of the existing Kronospan Facility and the presence and nature (physical and built environment) of the immediate surrounds means that the land to the north of the existing Kronospan Facility is the only practicable location for the Proposed Development. It is only by using the land to the north that the intended benefits of diverting HGV movements away from the main settlement would be realised.

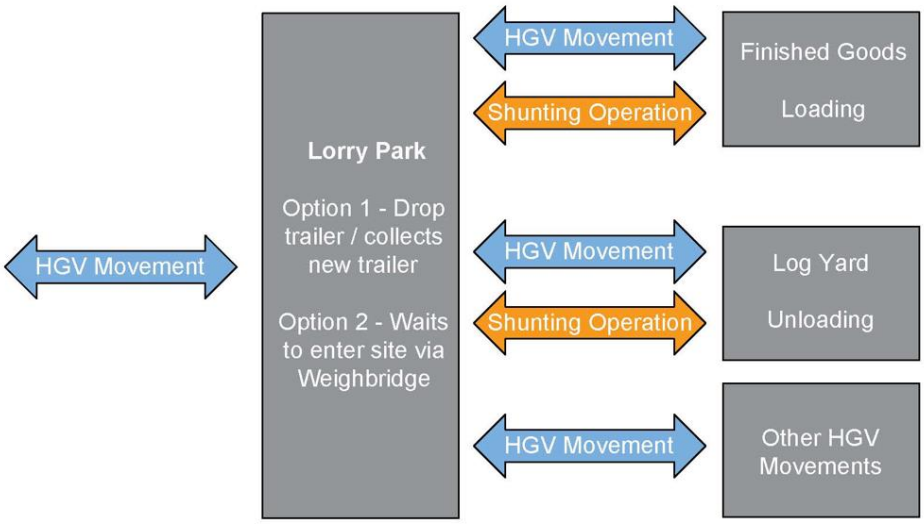
1.3.3 Although the Proposed Development Site is outside of the settlement limit/employment area defined in the local plans, its location immediately adjacent the existing Kronospan Facility would mean that it would be seen as a logical extension to the settlement limit/employment area.

Footprint and Location of the Proposed Lorry Park

1.3.4 The Proposed Development has been designed to maintain the current levels of activity and operations at the existing Kronospan Facility i.e., there are no provisions in place to increase the number of HGVs accessing and egressing.

1.3.5 The Kronospan Facility adopts a shunting loading/unloading operation (see **Inset 1.1**) to manage outbound HGVs and a timed (slotted) operation for in-bound timber deliveries only. The HGV shunting operation is undertaken on-site and has significant operational benefits by maximising HGV driver hours on the public road network and minimising the distance and duration of HGV shunting movements.

Inset 1.1: Existing and Proposed Lorry Park HGV Shunting Operation



1.3.6 Consultation with Cadw during the pre-application process raised the question as to why an off-site lorry park (to hold HGVs prior to unloading) outside of the Pontcysyllte Aqueduct and Canal World Heritage Site (WHS) Buffer Zone would not be feasible as an alternative to the Proposed Development.

1.3.7 Adopting the existing HGV shunting operation using an off-site lorry park (which would be required to be adjacent the A5/A483 east of the existing Kronospan Facility) would increase the coverage required from approximately 400m (on-site) to approximately 12-20km (depending on the off-site location) for each worst-case scenario HGV shunting movement (four separate movements between the existing Kronospan Facility and the off-site lorry park). This would result in a requirement for a greater number of HGV shunting vehicles and would increase the number of HGV movements to and from the Kronospan Facility.

1.3.8 The proposed lorry park would cover an area approximately 75% larger than the existing lorry park and approximately 10% more spaces. Its design (vehicles can enter and exit in forward gear, without the need for reversing, reducing the potential for accidents to occur and improving air quality and noise) means that more space is required.

Road Design

1.3.9 A roundabout design and a ghost island right turn (GIRT) were both considered for the proposed access off the B5070. The roundabout solution was selected as the preferred access arrangement as it would offer the following benefits:

- A roundabout would provide significant future proofing as it would be able to accommodate a significantly larger amount of traffic, accounting for any reasonable increase in future traffic levels.
- The roundabout design allows the internal layout to be positioned further to the north of the Proposed Development Site and therefore represents a more efficient use of space. The GIRT would need to be positioned further to the south and would require a greater amount of land to accommodate safe manoeuvres.
- The introduction of a roundabout on the B5070 in advance of entering the residential area of Chirk will help reduce vehicle speeds. It is understood that at present this section of road experiences relatively high vehicle speeds, which are anecdotally often in excess of the speed limit of 50 mph in this location.
- The introduction of a compact roundabout (instead of a standard roundabout design) is sufficient for the Proposed Development and necessitates a reduction in the speed limit along the B5070 from 50 miles per hour (mph) to 40mph to ensure compliance with the Design Manual for Roads and Bridges.
- Due to the GIRT having a stacking capacity, in the event that it was full, HGVs would have to wait on the B5070 and stop traffic from passing southbound.

Substation Siting

1.3.10 The siting of the proposed 132kV substation has been carefully considered. Five potential indicative locations were identified as follows:

- Site 1 – Existing Lorry Park.
- Site 2 – Reception Area (adjacent the proposed covered loading yard).

- Site 3 – Rear Farmhouse (now the site of the proposed engineering stores – planning permission granted).
- Site 4 – North Site 1 (in existing Kronospan Facility).
- Site 5 – North Site 2 (outside of existing Kronospan Facility).

1.3.11 The sites were appraised against a range of criteria including the local connection requirements of Scottish Power Energy Networks, landscape and visual impact, effect on Kronospan operations, technical feasibility, fire risk rating, flood risk, and collision risk.

1.3.12 On balance, Site 5 is the preferred location for the proposed 132kV substation. For visual impact reasons, the proposed 132kV substation (and the proposed weighbridge building) have been carefully sited at the southwestern extent of the Proposed Development Site, close to the existing sewage treatment works to group the more prominent Proposed Development buildings with existing built infrastructure.

1.3.13 Since the completion of the substation siting appraisal described above, the potential substation sites (including the preferred location Site 5) have been reviewed by an Independent Connection Provider (ICP) licenced to work on Scottish Power Energy Networks (SPEN) infrastructure (SPEN is the local distribution network operator (DNO). The ICP confirmed in correspondence dated 27 April 2023 that the selected site is the best overall location and is suitable for purpose and presents good access and security advantages.

Further Design Considerations

<u>Kronospan Liaison Group Meeting</u>

1.3.14 Draft proposals (of the Proposed Development) were presented to the members of the Kronospan Liaison Group Meeting on 25 May 2022. The main comment with respect to design was to ensure, wherever possible, that the proposed road layout was designed to minimise excessive speed along the B5070. The proposed roundabout design would help to achieve this.

1.3.15 An additional comment was made about the potential to position the lorry park further to the north (closer to the proposed roundabout) to ensure that

it would not encroach further south than the residential properties at 'Offa' and would be immediately opposite the field immediately north of Offa. This change was implemented.

Early Environmental Assessment Outcomes

1.3.16 The early stages of the environmental assessment work identified the following:

- The proposed southern wetland area was re-designed to enable a mature Category A tree to be retained.
- Options to screen potential views from Chirk Castle via the use of planted bunds within the Kronospan landholding west of the Site were explored. Given the height difference between the Castle and the Site, and the location of the Site on a west-facing slope, this screening would not have been effective. Instead, the approach taken is to break up views through planting at the western edge of the Site.
- Options to plant the entirety of the bund along the eastern perimeter of the Site were considered. Residents in properties east of the B5070 expressed concerns that planting here would block views from their properties to the hills west of the Site. Instead, tree planting is proposed west of the bund, which would help break up views of the Proposed Development, whilst maintaining the longer view to the hills.
- The Illustrative Landscape Masterplan for the Proposed Development Site (as shown on **Figure 4.3a**) was amended to include more areas of wildflower grassland and slightly less woodland planting to achieve biodiversity net gain.
- The proposed weighbridge building could have been single storey; however, this would have required the separation of their functions resulting in two separate buildings, one at the same height as the proposed weighbridge building, and a separate double storey building. The proposed design makes more efficient use of the land and would result in a reduced visual impact. The proposed pitched roof is preferred over a flat roof design for maintenance purposes and provides better opportunities for future solar installation.
- For the proposed lorry park lighting design, Option 2 (8m high lighting columns) was selected over Option 1 (12m high lighting columns) as the

shorter columns (despite requiring a greater number) would provide greater visual benefits.

Site Meeting with Landscape and Heritage Stakeholders

1.3.17 A meeting to discuss the principle of the Proposed Development was held on 07 October 2022 with representatives from Cadw, National Trust, and the Canal and River Trust (CRT). Representatives from the AONB Joint Committee and from WCBC were unable to attend.

1.3.18 The focus of discussions centred on the potential for further consideration of off-site landscaping works to further minimise visual impact and provide sensitive linkages (where appropriate) with notable landscape and heritage features including but not limited to Chirk Castle, and the Registered Park and Garden of Whitehurst.

1.3.19 These matters were expanded upon by the stakeholders referred to above and other statutory consultees during the subsequent statutory pre-application consultation stage (see text below for a summary of the pre-application consultation process).

Pre-Application Consultation

1.3.20 The key Proposed Development design changes (implemented and committed) resulting from the pre-application consultation process are summarised below:

- Provision of off-site landscape enhancements on land under the control of the Applicant – see **Figure 4.3b**, **ES Chapter 4.0 (Description of the Proposed Development),** and **ES Chapter 5.0 (Landscape and Visual Effects)** for further details.
- Aspirations by stakeholders for further landscape enhancements on third party land. The details of any proposals would be subject to agreement with relevant landholders, and as such cannot be stated with any certainty. Based on discussions to date, the following outline landscape enhancements are proposed:

- A: Woodland Management Plan along the Llangollen Canal corridor, within CRT land ownership. This is envisaged to comprise:
    - Selective removal of old/decaying tree cover along the canal cuttings.
    - Replacement planting with new native species.
    - Management of the woodland (including any new planting) to maintain existing levels of visual screening, to enhance biodiversity, to ensure the safety of canal users, and to maintain the stability of the canal structures and earthworks.
- B: Heritage Enhancements, described in greater detail in **ES Chapter 6.0 (Historic Environment),** would be provided via a Conservation Management Plan and would offer enhancement measures in relation to the WHS (and its Buffer Zone) through the setting out of relevant positive management proposals on land within the Applicant's ownership.

- The landscape proposals would be delivered by a combination of suitably worded planning conditions and a Section 106 Agreement or Unilateral Undertaking.
- The targeted field evaluation (**Appendix 6.6**) confirmed the likely remains of a lime kiln of possible medieval/post-medieval origin at the eastern extent of the Proposed Development Site between the proposed weighbridge car park access road and the landscape bund. Subject to further archaeological archiving works, this feature has the potential to be of National significance and would subsequently require preservation in situ. A suitable buffer (to be agreed with Cadw) would be enforced around the lime kiln feature to ensure the construction works would not cause damage. These measures will be set out in the detailed design stage.

Post-Submission Statutory Consultation Responses

1.3.21 During the statutory post-submission consultation stage undertaken by WCBC, several consultation responses have been received by WCBC and

subsequently issued to the Applicant for further consideration and comment.

1.3.22 Some of the consultation responses received were with respect to further consideration of alternatives to minimise impact on the surrounding landscape and historic environment; the most notable of which were provided by Cadw.

1.3.23 The Applicant and Cadw held a meeting on 20 April 2023 to discuss alternatives in greater detail. The discussion included further clarification of the key design parameters considered (of the various components) during the development of the Proposed Development and the desire to achieve, on balance, a proposal that has the least environmental impact, with particular regard given to consideration of the historic environment, the landscape and visual impacts, local amenity (noise, vibration and air quality), and impacts on the local highway network.

1.3.24 The discussion continued to understand the extent to which it would be possible to amend the design of the Proposed Development to reduce impacts on the historic environment, with a particular focus on reducing/removing the extent of new development located towards the northern extent of the red line boundary. An outline sketch of an alternative Proposed Development layout was produced to address this objective, which Cadw later agreed would likely assist with reducing the impact of the Proposed Development on the historic environment. This sketch was subsequently looked at in greater detail by the Applicant to develop a workable alternative layout for subsequent formal submission to WCBC. The key changes implemented during the development of the alternative layout are discussed in more detail at **ES Chapter 3.0 (Alternatives)** but are summarised below.

- Weighbridges, weighbridge building, and weighbridge car park moved approximately 20m to the south.
- Lorry park footprint reduced by approximately 50% (previously 91 HGV spaces, now 45 HGV spaces) and moved further south.
- Area at the northern extent of the Proposed Development Site now vacated by the reduced lorry park is proposed as further wildflower grassland.

- Roundwood storage areas reduced in size (around 21% collectively) to accommodate the above.
- Additional land on the western boundary of the western roundwood storage proposed for new woodland planting.
- The bund along the eastern boundary of the Site amended to a height of approximately 4m adjacent to the proposed lorry park, and to a height of approximately 7m north of the proposed lorry park (when measured from the adjacent internal platform/road level of the Proposed Development) to provide appropriate noise mitigation for the residential receptors at Offa/Wern. This would provide similar noise effects to the original (and now superseded) Proposed Development layout.
- The 5m high acoustic screen along the eastern boundary of the lorry park extended further south to also run adjacent the weighbridge car park area.

The Do Nothing Alternative

1.3.25 The alternative to the Proposed Development is to do nothing and operations continue as existing. This would mean that the benefits of the Proposed Development would not be able to be realised. In particular, the provision of the north access road is something which has been requested by the local community for several years. Kronospan has developed a proposal which would remove approximately 750 two-way HGV movements from the residential section of Holyhead Road over a 24-hour period which would have a variety of amenity and social benefits to the local community.

1.3.26 The do-nothing approach would jeopardise Kronospan's Vision 2025 whereby the Proposed Development would provide enhanced facilities which would help maintain the future viability of the business at the site in Chirk. The investment would ensure the business can continue meet customer demands in a competitive manufacturing environment, as well as delivering numerous environmental and social benefits. This investment would help to safeguard the significant direct and indirect employment opportunities supported by the business and the wider local and regional economic benefits which result from a major manufacturing business such as Kronospan.

1.4 Description of the Proposed Development

Introduction

1.4.1 The Proposed Development would comprise the principal components set out below. The location of each of these is illustrated on **Figure 4.1**. An illustrative 3D model of the Proposed Development (overlain on existing aerial photography) is provided at **Annex 1.1** at the end of this document.

1.4.2 The proposed north access road would require the creation of a new junction in the form of a roundabout from the B5070 approximately 1.2km to the north of the existing site entrance to the Kronospan Facility. This would be at the existing junction with an unnamed road running east near to Lodge Farm Cottage. The new roundabout would allow vehicles travelling to and from the existing Kronospan Facility to enter and exit the B5070 to the north of Chirk, avoiding the requirement for the majority of HGVs accessing the Facility to enter the settlement of Chirk. The proposed route would require the diversion of the existing access to Afon Bradley Farm, which would become an exit from the proposed roundabout. The new access road would lead from the roundabout west and then south across the existing agricultural field, entering the existing Kronospan Facility in the northeast corner of the current operational site.

1.4.3 Access and egress to the Site would be via the proposed north access road. HGV access/egress via the existing access off the B5070 would be in exceptional/emergency circumstances only.

1.4.4 An area (of approximately 0.87ha) for the parking of HGVs is proposed to the east of the proposed access road and to the west of the B5070. The proposed lorry park would cater for up to 45 HGVs and has been designed so that vehicles can enter and exit the proposed parking spaces in forward gear, without the need for reversing.

1.4.5 Approaching the existing wider Kronospan Facility there would be four parallel weighbridges to service incoming and outgoing vehicles. The proposed weighbridges have the flexibility to operate as two ‘in’ and two ‘out’ as required. In between the weighbridges is a proposed three storey timber clad building with a gantry, allowing timber samples to be taken from incoming vehicles for quality checking.

1.4.6 A proposed staff and visitor car park would be to the south of the proposed lorry park and immediately east of the proposed weighbridges. A single-storey facilities block for the lorry park would be north of the staff and visitor car park.

1.4.7 From the weighbridge, vehicles would continue south going to the east of the existing Gas Governor, entering the existing Kronospan Facility between the East Logyard (where the new East Warehouse is currently under construction) and Kronoplus. A route north towards the proposed roundabout and out of the Proposed Development Site would be to the west of the Gas Governor, immediately to the north of the Kronoplus building.

1.4.8 Vehicles exiting the Site would follow the route described above, with both lanes merging before the 'out' weighbridge', and then routing north to the new roundabout junction. There would be an access to the proposed 132kV substation, described below.

1.4.9 The proposed 132kV substation would cover a broadly rectangular area and would be constructed where possible from permeable materials (such as gravels or stones). Bund walls would be constructed around some of the proposed equipment to provide protection from vehicles on the adjacent access road. Two fire walls would be located adjacent to the two main transformers. An access road would be provided around three sides of the equipment, with an area for parking. A substation building and a building for ancillary equipment would also be constructed. The substation would be surrounded by palisade security fencing and floodlights would be provided.

1.4.10 Two proposed roundwood storage areas are proposed. One storage area would be immediately north of the proposed 132kV substation and west of the proposed weighbridge and would cover an area of approximately 0.41ha. The second storage area would be south of the proposed weighbridge car park and south-east of the proposed weighbridges and would cover an area of approximately 0.3ha.

1.4.11 Both proposed roundwood storage areas would provide temporary storage for logs (maximum storage height of 4m), prior to being moved to other facilities within the wider Kronospan Facility for processing.

1.4.12 Appropriate signage would be constructed at the proposed roundabout (and on the approach to the Proposed Development off the roundabout) to instruct and inform HGVs, visitors and contractors of the presence of and permanent access arrangements for the Kronospan Facility.

1.4.13 The Proposed Development would include landscape and ecological mitigation intended to reduce the visual effects of the new structures and vehicle movements and to enhance biodiversity. Measures to manage surface water flow, including two new drainage basins, would also be provided.

1.4.14 It is anticipated that construction would occur between Quarter 2 2024 and Quarter 3 2027. An indicative programme is set out below at **Inset 1.2**. There would be overlap between some of these activities, and the majority of construction works, (i.e. from the start of site clearance to the completion of the roundwood storage areas and weighbridge car park) would last for approximately fifteen months in total.

1.4.15 Construction of the proposed 132kV substation would take place after all the other elements are built and in operation.

Inset 1.2 Indicative Construction Programme

Activity	Duration (Days)	2024				2025				2026				2027			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Increase Afon Bradley access off B5070	10																
Site compound set up	15																
Earthworks (including wetlands and bund construction	120																
North access road	140																
Lorry park	170																
s278 highways works	180																
Weighbridge building and facilities block	150																
Roundwood storage area	60																
Weighbridge car park	40																
132kV substation	600																

1.5 Landscape and Visual Effects

1.5.1 Chapter 5.0 of the ES, along with the accompanying Figures and Appendices, comprises the Landscape and Visual Impact Assessment (LVIA) of the Proposed Development. The LVIA addresses the potential landscape and visual effects of the Proposed Development during construction and operation and follows best practice guidance set out in *Guidelines for Landscape and Visual Impact Assessment*[1] (GLVIA).

1.5.2 The Proposed Development would be introduced into what is presently an undeveloped area immediately north of the existing Kronospan Facility at the edge of Chirk. A series of relatively small new structures would be introduced towards the southern boundary of the Site. A new access road from the B5070 and new lorry parking would be introduced further to the north. A new roundabout would be constructed on the B5070, and part of the existing road would be realigned to accommodate this. The developed Site would be enclosed by a combination of new planting and an earth bund along the eastern perimeter. The landscape proposals would also include new hedgerows, new species-rich grassland and new wetland vegetation. There would be an overall net gain in tree cover as a result of the Proposed Development.

1.5.3 During the construction period the nature, location and intensity of activities is likely to vary. A range of features are likely to be present on a temporary basis, which would contrast with their surroundings. There would be significant effects upon landscape character within the Site and along the B5070 corridor. Significant visual effects would be experienced by users of the B5070 and by residents at Lodge Farm Cottage, Parkgate Cottage. These effects would relate chiefly to highways works which are expected to last for approximately nine months. Properties along the B5070 at the edge of Chirk would also experience significant visual effects resulting from the visibility of activities within the Site for the fifteen-month period when the majority of construction activities would take place.

[1] Landscape Institute and Institute for Environmental Management and Assessment, 3rd edition 2013. Guidelines for Landscape and Visual Impact Assessment. Abingdon: Routledge.

1.5.4 The Proposed Development would result in the removal of existing grassland, hedgerows and tree cover within the footprint of the proposals. There would be an initial significant adverse effect upon woodland due to the loss of existing tree cover. However, there would be an overall net gain in native woodland following the implementation of proposed new planting. As such, longer term effects would be significant and beneficial. Other changes in landscape fabric would not be significant.

1.5.5 Effects on landscape character would not be significant. The proposed new features that would be introduced would be less prominent than the far larger existing industrial structures. Their presence would result in a localised sense of urbanisation at the northern edge of Chirk, which would be limited in extent and intensity by a combination of landform and existing and proposed vegetation cover. Woodland recently planted by the Applicant (as part of the Kronospan Landscape Strategy) would reduce visibility as vegetation establishes (and this is already beginning to occur from some locations such as along the Canal corridor). Further new planting associated with other recent Kronospan development proposals, and with the Proposed Development would provide further screening. This planting would help to limit the visibility of the Proposed Development, in accordance with published guidelines for the Landscape Character Area.

1.5.6 Significant visual effects would occur at only one of the twenty Viewpoints included in the LVIA, and this effect would occur in the short-term only. This significant effect would occur from a Viewpoint on the B5070 close to the location of the proposed new roundabout and would occur due to the changes to the highway corridor and loss of nearby tree cover. As new planting establishes, the intensity of the effects would reduce to non-significant levels.

1.5.7 None of the viewpoints would experience significant visual effects in the medium and longer-term. At five of the viewpoints, the Proposed Development would not be visible at all due to a combination of intervening landform and vegetation cover, and at four further viewpoints, the Proposed Development would only be visible in the short-term before new woodland planting would wholly screen views.

1.5.8 Short-term significant visual effects are also likely to be experienced by residents in nearby properties at the edge of Chirk. Residents at Bryn Hyfryd west of the B5070 and in properties along Wern, Offa and Linden Avenue east of the B5070 would have views of the proposed new features from first floor windows. As proposed new planting establishes, this would break up these views, and the intensity of the effects would reduce.

1.5.9 From Chirk Castle, views of the Proposed Development would be available from the northern and north-eastern edge of the Castle including the pathways around the entrance and the roof. The new features would be well screened by intervening vegetation and where visible would be a minor background feature. Views would also be available from a short section of the permissive path that runs east from the Castle, and from this area proposed planting would provide some partial screening of views in the medium and longer-term. The amenity of visitors to the Castle would be unaffected by the limited changes in view that would occur.

1.5.10 From the Llangollen Canal corridor, there would be very little visibility of the Proposed Development. Occasional glimpsed views would be available in winter from locations east of the Marina. The equivalent summer views would be wholly screened by vegetation. Recent planting implemented by the Applicant (as part of the Kronospan Landscape Strategy) and new planting proposed as part of the Proposed Development would provide all year-round screening once this has established. Elsewhere along the Canal corridor, existing vegetation, the railway embankment and the canal cutting would screen views.

1.5.11 The lighting proposals for the Proposed Development would be designed in accordance with current good practice. They would ensure that any spillage of obtrusive light outside of the Site boundary would be minimised. Lighting is already present in the surrounding area and there would be only limited change from baseline. Night-time landscape and visual effects would not be significant.

1.5.12 The Proposed Development would be visible from some locations within the Clwydian Range and Dee Valley AONB. However, the new features would be limited additions, located towards the rear of the view, and their presence would not result in any notable change in the nature of the views

available looking out across what is a predominantly agricultural landscape. The statutory purposes of the AONB would not be materially affected by the presence of the Proposed Development.

1.5.13 The Site is located within a local Special Landscape Area (SLA) designation maintained by WCBC. The Proposed Development would be well enclosed by proposed planting and by the proposed earth bund along the eastern perimeter. This would greatly restrict the influence that it would have outside of the Site boundary, including from within the remainder of the designation. In the wider context, the landscape of the SLA would undergo little change. The Site and its surroundings do not fall within the revised SLA boundary proposed as part of the LDP.

1.5.14 Cumulative landscape and visual effects that could occur in a scenario where other consented and proposed development schemes are also present would not be significant. The presence of other developments within the existing Kronospan Facility and of the indicative 132kV underground cable route would have no influence of note upon the effects of the Proposed Development.

1.6 Historic Environment

1.6.1 Chapter 6.0 of the ES, along with the accompanying Figures and Appendices, addresses the potential impacts that the Proposed Development would have on the archaeological and historical resource of the area.

1.6.2 The assessment has been guided by present legislation concerning heritage and archaeology, and by several guidance documents including local, national and international guidelines dealing with the management of WHS.

1.6.3 A desk-based assessment, settings assessment and Heritage Impact Assessment has been undertaken to provide an assessment of baseline conditions, and a geophysical survey and trenched evaluation has been undertaken within the Site.

1.6.4 As a result of the above, baseline conditions for the historic environment comprise:

- No designated heritage assets are located within the Site.
- Within the extended study area there are 10 scheduled monuments (of which one is also the Pontcysyllte Canal and Aqueduct WHS and six relate to sections of Offa's Dyke), 18 listed buildings (including Grade I listed Chirk Castle, 2km to the south-west of the Site), one conservation area and five registered parks and gardens (including the Grade I designed landscape at Chirk Castle).
- There are 54 non-designated historic assets within 500m of the Site (including Afon Bradley farm which is a non-designated historic farm complex to the immediate east of the Site).
- Field surveys identified one new non-designated historic asset within the Site, the remains of a limekiln.

1.6.5 The majority of the relevant mitigation measures are embedded into the design of the Proposed Development, and form part of the Illustrative Landscape Masterplan (**Figure 4.3a**), which would reduce or eliminate potentially adverse historic environment effects. Additional mitigation

measures are proposed, comprising safeguarding during construction for the limekiln identified within the Site.

1.6.6 The level of residual effect level of residual effect, after the implementation of the embedded and additional mitigation measures is predicted to be:

- Neutral in relation to the limekiln, as the design of the Proposed Development has been amended to avoid the feature;
- Minor adverse in relation to non-designated Afon Bradley farm complex, resulting from development within the setting of this asset;
- Minor adverse in relation to Pontcysyllte Canal and Aqueduct WHS/ SM, as a result of limited changes to the setting of the asset;
- Minor adverse in relation to Chirk Castle, Grade I listed building and Chirk Castle Grade I registered park and garden; and
- A neutral effect in relation to Offa's Dyke scheduled monument.

1.6.7 None of the predicted residual effects in relation to the historic environment are significant.

1.7 Biodiversity and Nature Conservation

1.7.1 Chapter 7.0 of the ES, along with the accompanying Figures and Appendices, addresses the potential effects on biodiversity during construction and operation of the Proposed Development. Effects have been assessed in accordance with guidance set out in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1* (2018, Chartered Institute of Ecology and Environmental Management).

1.7.2 A series of measures would be enacted during both the construction of the Proposed Development and once operational to mitigate against potentially adverse effects. These measures include:

- Appointment of an Ecological Clerk of Works to ensure that biodiversity and nature conservation issues are managed appropriately during construction.
- No works to existing trees and hedges during bird nesting season.
- Protection of retained vegetation during the construction period, including trees with bat roost potential.
- Pre-construction surveys for protected species including otter and badger.
- Use of reasonable avoidance measures to prevent harm to reptiles and amphibians.
- Landscape proposals including the creation of new higher value habitats, which will be managed throughout the lifetime of the Proposed Development.
- Following best practice guidance to control pollution resulting from dust emissions, run-off and spills during construction.
- The design and implementation of lighting that is sensitive to the needs of wildlife during construction and once operational.
- A sustainable urban drainage system to control surface-water run-off from the Site; and
- Provision of bird and bat boxes on Kronospan land.

1.7.3 The construction and operation of Proposed Development would not give rise to any effects on statutory or non-statutory designated sites for nature conservation.

1.7.4 Construction activities would have a minor adverse effect upon priority habitats, due to the loss of approximately 750m of hedgerow. Once operational, approximately 1.28km of new hedgerow would be planted, and this would result in a minor beneficial effect.

1.7.5 Other vegetation within the Site is of low ecological value. As part of the Proposed Development, there would be a net loss in vegetation cover overall. However, the provision of newly created woodland, wildflower grassland and wetland would result in the creation of higher value habitat, and the effects of this would be minor beneficial.

1.7.6 Implementation of the landscape proposals would result in a minor beneficial effect for breeding birds. The overall net gain in tree and hedgerow cover within the Site would provide increased nesting opportunities.

1.7.7 Construction activities would result in a minor adverse effect on forging and commuting bats due to the loss of vegetation. There would also be a minor adverse effect on roosting bats, due to increased noise levels. Following the implementation of the landscape proposals, effects would be negligible.

1.8 Noise and Vibration

1.8.1 Chapter 8.0 of the ES, along with the accompanying Figures and Appendices, assesses the impact of the Proposed Development with regard to noise and vibration. It describes the methods used to assess the impacts, the baseline conditions that currently exist at the site, the potentially affected noise sensitive receptors, the possible direct and indirect impacts arising from the Proposed Development, and the mitigation measures that would be implemented to reduce noise impact from the Proposed Development.

1.8.2 Noise and vibration levels have been considered and assessed during the construction and operational phases of the Proposed Development. Relevant and appropriate noise and vibration guidance and standards have been used to determine the impact. The assessment has been undertaken to inform and guide the design of the Proposed Development, such that any likely noise and vibration impact on existing and potential sensitive receptors is minimised.

1.8.3 To establish any likely impact from noise a robust assessment of baseline sound levels has been considered by undertaking fixed position noise monitoring at 11 noise sensitive receptor areas around the Site, over a period of a week or a 5-day period including a weekend.

1.8.4 In accordance with appropriate standards, best practicable means (BPM) would be employed to control the noise generation during the construction period. Measures would include restriction on operating hours, screening measures, sensible routing of equipment to site and appropriate site management and liaison with residents to minimise and control noise. Such measures would be defined within the CEMP.

1.8.5 In relation to the operational phase, additional mitigation measures (including permanent screening at the proposed lorry park area and permanent screening close to the property of Bryn Hyfryd) are proposed to ensure that the resultant operational noise levels are within appropriate guidance and standards. The measures would be based on the employment of best available techniques (BAT) to mitigate any potential peak noise sources.

1.8.6 The assessment shows that there would be no significant impacts during the construction or operation of the Proposed Development following the implementation of appropriate mitigation.

1.8.7 The introduction of the lorry park results in HGVs being able to avoid the need to travel through part of Chirk town centre and the assessment shows that road traffic noise levels would be perceptibly reduced for those NSRs nearest to the existing entrance and north of the entrance off Holyhead Road. The Proposed Development therefore provides a positive benefit in respect of noise.

ANNEX 1.1

PROPOSED DEVELOPMENT – ILLUSTRATIVE 3D MODEL USING EXISTING AERIAL PHOTOGRAPHY