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

DESIGN AND ACCESS STATEMENT

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1.0 INTRODUCTION & BACKGROUND

1.1 Introduction

1.1.1 This Design and Access Statement (DAS) has been prepared to accompany a planning application made by Kronospan Limited (hereafter referred to as the Applicant) 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).

1.1.2 This document is to be read in conjunction with the Planning Statement and accompanying Technical Appendices, Planning Drawings and Environment Statement which form part of the planning submission.

1.1.3 The statutory requirement to produce a DAS is set out within Article 7 of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (see details below). It requires that this planning application is accompanied by a DAS that sets out the design principles and concepts that have been applied to the development, demonstrates how the development takes context into account, and how issues relating to access to the development have been dealt with.

1.2 Structure of Design and Access Statement

1.2.1 This DAS is divided into seven sections as follows:

- Section 1.0 provides an introduction to the document.
- Section 2.0 describes the legal background and guidance that underpins the document.
- Section 3.0 describes the Site and its surroundings.
- Section 4.0 provides a description of the Proposed Development.
- Section 5.0 describes the design principles.
- Section 6.0 identifies policies and issues relating to access.
- Section 7.0 provides some concise conclusions.

2.0 LEGAL BACKGROUND AND GUIDANCE

2.1 Legislative Requirements

2.1.1 The legal requirement to provide a DAS is set out in Article 7 of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012 (as amended). This is hereafter referred to as the 'DMPO'.

2.1.2 Paragraph 4 of Article 7 requires that a DAS must:

(a) explain the design principles and concepts that have been applied to the following aspects of the development:
   i. environmental sustainability;
   ii. movement to, from and within the development;
   iii. character; and
   iv. community safety
(b) demonstrate the steps taken to appraise the context of the development and how the design of the development takes that context into account in relation to its proposed use and each of the aspects specified in sub-paragraph (a);

2.1.3 Paragraph 5 of Article & requires that a DAS must, in relation to access, explain:

(a) The policy or approach adopted as to access and how policies relating to access in the development plan have been taken into account;
(b) How any specific issues which might affect access to the development have been addressed; and
(c) How features which ensure access to the development are to be maintained.

2.2 Good Practice Guidance

2.2.1 The Welsh Government have produced good practice guidance (*Design and Access Statements in Wales What Why and How*, 2017) on how good design can be reflected in DAS. Page 5 of the guidance is clear that:

'*A DAS communicates what is proposed and demonstrates the design process that has been undertaken to reach the final proposal*'

and that

"*…It is recommended that a DAS is concise…*"

2.2.2 This DAS provides a description of the relevant design and access issues in respect of the development. The level of detail provided is considered to be appropriate and proportionate to the nature and complexity of the scheme.

3.0 THE SITE AND SURROUNDINGS

3.1 Application Site

3.1.1 The Site of the Proposed Development is to the north of the existing Kronospan Facility, Chirk. It is on the western side of the B5070 Holyhead Road, on land that is presently in agricultural use. The Site has an area of approximately 11.74 hectares (ha). The entirety of the Site is under the ownership of the Applicant.

3.1.2 To the east, the Site abuts the B5070. The boundary with the highway is defined by a clipped hedgerow between 1.5m and 2m in height, which largely screens ground level views. To the east of the road, a series of two-storey residential properties at the edge of Chirk face the south-eastern part of the Site boundary. The north-eastern part of the Site faces a field on the eastern side of the road (which is under the control of Kronospan).

3.1.3 The northern boundary of the Site is defined by the existing access road to Afon Bradley Farm. This is a farm holding under the control of Kronospan, which includes a single residential property and a series of outbuildings.

3.1.4 The Afon Bradley is a small watercourse which runs along the western boundary of the Site and flows northwards into the River Dee. Fields under the control of Kronospan are west of the Afon Bradley The western edge of these fields is defined by the railway that runs between Chester and Shrewsbury. West of the railway is the Llangollen Canal which forms part of the Pontcysyllte Aqueduct and Canal World Heritage Site (WHS).

3.1.5 A sewage treatment works (owned by Dwr Cymru Welsh Water), a gas governor (owned by Wales and West Utilities), and one property (owned by Kronospan), all abut the southern boundary of the Site, with the wider (existing) Kronospan Facility located beyond these.

3.2 Wider Site Context

3.2.1 The wider Kronospan site covers an area of approximately 41.2 hectares at the western edge of Chirk. It is a well-established industrial facility in operation since the 1970s, and which includes a number of large industrial process buildings (some with emissions stacks), storage areas for raw materials, warehouse buildings, offices and car parking. Some of the existing structures are large in scale and height. The tallest

structures on site are the emissions stack (70m), the WESP stack (65.5m), the MDF cyclones (57m), and the dryer exhaust stack at the wet electrostatic precipitator (WESP) Chip Dryer (50m). Emission plumes from these stacks are often clearly visible from the surrounding area. Surface water for most of the wider Kronospan site currently drains to two lagoons on the northern boundary. A third lagoon was constructed to take surface water form the log yard.

3.2.2 Chirk is a small town off the A5 and just north of the England-Wales border (within Wales). The residential areas of the town mostly lie east of the B5070, with the wider Kronospan site to the west of this road. Dense tree planting, some of which is on an earth bund defines the eastern perimeter of the wider Kronospan site and provides effective screening of views from nearby properties.

3.2.3 On the western side of the B5070, to the south-east of the wider Kronospan site is an area of greenspace comprising a private sports club (immediately south of the Kronospan car park) and Chirk Recreation Ground. The Cadbury's (Mondelez) factory is immediately south of the wider Kronospan site. Chirk town centre lies south-east of the wider Kronospan site and includes various commercial and community buildings and areas of public open space.

3.2.4 The wider area is rural. The landform falls steeply, from the hills to the west towards the much lower-lying Shropshire Plain to the east. Local variations in topography are evident, with a marked rise to a ridge east of the town.

3.2.5 To the west of the wider Kronospan site, the land rises towards the foothills of the Welsh mountains. The Llangollen Canal forms part of the Pontcysyllte Aqueduct and Canal WHS. In addition to recognised heritage value, the canal corridor is an important recreational route. The canal passes close to the western boundary of the wider Kronospan site and some of the existing structures and perimeter fencing are visible from it.

3.2.6 Beyond the canal, settlement is sparse and land cover comprises a mixture of pasture and small woodlands. Much of this area falls with the boundary of the Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB). Chirk Castle and its associated grounds (Grade 1 registered) are a notable feature within the landscape. The Castle is owned by the National Trust and is a well-known and well-frequented visitor destination.

4.0 THE PROPOSED DEVELOPMENT

4.1.1 This section of the DAS provides a summary description of the layout and design of the Proposed Development.

4.1.2 A detailed description of the Proposed Development is provided at **ES Chapter 4.0 (Description of Proposed Development)**.

4.1.3 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 heavy goods vehicles (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.

4.1.4 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.

4.1.5 Approaching the existing wider Kronospan Facility there would be four parallel weighbridges to service incoming and outgoing vehicles. 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.

4.1.6 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.

4.1.7 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.

4.1.8 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.

4.1.9 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.

4.1.10 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.

4.1.11 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.

4.1.12 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.

5.0 DESIGN PRINCIPLES

5.1 Introduction

5.1.1 The following sub-sections provide an explanation of the principles and concepts that have been applied in developing the design of the Proposed Development.

5.2 Need and Use

General

5.2.1 The Proposed Development forms part of a range of projects that have been proposed by Kronospan over recent years to improve the sustainability of operations at the Chirk manufacturing facility. The enhancements undertaken at the Site to date have enabled it to deliver continuous environmental improvement whist maintain the manufacturing efficiencies required to sustain an economically viable business in the short, medium and long term. The recent improvements were delivered as part of the Kronospan Vision 2020 programme which involved the business investing £200 million in the site in Chirk since 2015.

5.2.2 The most recent developments at the Site have helped deliver a more efficient manufacturing process, responding to the evolving nature of customer demands. The Chirk facility can now offer a greater range of products than was previously the case and the business is continuing to deliver new and upgraded facilities required to meet future customer demands. The investments made will help secure the jobs and financial benefits that the business brings to the local economy.

5.2.3 To ensure that Kronospan maintains its position in a competitive market, delivers its products in a more sustainable way and make improvements to its impacts on the local community, further investment at the Site is required to meet Kronospan's Vision 2025 objectives.

5.2.4 The different elements of the Proposed Development would help achieve this as follows.

North Access Road (including Lorry Park, Weighbridge Building and Weighbridge Car Park)

5.2.5 The proposed north access road would be used to provide a new HGV access into the Kronospan Facility. There have been historical concerns raised by the local

community associated with HGVs travelling through the residential area of Chirk which primarily relate to amenity issues such as noise, air quality and dust. The local community has previously requested that Kronospan investigate the potential for a new access north of the town.

5.2.6 The proposed access would remove approximately 750 two-way HGV movements (over a 24-hour period) from the residential areas of Chirk which front onto Holyhead Road. This would result in a range of amenity benefits including:

- noise reduction;
- improvements in air quality;
- reductions in dust generated and mobilised by HGVs; and
- increased road safety.

5.2.7 With respect to noise and vibration, neutral to moderate benefits are anticipated for receptors experiencing road traffic noise due to the HGV traffic no longer travelling past the residential areas down the B5070. Associated beneficial effects with respect to air quality are anticipated for the same reasons.

5.2.8 Whilst there are no records of safety incidents on Holyhead Road relating to Kronospan traffic, it is well recognised that HGVs traffic has perceived and actual impacts on pedestrians and cyclists. Reducing the number of HGVs on the residential stretch of Holyhead Road would improve pedestrian and cyclist enjoyment and may encourage greater use by virtue of a perceived reduction in safety concerns.

5.2.9 The introduction of a roundabout on Holyhead Road 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.

5.2.10 The relocation and development of new weighbridge facilities as part of the new access road will improve the flow of traffic to the Site and away from the main pedestrian and staff entrance, improving the safety and wellbeing of employees and visitors.

5.2.11 At present, the HGV parking provided on the existing Kronospan Facility is adequate for peak time deliveries. However, Kronospan manages the HGV flow into the site using relatively constrained time windows to ensure HGV queuing is limited and that

adequate short-term parking is available. As such vehicles which arrive in the local area in advance of their predefined time slots are required to use parking facilities on the trunk road network. Improved HGV parking facilities at the Proposed Development Site (which would remain short term) would enable wider delivery slots to be created which would help reduce congestion of existing parking areas on the local trunk road network.

5.2.12 The Proposed Development would enable the existing HGV parking area at the site entrance to be re-purposed in the future for improved staff, visitor and contractor car parking, improving the working conditions for employees and enhancing the appearance of the entrance to the facility.

132kV Substation

5.2.13 The manufacturing processes which take place at Kronospan require large quantities of heat and electricity. The high voltage electricity network in this part of Wales is sub-standard for the level of demand it is required to meet. Regular maintenance has to be undertaken by the Distribution Network Operator (DNO) to the local grid infrastructure to ensure it continues to supply the needs of Chirk and the surrounding area. During periods of maintenance the supply of power to Kronospan can be severely affected, this in turn has a significant impact on manufacturing operations.

5.2.14 Due to the fragility in the local grid, Kronospan is only licensed to draw approximately 55% of their total demand from the grid. To meet its power demands, safeguard against the fragility of the local electricity grid, and reduce the risk of the local grid hindering manufacturing efficiency, Kronospan has installed its own power generation facilities, including an on-site biomass plant and a series of natural gas engines. Whilst the biomass plant provides renewable energy, the gas engines are fossil-fuel reliant.

5.2.15 In 2017 the Welsh Government set a target of meeting 70% of Wales' electricity demand from Welsh renewable electricity sources by 2030[1]. In 2019, it was estimated that over half (51%) of Wales' energy needs were met through renewable energy generation. As such there is clear ambition to significantly decarbonise the electricity grid in Wales providing the opportunity for businesses such as Kronospan to lower their carbon footprint. However, to benefit from this low carbon electricity it is

[1] *Welsh Government press release, Cabinet Secretary for Environment Lesley Griffiths , September 2017*

necessary for the grid infrastructure to be reinforced, not only to allow more renewable generation to connect to the grid but also for the grid to be resilient enough to supply power the business which need it.

5.2.16 it is clear that there is a need for investment in new grid infrastructure, Chirk being a prime example of this. Kronospan has been working with the DNO to identify how the current local grid issues can be resolved. This has resulted in the proposal to develop a new 132kV substation at the Site, which will enable Kronospan to connect directly into the existing 132kV overhead line that runs from Oswestry to Legacy, Wrexham. To expedite the connection, Kronospan would construct the proposed 132kV substation. Amongst other benefits, a new 132kV connection would enable Kronospan to invest in renewable energy projects on site such as solar PV, helping to contribute to the low carbon future for the plant.

5.2.17 The new connection would mean that Kronospan would no longer be reliant on the aging 33kV infrastructure which provides electricity to the rest of Chirk, and this would reduce demand on the local grid.

Roundwood Storage Areas

5.2.18 Two separate Roundwood Storage Areas are proposed. These would be used for the temporary storage of logs imported into the Kronospan Facility, prior to these being moved elsewhere within the Facility for processing.

5.3 Layout

5.3.1 The layout of the Proposed Development is driven by the operational requirement of the Kronospan Facility and by the environmental constraints present within the Site and the surrounding area.

5.3.2 The location and layout of the Proposed Development is linked to the location of existing Kronospan Facility and to the location of the B5070. The layout of the Proposed Development has been carefully considered to ensure that vehicles are able to enter and exit the Kronospan Facility via the Proposed Development in a way that is safe, efficient and which accords with current legislative requirements and best practice guidance. As stated above, the positioning of the proposed roundabout access at the northern extent of the Proposed Development would remove approximately 750 two-way HGV movements (over a 24-hour period) from the residential areas of Chirk which front onto Holyhead Road.

5.3.3 Proposed new structures (new buildings, roundwood storage areas and substation structures) would be towards the southern boundary of the Site, close to the existing assemblage of structures at Kronospan to minimise visual impact. The proposed lorry park would be to the north of this.

5.3.4 Material excavated to create the development platform would be used to construct an earth bund along the eastern perimeter of the Site. The new access from the B5070 would be via a new roundabout located in the north-eastern corner of the Site. Two attenuation basins proposed as part of a Sustainable Drainage Strategy (SuDS) would be in the north-western corner of the Site.

5.3.5 The Illustrative Landscape Masterplan for the Proposed Development Site is shown on **Planning Drawing 3a**. Landscape proposals would include new native woodland planting, new native hedgerow planting, new specimen tree planting, new species-rich grassland and new wetland vegetation. Following implementation, the proposals would be managed proactively by the Applicant as part of the ongoing management and maintenance of vegetation within their landholding. Management would be undertaken with the aim of maximising the biodiversity interest and screening views of the Proposed Development from sensitive visual receptors. Further details are provided at **Section 5.5** of this document.

5.4 Scale

Overview

5.4.1 The various component feature of the Proposed Development would be smaller in scale than many of the large industrial structures present within the existing Kronospan Facility. The landform of the Site is such that the level of the development platform would be below the existing ground levels east of the B5070, and hence the perceived height of the new features would be less than they actually are when seen from this direction. The proposed earth bund along the eastern perimeter of the Site would be similar to existing features further south and hence would be a landform of scale and type familiar to local people.

Area

5.4.2 The Proposed Development would extend northward from the existing Kronospan Facility by approximately 750m. From east to west, the Proposed Development would extend between approximately 120m and 200m. Approximately 4.39 hectares

of land would be occupied by hard surfaces, and approximately 7.35 hectares of land would be the subject of new planting or seeding or would comprise retained vegetation.

Landform

5.4.3 To create a development platform for the Proposed Development, including suitable gradients for the proposed access roads, changes would be made to the landform of the Site, with areas of both cut and fill required. The eastern part of the Site would typically be in cut, i.e. proposed ground levels would be below existing. The western part of the Site would typically be on areas of fill, with proposed ground levels above the existing. At the western edge of the Site, an area of embankment would tie-in the development platform with the existing landform. Proposed levels would vary between 86.7m AOD and 100.2m AOD. An earth bund would run along the eastern perimeter of the Site, with a height typically varying between approximately 2m and 4m above the development platform to the west.

Drainage

5.4.4 New attenuation basins with a surface area of approximately 0.35 hectares would be provided as part of the SuDS. The SuDS has been designed to restrict surface water run-off from the Site based on a 1 in 100-year storm event, with an additional uplift in rainfall intensity of 40% to allow for climate change. Surface water run-off would ultimately be discharged (controlled) into the Afon Bradley north-west of the Site.

Roads and Parking Areas

5.4.5 The new roundabout on the B5070 would have a diameter of approximately 35m and has been designed in accordance with CD116 Design Manual for Roads and Bridges (DMRB) guidance, '*Geometric design of Roundabouts*'. Approximately 100m of the B5070 north of the roundabout and approximately 120m to the south would be realigned.

5.4.6 The proposed north access road would run for approximately 475m from the roundabout past the proposed weighbridges. A 235m long access road to the proposed weighbridge car park would lead off the main access. To the south of the proposed weighbridges, the road would split into separate entry and exit roads, both approximately 170m long. A separate 95m access road would allow access to the two attenuation basins and to Afon Bradley Farm.

5.4.7 The scale of the Proposed Development is relatively substantial but reflects it use. This part of the Facility is occupied by the main processing buildings, and the Proposed Development would not detract from the existing buildings collective scale and complex of connected and adjacent buildings and structures.

5.4.8 The proposed lorry park would include spaces for 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, thereby reducing the potential for accidents to occur and improving air quality and noise through fewer and more efficient movement.

5.4.9 The proposed weighbridge car park would be to the east of the proposed weighbridges, and between the proposed lorry park to the north and the proposed eastern roundwood storage area to the south. It would cover an area of approximately 0.09ha and would include spaces for 32 cars. One space would be reserved for disabled users. Approximately 75% of the spaces (25 no.) would be reserved for staff use, with the remainder (8 no.) available for visitors.

Buildings

5.4.10 The proposed weighbridge building would be a timber-clad, three-storey structure with a gantry, allowing timber samples to be taken from incoming vehicles for quality checking. The ridge height of the building would be approximately 9m, and the level of the gantry platform would be approximately 5.6m. The timber buying function of the building would take place on the first floor and quality checking would take place on the second floor.

5.4.11 The proposed facilities block would be a timber-clad, single-storey structure providing welfare and toilet facilities for HGV drivers. The proposed facilities block would be immediately north of the proposed weighbridge car park.

132kV Substation

5.4.12 The proposed 132kV substation would be in the south-western part of the Site, to the south-west of the proposed weighbridges and due south of the proposed western roundwood storage area. It would cover an area of approximately 0.36ha. Access would be via a short road (approximately 30m in length) leading south-west from the main new access road.

5.4.13 The proposed substation would comprise a fenced compound housing a series of electricity supply infrastructure. Key components of the substation would include:

- 11kV substation building
- ancillary equipment building
- 6 no. voltage transformers
- 5 no. disconnector earth switches
- 2 no. grid transformers, with associated earthing transformer and neutral earthing resistor (both behind a 6.2m high fire wall)
- 3 no. surge arrestors
- 3 no. (cable) sealing ends
- 3 no. circuit breakers
- 4 no. post insulators
- Underground electrical cables buried in trenches
- Underground drainage infrastructure leading to a soakaway
- 2.4m steel palisade security fence and matching lockable gate
- Column mounted lighting
- Internal access road (3.7m wide)
- Parking for 5 no. vehicles

5.4.14 The tallest component would be the proposed disconnector earth switches, which would be approximately 6.3m high, whilst most of the substation electrical infrastructure would be up to approximately 6m high. The proposed ancillary equipment building and the proposed 11kV substation building would be approximately 3m high and finished in brickwork and metal cladding (colour to be determined at detailed design stage) respectively.

Roundwood Storage Areas

5.4.15 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. Access would be from the proposed access road leading to the proposed 132kV substation.

5.4.16 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. Access would be from the new road leading into the wider Kronospan Facility that runs due south from the proposed weighbridges.

5.4.17 The maximum height of stored materials would be 4m to comply with health and safety legislation.

5.5 Landscape and Visual Matters

Key Issues

5.5.1 Pre-application consultation undertaken with Wrexham County Borough Council (WCBC), and with the National Trust highlighted the following issues in respect of landscape and visual matters:

- Intrusion of urban development into the rural landscape surrounding Chirk;
- Potential harm to the setting of the Pontcysyllte Aqueduct and Canal World Heritage Site;
- Potential impact upon the setting of the Clwydian Range and Dee Valley Area of Outstanding Natural Beauty;
- Potential loss of a significant number of trees and hedgerows, exacerbating impacts on the rural landscape; and
- Potential impact upon the Chirk Castle Estate.

5.5.2 These are discussed below, along with other issues that are of relevance to the landscape design

Intrusion into the Countryside

5.5.3 The Site comprises undeveloped land outside of the existing Chirk urban area. The Wrexham Unitary Development Plan (UDP) (adopted 2005) identifies that the Site is within a Special Landscape Area (SLA). Policy EC5 of the UDP identifies that development within the SLA:

'… *will be required to conform to a high standard of design and landscaping, and special attention will be paid to minimising its visual impact both from nearby and distant viewpoints*'.

Views from the Llangollen Canal

5.5.4 The canal corridor west of the Site forms part of the Pontcysyllte Aqueduct and Canal World Heritage Site (WHS). An extensive area either side of the canal, including the Site, forms part of the 'essential setting' of the WHS. The canal (including the towpath) is also a well-used recreational resource. As such, potential adverse changes in view from the canal corridor itself (i.e. from the WHS), or changes in views towards the canal corridor from elsewhere within the essential setting of the WHS are important factors to be addressed as part of the design process.

Views from the AONB

5.5.5 The Clwydian Range and Dee Valley AONB extends over much of the landscape west of the Canal. The primary purpose of an AONB, as set out in the Countryside and Rights of Way Act 2000, is to '*conserve and enhance the natural beauty*'. The purpose of an AONB can be affected by change occurring outside of its boundary. As such, potential adverse changes in outwards views from within the AONB, and indeed changes in views towards the AONB from locations outside of the boundary, are important factors to be considered in the design process.

Tree Loss

5.5.6 The Proposed Development would include the construction of a new roundabout allowing access from the B5070. This would entail the removal of the majority of a belt of existing tree cover in the north-eastern corner of the Site, which has potential to open up views to southbound travellers.

Views from Chirk Castle

5.5.7 A large area of land west of the canal forms the Chirk Castle Estate, which is owned and managed by the National Trust. The wider parkland is a Registered Park and Garden, and the Castle itself is a Grade I Listed Building. Other structures within the parkland are also listed. Chirk Castle is promoted as a visitor destination by the National Trust and is well-used, with a range of different attractions/ facilities present.

5.5.8 There is a line of sight between the Site and the Castle itself and hence there is potential for change in view to adversely affect the setting of the Listed Building and the experience of visitors. Change in view also has potential to adversely affect the setting of the Registered Park and Garden.

Views from Nearby Properties

5.5.9 The presence of the Proposed Development has potential to result in notable change in view from those properties located at the edge of Chirk close to the Site boundary. 10 no. properties are located along a minor road called Wern, which runs parallel to the B5070. There are direct views into the Site on the opposite side of the road from the windows of these properties, which are partially broken up by tree cover on the eastern side of the B5070.

5.5.10 From discussions between Kronospan and residents, views from the properties toward the distant hills to the west (which include views to Chirk Castle) are highly valued. As such, the landscape design needs to be cognisant of this, whilst also seeking to provide screening of the Proposed Development.

Mitigation provided as Part of Previous Development

Landscape Strategy

5.5.11 In 2016, WCBC granted planning permission for a Recycled Storage Facility (RCF) at the Kronospan Facility (ref. P/2016/0219). One of the conditions attached to the planning permission was to provide a landscape strategy to mitigate the visual impact of development from public viewpoints. A similarly worded condition was also attached to other, earlier planning permissions.

5.5.12 As such, a landscape strategy was developed for the wider Kronospan site, which was approved by WCBC in 2018. The landscape strategy made provision for a series of different areas of native planting at locations where this was deemed to be desirable to screen views towards the wider Kronospan Facility. All planting within areas under the control of Kronospan has subsequently been implemented.

North Eastern Warehouse

5.5.13 In 2022, WCBC granted planning permission for a new warehouse at the north-eastern edge of the wider Kronospan site (ref. P/2021/0725). Conditions attached to the planning permission required the preparation of a planting scheme, a scheme of ecological mitigation, and a scheme for management of these (which would be subject to a Section 106 Agreement between Kronospan and WCBC). These schemes were submitted to WCBC in April and May 2022.

5.5.14 Of relevance to the Proposed Development is the provision for a belt of new planting to the north-west of the wider Kronospan Facility, and due west of where the Proposed Development would be located, along the boundary of the Kronospan landholding with the adjacent railway corridor.

Design Process

5.5.15 The Project Landscape Architect has been involved with various schemes at Kronospan since 2011. As such, they are familiar with the area surrounding the Kronospan Facility, and with the issues that need to be addressed as part of any development proposal.

5.5.16 A series of visits were made to the Site and the surrounding area in early 2022 to further understand the context into which the Proposed Development would be introduced and to understand visibility during winter with deciduous foliage absent (i.e. a worst-case scenario). This included taking a series of photographs from various locations, including from the roof of Chirk Castle (accessed with the permission of the National Trust).

5.5.17 Many of the photographs taken are used as viewpoints in the Landscape and Visual Impact Assessment (LVIA) of the Proposed Development, with photomontages of the change in view that would occur prepared from selected viewpoints.

5.5.18 Based on an initial layout, Zone of Theoretical Visibility (ZTV) mapping and a series of cross-sections were prepared to gain an understanding of the likely visibility of the Proposed Development from different locations in the surrounding area.

5.5.19 This exercise resulted in the following observations:

- The Site is on undulating ground that faces broadly westwards, and with a marked fall in elevation from east to west. As such, the Proposed Development would be set at a lower level than the area east of the Site.
- The southern part of the Site is visible from Chirk Castle, and from a section of the permissive path that runs through the estate east of the Castle itself. These views are relatively narrow ones framed by tree cover.
- Given the much greater elevation of the Castle than the Site, planting west of the Site would not screen views of the Proposed Development from Chirk Castle.

- Views from the Llangollen Canal are very well screened by a combination of vegetation cover and the railway embankment, with only localised and heavily filtered views of the Site available.
- The proposed bund along the eastern perimeter of the Site at the boundary with the B5070 would screen the majority of the Proposed Development in views from the houses east of the road. The bund would not prevent views from the houses towards Chirk Castle.
- The introduction of the proposed roundabout on the B5070 to allow access to the Proposed Development would result in the loss an existing belt of trees and would result in notable local changes in the view available to road users.

The Landscape Design Proposals

5.5.20 The following approach has been adopted in relation to the landscape design for the Proposed Development.

5.5.21 In relation to effects upon the SLA, 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 SLA. It is considered that this approach to the landscape design of the Proposed Development would accord with the wording of UDP Policy EC5, with supports the designation.

5.5.22 Existing views towards the Site from the Pontcysyllte Canal and towpath are well screened. Views are available from the visibility of Chirk Marina, filtered through existing vegetation. As planting implemented as part of the Landscape Strategy establishes, most of these views would be wholly screened by tree cover. Further additional planting would be implemented as part of the Proposed Development, which would similarly screen the remaining filtered views towards the Site. As such, it is not envisaged that there would be any views of the Proposed Development available from the Canal corridor beyond the short-term.

5.5.23 From locations within the AONB, the presence of development is an established part of outwards views. The Proposed Development would be visible from some locations but would be a limited addition which would not appreciably change the nature of these existing views. No specific measures are therefore proposed to address visual effects from the AONB, other the measures described below in relation to Chirk

Castle. The statutory purposes of the AONB would not be materially affected by the presence of the Proposed Development.

5.5.24 Rather than try to wholly screen views from elevated locations to the west and in particular from Chirk Castle, it is proposed that planting is used to break up views. Initially there would be some visibility of the Proposed Development, but as new planting establishes, this would progressively reduce in the medium and longer-term. The new planting would some of the new features from view, and would filter views of the proposed lorry park, which would be seen through gaps in new planting.

5.5.25 The provision of further planting within the lorry park itself to provide additional mitigation would require the footprint of the Proposed Development to extend further westwards into the floodplain of the Afon Bradley and would potentially impact directly upon land within Flood Zones 2 and 3, or upon the watercourse itself. SuDS cannot be located within Flood Zones 2 and 3, to ensure they would remain operational during large storm events. Additional engineering works would therefore be likely to be necessary to address any potential impacts related to an increased risk of flooding, and these themselves may give rise to additional environment effects. As such and given the relatively narrow width of views from Chirk Castle, which are framed by existing vegetation, and the relatively limited degree to which these would be likely to change, this option was not considered any further.

5.5.26 The landscape proposals **(see Planning Drawing 3a)** would result in a net increase in tree cover. Replacement planting immediately south-west of the proposed new roundabout would be on the proposed perimeter bund. The bund itself would provide some initial screening of views from the B5070. As the new planting establishes and matures, this would help to enclose the developed Site from the north-east, effectively recreating the existing belt of tree cover in this area. Further new native planting would be provided at the western edge of the Site.

5.5.27 The perimeter bunding at the eastern edge of the Site would largely screen views from ground floor windows into the Site. The proposed acoustic fencing would provide further screening. There would be some visibility of new features from first floor windows. However, these views would be broken up by planting specimen trees at the western edge of the bund, where space permits. This planting would frame views westwards in a similar fashion to the existing tree cover along the eastern side of the B5070. The long-range views westwards to the hills and to Chirk Castle would remain.

Landscape and Visual Impact Assessment

5.5.28 **ES Chapter 5.0** which forms part of the planning submission, along with the accompanying Figures and Appendices comprises the Landscape and Visual Impact Assessment (LVIA) of the Proposed Development. The LVIA identifies and assesses the landscape and visual effects of the Proposed Development, demonstrating how the design measures identified above would be effective, and concluding that only localised and short-term significant effects would occur.

5.6 Other Environmental Issues

5.6.1 The ES which forms part of the planning submission identifies and assesses effects upon the following:

- Historic environment.
- Ecology and nature conservation.
- Noise and vibration.

5.6.2 The Planning Statement which also forms part of the planning submission includes a series of Technical Appendices including:

- Agricultural Land Classification Survey.
- Flood Consequence Assessment and Surface Water Drainage Strategy.
- Arboricultural Impact Assessment.
- Lighting Assessment.
- Air Quality Assessment.
- Transport Assessment.

5.6.3 Key design outcomes recommended in these documents, which have been incorporated into the design of the Proposed Development include:

- The inclusion of new planting to wholly screen views of the Proposed Development from the Llangollen Canal.
- The inclusion of measures to protect buried archaeology from construction activity.
- The achievement of biodiversity net gain because of the landscape proposals and improvements to other land within the ownership of Kronospan.

- The inclusion of noise attenuation screening including adjacent to the property at Bryn Hyfryd.
- The development of a SuDS system to control surface water run-off.
- Identification of measures to retain and protect existing trees.
- The design and implementation of a lighting scheme that minimises the spillage of obtrusive light beyond the Site boundary.

5.6.4 Further details setting out how alternatives have been considered during the evolution of the Proposed Development and design process (including those resulting from initial design evolution, consultation with stakeholders, and environmental appraisal outcomes) are provided at **ES Chapter 3.0 (Alternatives).**

6.0 ACCESS

6.1 Relevant Planning Policies

6.1.1 The key UDP policy relating to access is:

- GDP1: requiring amongst other things the built development is located where there is convenient access to public transport and is well related to pedestrian and cycle routes where possible

6.1.2 The emerging Wrexham Local Development Plan (LDP) (2018 – 2033) is at an advanced stage having been through Examination in Public and the subsequent Matters Arising consultation in May 2022. Once adopted, it will replace the existing UDP. Relevant policies in the emerging LDP include:

- SP12 Transport and Accessibility: which seeks amongst other things to enhance the overall reliance of the network, to ensure new development provide adequate levels of car parking taking consideration accessibility to existing public transport facilities and to the walking and cycling network, and to deliver safety enhancements to the local highway network.
- DM1 Development Management Considerations: requiring amongst other things that development must be safely and conveniently accessible on foot, bicycle, by public transport and by car.
- T1 Managing Transport Impacts: requiring that amongst other things, development does not have an adverse impact on highway safety.
- T2 Active Travel: requiring that amongst other things walking and cycling infrastructure is an integral part of the overall design of the scheme.

6.1.3 In relation to these policies, there are public transport links running through Chirk (both bus and rail). Employees can access the Kronospan Facility both on foot and by bicycle (and there are on-site cycle storage facilities), and this would continue to be the case should the Proposed Development be implemented. The proposed north access road would remove a significant number of HGVs from Chirk, and this would have benefits in terms of highway safety as well as local residential amenity (reduction in noise, air quality, and dust).

6.2 Access to The Proposed Development

6.2.1 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.

6.2.2 The relocation and development of proposed weighbridge facilities as part of the proposed access road would improve the flow of traffic to the Site and away from the main pedestrian and staff entrance, improving the safety and wellbeing of employees and visitors.

6.2.3 At present, the HGV parking provided on the existing Kronospan Facility is adequate for peak time deliveries. However, Kronospan manages the HGV flow into the site using relatively constrained time windows to ensure HGV queuing is limited and that adequate short-term parking is available. As such vehicles which arrive in the local area in advance of their predefined time slots are required to use parking facilities on the trunk road network. Improved HGV parking facilities at the Proposed Development Site (which would remain short term) would enable wider delivery slots to be created which would help reduce congestion of existing parking areas on the local trunk road network.

6.2.4 The Proposed Development would enable the existing HGV parking area at the site entrance to be re-purposed in the future for improved staff, visitor and contractor car parking. This would improve the working conditions for employees and enhance the appearance of the entrance to the facility.

6.2.5 Those persons travelling to the Proposed Development for work would be able to use existing public transport (with several bus stops along the B5070), cycle storage within the Kronospan Facility, existing car parking at the Kronospan Facility, or the proposed weighbridge car park.

6.2.6 The Proposed Development would not be publicly accessible, and everywhere south of the proposed lorry park would be located behind a security fence. Controlled gated access would be provided from the proposed weighbridge car park. Access to the operational parts of the Kronospan Facility would be heavily controlled for safety reasons, with protocols to ensure the safety of employees and visitors. Once within the Kronospan Facility (including the Proposed Development), vehicles and pedestrians would be segregated via clearly demarcated routes.

6.2.7 All proposed entrances and exits would be maintained by the Applicant to ensure the health and safety of employees and visitors, and the efficient and effective circulation of vehicles and pedestrians within the Kronospan Facility.

6.2.8 The new buildings that would form part of the Proposed Development would accord with Part M of the Building Regulations. When approaching and entering the proposed weighbridge building and the proposed facilities block, there would be level access with a finished floor level of 0.15m above the adjacent ground. This is necessary to accord with Part C of the Building Regulations as well as Part M. Within the building sufficient clear widths would be provided to door openings to meet current Building Regulations and level door thresholds would be incorporated throughout.

6.2.9 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 and access arrangements for the Kronospan Facility.

7.0 CONCLUSION

7.1.1 The details included as part of the planning submission demonstrate that the Proposed Development has been designed in a manner that reflects its intended purpose whilst having full regard to the character of the Site and its surroundings.

7.1.2 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.

7.1.3 The design of the Proposed Development has full regard to environmental issues including:

- Minimising potentially adverse landscape and visual impacts, including from sensitive locations (some of which are also important cultural heritage assets) such as
  - Nearby residential properties;
  - The Pontcysyllte Aqueduct and Canal World Heritage Site;
  - Chirk Castle Registered Park and Garden; and
  - The Clwydian Range and Dee Valley Area of Outstanding Natural Beauty.
- Provision of a SuDS to control surface water run-off, including attenuation basins which would be vegetated to mimic natural features.
- Retention of protection of existing trees on-site where feasible.
- The delivery of biodiversity net gain.
- Minimising potentially adverse effects resulting from proposed lighting and from potential increases in noise levels.
- With respect to noise and vibration, neutral to moderate benefits are anticipated for receptors experiencing road traffic noise due to the HGV traffic no longer travelling past the residential areas down the B5070. Associated beneficial effects with respect to air quality are anticipated for the same reasons.
- Reducing the number of HGVs on the residential stretch of Holyhead Road would improve pedestrian and cyclist enjoyment and may encourage greater use by virtue of a perceived reduction in safety concerns.
- The introduction of a roundabout on Holyhead Road in advance of entering the residential area of Chirk will help reduce vehicle speeds.
- The relocation and development of new weighbridge facilities as part of the new access road will improve the flow of traffic to the Site and away from the main

pedestrian and staff entrance, improving the safety and wellbeing of employees and visitors.

- Improved HGV parking facilities at the Proposed Development Site (which would remain short term) would enable wider delivery slots to be created which would help reduce congestion of existing parking areas on the local trunk road network.
- The Proposed Development would enable the existing HGV parking area at the site entrance to be re-purposed for improved staff, visitor and contractor car parking. Improving the working conditions for employees and enhancing the appearance of the entrance to the facility.

7.1.4 In addition, the Proposed Development would make an important contribution to the environmental sustainability of the Kronospan Facility as a whole.

7.1.5 As such, there are not considered to be any unresolved design or access matters which should prevent the grant of planning permission.