TREE 21

TREE SURVEYS & CONSULTANCY SERVICES

ARBORICULTURAL METHOD STATEMENT

Installation of 132kv and Fibre Cables

Client	**Kronospan LTD**
Agent	**AXIS P.E.D LIMITED**
Date	**14th November 2025**
Site Address	**Kronospan 132kv substation, Chirk and Black Park**
Arboricultural Consultant	**Mike Wood** Dip Arb, Tech ArborA
Local Authority	**Wrexham County Borough Council (WCBC)**
Project Description	**Installation of two 132kV circuits and two fibre cables between the existing Legacy to Oswestry 132kV wood pole overhead line and the proposed Kronospan 132kV substation.**
Document Reference	**251114-1.1-K132F-AMS-T21**

Contents

1.0 Key Contact Details 1

2.0 Background 1

3.0 General Tree Welfare 3

4.0 General Precautions 4

5.0 Tables of Tasks and Detailed Method 5

Task 1: Installation and Management of Tree Protection Barriers 6

Task 2: Site Preparation, Plant & Equipment Access & Welfare/Storage Set up 7

Task 3: Supervision & Monitoring within Root Protection Areas &
the Installation of Underground Cables 8

Task 4: Site Rules & Contingencies 9

Appendix A – Tree Protection, Retention & Removal Plan

Appendix B – Tree Schedule

Appendix C – Tree Protection Specifications

Appendix D – Schedule of Arboricultural Supervision & Monitoring

1.0 Key Contact Details

Name	Company	Role	Contact Details
Chris Emery	Kronospan Ltd	Client	Email: c.emery@kronospan.co.uk
Bobby Clayton	Axis	Planner	Email: bobbyclayton@axis.co.uk
Mike Wood	Tree 21 Limited	Project Arboricultural Consultant	Email:info@tree21.co.uk
Jon Brewin	Wrexham County Borough Council (WCBC)	Local Authority Tree Officer	Email: jon.brewin@wrexham.gov.uk

2.0 Background

2.0.1 Tree 21 Limited have been instructed by Axis P.E.D Limited on behalf of Kronospan Ltd, to produce an Arboricultural Method Statement (AMS), a supporting Tree Protection, Retention & Removal Plan (TPRRP) and a schedule of supervision as part of an application for the installation of two 132kV circuits and two fibre cables between the existing Legacy to Oswestry 132kV wood pole overhead line and the proposed Kronospan 132kV substation.

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2.0.2 The AMS will be submitted and approved in writing by the Local Planning Authority (WCBC) before implementing. Works associated with the development shall only take place in strict accordance with this Method Statement, once approved. This Method Statement includes the following:

- *A Tree Protection, Retention & Removal Plan showing the location of the trees and the location of the 132kv and fibre cables, with notes on areas of supervision and details of areas where tree protection barriers will be installed.*
- *A specification for tree protection fencing and ground protection measures that comply with British Standard 5837:2012;*
- *Details of general arboricultural matters including proposed practices with regards, material storage and access and storage areas.*
- *Details of the frequency of supervisory visits and procedures for notifying the findings of such visits to the Local Planning Authority*
- *Method for protecting retained trees during the HDD works; and*
- *Details of all proposed tree works, including felling and pruning where possible with follow up information once confirmed.*

2.0.5 The document is intended to be used as a reference on site, providing detailed information on tree management and areas where arboricultural supervision and

monitoring is required to ensure the potential impact on nearby retained trees is minimised.

2.0.5 The document follows best practice guidelines in accordance with BS5837:2012 Trees in relation to design, demolition, and construction – Recommendations and practical solutions, based on sound arboricultural knowledge and experience of the author.

2.0.6 The document has been produced by Mike Wood *Dip Arb. TechArborA*, Principal Arboricultural Consultant of Tree 21 Limited. Mike Wood has over 30 years' experience in arboriculture, with over 19 years' experience in providing BS5837 surveys, reports, and technical documents, is a certified LANTRA Professional Tree Inspector and a member of the Arboricultural Association.

2.0.7 Any proposed works within areas protected by tree protection barriers known herein as Construction Exclusion Zones (CEZ) and the installation of the cables within Root Protection Areas of nearby trees are to comply with the contents of this document.

2.0.8 Any additional works that are not covered within this document are to be agreed with the Local Planning Authority and/or the Arboricultural Consultant and appropriate additional methodology provided and approved before implementing such works.

2.0.9 This document and plan provides information on the practical management of trees, during enabling works, access and installation of the cables. Tree protection barriers has been identified on the TPRRP where considered appropriate. The specification of these barriers has also been provided. The Document should be read along with the following appendices:

- Appendix A – Tree Protection, Retention & Removal Plan
- Appendix B – Tree Schedule
- Appendix C – Tree Protection Specifications
- Appendix D – Schedule of Arboricultural Supervision & Monitoring

3.0 General Tree Welfare

3.0.1 When working near trees, it is important to be aware that most tree roots are normally located in the top 600 mm of soil and can spread out horizontally to a distance at least equal to the height of the tree.

3.0.2 The distance from the tree in which damage is likely to occur is calculated by the Root Protection Area (RPA), which represents the minimum area around a tree deemed to contain sufficient roots and soil volume to keep the tree viable. RPAs should be treated as a precautionary area within which activities such as ground compaction, excavation, the storing of materials, ground stripping, raising of levels and building are likely to cause damage to trees and therefore should not take place. Usually, barriers are erected around the RPA to physically exclude such activities. The area within these barriers is known as the Construction Exclusion Zone (CEZ). Unavoidable activity within the CEZ must be carefully executed and must be guided by this detailed method statement.

3.0.3 Damage can sometimes be avoided, or at least minimised, by suitable technical measures which can be provided through consultation with a qualified Arboricultural Consultant. Tree protection measures and technical construction measures, applicable to this site, are included within this document.

3.0.4 The tree protection barrier will be retained in good order, through the extent of the project and only removed once all project related work is complete with the exception of soft landscaping works, which may be planned within the CEZ.

3.0.5 Trenching works within the highway extents to install the cables and the excavation of HDD pits within any part of tree Root Protection Areas will be carefully monitored, with supervision where appropriate by the project Arboricultural Consultant, where noted on the Tree Protection, Retention & Removal Plan.

3.0.6 All other works, including installation of tree protection barriers and trenching near trees to install the cables and works within Root Protection Areas must follow the detail in the methodology tables set out below.

4.0 General Precautions

4.0.1 In general, the following procedures will also be followed. No materials that are likely to have an adverse effect on tree health will be stored or discharged within tree Root Protection Areas.

4.0.2 Storing materials upslope from trees, will be avoided and absolutely no materials with a risk of spillage of leaching down-slope and contaminating Root Protection Areas will be stored upslope of any tree. Such materials may include but are not limited to:

- Fuel and oil
- Bitumen
- Cement & Concrete
- Building Sand
- Plant & Equipment

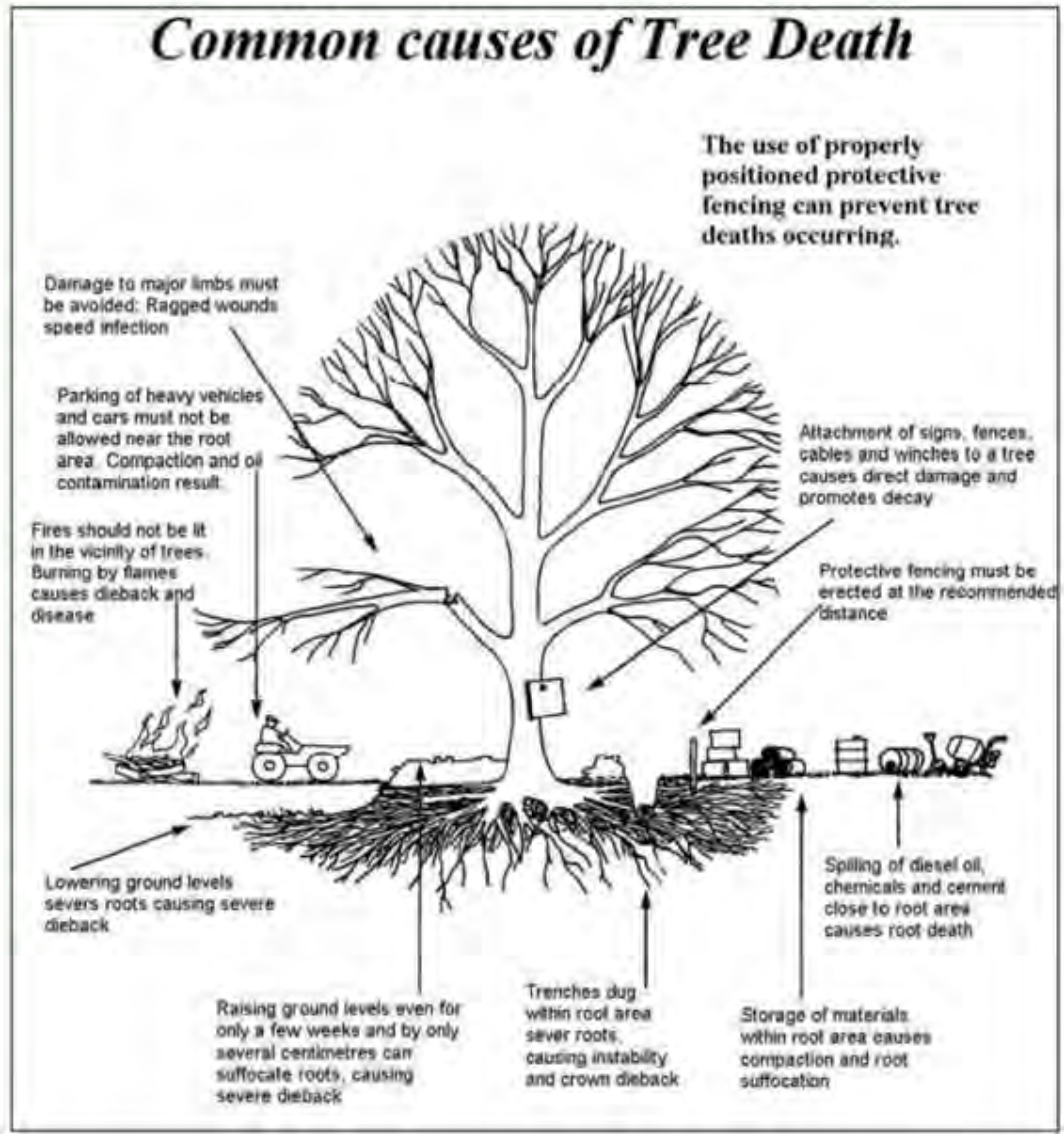
4.0.3 Fires will not be intentionally lit, under any circumstances within 15m of the edge of any retained tree canopy.

4.0.4 Once the tree protection barriers have been installed, those areas shall not be breached unless specifically agreed with the project Arboricultural Consultant, in writing. No works at all will occur within these Construction Exclusion Zones, including and not limited to:

- Ground level alterations.
- Storage of materials
- Product storage
- Access by plant, vehicles or any other site equipment

4.0.5 Any incidents involving potential damage to retained trees will be reported to the project Arboricultural Consultant within 24 hours. A site visit will then be undertaken and a site inspection form completed. This form will include details of reactive management works to rectify such incidents. A copy of each site inspection form will be made available to the Local Authority Tree Officer within 48 hours.

4.0.6 The Poster below will be enlarged and installed in welfare areas to remind operatives of how tree damage can occur on construction related sites.



5.0 Tables of Tasks and Detailed Method

5.0.1 The tables below provide detailed methods on each associated task and how they are to be undertaken, along with general tasks which may be required to complete the works. Any deviation from the methods set out in the tables below will be discussed and agreed with the project Arboricultural Consultant and/or the Local Authority Tree Officer before being implemented.

Task 1: Installation and Management of Tree Protection Barriers

Method and Action Required
1) The Tree Protection barriers will be installed following completion of the tree work and before any other works associated with the project work begins on site. 2) Barriers will be aligned as shown on the Tree Protection, Retention & Removal Plan (Appendix A) as reference. The final alignment will be agreed with the project Arboricultural Consultant at the point of installation on site, ensuring the Root Protection Areas of protected trees are fenced off as much as possible. The fenced off areas will form a Construction Exclusion Zone (CEZ) for the duration of the works. 3) A tree protection information sign (example shown at end of Appendix C) will be secured every 3rd panel at eye level, facing out of the protected area. This will aid identification of the Construction Exclusion Zones and inform site operatives of its importance. 4) Once installed and during the active HDD stages, in that area (page 12 of the TPRRP) the tree protection barrier will be inspected to ensure compliance. Any repairs , damage or realignment required, following the inspection will be rectified within 3 working days. 5) The tree protection fencing will remain in place, not moved, and kept in good condition until all construction works are complete. 6) Tree protection will be checked, during routine monthly site inspections by the project Arboricultural Consultant. These inspections will also observe access routes, storage and compound areas and any earthworks and storage of earth associated with the HDD works. Where appropriate changes in the interests of retained tree management will be requested, which will need to be implemented as discussed on site and no longer than 3 working days following an inspection.

Task 2: Site Preparation, Plant & Equipment Access & Welfare/Storage Set up

Method and Action Required
1) No plant/vehicle movement, or the setting up of material or welfare compounds associated with the Project will begin until all tree protection barriers have been installed, as set in the Tree Protection, Retention & Removal Plan on page 12. 2) Access routes, storage of materials and compounds will comply with the site rules, relating to the tree protection barriers as set out in task 5 of this document. 3) A 30 square metre compound for the HDD works and access route from the field gateway will be installed in the field parcel to the east of the A483. All materials, storage and HDD related activity to drill under the A483 will work from this compound. 4) Plant and equipment will access the compound directly from the field gate, over trackway or similar. 5) All other HDD access pits are located in or adjacent the road network and plant and equipment will remain on the hard surfaces of the highways to minimise the potential of soil compaction within verges near trees.

Task 3: Supervision & Monitoring within Root Protection Areas & the Installation of Underground Cables

Method and Action Required

1) All trench excavations within Root Protection Areas of retained trees as indicated on the TPRRP will be directly monitored and supervised by the project Arboricultural Consultant.

2) The access pit that is currently shown at the edge of the RPA of T86 (page 12 of the TPRRP) will be set as far the tree as possible and not within 1m of the tree stem. If the pit location needs to be within 3.3m of the stem the pit will be hand excavated in accordance with NJUG Volume 4. Ref. https://streetworks.org.uk/wp-content/uploads/2016/09/V4-Trees-Issue-2-16-11-2007.pdf

3) In general, all excavation trenching works near trees, as detailed on the TPRRP will follow NJUG Volume 4: *Street Works UK Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2)* and directly monitored and supervised by the project Arboricultural Consultant.

4) Spoil arisings from excavation will not be stored on soft ground within the rooting environment of retained trees.

5) If roots are disturbed, exposed or severed during trench excavations, the project Arboricultural Consultant will review the damage and record relevant information and advise accordingly. The advice may require direct and immediate action or a course of monitoring over a period of time. A site monitoring report will be completed and provided to the Local Authority Tree Officer and the client, with details of action taken or proposed action, such as long term monitoring and reactive management works, if appropriate.

6) Reactive works may include:
   - Root pruning
   - Soil improvement works such as the introduction of soil ameliorants.
   - Soil decompaction works
   - Tree pruning (or tree removal in extreme circumstances)
   - Removal of spoil/other material
   - Other measures as deemed appropriate in the interests of tree retention and welfare.

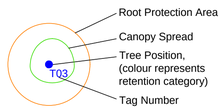
Task 4: Site Rules & Contingencies

Method and Action Required
1) Movement and storage of materials are to remain outside of all tree protection barriers/CEZ and soft ground along verges within Root Protection Areas at all times.
2) Any incident of damage to tree protection barriers or retained, protected trees are to be reported to the Project Arboricultural Consultant immediately and not longer than 1 working day.
3) If any damage to tree protection barriers occurs, the damage is to be repaired at the first available opportunity and not more than 3 working days.
4) Any damage to retained trees, or soft ground within Root Protection Areas, will require a site visit from the Arboricultural Consultant and subsequent arboricultural methodology provided to repair or mitigate any damage via a site monitoring form. This could include soil compaction, ground contamination, level alterations or materials storage.
5) The tree protection barriers shown on the plans in Appendix A and detailed on the TPRRP at page 12, are to remain in place in good repair throughout the project duration, whilst works associated with the cable installation is being undertaken.
6) Tree protection barriers and general tree welfare and management are to be inspected once per month, during the active works on this site.
7) Contractors commissioned to undertake the HDD and cable installation works will ensure that all supervision and monitoring and inspections as detailed within this document and Appendix D below are adhered to, in accordance with the details noted on the TPRRP.
8) On completion of all works associated with the installation of the cables, including back filling and following the removal of plant, equipment and all surplus site materials, machinery, storage, and welfare areas, the tree protection barriers can be removed.
9) Once removed the site will be inspected by the Project Arboricultural Consultant to ensure the site is left in a satisfactory condition and provide any further required improvement works if necessary.
10) Any improvement works required, will be confirmed via site inspection form, via email and another visit will take place to check the improvements have been made.

Appendix A: Tree Protection, Retention & Removal Plan

Tree plan with layout overlaid, showing tree protection, tree removal and text notes associated with protection.

Symbol Guide



BS5837:2012 - Tree Category

- Category A Trees High Quality
- Category B Trees Moderate Quality
- Category C Trees Low Quality
- Category U Trees Poor Quality/ Remove

Tree Protection & Removal

- Proposed Tree Removal
- Tree Protection Fencing

KEY

- Indicative Red Line Boundary
- Oswestry 6T
- Legacy Fibre Route
- Legacy 7T

TREE 21
Tree Surveys & Consultancy Services

Project Name:
Kronospan Cable Routes

Drawing Title:
Tree Protection, Retention and Removal Plan
Sheet 1 of 13

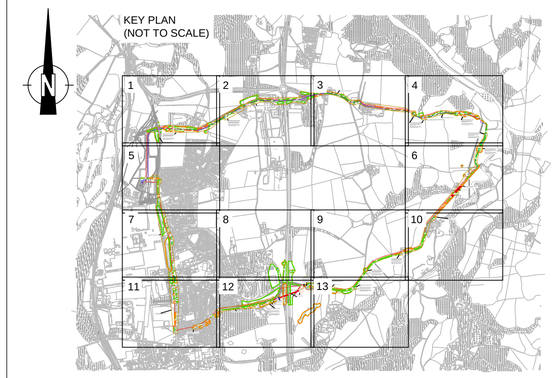
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251027-1.0-KCR-TPRRP-MH-01

Client:
Kronospan

Agent:
Axis

Date:
October 2025

Scale:
1:1000 @ A1



H279
H278
H280
G281
H255
H253
H254
H249
H240
H241
H245
G246
G247
G248
G251
T263
T264
T265
T266
T262
T261
T260
T259
T258
T257
T256
T252
T267
T268
T269
T270
T271
T272
T250
Parkgate Cottage

The route alignment has been stepped out into the road to help avoid potential damage to tree roots within the Root Protection Area of T252 - T265. Excavation will also be monitored by the project Arboricultural Consultant. Any concerns relating to structural damage, during or following excavations will be immediately reported to WCBC and management works prescribed.

Any root damage greater than 25mm will be recorded and impacted trees will be inspected once a year for a period of 3 years during full leaf. Any decline in physiological condition will be reported and a mitigation strategy produced.

Works in this area are addressed in a separate Arboricultural Impact Assessment, associated with a separate planning application (planning reference: P/2022/1080).

CUT
SHEET 5

CUT
SHEET 2

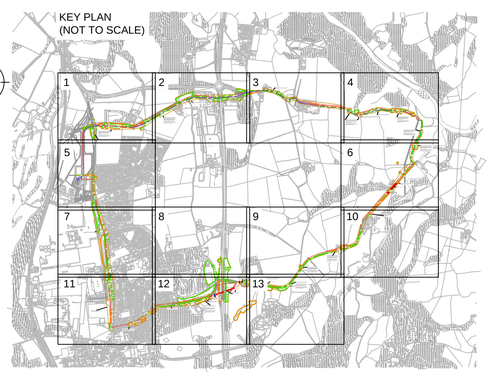
G233
G231
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T227
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G225
G222
G215
H212
G214
T236
T234
T235
H237
T238
T239
T242
H240
H241
T243
T244
CUT
SHEET 1
CUT
SHEET 3
MCDONALDS

Arboricultural impact in this area is considered to be very low with no additional management or supervision works considered necessary.

The route alignment has been stepped out into the road to help avoid potential damage to tree roots within the Root Protection Area of T238, T239, T243 & T244. However, excavation within the RPA of these trees will be monitored by the project Arboricultural Consultant. Any concerns relating to structural damage, during or following excavations will be immediately reported to WCBC and management works prescribed.

Any root damage greater than 25mm will be recorded and impacted trees will be inspected once a year for a period of 3 years during full leaf. Any decline in physiological condition will be reported and a mitigation strategy produced.

KEY PLAN
(NOT TO SCALE)



Symbol Guide

Root Protection Area
Canopy Spread
Tree Position, (colour represents retention category)
T03
Tag Number

BS5837:2012 - Tree Category

- Category A Trees High Quality
- Category B Trees Moderate Quality
- Category C Trees Low Quality
- Category U Trees Poor Quality/ Remove

Tree Protection & Removal

- Proposed Tree Removal
- Tree Protection Fencing

KEY

- Indicative Red Line Boundary
- Oswestry 6T
- Legacy Fibre Route
- Legacy 7T

TREE 21
Tree Surveys & Consultancy Services

Project Name:
Kronospan Cable Routes

Drawing Title:
Tree Protection, Retention and Removal Plan
Sheet 2 of 13

Drawing Number:
251027-1.0-KCR-TPRRP-MH-02

Client:
Kronospan

Agent:
Axis

Date:
October 2025

Scale:
1:1000 @ A1