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**BEACON FEN ENERGY PARK LTD**

**BEACON FEN ENERGY PARK**

**ARBORICULTURAL IMPACT ASSESSMENT**

**JANUARY 2024**

**DATE ISSUED:** 10/01/2024  
**JOB NUMBER:** ST19595  
**REPORT NUMBER:** 0013  
**VERSION:** V2.0  
**STATUS:** FINAL

**BEACON FEN ENERGY PARK LTD**

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**DECEMBER 2023**

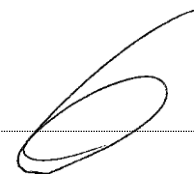
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<b>DRAWINGS</b>	<b>TITLE</b>	<b>SCALE</b>
ST19595 – 106 Rev. A	Tree Protection Plan Overview	1:5000@A0
ST19595 – 106 Rev. A	Tree Protection Plan Sheets 1-12	1:1000@A0



## 1 INTRODUCTION

### 1.1 Introduction

- 1.1.1 Wardell Armstrong LLP (WA) was commissioned by Beacon Fen Energy Park Ltd<sup>1</sup> to undertake a British Standard (BS) 5837:2012<sup>2</sup> tree survey, and to assess and report on the impacts on the trees and hedgerows in connection with the proposed Beacon Fen Energy Park development ('the Proposed Development') on land situated to the north of Heckington, Sleaford, Lincolnshire (approximate central Ordnance Survey (OS) grid ref. TF 14687 48004). This land is hereafter referred to as 'the Site'.
- 1.1.2 The purpose of this report is to provide an Arboricultural Impact Assessment (AIA) in order to evaluate the direct and indirect effects of the Proposed Development layout design on the trees and hedgerows that have been surveyed. These include trees and hedgerows identified within the Site, as well as those located offsite but within influencing distance of the Site (usually up to 15m but may be more for ancient and veteran trees). Where there are impacts from the Proposed Development, this report recommends (where feasible) mitigation measures to be taken to ensure that important trees and hedgerows are adequately considered during the design, construction and decommissioning phases. Where trees and hedgerows must be removed to enable the Proposed Development, potential compensatory measures, such as new tree and/ or hedge planting are proposed (where feasible).
- 1.1.3 The current assessment is based on the latest received Proposed Development layout. A Mitigation Layout is currently being developed, which will amend the design of the Proposed Development layout with the aim of reducing the impacts of the Proposed Development.
- 1.1.4 The BS 5837:2012 tree survey was undertaken by WA Arboriculturist Mark Levitt on various dates during April and May 2023. The results from this survey, in combination with the proposed layout, supporting documents / drawings and liaison with the design team, forms the basis of the assessment.
- 1.1.5 It is anticipated that an Arboricultural Method Statement (AMS) would be secured as a requirement to the Development Consent Order (DCO) for the Proposed Development. The AMS would set out the specifications and methodologies for the implementation of tree protection measures and would also provide a methodology for any proposed works that either encroach within the Root Protection Areas (RPAs)

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<sup>1</sup> Beacon Fen Energy Park Ltd is the Applicant and Developer of the project which is owned by Low Carbon Limited

<sup>2</sup> See report S1.1.5. <https://knowledge.bsigroup.com/products/trees-in-relation-to-design-demolition-and-construction-recommendations/standard>. Accessed August 2023

of retained trees and/ or that have the potential to result in loss or damage to those trees.

- 1.1.6 This AIA Report and attached Tree Protection Plan (TPP) accords with the methodologies and guidance set out in BS 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations (The British Standards Institution, 2012).

## 1.2 Site Context

- 1.2.1 The Site is located near the town of Sleaford and centered at National Grid Reference (NGR) TF 14687 48004, in the county of Lincolnshire. The Site is located predominantly within the district of North Kesteven, with the south-easternmost sections of the Cable Route Corridor located partially within the districts of Boston and South Holland.
- 1.2.2 The Site consists of one distinct area proposed for photovoltaic (PV), battery energy storage system (BESS) and associated infrastructure ('the Solar Array Area'), which is situated on land to the north of the village of Heckington, connected to the Bicker Fen Substation by a cable route ('the Cable Route Corridor'). The Solar Array Area is approximately 517 ha in size. In addition, an area of land is proposed for temporary construction access ('the Temporary Access Road'), which is proposed from the A17 at Asgarby, approximately 4km east of Sleaford, to the PV area. The Access Road is to be utilised during construction of the Proposed Development only, before being restored to its original land use following construction of the Proposed Development.
- 1.2.3 The Solar Array Area is almost wholly made up of arable agricultural fields divided by ditches and hedgerows. Tree cover is relatively low, with scattered trees and small woodland blocks limited to field boundaries and road verges.

## 1.3 Development Proposal

- 1.3.1 This AIA Report has been completed in relation to the Proposed Development, which comprises a ground-mounted solar PV electricity generation and BESS, together with associated grid connection infrastructure and a temporary access road. In order to assess the impacts of the Proposed Development, the Preliminary Energy Park Layout – Detailed View Ref. LCA-2023-01-C-BeaconFen Rev. A08 (prepared by Skyray, dated 22/08/2023) was used to produce the TPP. No finalised layout was available at the time of writing for the Cable Route Corridor and Temporary Access Road. In addition, we are awaiting access to be agreed for these areas in order to complete the BS 5837:2012 tree survey.

## 1.4 Planning Policy & Guidance

1.4.1 Under Section (S) 120 of the Planning Act 2008, an order granting development consent may impose requirements in connection with the development for which consent is granted. It is anticipated that the DCO requirements would specify the need to implement a management plan to minimise the impact from the Proposed Development on the trees and hedgerows to be retained.

## 1.5 Draft Overarching National Policy Statement for Energy

1.5.1 The Department for Business, Energy & Industrial Strategy 'Draft Overarching National Policy Statement for Energy (EN-1)' sets out national policy for the delivery of major energy infrastructure. Paragraph 5.4.13 (detailed below) sets out policy for such schemes affecting ancient woodland and veteran and ancient trees:

**Para 5.4.13:** *'Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The Secretary of State should not grant development consent for any development that would result in its loss or deterioration unless the benefits (including need) of the development, in that location clearly outweigh the loss of the woodland habitat. Aged or 'veteran' trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided<sup>3</sup>. Where such trees would be affected by development proposals the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons why. Applicants should provide a suitable compensation strategy in instances where proposals would result in the loss or deterioration of ancient woodland and ancient or veteran trees.'*

1.5.2 The Planning Inspectorate Advice Note 15<sup>4</sup> on DCOs contains the following relevant guidance:

**Good Practice Point 6:** *'Hedgerows affected by the Proposed Development should be identified in a Schedule to and on a plan accompanying the draft DCO. The Schedule and plan could also helpfully identify those hedgerows that are 'important' hedgerows (see Regulation 4 and Schedule 1 of The Hedgerows Regulations 1997 and section 97 of the Environment Act 1995). This would enable parties such as the relevant planning authority to make submissions on the appropriateness of including such provisions, and the Examining Authority to consider these.'*

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<sup>3</sup> This does not prevent the loss of such trees where the Secretary of State is satisfied that their loss is unavoidable.

<sup>4</sup> <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-15/#22>. Accessed September 2023

*The draft DCO should also include a relevant Schedule and plan identifying the trees likely to be affected that are protected by TPOs and/or are otherwise protected’.*

- 1.5.3 The Site, Temporary Access Road and part of the Cable Route Corridor are located within the administrative boundaries of North Kesteven District Council (NKDC). The NKDC Local Plan<sup>5</sup>, is combined with two other local authorities and was adopted in 2023. The following policy is of relevance:

**Central Lincolnshire Local Plan (adopted 2023)**

**Policy S66: Trees, Woodland and Hedgerows**

*‘Development proposals should be prepared based on the overriding principle that: the existing tree and woodland cover is maintained, improved and expanded; and opportunities for expanding woodland are actively considered, and implemented where practical and appropriate to do so.*

**Existing Trees and Woodland** - *Planning permission will only be granted if the proposal provides evidence that it has been subject to adequate consideration of the impact of the development on any existing trees and woodland found on-site (and offsite, if there are any trees near the site, with ‘near’ defined as the distance comprising 12 times the stem diameter of the offsite tree). If any trees exist on or near the development site, ‘adequate consideration’ is likely to mean the completion of a BS 5837 Tree Survey and, if applicable, an AMS.*

*Where the proposal will result in the loss or deterioration of:*

- a) ancient woodland; and/or*
- b) the loss of aged or veteran trees found outside ancient woodland, permission will be refused, unless and on an exceptional basis the need for, and benefits of, the development in that location clearly outweigh the loss.*

*Where the proposal will result in the loss or deterioration of a tree protected by a Tree Preservation Order or a tree within a Conservation Area, then permission will be refused unless:*

- c) there is no net loss of amenity value which arises as a result of the development; or*
- d) the need for, and benefits of, the development in that location clearly outweigh the loss.*

*Where the proposal will result in the loss of any other tree or woodland not covered by the above, then the Council will expect the proposal to retain those trees that*

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<sup>5</sup> <https://www.n-kesteven.gov.uk/planning-building/planning/planning-policy> Accessed August 2023

*make a significant contribution to the landscape or biodiversity value of the area, provided this can be done without compromising the achievement of good design for the site.*

**Mitigating for loss of Trees and Woodland** - Where it is appropriate for higher value tree(s) (category A or B trees (BS 5837)) and/or woodland to be lost as part of a development proposal, then appropriate mitigation, via compensatory tree planting, will be required. Such tree planting should be on-site wherever possible and should:

- e) take all opportunities to meet the six Tree Planting Principles (see supporting text); and*
- f) unless demonstrably impractical or inappropriate, provide the following specific quantity of compensatory trees:*

<b>Trunk diameter(mm) at 1.5m above ground of tree lost to development</b>	<b>Number of replacement trees required, per tree lost*</b>
75 - 200	1
210 - 400	4
410 - 600	6
610 - 800	9
810 - 1000	10
1000+	11

*\* Replacement based on selected standards 10/12 cm girth at 1m*

**New Trees and Woodland** - Where appropriate and practical, opportunities for new tree planting should be explored as part of all development proposals (in addition to, if applicable, any necessary compensatory tree provision). Where new trees are proposed, they should be done so on the basis of the five Tree Planting Principles. Proposals which fail to provide practical opportunities for new tree planting will be refused.

*Planting schemes should include provision to replace any plant failures within five years after the date of planting. Planting of trees must be considered in the context of wider plans for nature recovery which seeks to increase biodiversity and green infrastructure generally, not simply planting of trees, and protecting / enhancing soils, particularly peat soils. Tree planting should only be carried out in appropriate locations that will not impact on existing ecology or opportunities to create alternative habitats that could deliver better enhancements for people and wildlife, including carbon storage. Where woodland habitat creation is appropriate, consideration should be given to the economic and ecological benefits that can be achieved through natural regeneration. Any tree planting should use native and local provenance tree species suitable for the location.*

**Management and Maintenance** - *In instances where new trees and/or woodlands are proposed, it may be necessary for the council to require appropriate developer contributions to be provided, to ensure provision is made for appropriate management and maintenance of the new trees and/or woodland.*

**Hedgerows** - *Proposals for new development will be expected to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements.*

*Proposals for new development will not be supported that would result in the loss of hedges of high landscape, heritage, amenity or biodiversity value unless the need for, and benefits of, the development clearly outweigh the loss and this loss can be clearly demonstrated to be unavoidable. Development requiring the loss of a hedgerow protected under The Hedgerow Regulations will only be supported where it would allow for a substantially improved overall approach to the design and landscaping of the development that would outweigh the loss of the hedgerow. Where any hedges are lost, suitable replacement planting or restoration of existing hedges, will be required within the site or the locality, including appropriate provision for maintenance and management’.*

- 1.5.4 The remaining part of the Cable Route Corridor is located within the administrative boundaries of Boston Borough Council (BBC). The *South East Lincolnshire Local Plan*<sup>6</sup>, combining BBC with one other local authority, was adopted in 2019. It contains the following relevant policy:

**Policy 28: The Natural Environment**

*‘A high quality, comprehensive ecological network of interconnected designated sites, sites of nature conservation importance and wildlife-friendly greenspace will be achieved by protecting, enhancing and managing natural assets:*

*2. Nationally or locally-designated sites and protected or priority habitats and species:*

*a. development proposals that would directly or indirectly adversely affect these assets will not be permitted unless:*

*i. there are no alternative sites that would cause less or no harm; and*

*ii. the benefits of the development at the proposed site, clearly outweigh the adverse impacts on the features of the site and the wider network of natural habitats; and*

*iii. suitable prevention, mitigation and compensation measures are provided.*

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<sup>6</sup> <https://www.boston.gov.uk/article/20834/Planning-Policy> Accessed October 2023

*3. Addressing gaps in the ecological network:*

*a. by ensuring that all development proposals shall provide an overall net gain in biodiversity, by:*

*i. protecting the biodiversity value of land, buildings and trees (including veteran trees) minimising the fragmentation of habitats;*

*ii. maximising the opportunities for restoration, enhancement and connection of natural habitats and species of principal importance;*

*iii. incorporating beneficial biodiversity conservation features on buildings, where appropriate; and maximising opportunities to enhance green infrastructure and ecological corridors, including water space; and*

*iv. conserving or enhancing biodiversity or geodiversity conservation features that will provide new habitat and help wildlife to adapt to climate change, and if the development is within a Nature Improvement Area (NIA), contributing to the aims and objectives of the NIA.'*

**1.6 Best Practice Guidance**

1.6.1 BS 5837:2012 gives guidance on the level of information required in order to make an informed decision on the impact of development on trees. Undertaking a survey in accordance with the BS and the production of an Arboricultural Constraints Plan is the first stage in the context of the planning process, which is followed by an assessment of the arboricultural impacts arising from the development. When the development layout is fixed, the final stage is to specify how retained trees and hedgerows are to be protected during the development construction, and demolition/decommissioning (where applicable) phases.

1.6.2 It is anticipated that the protection of existing trees and hedgerows during construction and decommissioning would be specified within the DCO requirements. In-line with the British Standard, an arboricultural survey has been undertaken of the Solar Array Area and an Arboricultural Constraints Plan prepared to inform the development of the design for the Proposed Development. The results of this survey are described within this AIA Report. As the the Cable Route Corridor and the Access Route Corridor are still to be surveyed, the AIA report and associated Tree Protection Plans will be updated following the surveys of these two areas.

1.6.3 It is proposed that a further detailed AMS Report (to manage the arboricultural constraints during construction and decommissioning) would be submitted as part of



the DCO application. If required, further iterations to the AMS may be submitted in accordance with the DCO requirements.

## 1.7 Statutory Legal Protection

1.7.1 Legislation that affords a lesser or indirect level of protection to trees includes the following:

- The Wildlife & Countryside Act 1981<sup>7</sup>;
- The Conservation of Habitats & Species Regulations 2017<sup>8</sup>; and
- Hedgerow Regulations 1997<sup>9</sup>.

1.7.2 All of the above provide for the identification and safeguarding of flora and fauna that may be found in association with trees and woodlands.

## 1.8 Protected Species

1.8.1 Trees can contain features such as cavities, cracks, splits and loose bark that can offer potential habitat to species such as bats. Bats and their roosts are protected under Schedule 5 of the Wildlife & Countryside Act 1981 and the Conservation of Habitats & Species Regulations 2017, and are also listed under Section 41 of the Natural Environment & Rural Communities (NERC) Act 2006<sup>10</sup>.

1.8.2 Trees provide potential nesting habitat for birds and all wild UK birds and their active nests are protected under the Wildlife & Countryside Act 1981. For bird species listed on Schedule ZA1 of The Act, it is an offence to take, damage or destroy their nest(s), whether active or not.

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<sup>7</sup> <https://www.legislation.gov.uk/ukpga/1981/69/contents>

<sup>8</sup> <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

<sup>9</sup> <https://www.legislation.gov.uk/uksi/1997/1160/contents/made>

<sup>10</sup> <https://www.legislation.gov.uk/ukpga/2006/16/contents>



## 2 THE SURVEY – SOLAR ARRAY AREA

### 2.1 Desk Study – Constraints

2.1.1 WA accessed the NKDC’s online Tree Preservation Order (TPO) mapping<sup>11</sup> on 29<sup>th</sup> August 2023 to ascertain whether any trees within and/or immediately adjacent to the Site are protected by a TPO and/or Conservation Area (CA) status. WA found that there were no trees protected by a TPO or CA status located on or immediately adjacent to the Site at this time the check was undertaken.

2.1.2 WA also conducted a search using the Woodland Trust Ancient Tree Inventory<sup>12</sup> and the DEFRA Magic Map application<sup>13</sup> on 29<sup>th</sup> August 2023 to ascertain whether any recorded veteran and ancient trees and ancient woodland, traditional orchard and woodpasture and parkland priority habitats are located within the Site (or outside the Site, but within influencing distance of the Site). There were no veteran or ancient trees recorded at the time of the check on the Ancient Tree Inventory, either within the Site or outside the Site but within influencing distance of the Site.

2.1.3 The DEFRA Magic Map listed no ancient woodland, traditional orchard or woodpasture and parkland priority habitats within the Site. The nearest recorded ancient woodland, called ‘Old Wood’, is located approximately 940m to the north-east of the Site boundary. This area of ancient and semi-natural woodland will not be affected by the Proposed Development, therefore it is not considered that the Forestry Commission will need to be consulted as a Prescribed Body in accordance with the Section 42 of the Planning Act 2008<sup>14</sup>.

### 2.2 Field Survey

2.2.1 The arboricultural survey was undertaken by the Arboriculturist Mark Levitt on various dates in April and May 2023 using the methodology set out in BS 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations (see **Appendices 2 and 3**). The weather conditions during the survey visits ranged from storm conditions to heavy rain and, at times, dry and sunny. The weather conditions did not hinder the survey. The trees were surveyed in accordance with the methodology outlined in **Appendix 2**.

2.2.2 Each individual surveyed tree (T), tree group (G), woodland (W) and hedgerow (H) was given a sequential reference number. Trees were then classified in accordance with

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<sup>11</sup> <https://www.n-kesteven.gov.uk/planning-building/planning/tree-protection-hedges/map-tree-preservation-orders-conservation-areas>

<sup>12</sup> <https://ati.woodlandtrust.org.uk/>

<sup>13</sup> <https://magic.defra.gov.uk/magicmap.aspx>

<sup>14</sup> <https://www.legislation.gov.uk/ukpga/2008/29/contents>

the BS 5837:2012 tree quality assessment categories 'A', 'B', 'C' and 'U' (see category criteria and grading within **Appendix 3**).

- 2.2.3 'A' and 'B' category trees are considered as 'high' and 'moderate' quality, respectively, and are considered as a constraint to development. As such, these trees should be retained and afforded appropriate protection during development. 'C' category trees are considered to be of 'lower' quality due to their condition or 'lower' amenity value and are not usually considered a constraint to development. 'U' category trees are those in such a 'poor' condition that they cannot usually be retained within the current Site context for longer than ten years.
- 2.2.4 It should be noted that in some cases, category 'U' trees may have valuable habitat/ecological value despite being in poor arboricultural condition. In such cases, where it is safe to do so, these trees may be recommended for retention and/or pruning works. Where relevant, any such trees recorded are raised for appropriate attention.
- 2.2.5 Where trees are located outside the Site boundary but within influencing distance, irrespective of their BS 5837 categorisation, they should be considered as a constraint during the Site layout design process and protected during construction and decommissioning as such trees are not within the control of the Site owner.
- 2.2.6 Root Protection Areas (RPA) are calculated for individual trees utilising the methodology set out in BS 5837:2012, which is calculated by multiplying the stem diameter (measured at 1.5 m from ground level) by 12 for single-stemmed trees and a variant on this for multi-stemmed trees.
- 2.2.7 For surveys in England (and outside England where it is a local planning policy requirement), individual veteran trees are given both a standard BS 5837 RPA and a secondary veteran tree RPA. This is in accordance with Government standing advice 'Ancient Woodland, Ancient Trees And Veteran Trees: Advice for Making Planning Decisions'<sup>15</sup> and local planning policy, which is based on a calculation of fifteen times the stem diameter or five metres beyond the crown spread, whichever is greater.
- 2.2.8 For tree groups, woodlands and hedgerows, the calculated RPAs are based on a set distance from the canopy edge of the tree groups, woodlands and hedgerows. This calculation is based on the largest stem diameter of the trees on the edge of the tree groups and woodlands and the crown spread measurement for these edge trees. A variant of the tree group and woodland RPA calculation is used to calculate the

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<sup>15</sup><https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>  
Accessed September 2022.

hedgerow RPA, with the calculation based on the largest stem diameter of the hedgerow woody plants and the hedgerow width.

- 2.2.9 Further details for each individual tree, tree groups, woodlands and hedgerows surveyed are set out in the Arboricultural Survey Schedule (see **Appendix 1**) and on the Tree Protection Plan Ref. ST19595-106 Rev. A Tree Protection Plan Sheets 1-12.

### 3 SURVEY RESULTS AND EVALUATION – SOLAR ARRAY AREA

#### 3.1 Tree Population

3.1.1 The trees surveyed and assessed, which were located on and immediately adjacent to the Site, include one hundred and ninety-two (192) individual trees, eighty-five (85) tree groups, four (4) woodlands and thirty-eight (38) hedgerows.

3.1.2 The survey revealed that 4% of the individual tree population was classified as category ‘A’ quality, 26% were classified as category ‘B’ quality, 62% were classified as category ‘C’ quality and 8% were classified as category ‘U’ quality. Additionally, 1% of the tree groups surveyed were classified as category ‘A’ quality, 38% were classified as category ‘B’ quality, 60% as category ‘C’ quality and 1% of tree groups as category ‘U’ quality.

3.1.3 BS 5837:2012 states that category ‘A’ trees are the highest quality, ‘B’ trees are of moderate quality and ‘C’ trees are considered to be of low quality. Category ‘U’ trees are in such a poor structural and/ or physiological condition that they have a predicted life expectancy of less than ten years. Therefore, category ‘A’ and ‘B’ trees are considered a constraint to development, ‘C’ category trees are not usually considered a constraint to development, and ‘U’ quality trees should not be considered a constraint to development unless the trees are either ancient or veteran or provide habitat for protected species (e.g. bats). It should be noted that, where trees are outside of the control of the Applicant, they are all considered a constraint to development.

3.1.4 A detailed description of all trees and groups of trees surveyed and recommendations is provided within the Tree Survey Schedule in **Appendix 1**.

3.1.5 **Tables 1 and 2** summarise the BS 5837:2012 quality grading of the trees found onsite, with these figures represented in graph format by **Figures 1 and 2**.

Table 1: Individual Trees Quality Assessment Summary				
Tree quality	A	B	C	U
Individual Trees Identification	T7, T73, T95, T126, T135, T175, T190.	T2, T3, T4, T5, T8, T9, T10, T12, T13, T14, T15, T16, T17, T32, T36, T46, T48, T50, T51, T52, T53, T54, T56, T64, T72, T78, T83, T84, T85, T86, T96, T97, T98, T101, T104, T122, T124, T127, T132, T137, T138, T142, T145, T151, T156, T163, T176, T183, T189, T191.	T1, T6, T11, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T31, T33, T34, T35, T37, T38, T39, T40, T41, T42, T43, T44, T45, T47, T49, T55, T57, T58, T59, T60, T61, T62, T63, T65, T66, T67, T68, T69, T70, T71, T74, T75, T77, T79, T80, T81, T82, T88, T89, T90, T91, T93, T94, T99, T100, T102,	T30, T76, T87, T92, T128, T131, T167, T170, T172, T174, T178, T179, T180, T181, T186, T187.

Table 1: Individual Trees Quality Assessment Summary				
Tree quality	A	B	C	U
			T103, T105, T106, T107, T108, T109, T110, T111, T112, T113, T114, T115, T116, T117, T118, T119, T120, T121, T123, T125, T129, T130, T133, T134, T136, T139, T140, T141, T143, T144, T146, T147, T148, T149, T150, T152, T153, T154, T155, T157, T158, T159, T160, T161, T162, T164, T165, T166, T168, T169, T171, T173, T177, T182, T184, T185, T188, T192.	
<b>Totals</b>	<b>7</b>	<b>50</b>	<b>119</b>	<b>16</b>

Table 2: Tree Groups & Woodlands Quality Assessment Summary				
Tree quality	A	B	C	U
Tree Groups and Woodland Identification	G7.	G5, G6, G11, G22, G25, G29, G31, G32, G42, G43, G44, G45, G47, G48, G49, G51, G52, G53, G54, G55, G61, G62, G64, G65, G66, G68, G69, G74, G77, G83, W1, W2a, W2b, W3.	G1, G2, G3, G4, G8, G9, G10, G12, G13, G14, G15, G16, G17, G18, G19, G20, G21, G23, G24, G26, G27, G28, G30, G33, G34, G35, G36, G37, G38, G39, G40, G41, G46, G50, G56, G57, G58, G59, G60, G63, G67, G70, G71, G72, G73, G75, G76, G78, G79, G80, G81, G82, G85.	G84.
<b>Totals</b>	<b>1</b>	<b>34</b>	<b>53</b>	<b>1</b>

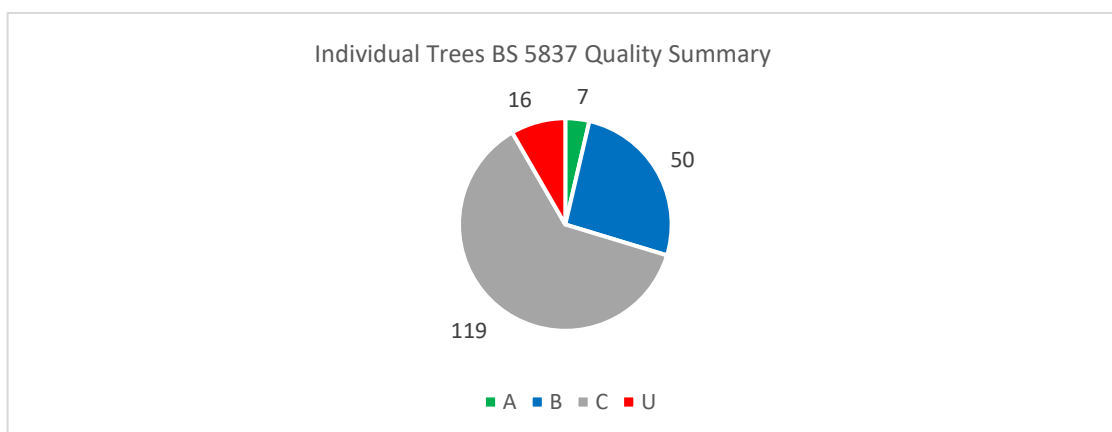
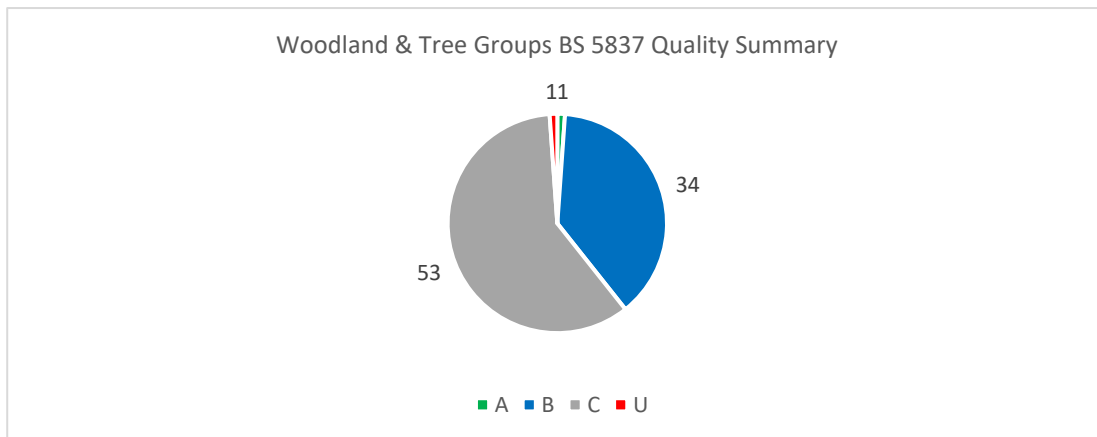


Figure 1: Overview of the BS 5837 Quality of Individual Trees Found onsite.



**Figure 2: Overview of the BS 5837 Quality of Tree Groups found onsite.**

3.1.6 The surveyed hedgerows were not allocated a quality category, as BS 5837:2012 does not include a methodology for the categorisation of hedgerows. However, the extent of the canopy spread and RPAs for hedges is shown on the ST19595 - 106 P0.03 Tree Protection Plan Sheets 1-12.

3.1.7 An assessment of the age class of the individual tree population on the Site reveals that the population is predominantly made up of early-mature trees, with these accounting for 55% of the population. The remaining individual tree population is made of veteran trees accounting for 2% of the population, late-mature trees accounting for 1% of the population, mature trees accounting for 20% of the population, semi-mature trees accounting for 17% of the population and young trees accounting for 5% of the population. A summary of the age class assessment for individual trees is shown in the graph in **Figure 3**.



**Figure 3: Individual trees age class assessment summary**

#### **4 DEVELOPMENT IMPACT TO RETAINED TREES – SOLAR ARRAY AREA**

- 4.1.1 The Proposed Development will necessitate the removal of four individual trees, three tree groups, six small sections of hedgerow and a small section of scrub, as detailed in full in **Table 3**, along with other non-removal impacts and potential impacts if the Proposed Development design isn't amended as per the recommendations in this report.
- 4.1.2 A Mitigation Layout is currently evolving as further constraints information is received and assessed. The design of this layout will take into account the arboricultural impacts discussed in this report and the recommendations to mitigate those impacts. Therefore, it is likely that the final impact of the Proposed Development on trees and hedgerows will be significantly lower than is discussed in this report.
- 4.1.3 In assessing the impacts of the Proposed Development on the trees on and adjacent to the Site, and in proposing mitigation for these impacts, the DCO application for development of the Site accords with the requirements of BS 5837:2012 and both National and Local planning policies for trees and development.

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
T58, T100, T178, T179, G40, G56, G84, H3 (partial), H6 (partial), H7 (partial), H13 (partial), H14 (partial), H16 (partial), Scrub	The removal of trees and hedgerows to facilitate the Proposed Development and also for risk management purposes	<p><b>Low Impact</b></p> <p>In order to facilitate the Proposed Development, a small number of trees will require removal. These include two category 'C' quality individual trees (T58, T100), two category 'U' quality individual trees (T178, T179), two category 'C' quality tree group (G40, G56) and one 'U' quality tree group (G84).</p> <p>The category 'U' quality trees (T178, T179) and tree group (G84) are to be removed due to their location in relation to proposed internal tracks and risk associated with them due to their increased probability of failure resulting from their poor condition.</p> <p>Additionally, small sections of the following hedgerows and scrub will be required to be removed, as shown on Tree Protection Plan Sheets 1-12 Ref. ST19595-106 Rev. A, and as described below:</p> <p>T58 (C Grade): If the existing track is to be used and widened, this tree will have to be removed to enable the track widening. If the track is not to be used for construction traffic, then the tree wouldn't have to be removed;</p> <p>T100 (C Grade): To be removed to enable the proposed Site fencing to be installed;</p> <p>G40 (C Grade): To be removed to enable the proposed Site fencing to be installed;</p> <p>H3: Approximately 2m in length to be removed to enable the installation of Site fencing;</p> <p>H6: Approximately 2.1m in length may have to be removed if the existing access track is utilised, as it may require slight widening;</p> <p>H7: Approximately 2.0m in length may have to be removed if the existing access track is utilised as, it may require widening;</p> <p>H13: Approximately 2.0m in length to be removed to enable the installation of Site fencing;</p> <p>H14: Approximately 2m in length to be removed to enable the installation of Site fencing;</p> <p>H16: Approximately 2m in length to be removed to enable the installation of Site</p>	<p>Although the tree and hedgerow losses are minimal, it is recommended that new trees and hedgerows are planted within the Site, if feasible. This will improve the visual amenity of the local landscape and provide additional habitat for wildlife.</p> <p>Additionally, as a large proportion of the tree population is made up of ash trees, additional planting would help to compensate for those trees that may be lost to Ash Dieback Disease over the lifetime of the Proposed Development.</p>	<p style="text-align: center;">C, U</p>



**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		<p>fencing;                      Scrub: 6.1m<sup>2</sup> to be removed to enable Site fencing to be installed</p> <p>The trees proposed for removal are all lower ‘C’ and ‘U’ quality specimens and their removal will have a negligible impact on local amenity and ecosystem services. Likewise, the impact of the proposed removal of the small sections of hedgerow, totalling approximately 12.1m in length, is also considered negligible, especially for scheme of this size.</p> <p>Additional removals may be required if the recommended amendments of the Proposed Development layout are not amended.</p>		
<p>T7,                      T73,                      T95,                      T190</p>	<p>Solar PV arrays, tracks and fencing proposed within the buffer zones and the RPAs of veteran trees</p>	<p><b>Low Impact</b></p> <p>Veteran trees are irreplaceable landscape and habitat features and are afforded increased protection under the 2023 NPPF and the subsequent Standing Advice ‘Ancient woodland, ancient trees and veteran trees: advice for making planning decisions’.<sup>16</sup> Their retention must be prioritised, and any development work must aim to minimise the impact on these trees.</p> <p>The extant Proposed Development layout impacts on veteran trees as detailed below:</p> <p>T7: Proposed site fencing is within the tree’s RPA and veteran tree buffer zone. Recommend redesign to enable Site fencing to be erected at the edge or outside of the veteran buffer zone at the location of Heras Tree Protection Fencing as shown on the Tree Protection Plan Ref. ST19595-106 Rev. A. If the Site fencing location is not amended, the Heras Tree Protection Fencing as shown on the Tree Protection Plan will still need to be installed and a method for digging post holes within the tree’s RPA and buffer zone where damage to the soil and tree’s roots are minimised will need to be included in an Arboricultural Method Statement.</p>	<p>A buffer zone for each recorded veteran tree, which is 15 times their stem diameter or 5m beyond the trees crown spreads (whichever is greater), is plotted on the Tree Protection Plan Ref. ST19595-106 Rev. A.</p> <p>Amend Proposed Development design to remove Proposed Development from within the veteran trees buffer zones and RPAs.</p> <p>Following removal of the Proposed Development from the veteran tree buffer zones and RPAs, these areas will be protected by Tree Protection Fencing as described in BS 5837:2012 – <i>Trees in relation to design, demolition</i></p>	<p style="text-align: center; color: green;">A</p>

<sup>16</sup> <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		<p>The impact of the fencing to installed (in accordance with a works specification included in an Arboricultural Method Statement) would still be low, however, it would be much easier and less costly to move the Site fencing to outside of the buffer zone;</p> <p>T73: Proposed solar arrays are shown to be located within this tree’s veteran buffer zone and RPA. Recommend redesign so the solar arrays are located outside of the veteran buffer zone and RPA. If the design is not amended the impact on the veteran tree is likely to be moderate;</p> <p>T95: A proposed and existing track and also proposed Site fencing are located within this tree’s veteran buffer zone and RPA. Recommend redesign so that the track and fencing are located outside of the veteran buffer zone and RPA. The impact of utilising the existing track would be high as it is within the tree’s crown spread, thus the tree’s crown would have to be substantially pruned to provide height clearance over the track. Additionally, unless the track is renewed to an acceptable no-dig standard there will be a significant impact on the tree’s root system and soil it depends upon from compaction damage.</p> <p>The proposed new track encroaches within the buffer zone and RPA and thus the potential impacts of this would also be high, unless constructed to a no-dig specification, where even then, the potential impact on the tree is still likely to be moderate. The impact of installing Site fencing (in accordance with special precautions as specified an Arboricultural Method Statement) within the tree’s buffer zone and RPA, would be low. However, this would involve the use of temporary ground protection measures and the post holes installed under the supervision of the Project Arboriculturist and therefore it is considered that it may be easier to install fencing to protect the full extent of the tree’s veteran buffer zone;</p> <p>T190: Proposed solar arrays significantly encroach within this tree’s veteran buffer zone and RPA. Recommend redesign so the solar arrays are located outside of the veteran buffer zone and RPA. If not redesigned, the impact on the veteran tree will be high.</p> <p>It is strongly recommended that, during the final design stage, the Proposed Development layout is adjusted to avoid development within these veteran trees buffer zones and RPAs. If the Proposed Development is moved out of these buffer</p>	<p><i>and construction.</i> The fencing will be erected prior to the commencement of the Proposed Development construction and decommissioning works and will remain in place throughout the development construction and decommissioning processes.</p> <p>The finalised protection of the veteran trees can be detailed in an Arboricultural Method Statement and updated Tree Protection Plan for the Proposed Development.</p>	

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		<p>zones, the impacts on these veteran trees will be low. If the Proposed Development isn't moved from within these veteran tree buffer zones and RPAs, the impact on the trees will be low to high, depending upon the size of the buffer zone and RPA encroachment impacts.</p> <p>In addition, due to their defining characteristics such as extensive wood decay, veteran trees or their parts often have a higher probability of failure and therefore represent an increased risk of harm if land is utilised within falling distance of the trees. It is therefore recommended from a health and safety perspective that tracks and solar PV arrays are moved as far from these trees as is feasible, at least outside of their respective veteran tree buffer zones .</p> <p>A potential positive impact of the Proposed Development, if the buffer zones and RPAs are kept clear of development, is that the land use within the Site will alter, resulting in less disturbance of soils within veteran tree buffer zones. This will be beneficial to the rooting areas of the veteran trees, compared to normal agricultural usage.</p>		
<p>H17, W1, Scrub.</p>	<p>Pruning of retained trees and hedgerows to facilitate the Proposed Development</p>	<p><b><u>Low Impact/ High* Impact</u></b>                      In order for the Proposed Development to be implemented, several trees and hedgerows may require pruning. The required works are detailed below:</p> <p>H17: The southern hedgerow extent may require lateral side pruning by up to a 0.3m to provide separation from an internal track proposed to be constructed to the south of the hedgerow. If required, this pruning is minimal and will have a negligible effect on the hedgerow;</p> <p>W1 (category 'B' quality): The southern woodland canopy extent may require pruning by up to a lateral 6.6m length to provide separation/height clearance from and/ or above an existing internal track, if the track is to be utilised. If the track is not be utilised or moved outside of the woodland's canopy spread, then the pruning will not be required. If required, the pruning is likely to have a moderate to high impact on the affected trees;</p> <p>Scrub: Scrub located adjacent to the north-west of tree T180 may have to be</p>	<p>All tree pruning works are to be carried out by a suitably qualified and insured arborist (tree surgeon) in accordance with British Standard 3998:2010 – Tree work – Recommendations.</p> <p>The pruning works are to be carried out with the minimum foliage removal that is possible to achieve the required clearance. For example, where clearance is required from an internal track, the pruning should include removing branches that are over the tracks up to a height of 5.2m from</p>	<p style="text-align: center; color: green;">C</p>

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		laterally side pruned back by up to 2.2m, in order to provide separation from a proposed internal track. This will have a low impact on the scrub's amenity value.	ground level. If a greater height clearance is required, the advice of the Project Arboriculturist should be sought.	
T4, T10, T64, T76, T183, T189, T191, G51, G53, G69, G77	Solar PV arrays installed within the RPAs of retained trees (Excluding veteran trees)	<p><b>Low Impact</b></p> <p>In general, the Proposed Development should benefit all retained trees as agricultural activities that are harmful to trees (e.g. ploughing and potential pesticide usage) will cease following the installation of the solar PV arrays. This will result in the soil being left undisturbed, potentially providing a larger soil volume for the trees to root into.</p> <p>To address the impacts from the installation of solar PV arrays within the retained trees' RPAs (and for the Proposed Development to accord with DCO planning policy and associated guidance), it is advised that solar PV arrays be moved outside the retained trees' RPAs at the final fixed layout design stage.</p> <p>If the Proposed Development layout remains as it currently is, the viability of these trees will need to be reassessed, with potential specific protection measures or mitigation measures prescribed, in order to retain the trees. Generally, the impact of the Solar PV arrays within the RPAs is low to high, with this depending on the amount of RPA encroached upon.</p> <p>The current Tree Protection Fencing layout shown on the Tree Protection Plan Ref. ST19595-106 Rev. A assumes the solar PV arrays will not be moved to a location outside of retained trees' RPAs, however if the Proposed Development layout is amended to remove and/ or reduce the impact on these trees, then the Tree Protection fencing layout will need to be updated.</p>	<p>At the final fixed layout stage of the project, the Proposed Development design shall avoid retained trees' RPAs.</p> <p>If not feasible for the Proposed Development design to avoid all retained trees and hedgerows RPAs, measures to ensure that these trees and hedgerows are protected when the Proposed Development is constructed, can be detailed in an AMS.</p>	<p>A, B, U</p>
T32, T51, T95, T102,	New and existing internal tracks within the RPAs of retained trees and hedgerows	<p><b>Moderate Impact</b></p> <p>On the current Proposed Development layout plan, a number of retained trees' RPAs are encroached upon by proposed internal tracks. The construction and use of these tracks using traditional methods (i.e. excavated for the track sub-base)</p>	<p>At the final fixed layout stage of the project, the Proposed Development design shall avoid retained trees' RPAs where feasible.</p>	<p>A, B, C</p>

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
G11, G57, G72, H7, H17, H23, H35, W1, W2a, W2b, W3	and veteran buffer zone	<p>will result in root severance and is very likely to compact the underlying soil, causing damage to any remaining roots and to the surrounding soil.</p> <p>In addition, a number of existing internal tracks shown on the Proposed Development layout conflict with the RPAs of retained trees and hedgerows. If utilised, as with construction of new tracks, the increase in traffic is likely to cause damage to underlying soils and roots within them, even if resurfaced.</p> <p>It is recommended that at the final fixed layout design stage, new internal tracks are relocated to avoid encroaching within retained trees' RPAs and hedgerows where feasible. If not feasible to do so, the tracks will have to be constructed in accordance with an approved no-dig specification.</p> <p>It is also recommended that existing internal tracks are only utilised where they are outside of retained trees crown spreads and RPAs. It is currently unclear whether the existing track at the south-eastern boundary of the site, adjacent to hedgerow H15, will be utilised. Owing to its proximity to veteran tree T95, it is recommended that the track is not utilised unless a diversion is created to avoid the veteran buffer. A proposed track also encroaches within the RPA and veteran buffer zone of the veteran tree T95. This access track must be moved outside of this tree's RPA and veteran buffer zone.</p> <p>If it is not feasible to re-route the affected access tracks, specialist ground protection methods, such as temporary ground protection or no-dig track construction, may be utilised to protect the soils within retained trees' RPAs.</p> <p>The current impacts within the RPAs of retained trees by tracks that are expected to be utilised are detailed below:</p> <p>T32 (Category 'B' quality): Proposed track encroaches within RPA by 16.1m<sup>2</sup>, which is 14.8% of the total RPA of 109m<sup>2</sup>. Moderate impact, thus recommend</p>	If not feasible, a specification for track construction within RPAs that minimises harm to the affected trees' roots and surrounding soil can be detailed in an AMS for the Proposed Development.	

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		<p>design change.</p> <p>T51 (Category 'B' quality): Existing track is within RPA and crown spread, encroaching over 94m<sup>2</sup> of the tree's RPA, which is 13.3% of the total RPA of 707m<sup>2</sup>. Moderate impact if track utilised, which may increase to a high impact if the tree has to be pruned to create height clearance. Recommend design change, if feasible.</p> <p>T102 (category 'C' quality): Proposed track encroaches within RPA by 14.9m<sup>2</sup>, which is 10.1% of the total RPA of 147m<sup>2</sup>. Moderate impact. Advise if track cannot be relocated outside of the tree's RPA that it is constructed to a no-dig specification within the RPA encroachment;</p> <p>G57 (category 'C' quality): Proposed track encroached within the group's RPA by 1.4m<sup>2</sup>, which is 1.4% of the tree's total RPA of 101.9m<sup>2</sup> and by up to 1.1m lateral length at its greatest depth of encroachment. It is considered that this encroachment is negligible. No design change required.</p> <p>G72 (category 'C' quality): The proposed track encroaches within the group's RPA in several places totalling 221.5m<sup>2</sup>, approximately 9.6% of the total RPA, with this being up to 2.8m in lateral length. If considered on the percentage encroachment alone, the impact would be considered low, however the lateral encroachment in places will result in a moderate impact on the affected trees. Advise amending track footprint so outside of the group's RPA. If not feasible, the track should be constructed to a no-dig specification where it encroaches within the groups RPA;</p> <p>H35: Proposed track encroaches within the hedgerow's RPA along its western edge by 81.9m<sup>2</sup>, which is 10.7% of the total RPA of 767.5m<sup>2</sup>, and by up to 1.6m lateral length at its greatest depth of encroachment. This impact is considered low and encroaching foliage can be pruned back from the track edge.</p> <p>W1: Existing track is within the RPA covering an area of 362.5m<sup>2</sup>, with this track predominantly covering by the woodland's RPA to the south of the woodland. If the track is to be utilised, the encroachment would be considered to have a high impact on the trees immediately adjacent to the track. If this track is to be utilised, advise moving it outside the woodland's RPA and canopy spread. This would entail having to remove some scrub growth to the south of the existing track, however this option is less damaging from an arboricultural perspective. If not feasible to</p>		

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		<p>move this track further to the south, the track will need to be constructed to a no-dig specification. Additionally, some crown raising pruning may be required to accommodate height clearance requirements underneath the woodland trees canopy overhanging the track;</p> <p>W2a &amp; W2b (category B): An existing track runs between these two woodlands, where their RPAs extend within the track footprint and canopy spread of both woodlands in several places. Advise not utilising this track, however if to be utilised the track will need to be constructed to a no-dig specification. Additionally, some crown raising pruning may be required to accommodate height clearance requirements underneath the woodland trees canopy overhanging the track;</p> <p>W3 (B category): A spur of an existing track is within this woodlands canopy and RPA. It is envisioned that this small section of track will not be required to be utilised and therefore no amendments are required. If the small section of track is to be utilised, the impact will need to be assessed and the AIA report and TPP updated accordingly.</p> <p>If it is not feasible to re-route the affected access tracks, specialist ground protection methods, such as no-dig construction, will need to be utilised to protect the soil and tree roots within retained trees and hedgerows RPAs. The AIA and TPP will need to be updated following amendments to the Proposed Development layout, if amended to remove tracks from within retained tree and hedgerow RPAs.</p>		
<p>T4, T7, T10, T46, T50, T51, T64, T76, T78,</p>	<p>Proposed security/ Site fencing installed within the crown/ canopy footprints and/ or RPAs of retained trees and hedgerows</p>	<p><b>Low Impact</b></p> <p>The proposed security/ Site fence is located within the crown/ canopy extents and/ or RPAs of the listed trees and hedgerows. It is recommended that, at the final fixed layout design stage, the fencing is moved outside of these trees and hedgerows crown/ canopy footprints and RPAs, where feasible to do so.</p> <p>There are three reasons for doing so. Firstly, to avoid removal of trees and hedgerows. Secondly, doing so will avoid impacts from the fence installation works on the root systems of the trees and hedgerows and the soil they depend upon. Thirdly, it is proposed that Site fencing is utilised to protect the trees and</p>	<p>Site security fencing shall be moved outside the affected trees' RPAs and veteran tree buffer zones, wherever possible. Where it is not possible, installation shall be completed utilising hand tools only, under the supervision and direction of the Project Arboriculturist. Ground protection measures are to be installed prior to the commencement of the fencing works within any RPAs and veteran</p>	<p>A, B, C, U</p>

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
T95, T98, T99, T173, T175, T183, G5, G7, G48, G60, G69, G71, H11, H33		<p>hedgerows during the construction of the Proposed Development, in order to minimise the use of additional secondary Heras fencing. Therefore, if not moved, additional Heras fencing will have to be utilised to protect the trees' full RPAs. Thus, from a sustainability perspective, it is better to move the location of the proposed Site fencing so that it protects tree and hedgerow RPAs fully, thus avoiding the need for additional Heras fencing. The location of the proposed additional Heras fencing is shown on the Tree Protection Plan Sheets 1-12 Ref. ST19595-106 Rev. A.</p> <p>If it is not feasible to amend the locations of the Site security fencing, this AIA report and associated Tree Protection Plan will need to be updated accordingly to detail which additional trees and sections of hedgerows will need to be removed to enable the fencing to be installed. Additionally, the installation of the Site security fencing within retained trees RPAs will need to be undertaken with care under the direction and supervision of the Project Arboriculturist to avoid loss and/or damage to major roots of these trees. Ground protection measures will also be required to be installed within the RPAs to ensure that that ground is not compacted during the fence installation works.</p> <p>Tree Group G60: This group is located outside of the Proposed Development Site boundary. However, Site fencing appears to run through the eastern end of the group. If the fencing is to be installed as it is currently shown, a small section of group G60 may require removal. As the tree group is outside of the Site boundary as shown as the red line on the Tree Protection Plan, this land where the tree group is located may not be under the control of Low Carbon and permission from the third-party landowner would be required to work on or remove the trees. It is advised that the Site fencing is moved so that it is within the Site red line and outside of the tree group's canopy spread and RPA.</p> <p>Veteran trees T7 and T95 also have proposed security fencing within their RPAs and buffer zones. Where it is possible, the fence will be moved outside of the RPAs and veteran buffer zones of these veteran trees. Where it is not possible to locate</p>	<p>buffer zones.</p> <p>A Method Statement for the fence installation works within the trees RPA and veteran tree buffer zones can be detailed in an AMS for the Proposed Development.</p>	



**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		<p>the security fencing outside of the RPAs and veteran tree buffer zones, then the fencing installation shall be undertaken under the direction and supervision of the Project Arboriculturist. No machinery shall be permitted within the RPAs and buffer zones and, therefore, all fencing shall be installed by hand. Ground protection measures will also be required to prevent ground compaction and post holes shall be located to avoid significant roots. Note the remainder of the veteran trees RPAs and buffer zones will still have to be protected with additional Heras fencing, so it makes sense to move the Site fencing to the full extent of these trees RPAs and veteran buffer zones.</p>		
<p>All retained trees and hedgerows</p>	<p>Proposed drainage scheme in proximity to retained trees and hedgerows</p>	<p><b>Potential Impact</b>                      The drainage scheme for the Proposed Development is yet to be finalised. For this reason, the impacts of any proposed drainage features have not been assessed at this stage. This will be assessed once the drainage design has been confirmed.</p>	<p>Unknown at this stage.</p>	<p>A, B, C, U</p>
<p>All retained trees and hedgerows</p>	<p>Development in proximity to retained trees and hedgerows</p>	<p><b>Low Impact</b>                      By its nature, a solar development seeks to avoid structures that create shade, including trees and hedgerows. For this reason, the majority of the Proposed Development will have no impact on trees and hedgerows within or immediately adjacent to the Site.</p> <p>Where there are impacts from the Proposed Development, small changes to the proposed Site layout at the final design fix will remove the impacts on important trees, such as the retained veteran trees.</p> <p>The trees to be retained will be protected with the proposed Site fencing, supplemented with Heras Tree Protection Fencing as described in BS 5837:2012 – <i>Trees in relation to design, demolition and construction</i>, where required. Where there are natural existing barriers, such as fences to be retained and rivers/ditches, these will be utilised to protect retained trees and hedgerows.</p> <p>Hedgerows will be protected by proposed 3-strand post-and-wire fencing as shown in <b>Appendix 6</b>. This includes any trees growing within the hedgerow whose</p>	<p>Site fencing, post-and-wire fencing for hedgerow protection and Heras Tree Protection Fencing, as shown on the Tree Protection Plan Sheets 1-12 Ref. ST19595-106 Rev. P0.03, shall be installed in accordance with BS 5837:2012 guidance and prior to the commencement of the Proposed Development, including the installation/construction of any required grounds works, temporary access tracks, permanent hard standing, sub-stations, solar PV arrays and associated other infrastructure. The fencing shall be retained for the duration of the construction/ installation works.</p>	<p>A, B, C, U</p>

**Table 3: Overview of Arboricultural Impacts and Proposed Mitigation**

Tree/ Group No.	Proposed Works	Impact	Mitigation/Compensation	Quality Categorisation
		<p>RPA does not exceed the RPA of the hedgerow, along with any outgrown hedgerows of moderate size that were surveyed as groups, but which retain hedgerow characteristics.</p> <p>Note, a number of hedgerows are located adjacent to ditches. Where the ditch ensures adequate separation between the Proposed Development and the hedgerow, additional fencing will not be required to protect these hedgerows.</p> <p>Where Site fencing is proposed around the solar arrays, this can be utilised to protect retained trees and hedgerows during the installation/construction of the Proposed Development, providing that it is installed prior to the Proposed Development construction commencing onsite. This includes the construction of the access tracks and any required ground works. Where the Site fencing does not protect the full RPA of trees and hedgerows and/or veteran/ancient tree and ancient woodland buffer zones, additional Heras fencing will need to be installed in addition to the Site fencing, in order to ensure all retained trees RPA and, where applicable, veteran tree buffer zones to ensure they are fully protected. The locations of both the proposed Site fencing and Heras Tree Protection Fencing is shown on the Tree Protection Plan Sheets 1-12 Ref. ST19595-106 Rev. A. The tree and hedgerow protection fencing will be installed prior to the installation of the solar PV arrays. With the Site fencing and additional tree and hedgerow protection fencing in place, the Proposed Development will have a low impact on the trees and hedgerow within and also immediately adjacent to the Site, provided that the other recommendations in this report are undertaken.</p>		
All retained trees and hedgerows	Decommissioning and removal of Proposed Development infrastructure	<p><b>Low Impact</b></p> <p>When the Proposed Development is eventually decommissioned and removed from the Site, appropriate steps will have to be taken to ensure trees and hedgerows are adequately protected during the decommissioning work. An up-to-date tree survey will need to be undertaken and an AMS and TPP produced to detail how the trees and hedgerows will be protected during the decommissioning works. Provided the survey and AMS and TPP are undertaken, and the decommissioning works are in accordance with the AMS and TPP, the impact of decommissioning works will be minimal on the retained trees and hedgerows.</p>	Decommissioning works to be in accordance with AMS and TPP produced for the decommissioning.	A, B, C, U

## 5 THE SURVEY – CABLE ROUTE CORRIDOR

### 5.1 Desk Study – Constraints

- 5.1.1 WA accessed the NKDC online Tree Preservation Order (TPO) mapping<sup>17</sup> on 20<sup>th</sup> October 2023 to ascertain whether any trees within and/or immediately adjacent to the Cable Route Corridor part of the Site are protected by a TPO and/or Conservation Area (CA) status. WA found that there were no trees protected by a TPO or CA status located on or immediately adjacent to this part of the Site at this time.
- 5.1.2 WA also conducted a search using the Woodland Trust Ancient Tree Inventory<sup>18</sup> and the DEFRA Magic Map application<sup>19</sup> on 20<sup>th</sup> October 2023 to ascertain whether any recorded veteran and ancient trees and ancient woodland, traditional orchard and woodpasture and parkland priority habitats are located within this part of the Site (or outside this part of the Site, but within influencing distance of this part of the Site). There were no veteran or ancient trees recorded at this time on the Ancient Tree Inventory, either within this part of the Site or outside this part of the Site but within influencing distance of the Site.
- 5.1.3 The DEFRA Magic Map listed no ancient woodland, traditional orchard or woodpasture and parkland priority habitats within this part of the Site. The nearest recorded ancient woodland, called ‘Old Wood’, is located to the north approximately 3.3km away from the Cable Route Corridor boundary. This area of ancient and semi-natural woodland will not be affected by the Proposed Development and, therefore, it is not considered that the Forestry Commission will need to be consulted as a Prescribed Body in accordance with the Section 42 of the Planning Act 2008.

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<sup>17</sup> <https://www.n-kesteven.gov.uk/planning-building/planning/tree-protection-hedges/map-tree-preservation-orders-conservation-areas>.

<sup>18</sup> <https://ati.woodlandtrust.org.uk/>.

<sup>19</sup> <https://magic.defra.gov.uk/magicmap.aspx>.

## **6 SURVEY RESULTS & EVALUATION – CABLE ROUTE CORRIDOR**

### **6.1 Tree Population**

6.1.1 Additional details of the trees and hedges including their Root Protection Areas (RPAs), BS5837:2012 quality categories or any structural or physiological problems with the trees which will feed into any detailed routing can only be ascertained by undertaking a tree survey. At the time of writing, a Site survey of Cable Route Corridor area has not been undertaken. Therefore, any recommendations are based on a desk-based study as outlined above, including TPO and CA statutory constraints, recorded ancient and veteran trees, ancient woodlands, traditional orchards and woodpasture and parkland priority habitats.

## **7 DEVELOPMENT IMPACT TO RETAINED TREES – CABLE ROUTE CORRIDOR**

- 7.1.1 The specific impacts to retained trees will be assessed following site survey and during the layout design process.

## 8 THE SURVEY –ACCESS ROUTE CORRIDOR

### 8.1 Desk Study – Constraints

- 8.1.1 WA accessed the NKDC online Tree Preservation Order (TPO) mapping<sup>20</sup> on 20<sup>th</sup> October 2023 to ascertain whether any trees within and/or immediately adjacent to the cable corridor part of the Site are protected by a TPO and/or Conservation Area (CA) status. WA found that there were no trees protected by a TPO or CA status located on or immediately adjacent to this part of the Site (at this time).
- 8.1.2 WA also conducted a search using the Woodland Trust Ancient Tree Inventory<sup>21</sup> and the DEFRA Magic Map application<sup>22</sup> on 20<sup>th</sup> October 2023 to ascertain whether any recorded veteran and ancient trees and ancient woodland, traditional orchard and woodpasture and parkland priority habitats are located within this part of the Site (or outside this part of the Site, but within influencing distance of this part of the Site). There were no veteran or ancient trees recorded at this time on the Ancient Tree Inventory, either within this part of the Site or outside the Site but within influencing distance of this part of the Site.
- 8.1.3 The DEFRA Magic Map listed no ancient woodland, traditional orchard or woodpasture and parkland priority habitats within this part of the Site. The nearest recorded ancient woodland, called ‘Evedon Wood’, is located approximately 1.75km away to the north-west from the Access Route Corridor Site boundary. This area of ancient and semi-natural woodland will not be affected by the Proposed Development and, therefore, it is not considered that the Forestry Commission will need to be consulted as a Prescribed Body in accordance with the Section 42 of the Planning Act 2008.

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<sup>20</sup> <https://www.n-kesteven.gov.uk/planning-building/planning/tree-protection-hedges/map-tree-preservation-orders-conservation-areas>.

<sup>21</sup> <https://ati.woodlandtrust.org.uk/>.

<sup>22</sup> <https://magic.defra.gov.uk/magicmap.aspx>.

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## **9 SURVEY RESULTS & EVALUATION – TEMPORARY ACCESS ROAD**

### **9.1 Tree population**

9.1.1 Additional details of the trees and hedges including their Root Protection Areas (RPAs), BS5837:2012 quality categories or any structural or physiological problems with the trees which will feed into any detailed routing can only be ascertained by undertaking a tree survey. At the time of writing, a site survey of the Access Route Corridor has not been undertaken. Therefore, any recommendations are based on a desk-based study as outlined above, including TPO and CA statutory constraints, recorded ancient and veteran trees, ancient woodlands, traditional orchards and woodpasture and parkland priority habitats.

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**10 DEVELOPMENT IMPACT TO RETAINED TREES – ACCESS ROUTE CORRIDOR**

10.1.1 The specific impacts to retained trees will be assessed following the Site survey and during the Access Route Corridor layout design process.



## 11 SUMMARY AND RECOMMENDATIONS

- 11.1.1 The requirements of BS 5837:2012 have been complied with, in assessing in this AIA Report the known arboricultural impacts arising from the Proposed Development.
- 11.1.2 WA reviewed the NKDC online TPO mapping on 29<sup>th</sup> August 2023 to ascertain whether any trees within and/or immediately adjacent to the Site are protected by TPO and/or CA status. It was found that none of the trees on or immediately adjacent to the Site are protected by either of these statutory designations. A review of the Magic Map resource (provided by DEFRA) showed that an area of ancient woodland, known as 'Old Wood', is located approximately 940m to the north-east of the Site boundary. This area of ancient and semi-natural woodland will not be affected by the Proposed Development. There are no listed traditional orchard or woodpasture and parkland priority habitats within the Site or outside the Site boundary but within influencing distance of the Site.
- 11.1.3 WA also reviewed the NKDC online TPO mapping on 20<sup>th</sup> October 2023 to ascertain whether any trees within and/or immediately adjacent to the Cable Route Corridor and Access Route Corridor are protected by TPO and/or CA status. It was found that none of the trees on or immediately adjacent to these areas are protected by either of these statutory designations.
- 11.1.4 In addition, a part of the Cable Route Corridor lies within the boundary of Boston Borough Council (BBC). WA contacted BBC by email on 16<sup>th</sup> October 2023. An email response was received on 19<sup>th</sup> October 2023 confirming that no trees within and/or immediately adjacent to the Cable Route Corridor are protected by TPO and/or CA status.
- 11.1.5 A review of the Magic Map resource (provided by DEFRA) showed that the nearest areas of ancient woodland to the Connection Route Corridor and Access Route Corridor are well over 1 km from the boundaries of these Sites. There are no traditional orchard or woodpasture and parkland priority habits within the Site or outside the Site boundary but within influencing distance of the of the Site. There were no veteran or ancient trees recorded at this time on the Ancient Tree Inventory, either within the Site or outside the Site but within influencing distance of the Site.
- 11.1.6 During the field survey, a small number of veteran/ancient trees were identified (e.g.T7, T73, T95 and T190). These trees can be retained, subject to minor amendments to the Proposed Development layout and afforded a buffer zone of 15 times their stem diameter or 5m beyond their crown spread, whichever is greater, as shown on the Tree Protection Plan Ref. ST19595 – 106 Rev. A.

- 11.1.7 In summary, four individual trees, three tree groups, six small sections of hedgerow and a small section of scrub would need to be removed to facilitate the Proposed Development and to reduce the risk to users of the Site. The trees to be removed are all of lower quality (category 'C' and category 'U'). The hedgerow removals are required for the internal tracks and to enable Site security fencing to be installed. The impact on local amenity and ecosystem services from these removals is very low, especially when considered against the scale of the Proposed Development. Note, additional removals may be required if the recommendations to amend the Proposed Development layout are not enacted.
- 11.1.8 The Proposed Development layout (as it stands) shows proposed Site fencing to be erected within the RPAs of several trees and also within veteran/ancient tree buffer zones. Additionally, solar PV arrays are located within some trees RPAs and veteran/ancient tree buffer zones. We recommend that during the final design stage, that the Proposed Development layout is adjusted to avoid these impacts, where feasible to do so.
- 11.1.9 With the above in mind, a Mitigation Layout is currently evolving as further information is received. The design of this layout will take into account the arboricultural impacts discussed in **Section 4** of this report and the recommendations to mitigate those impacts.
- 11.1.10 It is likely that the change from agricultural land usage to solar PV usage will improve the growing conditions for many of the trees onsite, including the veteran/ancient trees.
- 11.1.11 During the design of the Cable Route Corridor and the Access Route Corridor, it is recommended that the tree survey information (surveys yet to be undertaken at time of writing) is utilised to identify constraints to development and ensure the retention of as many trees as possible, particularly category 'A' and 'B' quality trees. No development activities, such as construction, excavations, ground level changes and storage of materials, should be located within RPAs or crown spreads of retained trees. If any veteran trees are identified during the surveys, the veteran tree buffers must also exclude development.
- 11.1.12 The trees and hedgerows that are to be retained on the Site will be protected during the proposed works with fencing appropriate to the development intensity type. Unless otherwise stated in an AMS, the protective fencing will be comprised of the proposed Site fencing, supplemented with either Heras type Tree Protection Fencing as described in BS 5837:2012 or post-and-wire fencing, where appropriate for

hedgerow protection. Examples of the Heras and post wire fencing are included in **Appendix 6**, with the location of all types of the protective fencing shown on the Tree Protection Plan Sheets 1-12 Ref. ST19595 – 106 Rev. A. Signage on the fencing will also be required to be installed at 10m intervals and an example of this is included in **Appendix 7**.

- 11.1.13 An AMS and an updated TPP is advised to be completed when the Proposed Development design is fixed to ensure tree and hedgerow protection measures are fully specified and implemented.

## 12 REFERENCES

- British Standard, BS 3998:2010 Tree work. Recommendations. (The British Standards Institution, 2010).
- British Standard, BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. (The British Standards Institution, 2012).
- NJUG Volume 4 - Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees (Issue 2:16th November 2007).
- Quantified Tree Risk Assessment User Manual, (QTRA User\_Manual\_V5.1.4\_2015\_01). (Incorporating extracts).
- Ministry of Housing, Communities and Local Government (2014) Tree Preservation Orders and Trees in Conservation Areas.  
<https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas>
- Forestry Commission (2007) Tree Felling – Getting Permission.
- Claus Mattheck (2007) Updated field guide for Visual Tree Assessment.
- Forestry Commission & Natural England (Updated 4<sup>th</sup> January 2018) Ancient Woodland and Veteran Trees: Protecting them from Development – Guidance.  
<https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences#veteran-trees>

## **Appendix 1 Tree Survey Schedule**

Location: Beacon Fen Solar DCO (Job. No. ST19595)

Surveyor: Mark Levitt

Weather: Sunny; Thunderstorms and Sunny; Sunny with cloud

Estimated Stem Diameters & Other Measurements highlighted in this colour

Survey Date(s): 17-20.04.2023; 02-04.05.2023;



Item type: T (tree), G (group), H (hedge), W (woodland)	Tree/ Group Ref. No.	Common Name	Height(m)	Crown Clearance (m) & compass direction	Crown Spread (m)				Stem Diameter @ 1.5m (mm)	Number of stems	Age Class: Y (Young), SM (Semi-Mature), EM (Early-Mature), M (Mature), LM (Late-mature), V (Veteran)	Condition			Estimated Remaining Contribution: (<10, 10+, 20+, 40+)	BS5837 Categorisation Grading	Sub Category	Comments	Preliminary management recommendations/ further works	Bat potential: L (Likely) U (Unlikely)	BS 5837 Root Protection Area (m <sup>2</sup> )	BS 5837 Root Protection Radius (m)	Veteran Tree Root Protection Radius (m)
					North	East	South	West				Physiological Condition: G (Good), F (Fair), P (Poor), D (Dead)	Structural Condition: G (Good), F (Fair), P (Poor)	Physiological Condition: G (Good), F (Fair), P (Poor), D (Dead)									
T	1	Ash	10.8	6.7 E	5.1	4.7	3.6	3.8	350	1	EM	F	F	10+	C	1	Field boundary hedgerow tree adjacent highway to the west. Dieback evident, unable to determine extent as out of leaf. Ivy on stem.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	55	4.2	N/A	
T	2	Ash	8.9	3 E	4.0	5.5	2.9	4.9	430	1	EM	F	F	20+	B	2	Field boundary hedgerow tree adjacent to highway to the west. Ivy dense on stem and into lower part of canopy. Dieback evident, unable to determine extent as out of leaf. Stem diameter estimated due to location within hedge preventing access for detailed survey.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	84	5.2	N/A	
T	3	Ash	12.5	1.7 E	5.5	6.7	5.2	7.1	400	1	EM	F	F	20+	B	2	Field boundary hedgerow tree adjacent to highway to the west. Dieback evident, unable to determine extent as out of leaf. Broken dead branch at north, moderate to large deadwood located mainly over hedge (dead branch and stubs on stem, smaller deadwood on east side over field). Ivy on stem. Stem diameter estimated due to location within hedge. Eastern canopy extents estimated due to access confined to field boundaries.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	72	4.8	N/A	
T	4	Ash	13.4	2.8 SE	5.3	8.0	10.1	7.0	1200	1	LM	F	F	10+	B	3	Large mature, field boundary hedgerow tree adjacent to highway to the west. Canopy reduced at north likely due to dieback and branch failures, branch stubs and large deadwood remains. Remainder of canopy has dieback, unable to determine extent as out of leaf, small to moderate deadwood in places. Large spreading canopy over field and road. Ivy on stem and into crown. Stem diameter estimated due to ivy and location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	651	14.4	N/A	
T	5	Ash	10.5	3 E	4.6	6.6	6.7	5.8	380	1	EM	G	G	10+	B	1,2	Field boundary hedgerow tree adjacent to highway to the west. Appears in reasonably good health, minor moderate deadwood. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	65	4.6	N/A	

T	6	Sycamore	6.5	3.7 E	0.8	3.2	2.3	1.5	70	95	115	100		4	EM	G	F	40+	C	1	Multi-stemmed small hedgerow tree. Suppressed by ash to north, canopy visually imbalanced. Good vitality. Stem diameters estimated due to location within hedge.	None required.	U	17	2.3	N/A
T	7	Ash	10.1	2.5 E	4.7	5.5	4.4	5.5	1100					1	V	G	F	40+	A	3	Large hollowing stem, good habitat value transitioning veteran. Aerial cavities and deadwood. Branches to east and over field showing good vitality. Tree adjacent to the road to the west. Access to stem restricted by location within hedge and ivy - stem diameter estimated.	Re-inspect for safety/risk management purposes within 2 years.	L	547	13.2	16.5
T	8	Ash	20	2.4 E	7.2	8.9	8.6	9.0	800					1	M	F	F	20+	B	1,2,3	Moderate to large deadwood visible within canopy, localised, otherwise canopy reasonably healthy but due to time of survey, the extent of dieback not confirmed during survey. Previously severed ivy stems on main stem. Inonotus hispidus large double bracket, decay fungus fruiting body, on main stem at west at approx. 2m. Stem diameter estimated due to ivy and location within hedge.	Assess for ash dieback disease when in full leaf within 18 months and undertake full safety/ risk management inspection within 12 months.	L	290	9.6	N/A
T	9	Ash	10.7	2.7 E	5.3	4.2	5.5	5.4	700					1	M	F	F	20+	B	3	Ivy dense on stem, appears to have previously failed leader at approx. 4-5m from ground level. Branches from below this forming new canopy, good vitality, minor deadwood visible. Tree adjacent to road to the west. Access to stem restricted due to ivy and hedge - stem diameter estimated.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	222	8.4	N/A
T	10	Ash	19.4	3.4 E	8.7	8.7	10.5	12.7	1150					1	M	F	F	20+	B	3	Large, mature, hedgerow field boundary tree. Wide spreading canopy with moderate to large deadwood visible. Reduced deadwood branch stub at northwest overhanging verge and ditch on roadside. Ivy dense on stems to approx. 6-7m from ground level. Stem diameter estimated due to ivy and hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	598	13.8	N/A
T	11	Ash	7.7	3.2 E	4.8	5.2	3.4	3.6	300					1	EM	F	G	20+	C	1	Hedgerow, field boundary tree, in reasonably good health. Stem diameter estimated due to location within hedge.	None required.	U	41	3.6	N/A
T	12	Ash	10.8	3.1 E	4.8	4.4	4.5	4.8	700					1	M	F	F	20+	B	3	Previously failed (or reduced) main stem to approx. 4-5m from ground level, dense ivy. Canopy regrowth from side stems at southeast and branch at north from main stem at approx. 4 m. Tree adjacent to road to the west. Stem diameter estimated due to location within hedge and ivy cover.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	222	8.4	N/A
T	13	Ash	14.5	2.5 NE	7.9	9.0	7.8	6.7	700					1	M	F	F	10+	B	3	Large, mature, hedgerow field boundary tree adjacent to road to the west. Ivy dense on stem and into crown. Wide spreading canopy. Has healthy growth throughout crown with minor deadwood only. Previously reduced. Stem diameter estimated due to low branch, epicormic growth and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	222	8.4	N/A

T	14	Ash	16.3	3 NE	8.6	9.5	6.6	6.4	680					1	M	F	F	20+	B	1,2,3	Large, mature, hedgerow field boundary tree adjacent to road to the west. Good vitality. Wide spreading canopy. Ivy dense on stem and into crown. Small decay pockets and moderate to large deadwood visible at south at approx. 4-5m from ground level. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	209	8.2	N/A
T	15	Sycamore	10.1	3N	3.7	2.7	3.0	3.7	330					1	M	G	G	40+	B	1,2	End of hedgerow tree. Good vitality. Stem diameter estimated due to location within brambles.	None required	U	49	4.0	N/A
T	16	Sycamore	6.9	2.5 S	3.3	3.6	3.2	2.3	180					1	M	F	F	40+	B	1	Hedgerow tree. Lean to north. Vigorous epicormic growth at stem base to south-east. Stem diameter estimated due to location within hedge and epicormic growth.	None required	U	15	2.2	N/A
T	17	Sycamore	9.4	3.8 S	4.2	3.6	4.0	3.2	340	330				2	EM	G	G	40+	B	1	Hedgerow tree. Good vitality. Bifurcated at approx. 1.4m. Northern stem diameter estimated due to location within hedge, restricting access.	None required.	U	102	5.7	N/A
T	18	Sycamore	7.9	3.1 S	3.2	2.8	3.1	3.2	250					1	EM	G	G	40+	C	1	Hedgerow tree. Good vitality. Twin stemmed from approx. 1.7m from ground level. Stem diameter estimated due to location within hedge restricting access.	None required.	U	28	3.0	N/A
T	19	Sycamore	6.6	2.6 S	3.0	2.2	3.3	1.8	200					1	EM	G	G	40+	C	1	Small hedgerow tree. Broken branch at east at approx. 2m. Good vitality. Epicormic growth from base at south. Stem diameter estimated due to location within hedge restricting access.	None required.	U	18	2.4	N/A
T	20	Sycamore	8.8	2.1 S	4.0	3.5	3.9	3.9	200					1	EM	G	G	40+	C	1	Hedgerow tree, ivy remnants on stem. Good vitality. Stem diameter estimated due to location within hedge and ivy remnants restricting access.	None required.	U	18	2.4	N/A
T	21	Sycamore	6.4	2.6 SW	4.5	3.4	4.3	4.3	230					1	EM	F	G	40+	C	1	Located atop southern ditch banking, north side of hedge. Good vitality, minor shoot dieback. Stem diameter estimated due to location restricting access.	None required.	U	24	2.8	N/A
T	22	Sycamore	8.9	2.5	3.5	3.4	3.5	2.5	250					1	EM	F	G	40+	C	1	Hedgerow tree. Later to flush than trees to east, possibly indicating reduced vitality. Stem diameter estimated due to location within hedge and brambles.	None required.	U	28	3.0	N/A
T	23	Sycamore	10.2	2.4 SW	3.0	2.7	3.9	3.2	200					1	EM	G	G	40+	C	1	Hedgerow tree. Good vitality. Ivy remnants on stem. Stem diameter estimated due to location within hedge and ivy and brambles.	None required.	U	18	2.4	N/A
T	24	Sycamore	10.9	2.7 S	4.0	3.5	4.0	3.7	250					1	EM	G	G	40+	C	1	Hedgerow tree. Good vitality. Ivy remnants on stem. Stem diameter estimated due to location within hedge and ivy restricting access.	None required.	U	28	3.0	N/A



T	25	Ash	6.8	2.4 S	4.5	3.4	4.0	3.7	200	220					2	EM	F	F	10+	C	1	Twin stemmed from base. Ivy on stems. Hedgerow tree. Decay visible at base between stems, unable to fully access to determine extent. Shoot dieback visible, unable to determine full dieback extent as out of leaf. Stem diameters estimated due to location within hedge.	If land use intensifies near the tree, undertake a full safety/ risk management prior to intensification and ideally when in leaf to ascertain if it has Ash Dieback Disease.	U	40	3.6	N/A
T	26	Sycamore	9.3	2.6 SW	4.0	4.5	4.0	2.0	150					1	SM	F	G	40+	C	1	Hedgerow tree, minor shoot dieback. Canopy weighted to northeast. Stem diameter estimated due to location within hedge and brambles.	None required.	U	10	1.8	N/A	
T	27	Sycamore	8.1	1.9 S	3.5	2.8	4.7	2.8	200					1	EM	G	G	40+	C	1	Hedgerow tree. Minor shoot dieback. Stem diameter estimated due to location within hedge.	None required.	U	18	2.4	N/A	
T	28	Sycamore	9.3	2 SE	4.5	5.0	3.4	3.8	320					1	EM	G	G	40+	C	1	Hedgerow tree. Good vitality. Remnants of ivy on stem, coming away. Stem diameter estimated due to ivy and location.	None required.	U	46	3.8	N/A	
T	29	Ash	9.9	2.6 S	4.2	4.2	4.7	4.2	250					1	EM	F	F	10+	C	1	Hedgerow tree. Shoot dieback, unable to determine extent as out of leaf, and minor to moderate deadwood. Stem diameter estimated due to location.	If land use intensifies near the tree, inspect for Ash Dieback Disease prior to intensification and when in leaf.	U	28	3.0	N/A	
T	30	Ash	7.8	2.8 S	3.0	0.5	1.8	1.2	150					1	SM	P	F	<10	U	1	Extensive dieback estimated from leaf flush visible during survey. Some habitat value arising from dead wood.	If land use intensifies near the tree, undertake a full safety/ risk management prior to intensification and ideally when in leaf to ascertain extent of Ash Dieback Disease.	U	10	1.8	N/A	
T	31	Sycamore	7.3	2.8	3.5	2.2	2.1	1.5	290					1	EM	F	F	40+	C	1	Minor moderate deadwood in places at west and east at approx. 2-4m. Some shoot dieback, but otherwise healthy canopy. Stem diameter estimated due to location within hedge and ivy. Adjacent to small ash to west.	None required.	U	38	3.5	N/A	

T	32	Sycamore	10.8	2.4 S	5.0	3.0	4.0	2.6	200					6	EM	G	G	40+	B	1,2	Multi-stemmed at approx. 1.3m. Fairly well balanced fastigate crown. Good vigour and vitality. Ivy on stem near ground to south. Stem diameters estimated due to location within hedge and ivy.	None required.	U	109	5.9	N/A
T	33	Sycamore	9	3.2 S	3.0	2.0	2.7	1.9	250					1	EM	G	G	40+	C	1	Hedgerow tree, good vitality, upright form. Stem diameter estimated due to location within hedge.	None required.	U	28	3.0	N/A
T	34	Sycamore	7.9	2.5 S	3.0	2.0	3.2	1.2	200					1	SM	G	G	40+	C	1	Small, hedgerow tree. Good vitality, ivy on stem. Stem diameter estimated due to location within hedge.	None required.	U	18	2.4	N/A
T	35	Sycamore	4.5	2.6 S	3.5	2.1	2.1	3.1	200	250				2	EM	G	G	40+	C	1	Small, hedgerow tree. Good vitality. Stem diameter estimated due to location within hedge.	None required.	U	46	3.8	N/A
T	36	Sycamore	8.8	2.2 SW	4.5	3.2	4.1	3.4	400					1	EM	G	G	40+	B	1,2	Good form and vitality, basal epicormic growth present. Stem diameter estimated due to location within hedge and ivy remnants on stem.	None required.	U	72	4.8	N/A
T	37	Sycamore	7.9	2.3 S	4.5	4.1	3.2	2.5	200	250				2	EM	G	G	40+	C	1	Small multi-stemmed, hedgerow tree. Ivy on stems. Good vitality. Stem diameters estimated due to location and ivy.	None required.	U	46	3.8	N/A
T	38	Sycamore	6.2	3.7 S	2.5	1.5	2.5	1.5	130					6	SM	F	F	20+	C	1	Small, multi-stemmed hedgerow tree. Ivy on stem. Lichen growth quite extensive, some shoot dieback. Good vitality in remaining new growth. Stem diameters estimated due to location within hedge and ivy.	None required.	U	46	3.8	N/A
T	39	Sycamore	7.4	2.8 S	3.5	2.4	3.3	2.9	100	220				2	EM	G	F	40+	C	1	Small, hedgerow tree. Good vitality. Multi-stemmed with ivy on stems and into lower part of crown. Stem diameters estimated due to location within hedge and ivy.	None required.	U	26	2.9	N/A
T	40	Sycamore	6.6	2.5 N	4.0	3.4	4.0	3.6	150	17	130	150		4	EM	G	F	40+	C	1	Small multi-stemmed tree atop southern ditch banking within hedge. Ivy on stem and into lower crown. Good vitality. Stem diameters estimated due to ivy and location within hedge.	None required.	U	28	3.0	N/A
T	41	Ash	7.7	3.2 E	2.3	2.7	3.0	3.7	300					1	EM	F	F	<10	C	1	Hedgerow tree adjacent to road to the south. Small to large deadwood branches at north. Ivy extensive on stem and taking over crown. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	41	3.6	N/A
T	42	Ash	12.2	3.9	2.9	4.2	4.5	3.4	400					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road to the south. Ivy on stem and into lower part of crown. Shoot dieback, unable to determine full extent of dieback as out of leaf. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	72	4.8	N/A

T	43	Ash	10	3.7 N	2.6	2.9	3.0	3.4	200					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road to the south, unable to determine full extent of dieback as out of leaf, ivy on stem. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	18	2.4	N/A
T	44	Ash	8.7	2.5 N	3.7	3.1	4.0	4.1	300					1	EM	F	F	<10	C	1	Hedgerow tree adjacent to road to the south, ivy on stem and into large proportion of crown. Unable to determine full extent of dieback as out of leaf. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	41	3.6	N/A
T	45	Ash	11.8	4 N	3.0	3.4	4.0	3.8	400					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road to the south. Ivy on stem and into crown. Unable to determine full extent of dieback as out of leaf. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	72	4.8	N/A
T	46	Ash	20.7	3.5 N	7.9	9.4	8.0	7.1	1000					1	M	G	F	40+	B	1,2,3	Large, mature tree adjacent to road to the south with wide spreading canopy. Tree in good health with moderate to large localised deadwood branches and stubs to north over field. Ivy dense on stem and on lower portions of upper branches. Located within hedge. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	452	12.0	N/A
T	47	Ash	10	3.5	2.6	3.4	4.2	2.9	250					1	EM	F	F	10+	C	1	Suppressed by larger ash to west. Hedgerow tree adjacent to road. Ivy on stem and taking over canopy. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	28	3.0	N/A
T	48	Ash	14	4.2	7.3	6.3	8.0	7.8	650					1	EM	F	F	20+	B	2;1	Hedgerow tree adjacent to road, ivy dense on stem and into crown. Unable to determine full extent of dieback as out of leaf. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	191	7.8	N/A
T	49	Ash	10.7	4	4.2	3.9	5.0	4.7	190	220				2	EM	F	F	40+	C	1	Hedgerow tree adjacent to road. Bifurcated at approx. 1.4m. Ivy on stem and into crown. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	38	3.5	N/A
T	50	Ash	21.1	3.8 N	9.8	10.2	8.0	13.0	950					1	M	F	F	40+	B	1,2,3	Large, mature tree adjacent to road. Located on southern side of hedge, ivy dense on stem and into crown. Canopy imbalance- suppressed at south by tree on opposite side of road. Stem diameter estimated due to location and ivy on stem.	Assess for Ash Dieback Disease when in full leaf within 18 months.	L	408	11.4	N/A

T	51	Ash	13.7	3.4 N	9.9	14.7	11.3	6.8	1500					1	M	F	F	20+	B	2,3	Large mature tree in hedgerow adjacent to road. Dense ivy coverage. Large deadwood over road. Wide spreading canopy. Ivy obscuring view but central leader appears to have been lost. Stem diameter estimated due to ivy and location within hedge.	Remove large deadwood over road within 12 months. Assess for Ash Dieback Disease when in full leaf within 18 months.	L	707	15.0	N/A
T	52	Ash	12.4	4 N	5.5	4.9	5.5	6.0	400					1	EM	F	F	20+	B	1,2	Hedgerow tree adjacent to road. Unable to determine full extent of dieback as out of leaf. Ivy extensive on stem and into crown. In reasonably good health. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	72	4.8	N/A
T	53	Ash	12	3.7 N	7.1	4.5	7.5	5.7	700					1	M	F	F	20+	B	1,2,3	Hedgerow tree adjacent to road. Ivy extensive on stem and into crown. Visually balanced, wide spreading crown, reasonably healthy but unable to determine full extent of dieback as out of leaf. Broken branch at north. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months. If land use intensifies to immediate north of tree, remove broken branch prior to intensification.	L	222	8.4	N/A
T	54	Ash	10	3.2	5.0	6.7	7.5	5.5	600					1	EM	F	F	20+	B	2,3	Large spreading canopy. Hedgerow tree adjacent to road. Unable to determine full extent of dieback as out of leaf. Small to moderate extensive deadwood. Ivy extensive on stem and into crown. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	163	7.2	N/A
T	55	Ash	8.7	3.6 N	4.4	2.9	4.5	3.8	100					7	SM	F	F	10+	C	1	Hedgerow multi-stemmed tree adjacent to road. Unable to determine full extent of dieback as out of leaf. Broken deadwood branch at east. Stem diameters estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	32	3.2	N/A
T	56	Ash	11.4	2.7 N	6.4	7.0	6.5	5.6	450					1	EM	F	F	20+	B	1,2	Hedgerow tree adjacent to road. Wide spreading prominent canopy. Unable to determine full extent of dieback as out of leaf. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	92	5.4	N/A
T	57	Ash	11	3.5 NW	5.1	5.3	5.2	4.9	400					1	EM	F	F	20+	C	1	Hedgerow tree adjacent to road. ivy on stem and into crown. Moderate extensive deadwood in lower canopy, unable to determine full extent of dieback as out of leaf. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	72	4.8	N/A

T	58	Ash	6.6	2.6 N	4.5	2.6	3.5	4.3	300	320				2	EM	F	F	10+	C	1	End of hedgerow tree on junction of road and field track. Bifurcated at base. Stems densely ivy covered. Unable to determine full extent of dieback as out of leaf. Stem diameters estimated due to ivy cover and location.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	87	5.3	N/A
T	59	Lime	6.8	1.5 N	3.2	3.9	3.2	2.7	280	100	90	100		4	EM	G	G	40+	C	1	Hedgerow tree adjacent to road. Good health and vigour. Ivy dense on main stem. Stem diameters estimated due to location within hedge and ivy.	None required.	U	48	3.9	N/A
T	60	Ash	10.5	3.6 N	4.0	3.7	4.5	3.3	450					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	92	5.4	N/A
T	61	Ash	8.8	2.8 NW	4.2	4.4	4.5	4.7	350	200	200			3	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameters estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	92	5.4	N/A
T	62	Ash	10	2.1 N	3.5	4.7	3.1	2.3	300	200	150			3	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	69	4.7	N/A
T	63	Ash	8.3	3.3 N	4.5	4.6	4.5	2.5	500					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	113	6.0	N/A
T	64	Ash	18.5	3 N	8.0	6.8	5.5	7.9	1200	150	150			3	M	F	F	40+	B	1,2,3	Large, mature hedgerow tree adjacent to road. Cavities and large deadwood in crown. Ivy dense on stem and into crown. Stem diameters estimated due to location within hedge and ivy.	Remove large deadwood above road within 6 months. Cut ivy at stem base at the same time. Inspect for safety/ risk management purposes and for Ash Dieback Disease when in full leaf within 18 months.	L	672	14.6	N/A

T	65	Ash	11.6	4.4 N	6.5	4.7	6.5	5.7	500	150	150			3	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameters estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	133	6.5	N/A
T	66	Ash	10	3 N	4.0	4.5	4.5	3.8	430					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	84	5.2	N/A
T	67	Ash	9.1	3.8 N	3.8	4.5	3.7	4.0	550	200				2	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	155	7.0	N/A
T	68	Ash	9.4	2.9 N	6.0	4.8	7.0	5.3	450					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Small to moderate deadwood in lower canopy. Ivy extensive on stem and into lower part of crown. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	92	5.4	N/A
T	69	Ash	5.8	3.6 N	4.5	4.4	4.0	3.5	420					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	80	5.0	N/A
T	70	Ash	12.3	4.5 N	4.5	5.3	5.0	3.6	430	100	95	150		4	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameters estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	102	5.7	N/A
T	71	Common Oak	4.2	0.5 E	1.1	1.2	0.9	0.6	80					1	Y	G	G	40+	C	1	Small planted tree on edge of shelter belt. Tree guard remains at base. Good health.	Remove tree guard within 12 months.	U	2.9	1.0	N/A
T	72	Crack Willow	8.8	0 W	5.7	3.1	4.8	9.2	300	250				2	EM	F	F	40+	B	3	Western stem failed into reservoir. Mostly dead stem at west but with some vertical regrowth to east close to upright second living stem. Rooted on edge of water, good vigour. Stem diameter estimated due to location.	If land use intensifies near the tree, recommend undertaking a full safety/ risk management inspection, prior to land use intensification.	L	69	4.7	N/A

T	73	Common Oak	11	2.2 W	8.0	4.5	5.5	5.0	1000					1	V	G	F	40+	A	3	Veteran tree located atop western ditch banking. Cavities and hollowing of stems and branches. Wounds at sites of previous failures. Large deadwood. Excellent vitality and habitat value. Ivy on stems in lower crown. Wasps or bees nest at base on west Stem diameter estimated due to location.	If land use intensifies near the tree, recommend undertaking a full safety/ risk management inspection, prior to land use intensification.	L	452	12.0	15
T	74	Ash	8.5	2.7 N	4.6	4.2	4.6	4.5	300					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	41	3.6	N/A
T	75	Ash	9.3	3.8 N	4.2	3.8	5.0	3.2	250					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy extensive on stem and into crown. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	28	3.0	N/A
T	76	Ash	4.6	0 N	1.5	2.1	1.5	1.8	1500					1	M	P	P	<10	U	1	Very large mature remnant stem covered in ivy. Vigorous epicormic growth at stem base. Fungal fruiting bodies. Ganoderma decay fungi brackets on southern side of stem and Daldinia concentrica on northern side. High habitat value. Very large RPA due to BS 5837 RPA methodology. Likely to be very much smaller, due to the main stem/ stump being mostly dead. RPA not amended for adjacent road.	Consider retaining for habitat.	L	707	15.0	N/A
T	77	Ash	10.4	2.8 N	5.0	5.0	5.5	2.7	350					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to the road. Unable to determine extent of dieback as out of leaf. Ivy on stem and into crown. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	55	4.2	N/A
T	78	Ash	13.1	3.3 N	6.0	5.8	6.5	6.5	700					1	M	F	F	20+	B	1,2	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy dense on stem and into crown. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	222	8.4	N/A
T	79	Ash	9.4	2.1 NW	3.6	3.9	4.2	4.1	250	100	100			3	EM	F	F	10+	C	1	Multi-stemmed hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Stem diameters estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	37	3.4	N/A

T	80	Ash	8.3	3.7 N	4.0	4.4	5.0	5.0	350	150	100	150		4	EM	F	F	10+	C	1	Outgrown hedgerow tree adjacent to road, multi-stemmed. Unable to determine extent of dieback as out of leaf. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	80	5.1	N/A
T	81	Ash	7.6	3.1 N	4.0	3.6	4.5	5.0	450					1	EM	F	F	10+	C	1	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Heavily ivy covered into half way up multiple stemmed crown. Stem diameter estimated due to location within hedge and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	92	5.4	N/A
T	82	Field Maple	8.1	4 N	2.5	4.2	4.0	3.3	250	220				2	M	G	F	40+	C	1	Modest sized tree adjacent to road. Upright, multi-branched form, twin stemmed from bifurcation at approx. 1.4m. Tight Union. Stem diameters estimated due to location within hedge and low multiple branching.	None required	U	50	4.0	N/A
T	83	Ash	12.8	3.9 N	6.0	4.7	6.5	5.5	430	200	250	230	80	5	EM	F	F	20+	B	2,3	Outgrown hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Ivy on main stem. Self-corrected lean to south. Stem diameters estimated due to location and ivy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	157	7.1	N/A
T	84	Ash	14.2	2.2 W	4.5	4.4	6.0	4.0	420					1	EM	F	F	20+	B	1,2	Hedgerow tree adjacent to road, prominent specimen. Unable to determine extent of dieback as out of leaf. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	80	5.0	N/A
T	85	Ash	14.7	2.5 N	6.0	6.5	5.5	4.3	400					1	EM	F	F	20+	B	1,2	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Large epicormic stems from stem base. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	72	4.8	N/A
T	86	Ash	12	2.6 N	5.0	5.0	5.0	4.9	400					1	EM	F	F	20+	B	1,2	Hedgerow tree adjacent to road. Unable to determine extent of dieback as out of leaf. Small to moderate deadwood visible. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	72	4.8	N/A
T	87	Ash	5.6	3 N	4.0	3.0	1.7	2.4	100					7	SM	P	F	<10	U	1	Dieback appears quite extensive, less than 50% of the canopy is flushing. Multi-stemmed tree within hedge. Stem diameter estimated due to location within hedge.	If land use intensifies within falling distance of the tree, coppice tree prior to intensification for risk management purposes.	U	32	3.2	N/A



T	88	Ash	6.1	2.5 S	4.5	4.1	3.2	2.0	100					6	SM	F	F	10+	C	1	Unable to determine extent of dieback as out of leaf. Multi-stemmed hedgerow tree. Stem diameter estimated due to location within hedge.	None required	U	27	2.9	N/A
T	89	Field Maple	6.4	3 S	3.0	2.5	2.5	2.8	200					1	EM	F	F	10+	C	1	Hedgerow tree with minor shoot dieback and some whole parts of canopy dieback. Ivy on stems. Stem diameter estimated due to location within hedge and ivy.	None required	U	18	2.4	N/A
T	90	Field Maple	6.1	3.5 S	2.5	2.0	2.7	1.6	200					1	EM	F	F	10+	C	1	Hedgerow tree with some shoot dieback. Multi-stemmed from approx. 1.6m, tight unions, ivy on stems obscuring view. Stem diameter estimated due to location within hedge and ivy.	None required	U	18	2.4	N/A
T	91	Field Maple	5.4	3 S	2.5	2.4	2.9	2.2	150	100				2	EM	F	F	10+	C	1	Minor shoot dieback and canopy quite sparse. Ivy on stems. Stem diameter estimated due to location within hedge.	None required	U	15	2.2	N/A
T	92	Ash	8.5	3 NW	3.6	2.5	4.0	2.8	200	200				2	EM	F	F	<10	U	1	Dieback extent estimated at 25-50%. Hedgerow tree. Ivy on stems from base to approx. 2 to 3m from ground level. Stem diameter estimated due to location within hedge.	If land use intensifies within falling distance of the tree, coppice tree prior to intensification for risk management purposes.	U	36	3.4	N/A
T	93	Ash	6.6	2.3 N	2.5	3.8	2.0	1.5	150	180				2	EM	F	F	10+	C	1	Small, twin-stemmed, hedgerow tree. Unable to determine extent of dieback as out of leaf. Stem diameter estimated due to location within hedge.	None required	U	25	2.8	N/A
T	94	Ash	6.3	2.5 N	3.2	3.4	3.0	2.0	180	200	200	210		4	EM	F	F	10+	C	1	Small, multi-stemmed, hedgerow tree. Unable to determine extent of dieback as out of leaf. Stem diameter estimated due to location within hedge.	None required	U	71	4.7	N/A

T	95	Ash	9	3.2 NW	5.1	6.3	6.0	5.5	1050					1	V	F	F	20+	A	3	Large-stemmed field boundary veteran tree. Tear out wound to south of large limb. Large wound with extensive decay, only partially visible due to location. Large dead branch stub above tear out to west at approx. 5m. Epicormic growth at stem base to north-east. Very large (>301mm) fallen deadwood within ditch and hedge to south. Dieback extent estimated at between 25-50%. Small to large (<75mm to 300mm) deadwood stubs and branches throughout crown. Excellent habitat value and likely bat roosting potential. Bird's nest on central stem at approx. 4.5m from ground level. Another tear-out wound just below this visible from east but not completely, decay looks extensive within this stem. Decay in main stem, cracking bark and exposed heartwood at approx. 2m at north and near base at west. Stem diameter estimated (by measuring half way round and doubling) due to location adjacent hedge and ditch.	If land use intensifies near the tree, undertake a safety/ risk management/ veteran tree management inspection, prior to land use intensification.	L	L	12.6	15.75
T	96	Ash	8.4	2.4 NW	2.8	5.3	6.0	5.0	180					10	M	F	F	20+	B	3	Hollowed-out centre. Multi-stemmed from remaining basal sections surrounding this. Fungal decay brackets present to south on inside, north side, of southern basal section. Broken branch at west, still attached, majority of shoots still leaf flushing. Stem diameter of former bole estimated at 1.5-2m, wider west to east than north to south. Approx. 10 stems.	None required.	U	147	6.8	N/A
T	97	Hawthorn	5.8	0 S	3.0	4.0	3.0	2.3	180					7	EM	G	F	40+	B	2	Rounded, multi-stemmed form but asymmetric crown, weighted to east over ditch. Rooted at base of ditch, adjacent west of ditch. Good vitality. Stem diameter and canopy extents for north, east and south estimated due to location. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	103	5.7	N/A
T	98	Hawthorn	5.5	0	3.5	3.7	3.7	3.4	190					6	M	G	F	40+	B	1,2	Rounded, multi-stemmed form. Good vitality. Stem diameter estimated due to low canopy. Southern canopy extent estimated due to location just north of ditch. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	98	5.6	N/A
T	99	Hawthorn	4	0	3.0	2.7	3.5	3.0	150					6	EM	G	F	40+	C	1	Small, multi-stemmed tree. Rounded form, but straggly canopy in places. Good vitality. Stem diameter estimated due to low canopy. Southern canopy extent estimated due to location. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	61	4.4	N/A

T	100	Hawthorn	5.4	0	4.0	3.8	4.0	3.1	150					6	EM	G	F	10+	C	1	Small, multi-stemmed tree. Rounded form, straggly canopy in places. Good vitality. Stem diameter estimated due to low canopy. Southern canopy extent estimated due to location. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	61	4.4	N/A
T	101	Hawthorn	6.5	0 N	4.0	3.4	4.0	4.9	120					6	M	G	F	40+	B	1,2,3	Rounded form, good vitality. Multi-stemmed specimen. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and Stem diameter estimated due to topography.	None required.	U	39	3.5	N/A
T	102	Ash	9.3	1.6	5.7	6.0	4.9	5.5	190					9	EM	F	F	10+	C	1	Multi-stemmed at base. Unable to determine extent of dieback as out of leaf. Likely outgrown, former hedgerow tree. Stem diameter estimated due to location on edge of ditch, access to stems restricted. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	147	6.8	N/A
T	103	Swedish Whitebeam	3.7	0.5 E	1.9	1.8	1.2	0.9	65	80				2	Y	F	F	20+	C	1	Small tree at northern extent of group G21. Part of canopy died back at east, otherwise healthy crown. Small multi-stemmed tree, one small stem dead. Minor shoot dieback through canopy. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	4.8	1.2	N/A
T	104	Sycamore	10.1	0.3 W	4.5	3.6	3.7	3.4	420					1	EM	F	G	40+	B	1,2	Likely former outgrown hedgerow tree. Ivy on stem and branches. Some shoot dieback. Stem diameter estimated due to ivy. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	80	5.0	N/A
T	105	Hornbeam	8.5	0.6	3.8	2.2	0.5	2.5	210					1	EM	G	G	20+	C	1	Suppressed by larger third party garden tree at southeast. Good vitality. Ivy on stem. Stem diameter measured over ivy on stem. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	20	2.5	N/A
T	106	Common Oak	5.3	0.5	2.7	3.5	2.8	2.1	180					1	SM	G	G	40+	C	1	Location of tree on third-party land with no access prevented detailed measurements and assessment of the tree. Tree not shown on topographical survey, plotted on site using GPS. Stem diameter and southern canopy extent estimated due to location within garden. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	15	2.2	N/A
T	107	Hawthorn	3	0 S	2.0	1.9	2.0	1.9	95					6	EM	G	F	40+	C	1	Small multi-stemmed tree, good vitality. Access restricted by steep banking and ditch. Height, lowest branch, location (distance north of ditch), north and south canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	24	2.8	N/A

T	108	Hawthorn	3.6	0 S	2.0	2.3	2.0	1.8	100					6	EM	G	F	40+	C	1	Multi-stemmed, upright form. Minor shoot dieback. Access restricted by steep banking and ditch. Height, lowest branch, location (distance north of ditch), north and south canopy extents, and stem diameter estimated due to topography.	None required.	U	27	2.9	N/A
T	109	Hawthorn	2.5	0 S	1.5	1.9	2.0	1.9	60					6	EM	G	F	40+	C	1	Small, multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, location (distance north of ditch), north and south canopy extents, and stem diameter estimated due to topography.	None required.	U	9.8	1.8	N/A
T	110	Hawthorn	3	0.5 S	2.0	3.0	2.0	2.0	65					6	EM	G	F	40+	C	1	Small, multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, location (distance north of ditch), north and south canopy extents, and stem diameter estimated due to topography.	None required.	U	11	1.9	N/A
T	111	Hawthorn	4	0.5 S	2.5	2.4	2.5	2.0	250					1	M	G	F	40+	C	1	Small, multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, location (distance north of ditch), north and south canopy extents, and stem diameter estimated due to topography.	None required.	U	28	3.0	N/A
T	112	Hawthorn	2.5	0 S	2.0	2.0	2.0	1.8	60					6	EM	G	F	40+	C	1	Access restricted by steep banking and ditch. Height, lowest branch, canopy extents (north and south), and stem diameter estimated due to topography.	None required.	U	9.8	1.8	N/A
T	113	Hawthorn	3	0.5 N	2.0	2.2	2.0	1.8	90	95	100	100		4	EM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	17	2.3	N/A
T	114	Hawthorn	2.5	0 N	2.0	1.5	1.5	2.0	60					6	EM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents (north and south), and stem diameter estimated due to topography.	None required.	U	9.8	1.8	N/A
T	115	Hawthorn	3.5	0.5 N	2.5	2.4	2.5	2.1	65					6	EM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents (north and south), and stem diameter estimated due to topography.	None required.	U	11	1.9	N/A
T	116	Hawthorn	4	0 N	1.2	1.0	1.2	1.2	50	60	30	40	50	5	EM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	5.0	1.3	N/A

T	117	Hawthorn	2.5	0 N	2.0	2.0	2.0	1.8	50					6	SM	G	F	40+	C	1	Small multi-stemmed. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents (north and south), and stem diameter estimated due to topography.	None required.	U	6.8	1.5	N/A
T	118	Hawthorn	2	0 S	2.0	1.6	2.0	2.0	80					6	EM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents (north and south), and stem diameter estimated due to topography.	None required.	U	17	2.4	N/A
T	119	Hawthorn	2.5	0 S	1.5	1.6	1.5	1.3	120					1	EM	G	F	40+	C	1	Small multi-stemmed tree. Good . Access restricted by steep banking and ditch. Height, lowest branch, canopy extents (north and south), and stem diameter estimated due to topography.	None required.	U	6.5	1.4	N/A
T	120	Hawthorn	2.5	0.5 S	2.0	2.0	2.5	3.1	120					1	EM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	6.5	1.4	N/A
T	121	Hawthorn	2.5	0 S	2.0	1.8	2.0	1.9	50					6	SM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	6.8	1.5	N/A
T	122	Hawthorn	5.7	0 N	3.5	3.4	3.5	3.5	100					6	EM	G	F	40+	B	1,2	Multi-stemmed specimen with good crown form and vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	27	2.9	N/A
T	123	Hawthorn	3	0 S	1.8	2.0	2.0	1.7	50	60	70	60		4	EM	G	F	40+	C	1	Small multi-stemmed tree. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	6.6	1.4	N/A
T	124	Hawthorn	5.8	0 S	3.0	3.0	3.0	3.0	110					6	M	G	F	40+	B	1,2	Multi-stemmed medium-sized tree. Good canopy form and vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	33	3.2	N/A
T	125	Elder	2.6	0 E	2.0	2.3	3.0	2.3	120					6	M	P	F	20+	C	3	Extensive dieback. Some good regrowth from base. Standing dead stems and branches. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	L	39	3.5	N/A
T	126	Hawthorn	8	0 S	4.5	4.3	5.0	6.0	175					6	M	G	F	40+	A	1,3	Large, mature specimen. Generally good vitality, but minor shoot dieback. Bird's nest visible in canopy at east at approx. 6m above ground level. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	L	83	5.1	N/A

T	127	Hawthorn	5.5	0 S	3.0	4.5	3.5	2.0	110					6	M	G	F	40+	B	1,2	Multi-stemmed specimen, canopy weighted to east. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	33	3.2	N/A
T	128	Ash	10.2	0.5 NW	5.0	4.9	6.5	6.2	400					1	N/A	D	P	N/A	U	1	Standing dead tree. Habitat value. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	Consider retaining for habitat, however if land use intensifies near the tree, consider monolithing to a height where the risk of failure is tolerable.	L	72	4.8	N/A
T	129	Hawthorn	3	0.5 S	2.0	1.7	1.5	1.0	90					1	SM	G	G	40+	C	1	Small tree beneath western dead ash canopy. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	3.7	1.1	N/A
T	130	Hawthorn	3	0 E	1.5	1.5	2.0	1.2	75	95				2	EM	G	F	40+	C	1	Small multi-stemmed tree beneath ash canopy. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	6.6	1.5	N/A
T	131	Elder	2.5	1 N	1.0	1.2	1.2	1.2	100	90	80			3	M	P	P	<10	U	1	Small multi-stemmed tree. Dieback extensive. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. Low risk due to small size.	Consider retaining for habitat value.	L	11	1.9	N/A
T	132	Elder	3	0.5 N	2.5	2.8	2.2	2.0	95					6	M	G	F	20+	B	3	Medium-sized multi-stemmed specimen. Some dieback otherwise excellent vitality. Badger sett potentially beneath on steep ditch banking. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	L	24	2.8	N/A
T	133	Hawthorn	5.9	0 N	4.5	4.7	3.5	3.9	110					6	M	G	F	40+	C	1	Medium-sized multi-stemmed specimen. Straggly canopy. Reasonable vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	33	3.2	N/A
T	134	Hawthorn	3	0 W	1.5	0.9	1.0	2.0	100					1	SM	G	G	40+	C	1	Small tree within edge of canopy of T139. Excellent vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	U	4.5	1.2	N/A

T	135	Hawthorn	6	0 S	4.0	4.7	5.5	4.9	150					6	M	G	F	40+	A	1,3	Large multi-stemmed specimen. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	L	61	4.4	N/A
T	136	Elder	2.6	0 N	2.5	2.5	3.7	3.0	130					6	M	F	F	20+	C	1	Mature, multi-stemmed small tree. Some dieback at east and south otherwise excellent vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography.	None required.	L	46	3.8	N/A
T	137	Hawthorn	5.5	0	3.5	2.8	3.0	3.2	100					6	EM	G	F	40+	B	2	Rounded, multi-stemmed form. Good vitality. Stem diameter, northern and southern canopy extents estimated due to location and steep banking.	None required.	U	27	2.9	N/A
T	138	Hawthorn	5.8	0 NE	3.5	3.4	3.2	3.2	100	120	110			3	EM	G	F	40+	B	2	Rounded, multi-stemmed form, good vitality, but somewhat straggly canopy. Stem diameter, northern and southern canopy extents estimated due to location adjacent south of ditch and steep banking at south.	None required.	U	17	2.3	N/A
T	139	Hawthorn	3.7	0.1 S	2.3	2.6	2.2	1.8	80					6	EM	G	F	40+	C	1	Small open growing multi-stemmed tree, one of three with two smaller self-set specimens to northwest. Low canopy Stem diameter estimated.	None required.	U	17	2.4	N/A
T	140	Hawthorn	2.5	0.5 N	1.5	1.7	1.7	1.4	70					8	EM	G	F	40+	C	1	Small open growing multi-stemmed tree, one of three with two smaller self-set specimens to west. Low canopy Stem diameter estimated.	None required.	U	18	2.4	N/A
T	141	Hawthorn	3.7	0.5	2.6	3.0	1.9	2.2	95					6	EM	G	F	40+	C	1	Small open growing multi-stemmed tree, one of three. Smaller self-set specimen directly at south. Low canopy stem diameter estimated.	None required.	U	24	2.8	N/A
T	142	Field Maple	6.2	2 S	3.0	3.6	3.3	3.9	200	100	95	100		4	EM	G	G	40+	B	1,2	Multi-stemmed hedgerow tree. Good vitality. Stem diameter estimated due to location within hedge.	None required.	U	31	3.2	N/A
T	143	Field Maple	5.3	2.5 S	3.0	2.0	2.2	1.7	150	100				2	SM	G	G	40+	C	1	Multi-stemmed hedgerow tree. Good vitality. Stem diameter estimated due to location within hedge.	None required.	U	15	2.2	N/A
T	144	Ash	5.9	1.6 SE	1.6	3.2	2.8	1.9	170	75				2	SM	F	F	10+	C	1	Minor dieback visible. Hedgerow tree, stems accessible. Small deadwood low in canopy at east roadside over hedge and verge. Imbalanced crown weighted east.	None required.	U	16	2.2	N/A
T	145	Field Maple	9.5	2.1 S	4.1	3.6	4.5	4.0	200	210	250			3	EM	G	F	40+	B	1,2	Medium-sized, multi-stemmed, hedgerow tree. Good vitality. Unions appear quite tight, but visibility of these restricted to some extent by stems and branches. Stem diameter estimated due to low canopy and location within hedge. Southern canopy extent estimated due to rape seed crop in field at south.	None required.	U	66	4.6	N/A

T	146	Ash	9.6	2.4	4.2	4.4	5.0	3.4	280						1	SM	F	F	10+	C	1	Medium-sized hedgerow tree adjacent to road. Dieback evident, less than 25% estimated. Leaves flushed but not in full leaf. Bifurcated at approx. 1.8m.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	35	3.4	N/A
T	147	Field Maple	7.8	3.2	3.5	2.7	2.5	2.3	95						6	EM	G	F	40+	C	1	Multi-stemmed at base. Hedgerow tree. Excellent vitality. Stem diameter estimated due to location within hedge.	None required.	U	24	2.8	N/A
T	148	Ash	5.6	2.1 S	2.2	1.8	2.0	1.3	140						1	SM	F	F	40+	C	1	Small hedgerow tree. Dieback appears minimal. Elder at base from hedge growing into crown.	None required.	U	8.9	1.7	N/A
T	149	Field Maple	4.9	2.3 S	2.6	3.7	4.0	3.8	150	190					2	EM	G	F	40+	C	1	Bifurcated at stem base. Hedgerow tree. Good vitality. Stem diameter estimated due to low canopy.	None required.	U	27	2.9	N/A
T	150	Ash	4.8	1.5 S	1.6	1.1	1.6	0.9	80						1	Y	F	F	40+	C	1	Small hedgerow tree. Dieback minimal.	None required.	U	2.9	1.0	N/A
T	151	Field Maple	5.7	3 S	3.5	3.6	3.2	3.4	190	290					2	EM	G	F	40+	B	1,2	Multi-stemmed, hedgerow tree. Good vitality. Stem diameters estimated due to low canopy.	None required.	U	54	4.2	N/A
T	152	Ash	6.5	2.5 S	2.1	2.3	1.7	1.4	100	110					2	SM	F	F	10+	C	1	Small twin-stemmed hedgerow tree adjacent to road. Dieback estimated to be less than 25%. Stem diameters estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	10.0	1.8	N/A
T	153	Ash	5.1	1.5 S	2.0	1.2	1.0	1.6	110	120					2	SM	F	F	10+	C	1	Small multi-stemmed hedgerow tree. Dieback minimal. Stem diameters estimated due to vegetation, ditch and location within hedge.	None required.	U	12	2.0	N/A
T	154	Field Maple	6.1	2.2 S	2.7	2.8	2.8	3.0	110	100	120				3	EM	G	G	40+	C	1	Multi-stemmed, hedgerow tree. Good vitality. Stem diameters estimated due to low canopy and location within hedge.	None required.	U	17	2.3	N/A
T	155	Common Oak	4.6	1.7 SE	2.3	2.4	2.0	2.7	210						1	SM	G	G	40+	C	1	Single-stemmed hedgerow tree. Good vitality.	None required.	U	20	2.5	N/A
T	156	Field Maple	9.8	1.7 S	5.7	3.3	4.5	4.2	350	200					2	M	G	G	40+	B	1,2	Twin-stemmed, stem bifurcates at approx. 1.4m. Good vitality. Hedgerow tree. Stem diameter estimated due to low canopy.	None required.	U	74	4.8	N/A
T	157	Ash	3	1 S	1.0	0.6	1.5	1.2	80	65					2	Y	F	F	40+	C	1	Very small tree adjacent to road, suppressed by field maple. Dieback visible less than 25% estimated.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	4.8	1.2	N/A
T	158	Field Maple	6	2.2 S	2.0	1.9	2.7	1.9	120	200					2	EM	G	F	40+	C	1	Small multi-stemmed hedgerow tree. Good vitality. Stem diameters estimated due to location within hedge.	None required.	U	25	2.8	N/A



T	159	Ash	6	2.9 S	3.0	2.0	2.1	1.4	150					1	SM	P	F	10+	C	1	Small hedgerow tree adjacent to road. Dieback evident, estimated less than 50%. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	10	1.8	N/A
T	160	Ash	6.4	3 S	3.0	2.2	2.3	1.0	100					6	SM	F	F	10+	C	1	Multi-stemmed hedgerow tree. Dieback minimal. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	27	2.9	N/A
T	161	Ash	6	3 S	4.0	3.4	2.3	1.8	220					1	SM	F	F	10+	C	1	Small to medium-sized hedgerow tree adjacent to road. Dieback quite extensive - estimated 25-50%.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	22	2.6	N/A
T	162	Field Maple	6	2.8	2.5	1.7	2.0	1.4	100	150	120			3	EM	G	G	40+	C	1	Small multi-stemmed hedgerow tree. Good vitality. Stem diameters estimated due to location within hedge.	None required.	U	21	2.6	N/A
T	163	Ash	10.2	3 S	4.0	4.4	4.5	2.9	270					1	EM	F	F	10+	B	1	Medium-sized hedgerow tree. Minor dieback.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	33	3.2	N/A
T	164	Hazel	4.2	0.5 W	2.1	2.5	2.5	2.5	50					10	SM	G	F	40+	C	1	Typical multi-stemmed form. Minor shoot dieback. Foliage with good health and vitality. Stem diameter, location, canopy extents west and east estimated due to location and low canopy.	None required.	U	11	1.9	N/A
T	165	Ash	6.3	2 S	2.7	2.8	2.5	1.9	95					6	SM	F	F	10+	C	1	Small, multi-stemmed tree adjacent to road. Dieback evident but less than 25%. Stem diameters estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	24	2.8	N/A
T	166	Ash	7.1	2.9 S	3.0	1.6	1.4	1.1	175					1	SM	F	F	10+	C	1	Single-stemmed hedgerow tree. Dieback evident but less than 25%. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	14	2.1	N/A
T	167	Ash	10.9	3.3 S	6.5	5.2	6.5	4.9	550					1	M	F	P	<10	U	1	Dieback extent approx. 45%. Large stem at south with cracking bark, indicating internal decay and structural compromise in integrity. Wide spreading canopy. Hung up branch at south over field. Stem diameter estimated due to location within hedge.	Assess for Ash Dieback Disease and safety/ risk management objectives when in full leaf within 12 months.	L	137	6.6	N/A
T	168	Ash	3.5	1.5 N	2.0	2.0	2.0	2.0	80	80	80	80	80	5	SM	G	G	20+	C	1	Small multi-stemmed hedgerow tree. Dieback minimal.	None required.	U	14	2.1	N/A

T	169	Ash	3	1.4 E	1.5	1.5	1.5	1.5	60					6	SM	G	F	10+	C	1	Small multi-stemmed ash, dieback minimal. Third party tree. Stem diameter and canopy extents estimated due to location within third party boundary fencing and vegetation.	None required.	U	9.8	1.8	N/A
T	170	Ash	2.5	1.5 E	1.0	1.0	1.0	1.0	90					1	Y	P	F	<10	U	1	Small tree in poor health, likely due to Ash Dieback Disease. Low risk due to small size. Stem diameter and canopy extents estimated due to vegetation.	None required.	U	3.7	1.1	N/A
T	171	Ash	4	1.4 E	1.5	1.5	1.5	1.5	95					1	Y	P	F	10+	C	1	Upright, small tree. Leaf cover, less than 25%. Stem diameter estimated due to location and vegetation.	None required.	U	4.1	1.1	N/A
T	172	Ash	2	1.3 E	1.0	1.0	1.0	1.0	75					1	Y	P	F	<10	U	1	Small tree, dieback quite extensive. Low risk due to small size. Stem diameter estimated due to location and vegetation.	None required.	U	2.5	0.9	N/A
T	173	Hawthorn	3	0.2 E	1.4	2.4	1.7	1.4	90	80	100	95		4	SM	G	F	40+	C	1	Small field boundary tree. Excellent vitality. Stem diameters estimated due to low canopy.	None required.	U	15	2.2	N/A
T	174	Elder	4	0 SE	3.0	2.1	2.4	1.8	300					1	M	P	P	<10	U	1	Mature, multi-stemmed tree. Dieback evident and quite extensive. Ivy dense on stems. Low risk due to small size of tree. Stem diameter estimated due to location and ivy.	None required.	U	41	3.6	N/A
T	175	Horse Chestnut	15	1 SE	7.0	8.0	8.0	6.5	1300					1	M	G	F	40+	A	1,2,3	Large, prominent tree close to road and visible from much of surrounding arable landscape. Excellent vitality. Low canopy in full leaf at time of survey obscuring stems and branches. Third party tree. Vegetation around base. Looks to have one large main stem with some large vigorous epicormic shoots at southwest. Stem diameter and some canopy extents estimated due location and low canopy.	N/A as third party tree.	L	707	15.0	N/A
T	176	Ash	15	1.7 S	5.9	5.5	6.3	3.5	750					1	M	F	P	20+	B	2,3	Tall prominent roadside tree within group. Failure of eastern stem at approx. 5m, tear-out wound remaining. Large Inonotus decay fungi bracket below at stem bifurcation - secondary stem above this adjacent to road and overhead lines. Dieback evident, less than 40% estimated but canopy appears sparse. Stem diameter and some canopy extents estimated due to location within group and low canopies.	Recommend undertaking a full safety / risk and condition inspection and Ash Dieback Disease survey within 18 months when in leaf.	L	254	9.0	N/A
T	177	Ash	3.8	1 W	2.0	1.2	1.2	1.3	100	100				2	EM	F	F	10+	C	1	Small tree. Dieback less than 20%. Low risk due to small size. Stem diameter and eastern canopy extents estimated due to location on ditch banking.	None required.	U	9.0	1.7	N/A
T	178	Ash	4.6	1.2 S	0.0	2.0	1.6	1.3	120	90				2	Y	P	F	<10	U		Small multi-stemmed tree. Dieback extensive. Low risk due to small size. Stem diameter and eastern canopy extents estimated due to location on ditch banking.	None required.	U	10	1.8	N/A

T	179	Ash	4.1	0.6 W	1.2	2.0	1.8	1.2	100	90	95			3	SM	P	F	<10	U		Small multi-stemmed tree. Dieback extensive. Low risk due to small size. Stem diameters and eastern canopy extents estimated due to location on ditch banking.	None required.	U	12	2.0	N/A
T	180	Ash	3.9	0.4 SW	1.0	1.2	1.0	1.3	100					1	Y	D	F	N/A	U		Standing dead small single-stemmed tree. Stem diameter and western and Eastern canopy extents estimated due to location.	None required.	U	4.5	1.2	N/A
T	181	Ash	3.5	0.3 S	0.7	1.0	1.0	0.5	100					1	Y	P	F	<10	U		Small tree, upright form. Dieback extensive. Low risk due to small size. Stem diameter and canopy extents estimated due to location adjacent ditch on banking.	None required.	U	4.5	1.2	N/A
T	182	Ash	5.1	0 S	2.5	2.4	2.5	2.3	120	90	100	50	60	5	SM	F	F	10+	C	1	Small multi-stemmed tree. North bank of ditch, therefore potentially third party tree. Dieback evident but less than 25%.	If land use intensifies near the tree, undertake an Ash Dieback Survey when the tree is in leaf, ideally prior to land use intensification.	U	17	2.4	N/A
T	183	Ash	15	1.7 S	7.0	9.0	5.5	5.2	1300	200				2	M	P	P	10+	B	2,3	Large single-stemmed specimen with epicormic stem at south. Dieback extensive. Close to road. Fallen hung-up large deadwood branch at south. Stem diameters estimated due to location and ivy.	Recommend full safety / risk and condition assessment within 12 months.	L	707	15.0	N/A
T	184	Sycamore	4.7	0.3 E	1.8	3.0	1.8	1.4	60	70	80	90		4	SM	G	F	40+	C	1	Small, upright, multi-stemmed tree. Good vitality. Stem diameter at east and eastern canopy extents estimated due to location and low canopy.	None required.	U	10	1.8	N/A
T	185	Ash	6.3	0.3 SE	1.4	2.0	1.8	1.6	90	90	110			3	SM	G	F	40+	C	1	Small, upright, multi-stemmed roadside tree. Excellent vitality. Stem diameters estimated due to location and low canopy.	None required.	U	13	2.0	N/A
T	186	Ash	7.8	0.5 W	2.7	2.2	2.6	2.5	220	120	190	100		4	EM	P	F	<10	U		Likely outgrown former hedgerow, small multi-stemmed tree. Dieback evident and quite extensive, near 50%. Stem diameters estimated due to location and vegetation.	If land use intensifies within falling distance of the tree, undertake a full safety/ risk management and Ash Dieback Disease inspection, prior to land use intensification and when in full leaf.	U	49	4.0	N/A

T	187	Elder	3	0.2 S	1.0	1.0	2.1	1.4	100					6	M	P	P	<10	U		Small multi-stemmed tree. Dieback extensive. Low risk due to small size. Stem diameter estimated due to low canopy and stems.	None required.	U	27	2.9	N/A
T	188	Ash	7.2	2 SE	3.3	4.0	5.4	2.1	300					1	EM	F	F	10+	C	1	Single-stemmed hedgerow tree. Large wound from approx. 2m to ground at north from limb tear out. Deadwood stacked on ground below this. Dieback visible but less than 25%. Stem diameter estimated due to location within hedge, wound and vegetation.	If land use intensifies within falling distance of the tree, undertake a full safety/ risk management and Ash Dieback Disease inspection, prior to land use intensification and when in full leaf.	L	41	3.6	N/A
T	189	Ash	17.5	2 NW	7.5	6.1	6.0	6.0	350	750				2	M	P	F	10+	B	3	Upper portion of crown extensive dieback, lower portion mostly coming into leaf but with dieback also visible. Overall crown dieback estimated at less than 50%. Stem bifurcated at approx. 1.4m with tight union. Small to moderate deadwood throughout canopy. Large deadwood branches in upper canopy. Fallen moderate deadwood branch hung up in bifurcated union. Decay wound visible in upper stems and branches at approx. 4-5m in centre of crown along upper part of branch at south, partially occluded. Stem diameters estimated due to location adjacent hedgerow section.	If land use intensifies within falling distance of the tree, undertake a full safety/ risk management and Ash Dieback Disease inspection, prior to land use intensification and when in full leaf.	U	310	9.9	N/A
T	190	Sessile Oak	13.8	0.2 SE	7.2	5.8	6.0	7.3	1500					1	V	F	F	40+	A	3	Small leaves indicating tree in decline. Excellent habitat value. Balanced crown. Broken main stem, previously failed leader. Wounds where branches lost in northern stem. Decay in upper wound, somewhat occluded. Cavities in lower wounds - additional bat potential to main stem at south which has large open upward facing cavity likely connecting basal cavities via to some extent hollowed stem. Stem diameter estimated due to location within elder group and potential use by nesting birds and animals.	If land use intensifies within falling distance of the tree, undertake a full safety/ risk management inspection, prior to land use intensification.	L	707	15.0	22.5
T	191	Ash	10.6	1.6 NW	5.1	3.7	5.5	8.6	800					1	M	F	P	20+	B	3	Single-stemmed with large epicormic growth at stem base at north-east. Dieback evident but majority of crown coming into leaf. Tear-out failed main stem. Large failed part of stem hung up resting on large branch at west. Other stems and branches regrowth following failure. Could be lightning strike, historic not recent, cracking bark and stem with wounding and decay down from failure at approx. 3m to base at north. Southern canopy extents estimated due to crops at south.	If land use intensifies within falling distance of the tree, undertake a full safety/ risk management inspection, prior to land use intensification.	L	290	9.6	N/A

T	192	Ash	7.1	0 S	2.5	2.3	2.8	2.5	90	95	210			3	SM	F	F	10+	C	1	Small multi-stemmed tree. Dieback evident but minimal. Stem diameters estimated due to location within ditch. Northern canopy extent estimated due to blackthorn hedge.	None required.	U	28	3.0	N/A
G	1	Hawthorn, blackthorn, sycamore, ash.	5.4	2.9 S	Partially plotted on site using GPS and polygon closed using aerial photography.				300					1	EM	G	F	40+	C	2	Outgrown section of hedge now small field boundary trees. Multi-stemmed. Ivy on majority of stems. Good vitality. Minor shoot dieback. Flaied on south side to approx. 3-3.5m from ground level. No access to stems due to ivy and hedge - Stem diameter estimated.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	2	Sycamore	7.2	2.7 S	Partially plotted on site using GPS and polygon closed using aerial photography.				300					1	SM	G	G	40+	C	2	Outgrown hedgerow, small multi-stemmed trees. Good vitality. Ivy on stems. Stem diameters estimated due to location within hedge and ivy.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	3	Hawthorn, sycamore.	5.7	2.4 S	Partially plotted on site using GPS and polygon closed using aerial photography.				210					1	Y-SM	G	F	40+	C	2	Outgrown hedgerow, small multi-stemmed trees. Good vitality. Minor deadwood. Ivy on stems and into canopies. Flaied on both sides to approx. 2.5-3m from ground level. Stem diameter estimated due to location within hedge.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	4	Ash, sycamore, hawthorn	6.8	3.1 S	Partially plotted on site using GPS and polygon closed using aerial photography.				300					1	Y-SM	G	F	40+	C	2	Outgrown hedgerow, small multi-stemmed trees. Good vitality, some shoot dieback evident on ash. Flaied at south to approx. 3m from ground level. No access to north, ditch side. Stem diameters estimated.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	5	Ash	14.5	4.2 N	Plotted on site to extent of canopy spread using GPS.				800					1	SM-M	F	F	40+	B	1,2,3	Roadside group. Smaller tree at west suppressed by larger tree at east. Both heavily ivy covered. Unable to determine extent of dieback as out of leaf. Stem diameter estimated due to ivy and location within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	N/A	2m from edge of canopy.	N/A
G	6	Ash	10.2	5 N	Plotted on site to extent of canopy spread using GPS.				600					1	SM-M	F	F	40+	B	2,3	Roadside group. Mature outgrown hedgerow stem at west, smaller but also likely outgrown hedgerow stems at east. Cavity in field side near ground on large mature hedgerow stem at west. Habitat and conservation value. Stem diameter estimated due to multiple stems within hedge.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	N/A	2.9m from edge of canopy.	N/A
G	7	Sycamore, aspen, hawthorn, Scots pine, oak, field maple, silver birch, hazel, holly, yew	16.8	0	Plotted on site to extent of canopy spread using GPS.				570					1	Y-EM	G	G	40+	A	2	Planted shelter belt around fishing reservoir. Good health, except ash with dieback, unable to determine extent as out of leaf. Single stem and multi-stemmed trees. Some bushy rounded form outgrown hedge trees - hawthorns and blackthorn, field maple. ash and hazel stands. Tree guards remains at bases of several trees. Some dead standing and fallen trees. Fallen deadwood on ground. Bird boxes on some trees. Stem diameter of sycamore tree at southeast estimated to be largest specimen. Hedges surrounding external boundary taken as canopy extents where tree canopies do not exceed these.	Recommend removal of redundant tree guards.	U	N/A	2m from edge of canopy.	N/A

G	8	Sycamore, hawthorn	5.5	3.5 N	Partially plotted on site using GPS and polygon closed using aerial photography.	300					1	SM	G	F	40+	C	2	Small multi-stemmed trees, on corner of field atop ditch banking. Good vitality. No access to east and south and parts of north and west due to location and hedgerows. Small bridge at northeast.	None required	U	N/A	0.5m from edge of canopy.	N/A
G	9	Hawthorn	7.1	1.7 N	Partially plotted on site using GPS and polygon closed using aerial photography.	250					1	M	G	F	40+	C	2	Small multi-stemmed trees, outgrown hedgerow section. Excellent vitality. Stem diameter estimated due to location within hedge. Canopy plotted with GPS at north, no access to south due to ditch.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	10	Sycamore	4.4	2.1 N	Plotted on site to extent of canopy spread using GPS.	300					1	SM	G	G	40+	C	2	Multi-stemmed hedgerow trees, excellent vitality. Minor ivy growth on some stems. Stem diameter estimated due to location.	None required.	U	N/A	1.7m from edge of canopy.	N/A
G	11	Cherry, hawthorn, blackthorn, sycamore, hornbeam	10	1.5 N	Partially plotted on site using GPS and polygon closed using aerial photography.	300					1	Y-EM	G	F	40+	B	2	Single and multi-stemmed small to medium sized trees in field corner. Small scrubby blackthorn and dogwood beneath canopy and around pond. No access around east, south and west of pond, canopy extends here estimated, no access to south.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	12	Ash, sycamore hawthorn.	4.8	2.8 W	Plotted on site to extent of canopy spread using GPS.	180					1	Y-SM	P-G	F	40+	C	2	Small, multi-stemmed trees. Ash tree at north with extensive dieback and dead branches. Hawthorn and sycamore good vitality. Stem diameter of largest tree (ash at north) estimated due to location within hedge.	None required.	U	N/A	To edge of canopy.	N/A
G	13	Blackthorn, hawthorn.	3	0	Partially plotted on site using GPS and polygon closed using aerial photography.	150					1	SM-M	G	F	40+	C	2	Scrubby group around corner of large ditch banking. Scrub to west, small groups and individuals of hawthorn along banking. Stem diameter estimated due to location. No access to east and south and western extent west side of canopies.	None required.	U	N/A	To edge of canopy.	N/A
G	14	Sycamore, hawthorn, elm.	5	0 N	Partially plotted on site using GPS and polygon closed using aerial photography.	200					5	Y-EM	G	F	40+	C	2	Small multi-stemmed trees, good vitality. Scrubby group. On banking of large ditch, stem diameter estimated. No access to south and west.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	15	Hawthorn.	2.5	0 E	Plotted on site to extent of canopy spread using GPS.	150					1	EM	G	F	40+	C	1,2	Small group of multi-stemmed specimens. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	To edge of canopy.	N/A
G	16	Hawthorn	5	0 S	Plotted on site to extent of canopy spread using GPS.	200					1	Y-EM	G	F	40+	C	1,2	Medium sized hawthorn at east. Smaller hawthorns at west. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	1.3m from edge of canopy.	N/A





G	24	Willow, dog rose scrub	2.5	0 N	Plotted on site to extent of canopy spread using GPS.	100					1	Y	G	F	40+	C	2	Small multi-stemmed scrubby group. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	To edge of canopy.	N/A
G	25	Hawthorn, blackthorn, dog rose, field maple.	6.5	0 N	Plotted on site to extent of canopy spread using GPS.	350					1	SM-M	G	F	40+	B	2	Linear group. Good vitality as well as screening, habitat and connectivity value. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	26	Hawthorn	4	0 N	Plotted on site to extent of canopy spread using GPS.	250					1	EM	G	F	40+	C	2	Small group of hawthorn, good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	27	Hawthorn, dog rose.	4	0 N	Plotted on site to extent of canopy spread using GPS.	200					1	SM-EM	G	F	40+	C	2	Small group of hawthorn and dog rose. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	28	Hawthorn, dog rose.	5	0 N	Plotted on site to extent of canopy spread using GPS.	150					1	SM-M	P-F	F	40+	C	2	Collapsed dead hawthorn at west. Dog rose growing through eastern canopy of eastern tree with dieback in its crown. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	29	Hawthorn, blackthorn, dog rose.	5.5	0 N	Plotted on site to extent of canopy spread using GPS.	250					1	SM-M	G	F	40+	B	2,3	Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	30	Hawthorn, dog rose.	6	0 S	Partially plotted on site using GPS and polygon closed using aerial photography.	300					1	SM-M	G	F	40+	C	2	Short linear group adjacent to north of ditch. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.5m from edge of canopy.	N/A



G	31	Hawthorn, dog rose.	5.5	0 S	Partially plotted on site using GPS and polygon closed using aerial photography.	250					1	SM-M	G	F	40+	B	2	Linear group of multi-stemmed specimens. Good vitality. Habitat and screening and connectivity value. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	32	Hawthorn.	5.5	0 S	Partially plotted on site using GPS and polygon closed using aerial photography.	250					1	EM-M	G	F	40+	B	2	Small group of multi-stemmed close growing trees. Good vitality. Southern-most tree well over/into ditch. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	33	Hawthorn, dog rose.	3	0 S	Partially plotted on site using GPS and polygon closed using aerial photography.	200					1	EM	G	F	40+	C	2	Small group of multi-stemmed specimens. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameters estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	34	Hawthorn, dog rose.	6	0 N	Partially plotted on site using GPS and polygon closed using aerial photography.	300					1	M	F-G	F	20+	C	2	Some dieback and small to medium deadwood on western tree. Otherwise good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameters estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	L	N/A	0.5m from edge of canopy.	N/A
G	35	Hawthorn	4.5	0 S	Partially plotted on site using GPS and polygon closed using aerial photography.	200					1	SM-EM	G	F	40+	C	2	Small group of multi-stemmed specimens. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameters estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	36	Blackthorn.	4	0 N	Partially plotted on site using GPS and polygon closed using aerial photography.	250					1	M	G	F	40+	C	2	Short linear group of scrubby multi-stemmed small trees. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	37	Blackthorn.	3.5	0 N	Plotted on site to extent of canopy spread using GPS.	150					1	M	G	F	40+	C	2	Linear multi-stemmed tree group. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	To edge of canopy.	N/A

G	38	Blackthorn.	3.5	0 N	Plotted on site to extent of canopy spread using GPS.	150					1	M	W	F	40+	C	2	Linear multi-stemmed tree group. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	To edge of canopy.	N/A
G	39	Elder.	3	0 N	Partially plotted on site using GPS and polygon closed according to aerial photography.	200					1	M	F	P	40+	C	2	Southern trees more extensive dieback, northern trees with better vitality, but with minor dieback. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	40	Hawthorn, dog rose.	6	0	Partially plotted on site using GPS and polygon closed according to aerial photography.	350					1	EM-M	G	F	40+	C	2	Two multi-stemmed hawthorns. Rounded forms. Smaller tree at east closer to ditch, canopy reaching close to southern bank. Dog rose at south of larger tree. Good vitality. Stem diameter estimated due to low canopy. Canopy extent not drawn in places due to location, ditch and topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	41	Hawthorn.	5	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	250					1	SM-EM	G	F	40+	C	2	Small group of multi-stemmed specimens. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	42	Hawthorn.	6.5	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	350					1	EM-M	G	F	40+	B	1,2	Medium to large, multi-stemmed trees. Good vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	43	Hawthorn.	5.5	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	350					1	EM-M	G	F	40+	B	1,2,3	Small at east and mature at west. Multi-stemmed trees. Excellent vitality. Access restricted by steep banking and ditch. Height, lowest branch, canopy extents, and stem diameter estimated due to topography. GPS position appears to be inaccurate, adjusted to align with aerial photography.	None required.	L	N/A	0.3m from edge of canopy.	N/A

G	44	Hawthorn, elder, dog rose, blackthorn.	8.8	0.5 N	Partially plotted on site using GPS and polygon closed according to aerial photography.	300					1	SM-M	P-G	F	40+	B	2	Potentially third party trees. Multi-stemmed, outgrown, former hedgerow field boundary trees and self-set small elders on north bank of ditch. Excellent vitality. Medium sized (100mm) standing dead stem at western extent of group, several dead dog rose stems and other standing dead stems, up to c.200mm. Some dieback on occasional hawthorns. Stem diameter estimated to location on third party land. Northern canopy extents drawn with tablet internal GPS. Western, southern and eastern canopy extents drawn using aerial imagery.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	45	Hawthorn, dog rose.	5.2	1.2 N	Partially plotted on site using GPS and polygon closed according to aerial photography.	300					1	EM-M	G	F	40+	B	2,3	Third party. Outgrown field boundary former hedgerow trees. Excellent vitality. Stem diameters estimated due to location and low canopies. Canopy drawn on site using tablet internal GPS. Eastern, southern, and western canopy extents drawn using aerial imagery. No access due to ditch, vegetation and being third party land.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	46	Blackthorn	7.2	1.8 N	Partially plotted on site using GPS and polygon closed according to aerial photography.	180					1	M	F	F	20+	C	2	Potentially third party. Leggy, sparse canopied, amenity garden trees, overhanging hedge and just into site at east. Stem diameter estimated due to location. Access restricted, majority of canopy extents, stem diameter and lowest branch estimated.	None required.	U	N/A	To edge of canopy.	N/A
G	47	Poplar, ash, oak, elder, hawthorn, cypress.	13.3	0 E	Partially plotted on site using GPS and polygon closed according to aerial photography.	600					1	SM-M	P-G	F	40+	B	2	Boundary trees on east side of boundary fencing with canopies extending further into site at north and east. Generally good vitality, dieback on ash - unable to determine extent as out of leaf. Stem diameter estimated due to low canopies and branches.	None required.	U	N/A	1.2m from edge of canopy.	N/A
G	48	Willow, elder.	12.6	0	Plotted on site to extent of canopy spread using GPS.	450					1	SM-M	F	P-F	20+	B	2,3	Multi-stemmed trees around pond. Medium-sized crack willows, several failures already evident. Small elder trees along southern extent of group. Dieback and small dead branches. Smaller willow at east. Stem diameter estimated due to location.	If land use intensifies near the trees, undertake a full safety/ risk management survey, prior to land use intensification.	L	N/A	1m from edge of canopy.	N/A
G	49	Oak, fir, larch	9.8	2 N	Partially plotted on site using GPS and polygon closed according to aerial photography.	400					1	SM-EM	F	F	40+	B	1,2	Third party trees. Medium-sized, single-stemmed oak, small upright single-stemmed fir, leaning single-stemmed, small to medium-sized larch - lean to east. Oak and small part of larch canopies protruding into site. Larch some dieback. Fir also, high canopy. Oak appears in good health, ivy on stem. Stem diameter estimated due to location.	None required.	U	N/A	2m from edge of canopy.	N/A

G	50	Blackthorn.	3.2	0	Plotted on site to extent of canopy spread using GPS.	220					1	SM-M	G	F	40+	C	2	Outgrown multi-stemmed blackthorn, gappy former hedge, now small trees. Brambles in canopies at south. Good vitality. Some dieback and small dead stems. Stem diameter estimated due to low canopies.	None required.	U	N/A	To edge of canopy.	N/A
G	51	Sycamore, hawthorn, blackthorn, cherry, elder.	7.3	0	Plotted on site to extent of canopy spread using GPS.	450					1	SM-M	F-G	G	40+	B	1,2	Boundary group, flailed at west. Ivy on stems. Low canopies, multi-stemmed trees. Some dieback on occasional sycamore, elder and hawthorns and small deadwood (less than 75mm). Stem diameter estimated due to low canopy and branches of sycamore at northern extent.	None required.	U	N/A	1.5m from edge of canopy.	N/A
G	52	Sycamore.	6.7	0	Partially plotted on site using GPS and polygon closed according to aerial photography.	300					1	SM	G	G	40+	B	2	Multi-stemmed, likely former outgrown hedgerow trees. Good vitality. Stem diameter estimated due to location, vegetation, low canopies and branches.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	53	Sycamore, ash.	10.6	0	Plotted on site to extent of canopy spread using GPS.	400					1	SM-M	F	F	40+	B	2	Linear boundary group. Likely former outgrown hedgerow trees. Short hawthorn and blackthorn hedge sections beneath. Stem diameter estimated due to vegetation, low canopies and branches.	None required.	U	N/A	1.5m from edge of canopy.	N/A
G	54	Ash, sycamore, hawthorn.	8.4	0	Plotted on site to extent of canopy spread using GPS.	400					1	Y-M	P-F	F	20+	B	2	Ash trees dieback estimated at less than 50%. Sycamore good vitality. Multi-stemmed likely former hedgerow trees. Stem diameter estimated due to vegetation, low canopies and branches.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	N/A	1.2m from edge of canopy.	N/A
G	55	Sycamore, Swedish whitebeam, elder, hawthorn.	7.6	0	Plotted on site to extent of canopy spread using GPS.	400					1	Y-EM	P-F	F	40+	B	2	Linear boundary group. Likely outgrown former hedgerow trees. Multi-stemmed larger sycamores and small hawthorn, whitebeam and elder. Shoot dieback in places. Upper part of elder dead forming medium (80mm) deadwood stem leaning towards field. No hedge beneath. Flailed at western side.	None required.	U	N/A	1m from edge of canopy.	N/A
G	56	Sycamore.	9.3	0	Plotted on site to extent of canopy spread using GPS.	320					1	SM-EM	G	G	40+	C	2	Outgrown, former hedgerow trees. Excellent vitality. Flailed lower branches at west to form part of hedge H16 beneath. Stem diameter estimated due to location within hedge.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	57	Sycamore, hawthorn, field maple, blackthorn.	5.4	0	Partially plotted on site using GPS and polygon closed according to aerial photography.	250					1	Y-SM	P-F	F	20+	C	2	Outgrown former hedgerow trees. Small tear-out wound on field maple. Sycamore canopy sparse with some shoot dieback. Hedgerow hawthorn and blackthorn beneath. Stem diameter estimated due to location within hedge.	None required.	U	N/A	0.8m from edge of canopy.	N/A

G	58	Hawthorn, elder.	5.5	0.5 E	Partially plotted on site using GPS and polygon closed according to aerial photography.	120					7	EM-M	P-F	F	40+	C	2	Small to medium, multi-stemmed trees. Former outgrown hedgerow, field boundary trees. Extensive dieback on northernmost hawthorn, some dieback on other hawthorns and elder. Tear-out wound and decay on stem of hawthorn second from end at south. Stem diameter estimated due to location and low canopy.	None required.	U	N/A	1m from edge of canopy.	N/A
G	59	Hawthorn, dog rose.	4	0 E	Partially plotted on site using GPS and polygon closed according to aerial photography.	350					1	SM-EM	P-G	F	40+	C	2	Linear group of small outgrown hedgerow trees. Good vitality generally but some dieback. Stem diameter and western canopy extents estimated due to location and low canopy.	None required.	U	N/A	1.5m from edge of canopy.	N/A
G	60	Hawthorn, dog rose.	3	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	250					1	EM-M	G	F	40+	C	2	Small, multi-stemmed hawthorns and dog rose, individuals and small groups along boundary line north of ditch. Good vitality. Stem diameter estimated due to low canopy. Canopy extents to be refined and completed using aerial imagery where access restricted due to ditch, banking and boundary and third party locations.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	61	Hawthorn, blackthorn, dog rose, elder.	6.5	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	320					1	M	G	F	40+	B	1,2	Linear field boundary group. Likely outgrown former hedgerow. Some dead stems but generally good vitality. Screening, habitat and connectivity value. Stems mainly rooted along northern ditch banking with occasional elder on southern banking, forming one canopy extending south into site. No access to northern and western extents due to third party land, or stems due to low canopies and steep topography in places.	None required.	U	N/A	1.5m from edge of canopy.	N/A
G	62	Field maple, oak.	7.4	2.3 S	Plotted on site to extent of canopy spread using GPS.	100	200	120	95	170	5	EM	G	F	40+	B	2	Single-stemmed oak at west, multi-stemmed maple at east, stake remaining adjacent stem at south. Good vitality. Stem diameters estimated due to low canopy. Canopy extent at south estimated due to crop in field.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	63	Field maple, ash.	5.7	2 S	Plotted on site to extent of canopy spread using GPS.	250					1	EM	F	F	40+	C	2	Field maple multi-stemmed, good vitality. Ash single-stemmed, dieback estimated at less than 25%.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	N/A	0.5m from edge of canopy.	N/A
G	64	Field maple, ash.	8.8	1.5 S	Plotted on site to extent of canopy spread using GPS.	350					1	EM	P-G	F	40+	B	2	Multi-stemmed, likely outgrown former hedgerow trees. Maple good vitality, ash some dieback visible, less than 25%. 2 ash at west, 3 maple at east. Stem diameter estimated due to low canopies and location within hedge for western ash.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	N/A	0.5m from edge of canopy.	N/A
G	65	Ash, field maple.	8.9	1.5 S	Plotted on site to extent of canopy spread using GPS.	200	180	200			3	EM	F	F	40+	B	2	Multi-stemmed short linear boundary group. Two ash at east, either side of small maple, 3 maples at west. Ash minimal dieback. Stem diameters estimated due to low canopy and branches.	None required.	U	N/A	1m from edge of canopy.	N/A

G	66	Field maple, ash.	8	1.6 S	Plotted on site to extent of canopy spread using GPS.	350					1	EM	F-G	F	40+	B	1,2	Linear boundary group of multi-stemmed specimens. Maple good vitality, ash minor dieback. Stem diameter estimated due to low canopy.	None required.	U	N/A	1m from edge of canopy.	N/A
G	67	Ash, field maple.	7.7	2.2 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	350					1	SM-EM	P-G	F	40+	C	2	Two ash at west, smaller field maple at east, multi-stemmed. Ash at west late leaf flush, both with dieback evident but minimal on eastern tree and estimated less than 25% on western tree. Field maple good vitality. Stem diameter estimated due to location within hedge and low canopy.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	N/A	1.5m from edge of canopy.	N/A
G	68	Field maple, elm, hawthorn, blackthorn, oak.	11.1	3.5 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	330					1	SM-EM	G	F	40+	B	2	Linear boundary group. Single and multi-stemmed trees. Good vitality. Stem diameter estimated due to low canopies.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	69	Poplar, oak, pine, birch, cherry, willow, elm, hawthorn.	20	1.5 E	Partially plotted on site using GPS and polygon closed according to aerial photography.	800					1	EM-M	G	F	40+	B	1,2	Linear boundary group. Mostly within dog kennels land. Good vitality. Stem diameter estimated due to location on third party land. Canopy extents to be completed using aerial imagery.	None required.	U	N/A	2m from edge of canopy.	N/A
G	70	Hawthorn	3	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	100					1	SM	F	F	40+	C	2	Small group of trees at site boundary.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	71	Hawthorn, blackthorn, dog rose.	6	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	300					1	SM-M	G	F	40+	C	2	Field boundary group. Good vitality. Likely outgrown former hedgerow running around corner adjacent to roadside verge. Stem diameter estimated due to location within group and low canopy.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	72	Hawthorn, blackthorn, dog rose, field maple.	5.5	0 W	Partially plotted on site using GPS and polygon closed according to aerial photography.	300					1	Y-EM	G	F	40+	C	2	Field boundary outgrown former hedgerow group. Good vitality. Stem diameter and eastern canopy extents estimated due to low canopies and location. Two largest trees two field maple at approximate centre, just south of gap and ditch crossing between fields.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	73	Ash, blackthorn.	6.1	0 S	Plotted on site to extent of canopy spread using GPS.	120	120				2	SM-M	P-G	F	40+	C	2	Small single and multi-stemmed ash trees at west, short section of outgrown blackthorn hedge at east. Ash minor dieback, blackthorn excellent vitality.	None required.	U	N/A	To edge of canopy.	N/A
G	74	Hawthorn, field maple, dogwood, blackthorn.	5.7	0 S	Partially plotted on site using GPS and polygon closed according to aerial photography.	300					1	SM-EM	G	F	40+	B	2	Linear roadside group. Good vitality. Flailed on roadside to c. 3m from ground level. Screening value and fairly prominent in landscape as only major group on this part of boundary.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	75	Hawthorn	7	0 S	Plotted on site to extent of canopy spread using GPS.	250					1	M	P-G	F	40+	C	2	Outgrown former hedgerow. Small multi-stemmed trees. Good vitality. Small, standing dead stems at eastern extent. Stem diameter estimated due to low canopy.	None required.	U	N/A	1m from edge of canopy.	N/A
G	76	Hawthorn.	6	0 S	Plotted on site to extent of canopy spread using GPS.	300					1	M	G	F	40+	C	2	Outgrown former hedgerow. Small multi-stemmed trees. Excellent vitality. Stem diameter estimated due to low canopies.	None required.	U	N/A	1m from edge of canopy.	N/A

G	77	Field maple, hawthorn.	9	3 SW	Plotted on site to extent of canopy spread using GPS.	700					1	EM-M	F-G	F	40+	B	1,2,3	Mature field maple specimen, flanked to east by outgrown former hedgerow hawthorn multi-stemmed trees. Flailed, multi-stemmed field maple stems performing hedgerow function at west, likely epicormic growth from mature tree. Mature field maple tree with wounds in upper main stem at south, cavities and bat potential, flailed leaders above with decay and small cavities developing. Good habitat value but canopy also good vitality with small patches of shoot dieback in places. Hawthorns good vitality with minor shoot dieback visible. Stem diameters estimated due to location within low canopies.	None required.	L	N/A	2.5m from edge of canopy.	N/A
G	78	Hawthorn.	5.4	0 S	Plotted on site to extent of canopy spread using GPS.	320					1	M	G	F	40+	C	2	Small, multi-stemmed trees, excellent vitality. Stem diameter estimated due to low canopies.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	79	Hawthorn.	5.5	0 S	Plotted on site to extent of canopy spread using GPS.	300					1	EM-M	G	F	40+	C	2	Small, multi-stemmed trees, outgrown former hedge. Stem diameters estimated due to low canopies.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	80	Hawthorn.	5.6	0.3 S	Plotted on site to extent of canopy spread using GPS.	300					1	M	G	F	40+	C	2	Multi-stemmed, mature, small, outgrown former hedgerow trees. Stem diameter estimated due to low canopies.	None required.	U	N/A	0.8m from edge of canopy.	N/A
G	81	Elder.	2	0 S	Plotted on site to extent of canopy spread using GPS.	120					1	EM	G	F	20+	C	2	Small, multi-stemmed elder around base of veteran oak T75. Stem diameters estimated due to low canopies.	None required.	U	N/A	0.3m from edge of canopy.	N/A
G	82	Elm, hawthorn.	7	0 W	Plotted on site to extent of canopy spread using GPS.	250					1	Y-EM	F	F	40+	C	2	Mixed standing dead trees and stems and healthy specimens, including row of elm along western extents. Dutch elm disease likely cause of majority of dead stems. Single and multi-stemmed trees. Stem diameter and canopy extents at west estimated due to low canopies.	None required.	L	N/A	0.5m from edge of canopy.	N/A
G	83	Field maple, hawthorn, ash.	8	0.1 S	Plotted on site to extent of canopy spread using GPS.	300					1	EM-M	F-G	F	40+	B	2	Short linear boundary group of multi-stemmed trees. Likely outgrown former hedgerow section. Excellent vitality of maple and hawthorn. Ash with minor dieback evident. Some screening value. Stem diameter estimated due to low branches. Third party land restricting access.	None required.	U	N/A	0.5m from edge of canopy.	N/A
G	84	Ash	5.3	0.5 W	Plotted on site to extent of canopy spread using GPS.	200	100	70			3	Y-EM	P-D	P	<10	U		Small linear group of dead and living trees. Dieback extensive to minimal at north. Stem diameters estimated due to location on ditch banking.	If land use intensifies near the dead trees and those with extensive dieback, consider removal of these trees, prior to land use intensification.	U	N/A	1m from edge of canopy.	N/A



G	85	Hawthorn, dog rose.	3	0 W	Plotted on site to extent of canopy spread using GPS.	150						1	Y-SM	G	F	40+	C	2	Dog rose scrub at south, small hawthorn tree at north. Stem diameter and canopy extents at east estimated due to location and low canopy.	None required.	U	N/A	0.5m from edge of canopy.	N/A
H	1	Hawthorn, sycamore, elder.	0.7	N/A	Plotted on site to extent of canopy spread using GPS.	75	150					2	M	G	G	40+	N/A		Field boundary hedge, well managed. Large mature elder stems present c. 150 diameter	None required.	U	N/A	1.5m from edge of hedge.	N/A
H	2	Blackthorn, hawthorn, sycamore, elder.	2.7	N/A	Plotted on site to extent of canopy spread using GPS.	75						1	M	G	G	40+	N/A		Managed field boundary hedge, not recently cut. Height average 2.5m. Outgrown short section (C. 5m) close to northern extent, encompassing small decaying stem/stump, to 4.5m height.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	3	Hawthorn, sycamore, blackthorn.	1.9	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	75						1	M	G	G	40+	N/A		Well managed field boundary hedgerow. Ditch to north. No access to north, only southern extents plotted on site with GPS.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	4	Hawthorn, elder, dogwood, dog rose.	2	N/A	Plotted on site to extent of canopy spread using GPS.	150						1	M	G	G	40+	N/A		Well managed field boundary hedge. Gaps beneath in places. Brambles in places.	None required.	U	N/A	1m from edge of hedge.	N/A
H	5	Hawthorn.	0.8	N/A	Plotted on site to extent of canopy spread using GPS.	75						1	M	G	F	40+	N/A		Gappy, essentially defunct short corner section of hedge, part of H1 really but less good quality. Ivy and brambles throughout, gap in centre, old fence posts within.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	6	Hawthorn, blackthorn, sycamore, elder, cherry.	2.5	N/A	Plotted on site to extent of canopy spread using GPS.	90						1	M	G	G	40+	N/A		Well managed field boundary hedge, one small gap with young cherry planted within it.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	7	Hawthorn, sycamore, elder, blackthorn.	1.8	N/A	Plotted on site to extent of canopy spread using GPS.	100						1	M	G	G	40+	N/A		Well managed field boundary hedge along north of road.	None required.	U	N/A	0.8m from edge of hedge.	N/A
H	8	Hawthorn, blackthorn, elder, sycamore, garden privet.	1.5	N/A	Plotted on site to extent of canopy spread using GPS.	100						1	M	G	G	40+	N/A		Well managed field boundary hedge along north of road. Ivy in places, small gaps, some gaps planted with young individual trees.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	9	Hawthorn, blackthorn, elder.	2	N/A	Plotted on site to extent of canopy spread using GPS.	200						1	M	G	G	40+	N/A		Well managed field boundary hedge. Good vitality.	None required.	U	N/A	1m from edge of hedge.	N/A
H	10	Blackthorn, hawthorn.	2	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	95						1	M	G	G	40+	N/A		Well managed hedgerow atop western banking of southern end of ditch. No access to eastern side preventing detailed measurements.	None required.	U	N/A	To edge of hedge.	N/A
H	11	Hawthorn, blackthorn, sycamore, elder	2	N/A	Plotted on site to extent of canopy spread using GPS.	95						1	M	G	G	40+	N/A		Well managed field boundary hedge	None required.	U	N/A	1m from edge of hedge.	N/A



H	12	Hawthorn sycamore, blackthorn.	1.5	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	150					1	M	G	G	40+	N/A	Well managed field boundary hedge along north of ditch. Runs along south of G11. No access to southern extent due to location and no access too part of northern extent due to G11.	None required.	U	N/A	1.5m from edge of hedge.	N/A
H	13	Hawthorn, blackthorn, sycamore.	2	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	200					1	M	G	F	40+	N/A	Well managed field boundary hedge. Small gaps. Good vitality generally. Stem diameter estimated due to low canopy.	None required.	U	N/A	1m from edge of hedge.	N/A
H	14	Hawthorn, blackthorn, field maple, sycamore, dogwood.	2	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	200					1	M	G	F	40+	N/A	Field boundary hedgerow. Excellent vitality. Stem diameter estimated due to low canopy.	None required.	U	N/A	0.8m from edge of hedge.	N/A
H	15	Hawthorn, guelder rose, elder, dog rose.	6	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	250					1	SM-EM	G	F	40+	N/A	Field boundary hedgerow. Gappy and small trees, as well as medium-sized hawthorns developing, although could still be managed back to hedge, with gaps filled with new planting. Stem diameter estimated due to low canopies.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	1.5m from edge of hedge.	N/A
H	16	Hawthorn, dog rose, field maple, elder, blackthorn.	3.5	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	100					1	M	F	F	40+	N/A	Field boundary hedge. Gappy, straggly canopies of developing small trees. Some dead dog rose stems. Some small hawthorns with extensive dieback and dead stems. Stem diameter estimated due to low canopies.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	To edge of hedge.	N/A
H	17	Hawthorn, blackthorn, elder.	2	N/A	Plotted on site to extent of canopy spread using GPS.	90					1	M	F	G	40+	N/A	Well managed field boundary hedge in two sections. Generally good vitality, some dieback patches in places. Stem diameter estimated due to low canopies.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	18	Cypress	3	N/A	Plotted on site to extent of canopy spread using GPS.	90					1	Y-SM	G	G	40+	N/A	Amenity, property boundary hedge. Yet to be cut. Good vitality. Stem diameter estimated due to low canopies.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	19	Hawthorn.	2.5	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	100					1	M	G	G	40+	N/A	Field boundary hedgerow. Gappy. Good vitality. Access to west and north of hedge sections restricted by third party land.	None required.	U	N/A	1m from edge of hedge.	N/A
H	20	Hawthorn, garden privet.	2.5	N/A	Plotted on site to extent of canopy spread using GPS.	120					1	M	G	G	40+	N/A	Field boundary hedgerow. Generally excellent vitality and connectivity. Some gaps, large to smaller beneath canopy and between stems. Stem diameter estimated due to low canopies.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	0.5m from edge of hedge.	N/A
H	21	Hawthorn, elder, oak, dog rose, blackthorn.	2	N/A	Plotted on site to extent of canopy spread using GPS.	120					1	M	G	G	40+	N/A	Field boundary hedgerow. A few gaps in places from small to approx. 2m wide. Good vitality. Stem diameter estimated due to low canopy.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	1m from edge of hedge.	N/A

H	22	Hawthorn, elder, dog rose, blackthorn.	2	N/A	Plotted on site to extent of canopy spread using GPS.	180					1	M	G	F	40+	N/A	Well managed field boundary hedge. Good vitality generally. Stem diameter estimated due to low canopy.	None required.	U	N/A	2m from edge of hedge.	N/A
H	23	Hawthorn, blackthorn, hazel, guelder rose, dog rose.	3.5	N/A	Plotted on site to extent of canopy spread using GPS.	250					1	M	F	F	40+	N/A	Boundary hedgerow around edge of plantation (eastern part of W2). Outside and inside of canopy extents of eastern part of W2 in places. Internally not accessible all way around, width approx. 1-1.5m. In places small multi-stemmed trees self set within plantation spreading back from hedge but not functioning generally as part of hedge (recorded as part of eastern part of W2 (plantation). Stem diameter and in places canopy extents estimated. Height varies max., 3-3.5m.	None required.	U	N/A	2m from edge of hedge.	N/A
H	24	Hawthorn, dog rose.	2	N/A	Plotted on site to extent of canopy spread using GPS.	80					1	M	G	F	40+	N/A	Well managed field boundary hedge. Good vitality, one small gap on west side of trees, not quite full gap. Access to north limited by vegetation and dry ditch to some extent.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	25	Blackthorn, hawthorn.	2.5	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	200					1	M	G	F	40+	N/A	Well managed field boundary hedgerow at west, small section at east between field access points adjacent west of northern point of ditch between fields. Stem diameter estimated due to low canopies.	None required.	U	N/A	1.5m from edge of hedge.	N/A
H	26	Hawthorn.	2.5	N/A	Plotted on site to extent of canopy spread using GPS.	200					1	M	G	F	40+	N/A	Short section of field boundary hedgerow, c. 3-4m long. Excellent vitality. On northern ditch banking therefore likely third party. Stem diameter estimated due to location, low canopy and hedgerow species.	None required.	U	N/A	1.2m from edge of hedge.	N/A
H	27	Blackthorn.	2	N/A	Plotted on site to extent of canopy spread using GPS.	95					1	M	G	F	40+	N/A	Short section of hedge. Excellent vitality. Stem diameter estimated due to low canopy.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	28	Field maple, hawthorn.	3	N/A	Plotted on site to extent of canopy spread using GPS.	100					1	M	G	F	40+	N/A	Outgrown very short remnant hedgerow section around telegraph pole. Excellent vitality. Stem diameter estimated due to location and low canopy.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	29	Hawthorn.	1.8	N/A	Plotted on site to extent of canopy spread using GPS.	80					1	M	F	F	20+	N/A	Field boundary hedgerow, short section north of field access gate. Good vitality but in places ivy and extensive bramble encroachment. Stem diameter estimated due to low canopy.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	30	Blackthorn, hawthorn, field maple, dog rose, ash.	3	N/A	Plotted on site to extent of canopy spread using GPS.	100					1	M	F	F	40+	N/A	Field boundary hedgerow. A few small gaps, brambles encroaching in places. Generally good vitality otherwise. Stem diameter estimated due to low canopies. Bramble mass estimated due to restricted access due to brambles.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	0.8m from edge of hedge.	N/A

H	31	Sycamore, hawthorn, blackthorn, field maple, hazel, dogwood, garden privet.	2	N/A	Plotted on site to extent of canopy spread using GPS.	300					1	M	F	F	40+	N/A	Field boundary hedgerow. Gappy. Some ivy and brambles encroachment. Good vitality generally. Stem diameters estimated due to location adjacent east side ditch and low canopies.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	2.5m from edge of hedge.	N/A
H	32	Hawthorn, ash, blackthorn, field maple, dogwood.	2.5	N/A	Plotted on site to extent of canopy spread using GPS.	300					1	M	G	F	40+	N/A	Well managed field boundary hedgerow. Excellent vitality. Stem diameter estimated due to low canopies.	None required.	U	N/A	2.5m from edge of hedge.	N/A
H	33	Hawthorn, dog rose, blackthorn.	1.8	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	150					1	M	F	F	40+	N/A	Very gappy, defunct, bramble covered in places, managed field boundary hedge. Good vitality where still intact. Stem diameter estimated due to low canopy.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	0.5m from edge of hedge.	N/A
H	34	Hawthorn, elder, dog rose.	5	N/A	Plotted on site to extent of canopy spread using GPS.	250					1	EM-M	F	F	40+	N/A	Field boundary hedgerow. Gappy. Some small dead trees/stems in places. Otherwise generally good vitality. Stem diameters estimated due to location within hedge and low canopies.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	1.5m from edge of hedge.	N/A
H	35	Hawthorn, blackthorn, dog rose.	3	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	180					1	M	G	F	40+	N/A	Wide field boundary hedgerow. Width approx. 3m. Becoming outgrown, particularly towards north. Good vitality. Stem diameter and eastern canopy extents estimated due to low canopies and location adjacent west of ditch.	None required.	U	N/A	0.8m from edge of hedge.	N/A
H	36	Hawthorn, sycamore, dog rose.	2	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	100					1	M	F	F	40+	N/A	Field boundary hedgerow, managed. Hawthorn generally good health and condition, gappy, with some dieback in places, particularly the dog rose. Stem diameter estimated due to low canopies and location on steep banking, northern, southern and eastern canopy extents not plotted due to banking and ditch at east.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	0.5m from edge of hedge.	N/A
H	37	Blackthorn.	3	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	200					1	M	G	F	40+	N/A	Short section of field boundary hedge. Good vitality, slightly outgrown. Stem diameter estimated due to location and low canopy. Northern canopy extents estimated due to adjacent woodland vegetation.	None required.	U	N/A	0.5m from edge of hedge.	N/A
H	38	Hawthorn	2	N/A	Partially plotted on site using GPS and polygon closed according to aerial photography.	100					1	EM	F	F	40+	N/A	Gappy field boundary hedgerow, managed.	If retained, recommend planting up gaps with native hedgerow species.	U	N/A	0.5m from edge of hedge.	N/A

W	1	Ash, hawthorn, field maple, elder	8.9	2.5 N	Partially plotted on site using GPS and polygon closed according to aerial photography.	410						1	Y-SM	F	F	40+	B	2,3	Ash stand with hawthorns and blackthorn small trees. Scrub of hawthorn and blackthorn along western boundary. Standing dead and dying trees, mostly ash. Deadwood and cavities. Habitat value. No access along western boundary, canopy edge drawn utilising aerial photography.	If land use intensifies near the dead and dying trees, consider felling, prior to land use intensification.	L	N/A	0.9m from edge of canopy.	N/A
W	2a	Ash, hawthorn, oak, field maple.	13.6	3 W	Plotted on site to extent of canopy spread using GPS.	300						1	SM-EM	F	F	40+	B	2	Plantation trees with hedge surrounding perimeter. Ash with some dieback evident, estimated less than 25%. Stem diameter estimated due to vegetation.	Assess for Ash Dieback Disease when in full leaf within 18 months.	U	N/A	2m from edge of canopy.	N/A
W	2b	Ash, Scots pine, elm, hawthorn.	10	0 W	Partially plotted on site using GPS and polygon closed according to aerial photography.	450						1	Y-M	F	F	40+	B	2,3	Strip of small to medium-sized trees, single and multi-stemmed. Ash with dieback evident - less than 25%. Small elm trees at west, some standing dead. Some habitat value and bat potential. Scrub along western edge - blackthorn, elder. Access within group limited by ground vegetation. Stem diameter estimated.	Assess for Ash Dieback Disease when in full leaf within 18 months. Consider removal of dead trees, if land use intensifies near them, prior to land use intensification.	L	N/A	3m from edge of canopy.	N/A
W	3	Ash, elm, oak, hornbeam, wild cherry, blackthorn, hawthorn, elder, hazel, field maple.	21	0	Partially plotted on site using GPS and polygon closed according to aerial photography.	600						1	Y-M	F	F	40+	B	1,2,3	Mixed woodland of ash and oak, with smaller understorey of elm, hawthorn and hornbeam. Ground flora, ponds and hide within. Old hollowing ash boles with tall multi-stemmed canopies. Unable to determine extent of dieback as out of leaf. Standing deadwood and fallen deadwood in places, majority of trees in good health except for ash with dieback. Stem diameter estimated due to vegetation. Western canopy extents not plotted due to ditch and vegetation. Part of canopy only plotted, using internal tablet GPS.	Assess for Ash Dieback Disease when in full leaf within 18 months. If land use intensifies near to the trees, recommend undertaking a full safety/ risk management survey, prior to land use intensification..	L	N/A	3m from edge of canopy.	N/A

## **Appendix 2 Survey Methodology**

## Appendix 2: Survey Methodology

The following process has been followed and the features of each tree, group of trees or woodland have been recorded in the Arboricultural Data Sheets (See Appendix 1):

- Each individual surveyed tree (T), tree group (G), woodland (W) and hedgerow (H) was given a sequential reference number.
- Where a number of surveyed trees formed a cohesive feature, such as groups, woodland compartments or whole woodlands, they were recorded, assessed and plotted as groups (G) or as woodland (W). Whilst not every tree within groups is surveyed, a representative sample of the largest edge trees were measured in order to be able to plot the group or woodlands crown spreads and RPAs. Where detailed plans show development proposed within a group or woodland, all trees within influencing distance of the development proposals are usually recorded, plotted and assessed.
- The surveyed trees and hedgerows were then identified by their common and/or Latin name.
- Tree height measured in metres from the stem base using a Truepulse 360 laser. Where the ground has a significant slope, the higher ground is selected. This informs crown/stem ratio and shading.
- Crown height/ height of lowest branches is measured in metres above ground level using a Truepulse 360 laser and is an indication of the average height at which the main crown begins.
- Stem diameter is measured in millimetres at 1.5m above the adjacent ground level (upslope on sloping ground) with a standard diameter measuring tape to enable RPAs to be calculated.
- Crown spread is measured in metres using a Truepulse 360 laser and taken at the four-cardinal compass points to derive an accurate representation of the crown to be plotted on the TPP.
- Age class of the tree is described as:
  - Young – Newly planted trees and self-seeded trees;
  - Semi-mature – Large nursery stock that can be newly planted or self-seeded trees still in the early stages of establishment;
  - Early mature – Trees in the first third of their life cycle which is characterised by their quickness of growth and subsequently significant increase in size;
  - Mature – Trees in the second third of their life cycle, characterised by reaching their ultimate size and slowing of annual incremental growth;

- Late mature – Trees in the final third of their life cycle, often characterised by showing signs of decline; and
- Veteran – Trees that show ancient tree characteristics irrespective of their age, such as crown retrenchment and decaying wood habitat.
- Physiological condition is assessed and classed as G (good), F (fair), P (poor) or D (dead). This is an indication of the health of the tree and takes into account vitality, presence of disease and dieback.
- Structural condition is assessed and classed as G (good), F (fair) or P (poor). This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.
- Life expectancy is classed as: less than 10 years (<10), at least 10 years (10+), at least twenty years (20+) or at least 40 years (40+). This is an indication of the number of years before the removal of the tree is likely to be required.
- The trees were then classified in accordance with the BS 5837:2012 tree quality assessment categories 'A', 'B', 'C' and 'U' (see category criteria and grading within Appendix 3).
- Comments include a brief description of the tree with comments on the form, vitality, health and any significant defects that may be present.
- Recommendations for work are based on the existing land use.

## **Appendix 3 Tree Categorisation Method**



## Appendix 3: Tree Categorisation Method

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
<b>Trees unsuitable for retention</b> (see Note)		
<b>Category U</b> Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality</li> </ul> <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>	See Table 2
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>
		<b>3 Mainly cultural values, including conservation</b>
<b>Trees to be considered for retention</b>		
<b>Category A</b> Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features
<b>Category B</b> Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality
<b>Category C</b> Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees with no material conservation or other cultural value
		Trees with material conservation or other cultural value
		Trees with significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
		Trees with material conservation or other cultural value
		Trees with no material conservation or other cultural value
		Trees with no material conservation or other cultural value

A single tree, group or woodland can come under one or more sub-headings. This does not confer upon it a higher value than a tree with a single value.

## **Appendix 4 General Tree Constraints**

#### **Appendix 4: General Tree Constraints**

- Trees impose a constraint to development in a variety of ways. These principally include their rooting areas, referred to as Root Protection Areas (RPAs), their current and future crown spread, and their species characteristics (e.g. branch and fruit drop, production of 'honey dew', density of foliage etc). Where located on shrinkable clay soils, trees can also contribute to subsidence damage to buildings.
- Consideration should be given during the design stage to any incompatibilities between the design and tree retention. These include (but are not limited to) the effects on the amenity value provided by existing trees, working space required during construction, infrastructure/utility requirements, highway visibility requirements and foundation design to prevent the effects of subsidence.
- The RPA is calculated using the tree's diameter at 1.5m and represents the minimum area which should be left undisturbed around each retained tree to enable its survival following development.
- Tree root morphology is influenced by many factors including, but not limited to; past land use, the presence of roads, structures and underground services, drainage and soils. Any of these factors may result in non-uniform root growth and therefore result in an RPA represented as a polygon RPA that reflects suitable protection of the root system.
- The majority of tree roots are generally found within the top 600mm of soil, depending on soil types and profiles. Any disturbance or sudden changes to the rooting environment can result in damage being caused to roots and alterations to the roots physiological ability to absorb water, nutrients and undertake gaseous exchange.
- Where alterations have been made within the trees' rooting environment, the damage can often be observed within the crown of the trees, reduced vitality and increased deadwood production. Trees are likely to decline progressively, or in some circumstances may become a hazard where stability and structural integrity has been compromised by Site operations.
- The RPA must be protected by the installation of tree protection fencing prior to the commencement of development work onsite. The fencing provides a physical barrier that is secured, to prohibit activities considered detrimental to the retention of healthy trees (e.g. excavations, soil stripping, discharge of substances harmful to trees, storage of materials, fires). In addition to this, it may be necessary to install specialist temporary

ground protection which enables access within the RPA, without causing long-term detriment to the health of the tree/s.

- No traditional construction works should take place within the RPA of retained trees. However, in some circumstances and where there is an overriding requirement for construction and the retention of trees, it may be appropriate to employ techniques and use materials that allow trees to be retained, whilst enabling the construction. For hard surfacing, such as drives, roads and footways, utilising no-dig construction techniques and using three-dimensional geogrids and permeable wearing course materials may be appropriate. For built structures within RPAs, the use of pile and above ground level beam foundations and/or cantilevered engineering solutions can enable structures to be constructed within RPAs. The project arboriculturist should be consulted on the appropriateness of building within retained tree RPAs, as this is not appropriate for all trees and soil types.
- Where aerial parts of the tree crowns extend beyond the edge of the RPA, consideration should be given to protection of these parts, allowing for protection during development processes including working space. It may be appropriate to consider pruning of aerial parts to allow construction clearances and future nuisance abatement, this however must be considered by the project arboriculturist and the LPA. Where development proposals identify a need for working within the RPA/crown spread of retained trees and it can be demonstrated that retained trees remain viable, then it is important that the project arboriculturist is contacted to advise and prepare an AMS and identify appropriate stages of supervision.

## **Appendix 5 Report Limitations**

## Appendix 5: Report Limitations

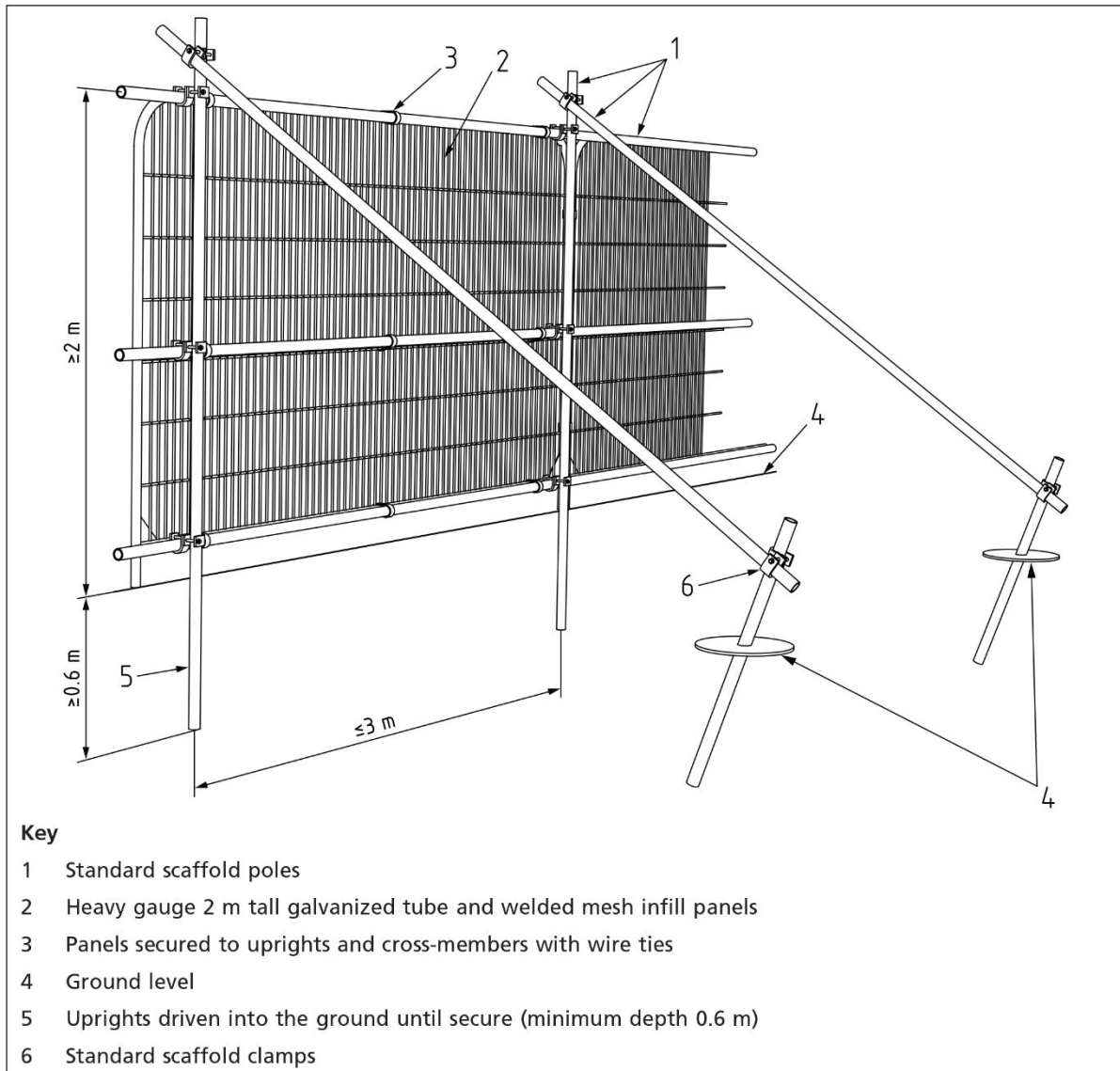
- Trees are influenced by a variety of environmental variables, which can affect the health of trees causing biomechanical and physiological changes. All comments made on tree health reflects their physical condition at the time of the survey. Owing to the changeable nature of trees and other site/environmental conditions, which may influence trees, the preliminary management recommendations/ further works for the surveyed trees undertaken, which can be found in Appendix 1 of this report, are only valid for a period of 12 months from the date of the Site survey being commenced on 17<sup>th</sup> April 2023 and being completed on the 4<sup>th</sup> May 2023. These recommendations relate specifically to the general maintenance of tree health and safety and do not affect the implications of this Arboricultural Impact Assessment and therefore, the results of the survey remain valid beyond the period between 17<sup>th</sup> April 2024 and 4<sup>th</sup> May 2024.
- This AIA Report and the associated TPP is based on a survey plan supplied comprised of LIDAR mapping overlain onto an OS Mastermap base map. Where tree stem locations, tree group, woodland hedgerow footprints are not shown on the base mapping, these are plotted using GPS plotting and/ or the utilisation of site features to manually plot the tree stem locations and canopy spreads for tree groups. Aerial photography is also utilised to plot tree group canopy spreads, where utilisation of GPS is not feasible. These methods provide a good representation of the surveyed trees; however, please note that even though the GPS used is usually sub-metre accurate, sometimes sub-metre accuracy cannot be attained. WA cannot be held liable for plotting inaccuracies, where GPS positioning doesn't achieve sub-metre accuracy.
- Although comments and recommendations on the safety of particular trees may have been made, this survey is not a Tree Risk Management Survey and thus should not be treated as such. All trees were surveyed from ground level only and in a solely visual nature. However, where trees have been identified as presenting an imminent safety risk due to structural defects, this has been brought to the attention of the client and treated as a separate matter. Should trees require further detailed assessment (decay detection, aerial inspections) and do not present an imminent safety risk, the information will be detailed within the survey schedules.
- Any management recommendations have been made in accordance with BS 3998: 2010 Tree Works – Recommendations; and/or industry best practice. Works have been recommended in accordance with any statutory obligations on the landowners or occupiers.

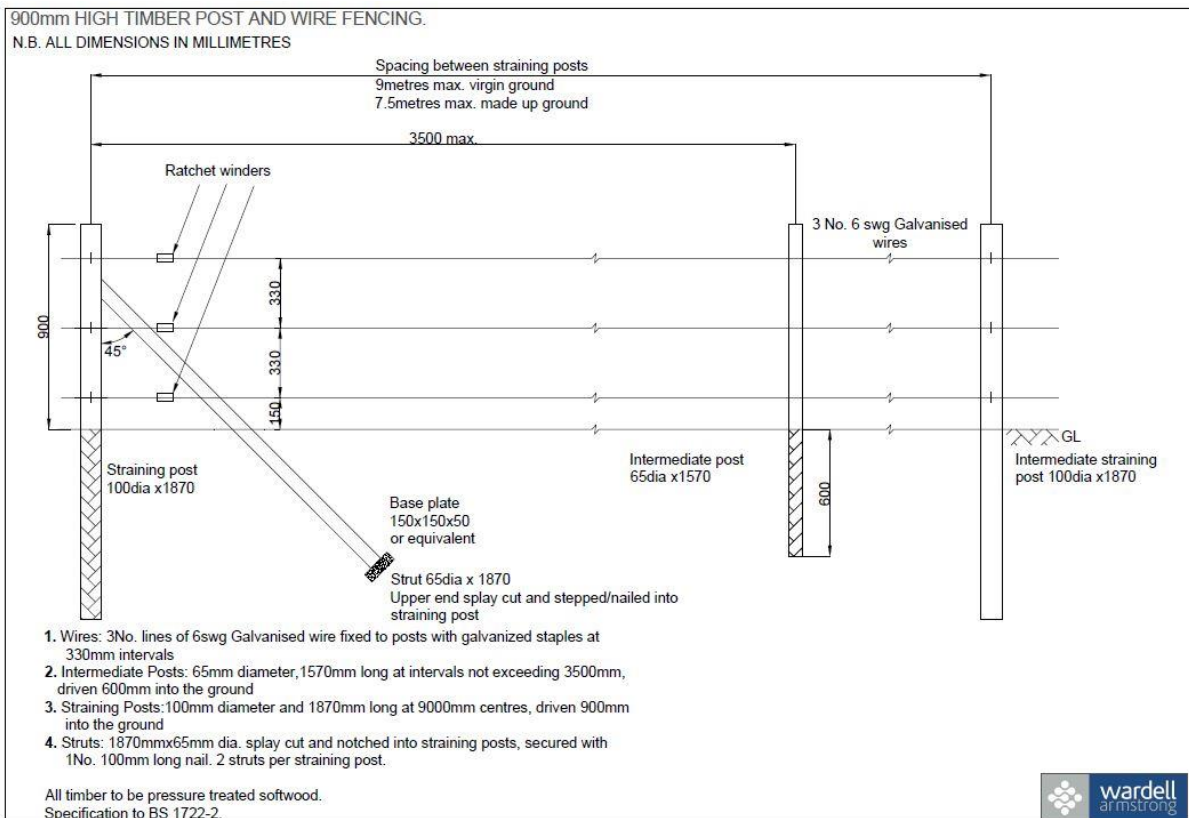
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- This survey did not include an ecological survey of vegetation or habitat areas. Any ecological issues incidentally observed during the survey are reported on in the tree schedule.
  - For the purpose of this report no samples were obtained from Site for analysis or any other reason.
  - The survey did not include soil sampling to determine whether the soil is shrinkable.

## **Appendix 6 Tree Protection Fencing**



## Appendix 6: Tree Protection Fencing





Post and wite fencing to be utilised for the protection of hedgerows

## **Appendix 7 Tree Protection Signage**

## Appendix 7: Tree Protection Signage



## **Appendix 8 Glossary of Common Terms Used in Arboriculture**

## Appendix 8: Glossary of Common Terms Used in Arboriculture

**Abscission.** The shedding of a leaf or other short-lived part of a woody plant.

**Abiotic.** Pertaining to non-living agent's e.g. environmental factors.

**Absorptive Roots.** Non-woody short-lived roots, generally having a diameter less than one millimetre, the primary function of which is the uptake of water and nutrients.

**Access Facilitation Pruning.** One off pruning operation to provide access for development operation. Pruning that will not be detrimental to trees health or amenity.

**Arboricultural Method Statement (AMS).** A methodology for the implementation of development where encroachment within the Root Protection Areas (RPA) has the potential to cause damage or loss of retained trees.

**Arboriculturist.** Someone who through relevant training and experience has gained knowledge in the expertise of trees.

**Adaptive Growth.** The process by where wood formation rates increasing in the cambial zone, as well as wood quality, responds to gravity and other forces acting on the cambium.

**Adaptive Roots.** The adaptation of existing roots; or a production of new roots in response to damage or decay.

**Adventitious Buds, Roots, Shoots.** Which grow in other than primary apical control.

**Anchorage.** The process in which a tree uses its roots system to support itself within the soil structure.

**Ancient:** A tree that has passed beyond maturity and is old, or aged, in comparison with other trees of the same species.

**Arisings.** Parts of the tree that has been removed for disposal, branches, leaves, roots etc.

**Canker.** Area of dead cambium killed by overlying pathogenic tissues.

**Cavity.** A hole in the woody structure of the tree; often caused through decay.

**Cleaning Out.** The removal of dead, diseased crossing branches, damaged branches and alien structures.

**Competent Person.** Person with training and experience in accordance with the proposed matter being addressed, having an understanding of a particular matter being approached.

**Condition.** An indication of the physiological vitality of a tree, but not the stability of a tree.

**Construction.** A Site based operation that has the potential to affect retained trees.

**Construction Exclusion Zone.** An area based on the RPA from which construction activity is prohibited.

**Coppicing.** Removal of all aerial parts of the tree leaving a stump for regeneration of new shoot.

**Crown/Canopy.** The parts of the tree that supports the leaves.

**Crown Lifting.** The removal of limbs and small branches to a specified height above ground level.

**Crown Thinning.** The removal of a proportion of secondary branch growth throughout the crown to produce an even density well balanced crown structure.

**Crown Reduction/Reshaping.** Removal in the height to a specified description to maintain a flowing crown structure.

**Deadwood.** Non-functional branches which no longer support natural growing conditions of the tree but may be beneficial for the support of habitats and species, possibly including rare saproxylic invertebrates. Thus, may also be referred to as 'Decaying Wood Habitat' or 'Dysfunctional wood'. Size ranges for deadwood referred to in this report and/or Appendix 1: - Small (<75 mm diameter), Medium (76 – 150 mm), Large (151-300) mm and Very large >301 mm. For some species such as oak etc, the risk of deadwood falling from the tree can be lesser than for other species, due to the variety of wood strengths of different tree species.

**Defect.** Any area of the tree that no longer has an optimal mechanical uniformity of stress. Defects may or may not affect the long-term retention of the tree(s), depending upon severity, the likelihood of the defect(s) failing and the location of the tree(s) (Target).

**Dieback.** Death of woody parts of the tree starting at distal ends of the tree.

**Disease.** Damage occurring to living organisms as a result of pathogenic micro-organisms.

**Distal.** Furthest distance away from the main body of the tree.

**Dysfunction.** In woody tissues, the loss of physiological function, especially water conduction, in sapwood.

**Epicormic Growth.** Growth from dormant or adventitious buds, not developing from the first shoot.

**Girdling Roots.** A circling root which constricts the stem or roots, with the potential to cause death and the restriction of flow within the phloem.

**Heartwood.** Dysfunctional xylem which no longer has conductive properties, but which has become an integral structural part of the tree.

**Heave.** The swelling of shrinkable clay soils, often when vegetation has been removed allowing soil rehydration to develop, with the potential for listing structures (e.g. walls).

**Included Bark/Acute Forks.** Face to face contact of bark usually at fork unions, or branch unions.

**Lopping/Topping.** A term used to describe the removal of large sized branches

**Monolith.** Removing some or most of the trees crown and sometimes the upper stem, in order to retain as much of the tree as standing deadwood habitat for ecological reasons.

**Pathogen.** A micro-organism that causes disease within another organism.

**Phytotoxic.** Toxic to plants.

**Pollarding.** The removal of the tree canopy to produce knuckles where new growth develops and is removed cyclically usually performed on young trees.

**Pruning.** Selective removal of parts of the tree to achieve a desired outcome.

**Root Protection Area (RPA).** An area around a tree identified by multiplying the stem diameter at 1.5 m from ground level by 12 to produce a radial area or rooting volume around a tree to be protected Ref. BS 5837: 2012.

**Service.** Any above and below ground structure or apparatus for utility provision.

**Size of part.** Relating to risk assessments, identifying the size of the hazard, or parts of a tree which may cause harm if failure occurs.

**Stem(s).** The main structure from the ground up supporting the crown.

**Stress.** In plants, the physiological depletion as a result of environmental influences.

**Structure.** A manufactured object, such as building, roads, path, wall or excavated structures.

**Structural Roots.** The primary larger diameter roots which hold and support the aerial parts of the tree.

**Subsidence.** The shrinkage of soil through the absorption of water via vegetation and the sinking effects on surrounding architectural structures.

**Targets.** In risk assessment, persons or property at risk of harm as a result of a hazard (falling tree, branch, etc.).

**Transitioning Veteran Trees:** Trees with some veteran features, but not sufficient veteran features to be considered full veteran trees. They contribute to the veteran tree resource and, through the ageing process are expected to become true veterans in time, before which they offer bridge and continuity habitat for important saproxylic invertebrates and fungi.

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**Tree Protection Plan (TPP).** A scaled drawing informed by descriptive text where necessary, based upon finalised Site proposals, showing trees for retention and illustrating the tree and landscape protection measures.

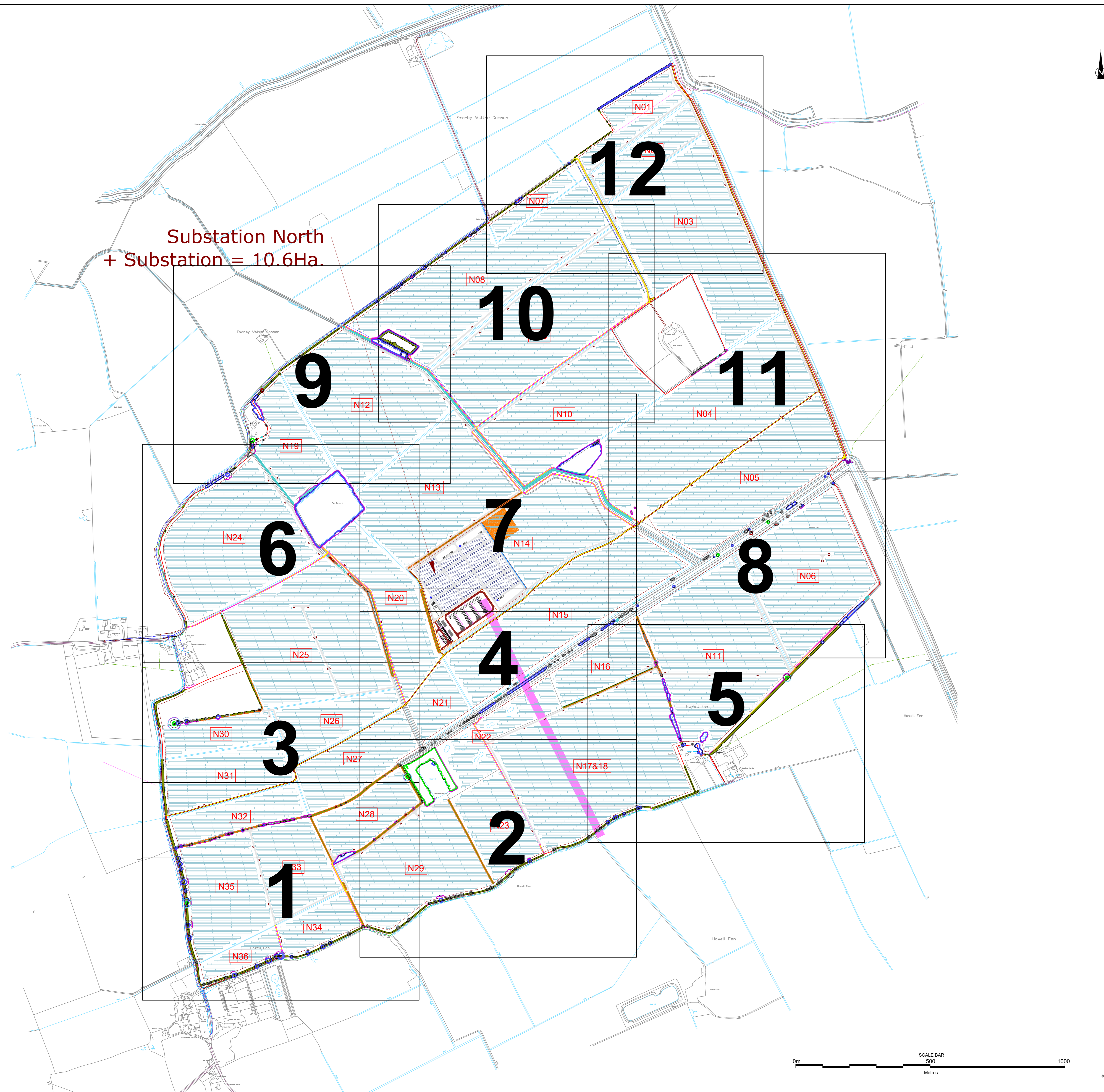
**Veteran Tree.** Tree that, by recognized criteria, shows features of biological, cultural or aesthetic characteristics of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

**Windthrow.** The blowing over a tree at its roots.



**DRAWING**



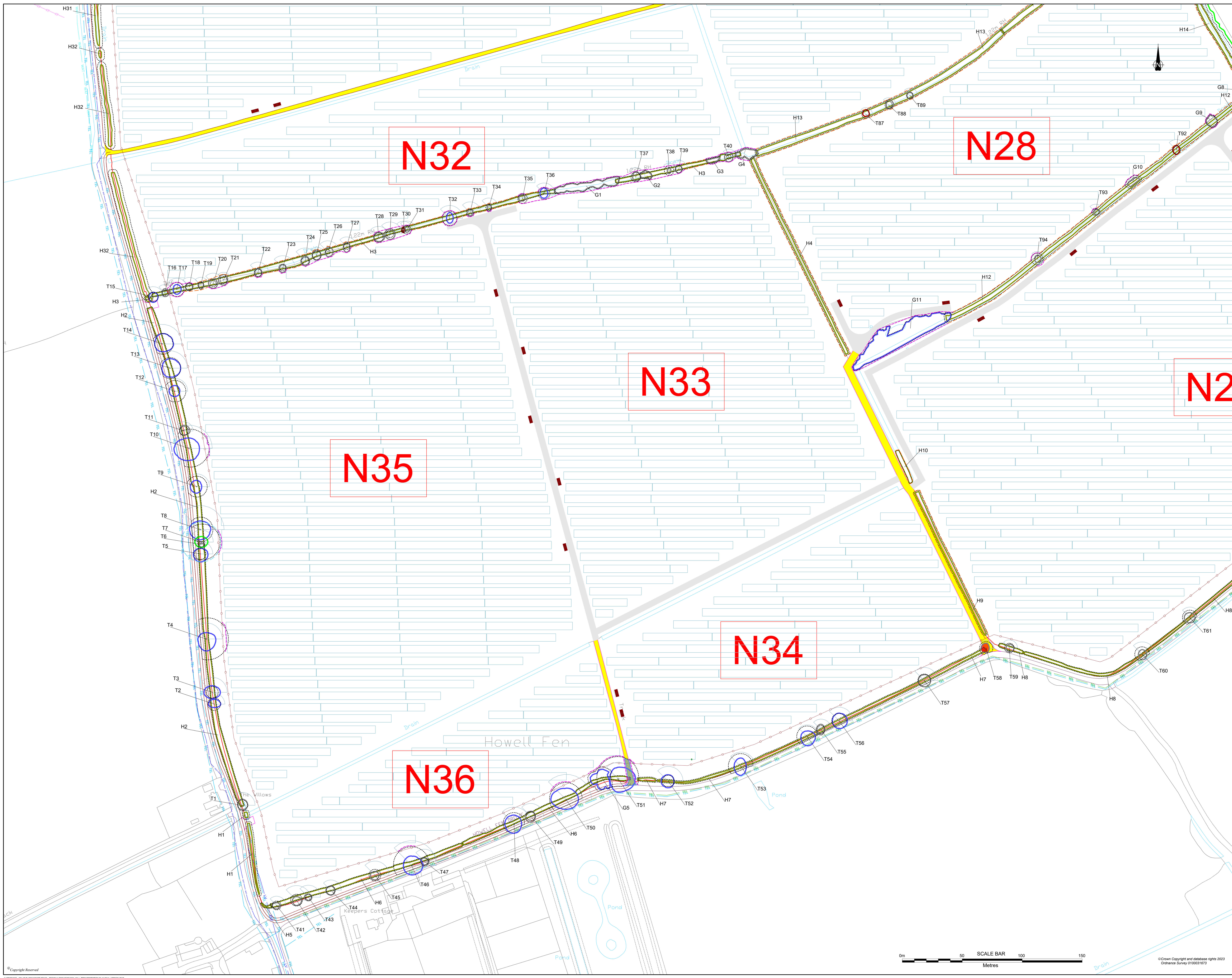


Substation North  
+ Substation = 10.6Ha.

- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION
- TREES**  
Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
RPA - Root Protection Area  
Where RPA is not visible it extends to the same distance as the canopy.  
The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT
- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S):  
LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGY-PARK-LAYOUT PRELIMINARY-A(06).DWG

A	FIRST ISSUE	DATE	BY	CHK
REV	REASON	DATE	BY	CHK
CLIENT				
BEACON FEN ENERGY PARK LTD				
PROJECT				
BEACON FEN ENERGY PARK				
DRAWING TITLE				
TREE PROTECTION PLAN SHEET OVERVIEW				
DRG No.	ST19595-106	REV	A	DIFF. CODE
DRG SIZE	A0	SCALE	1:5000	DATE
				27/07/2023
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY
			MS	



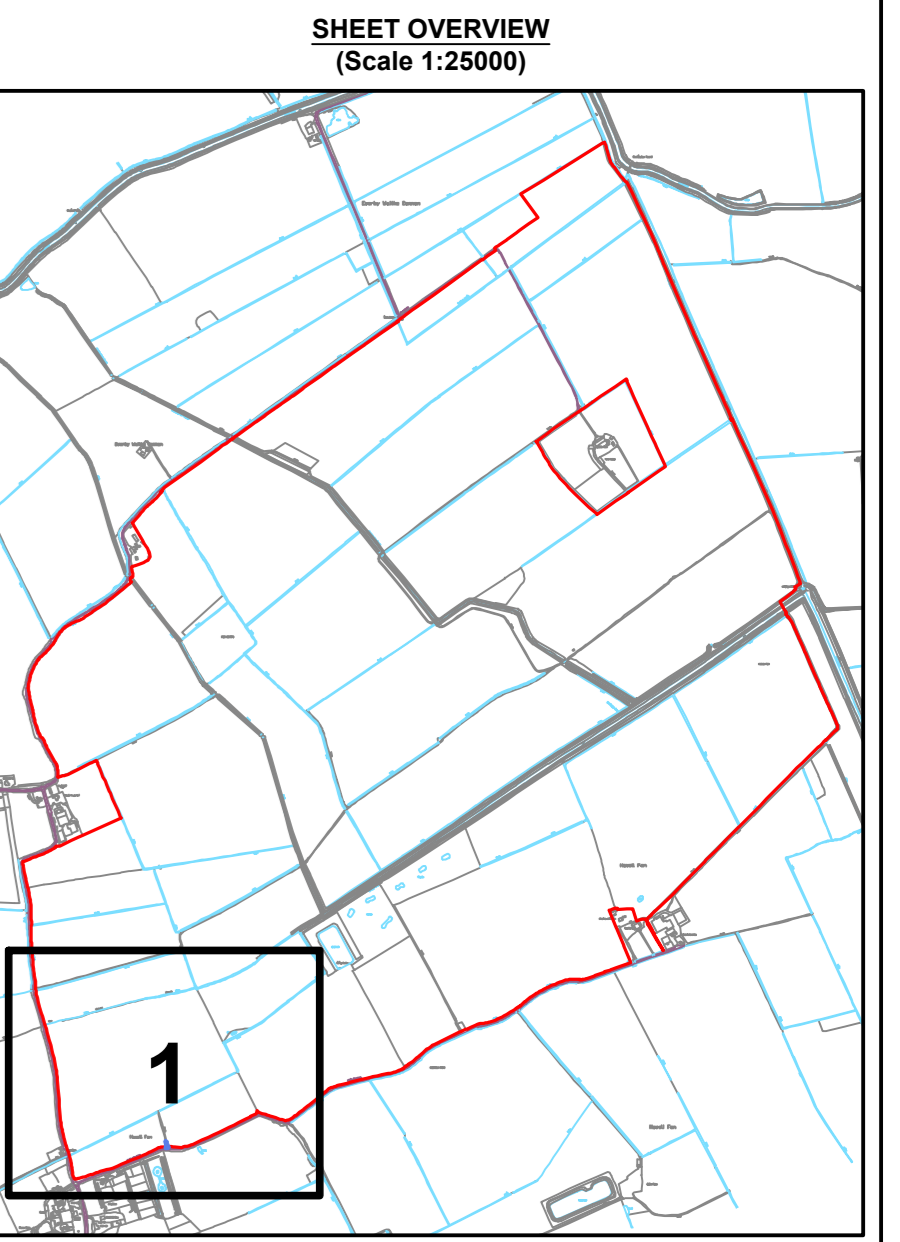


- KEY**
- SITE BOUNDARY
  - HEDGE
  - - - HEDGE - DEFUNCT
  - ▨ SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - ▨ EXTENT OF PRUNING
  - - - LOCATION OF TREE PROTECTION FENCING
  - - - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - ▨ NO-DIG CONSTRUCTION

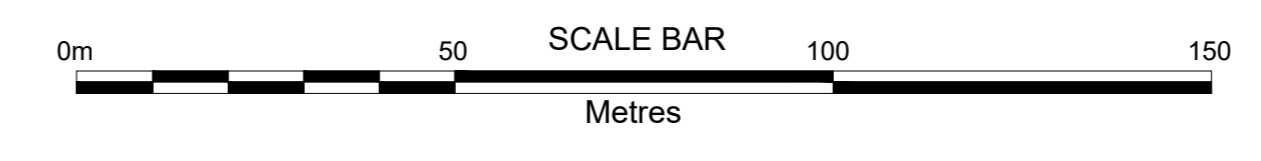
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T1/G1 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS

REFERENCED DRAWING(S)  
 LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGYPAKLAYOUT  
 PRELIMINARY-A(08).DWG

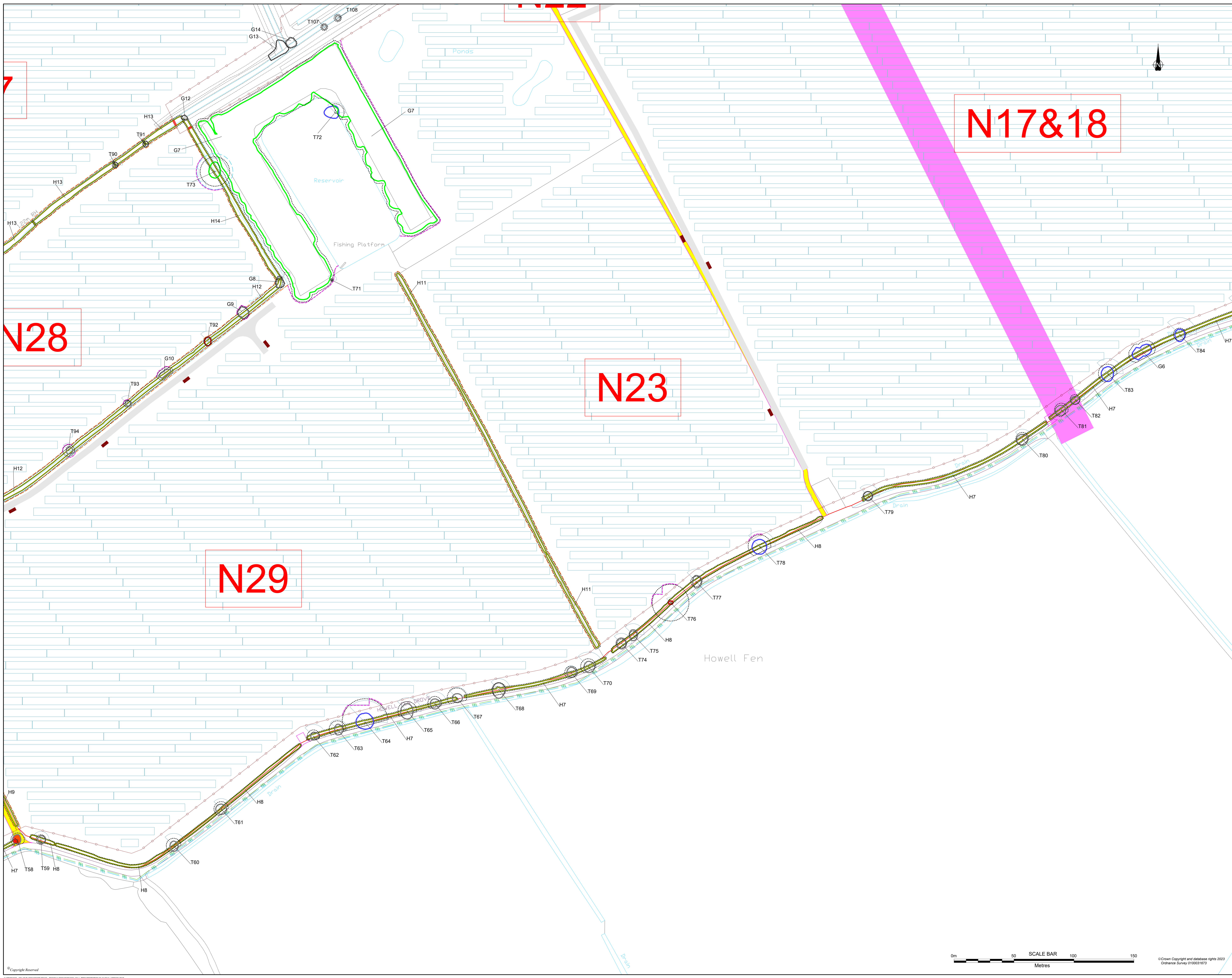


REV	DATE	BY	CHK	APP
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CLIENT: BEACON FEN ENERGY PARK LTD				
PROJECT: BEACON FEN ENERGY PARK				
DRAWING TITLE: TREE PROTECTION PLAN SHEET 1 OF 12				
PROJ NO:	ST19595-106	REV	A	DATE CODE
PRO SIZE:	A0	SCALE:	1:1000	DATE:
DRAWN BY:	MAB	CHECKED BY:	AR	APPROVED BY:



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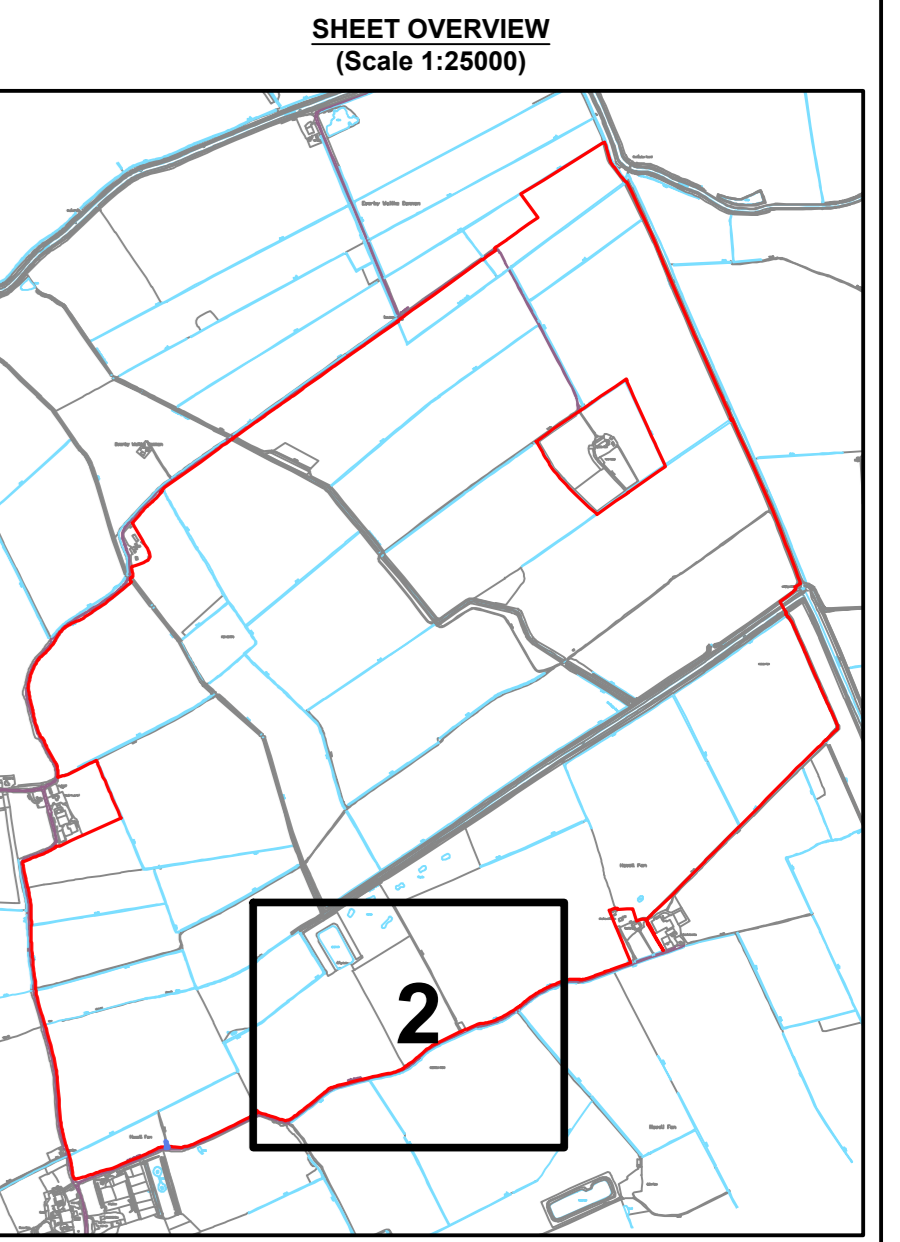




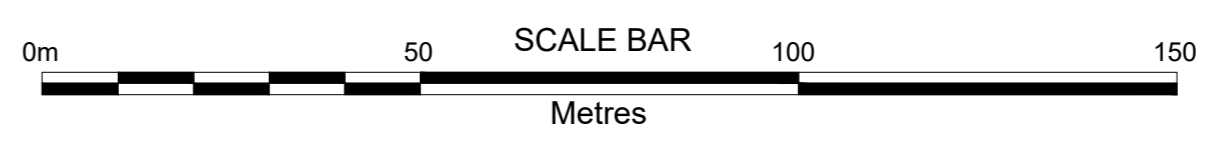
- KEY**
- SITE BOUNDARY
  - HEDGE
  - - - HEDGE - DEFUNCT
  - ▨ SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - ▨ EXTENT OF PRUNING
  - ▨ LOCATION OF TREE PROTECTION FENCING
  - ▨ LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - ▨ NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T108/T107 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - ▨ Fence
  - ▨ Existing track
  - ▨ Internal track
  - ▨ FOOTPATH
  - ▨ U/G ELEC CABLE 33kV
  - ▨ U/G ELEC CABLE 11kV
  - ▨ U/G LV CABLE
  - ▨ O/H ELEC CABLE 11kV
  - ▨ WATER MAIN
  - ▨ DECOMMISSIONED WATER MAIN
  - ▨ BT TELECOMMS
  - ▨ PLANNED BT TELECOMMS

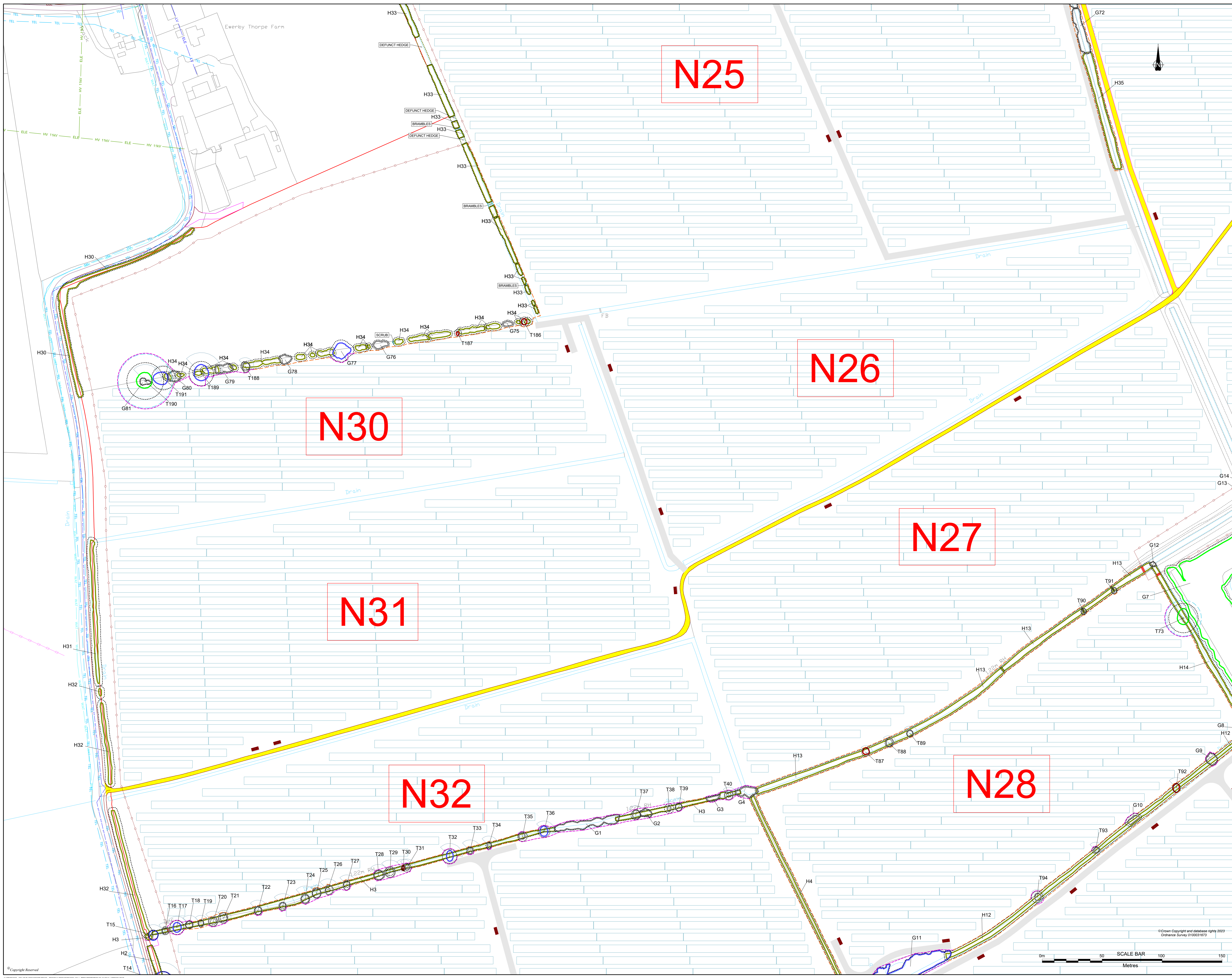
REFERENCED DRAWING(S)  
 LCA-2023-01-BEACONFEN-DETAIL-EDVIEW\_ENERGY-PARK-LAYOUT PRELIMINARY-A(08).DWG



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NO.	REV.	DATE	BY	CHK	APP	DATE	BY
CLIENT							
BEACON FEN ENERGY PARK LTD							
PROJECT							
BEACON FEN ENERGY PARK							
DRAWING TITLE							
TREE PROTECTION PLAN SHEET 2 OF 12							
DRG No.	ST19595-106	REV	A	DATE CODE			
DRG SIZE	A0	SCALE	1:1000	DATE	27/07/2023		
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS		
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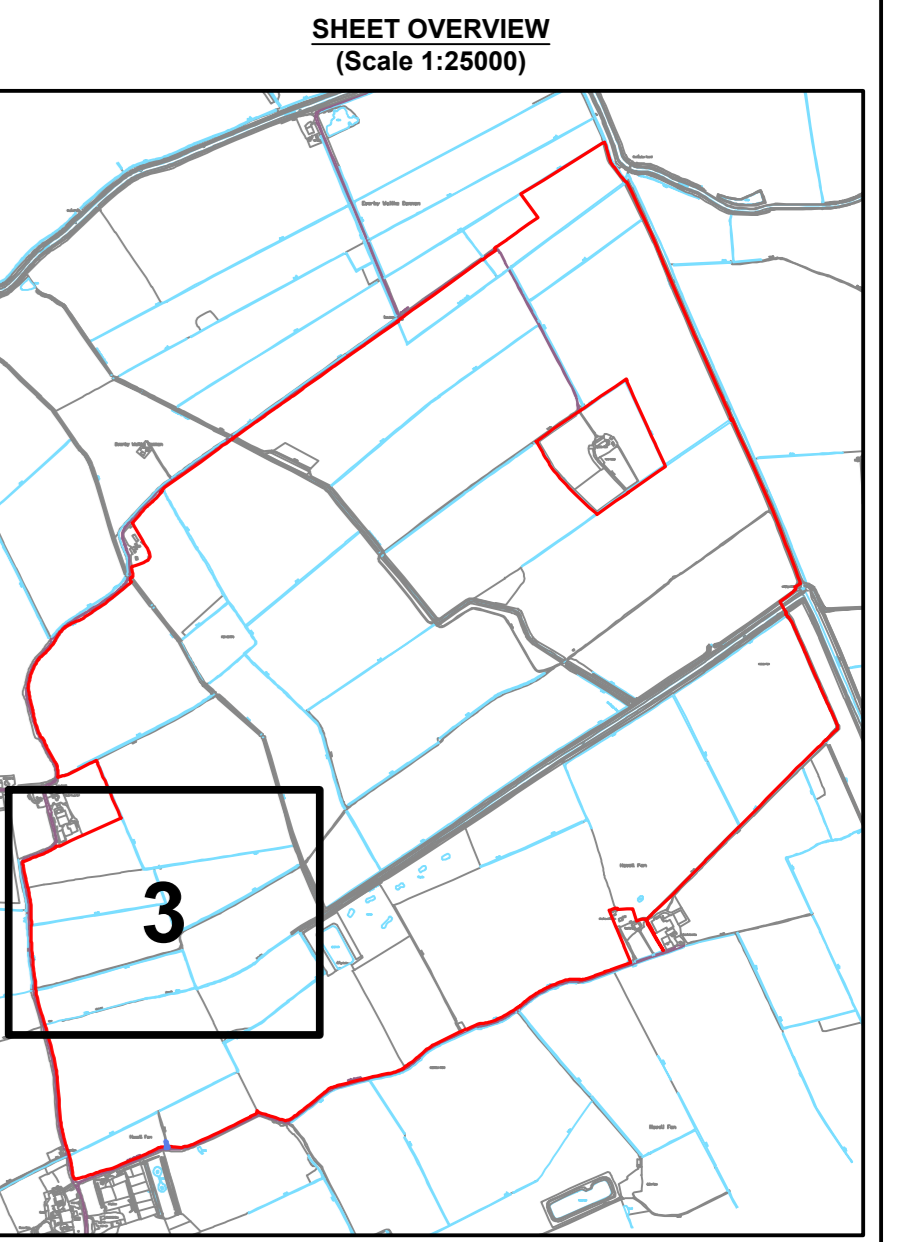






- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T181/W181 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S)**  
 LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGYPAKLAYOUT PRELIMINARY-A(08).DWG



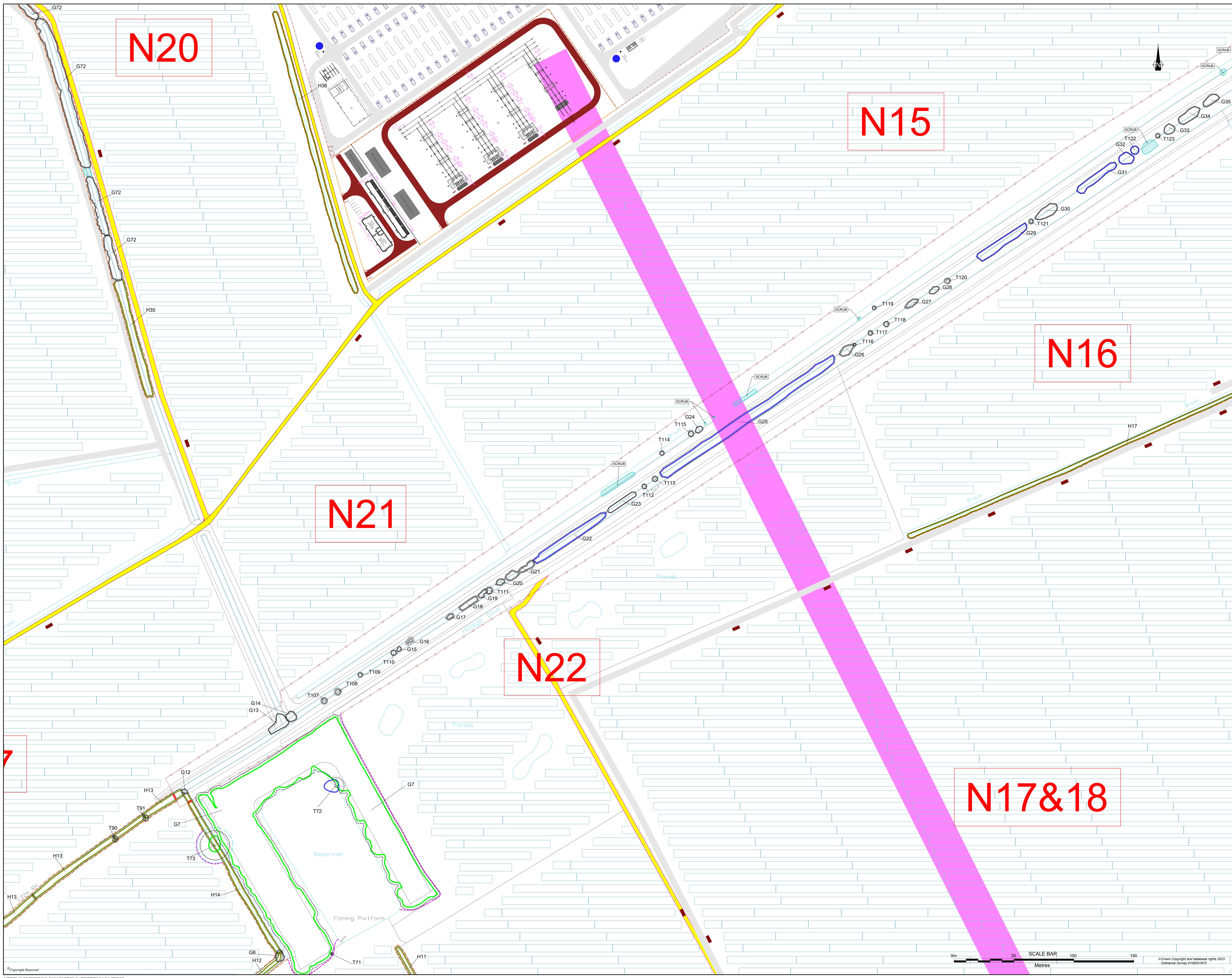
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CLIENT					
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PROJECT					
BEACON FEN ENERGY PARK					
DRAWING TITLE					
TREE PROTECTION PLAN SHEET 3 OF 12					
GRID NO.	ST19595-106	REV	A	DATE CODE	
PROJ. NO.	A0	SCALE	1:1000	DATE	27/07/2023
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS

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0m 50 100 150  
 Metres

**wardell armstrong**



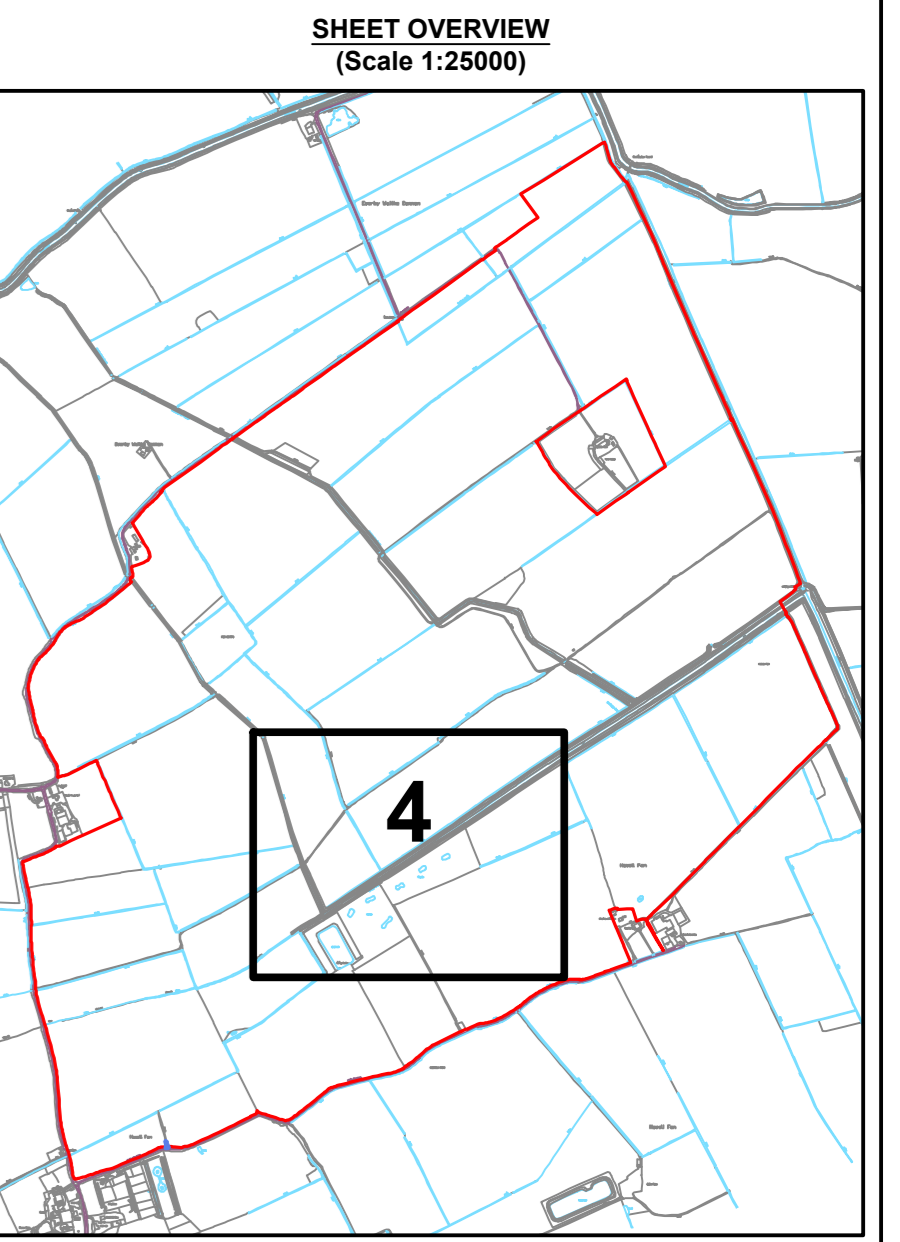


- KEY**
- SITE BOUNDARY
  - HEDGE
  - - - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - - - EXTENT OF PRUNING
  - - - LOCATION OF TREE PROTECTION FENCING
  - - - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION

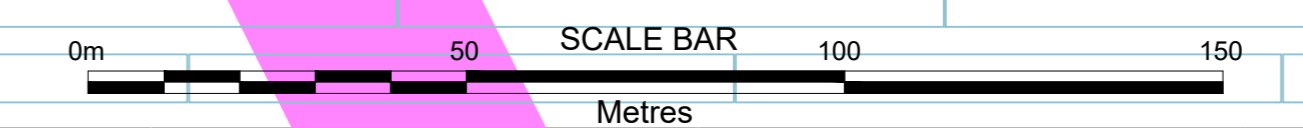
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T1151 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS

REFERENCED DRAWING(S)  
 LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGYPARKLAYOUT  
 PRELIMINARY-A(08).DWG

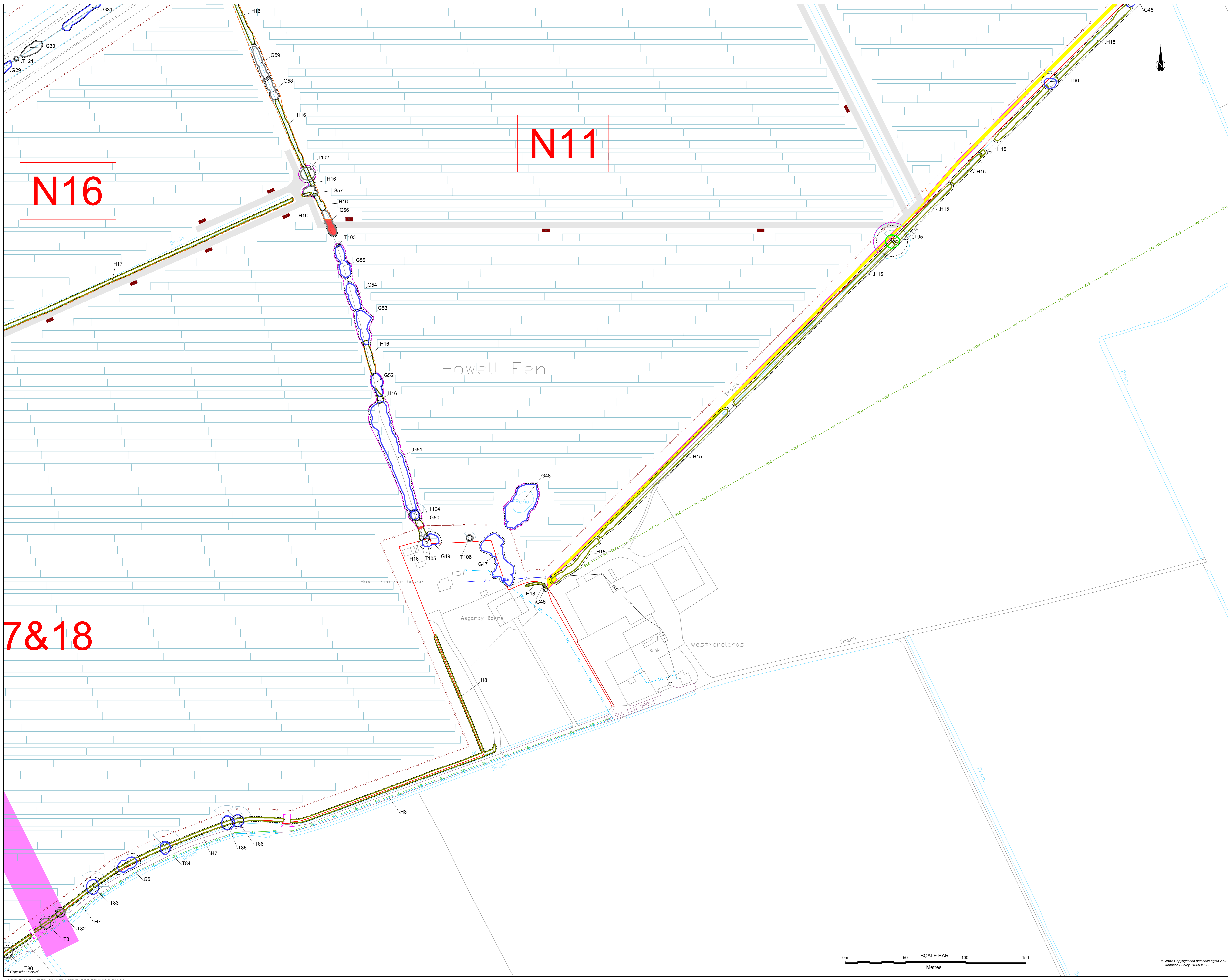


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BEACON FEN ENERGY PARK LTD					
PROJECT					
BEACON FEN ENERGY PARK					
DRAWING TITLE					
TREE PROTECTION PLAN SHEET 4 OF 12					
DRG No:	ST19595-106	REV	A	DATE CODE	
DRG SIZE	A0	SCALE	1:1000	DATE	27/07/2023
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS



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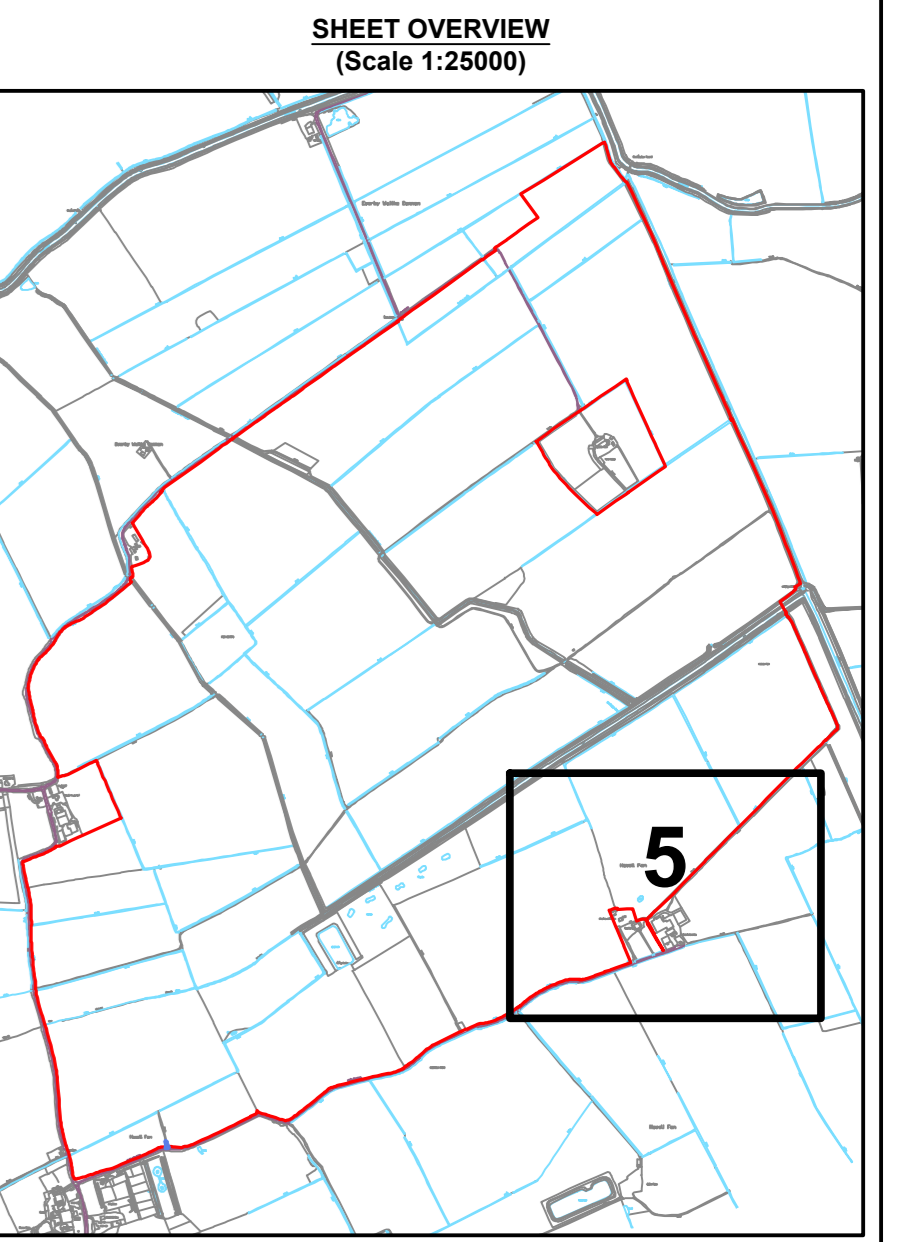


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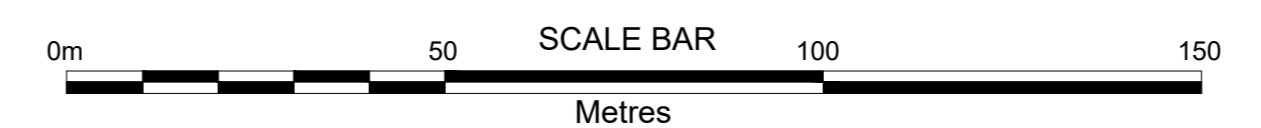
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7&18

- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT
- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S)**  
 LCA-2023-01-BEACONFEN-DETAILVIEW\_ENERGYPAKLAYOUT PRELIMINARY-A(08).DWG

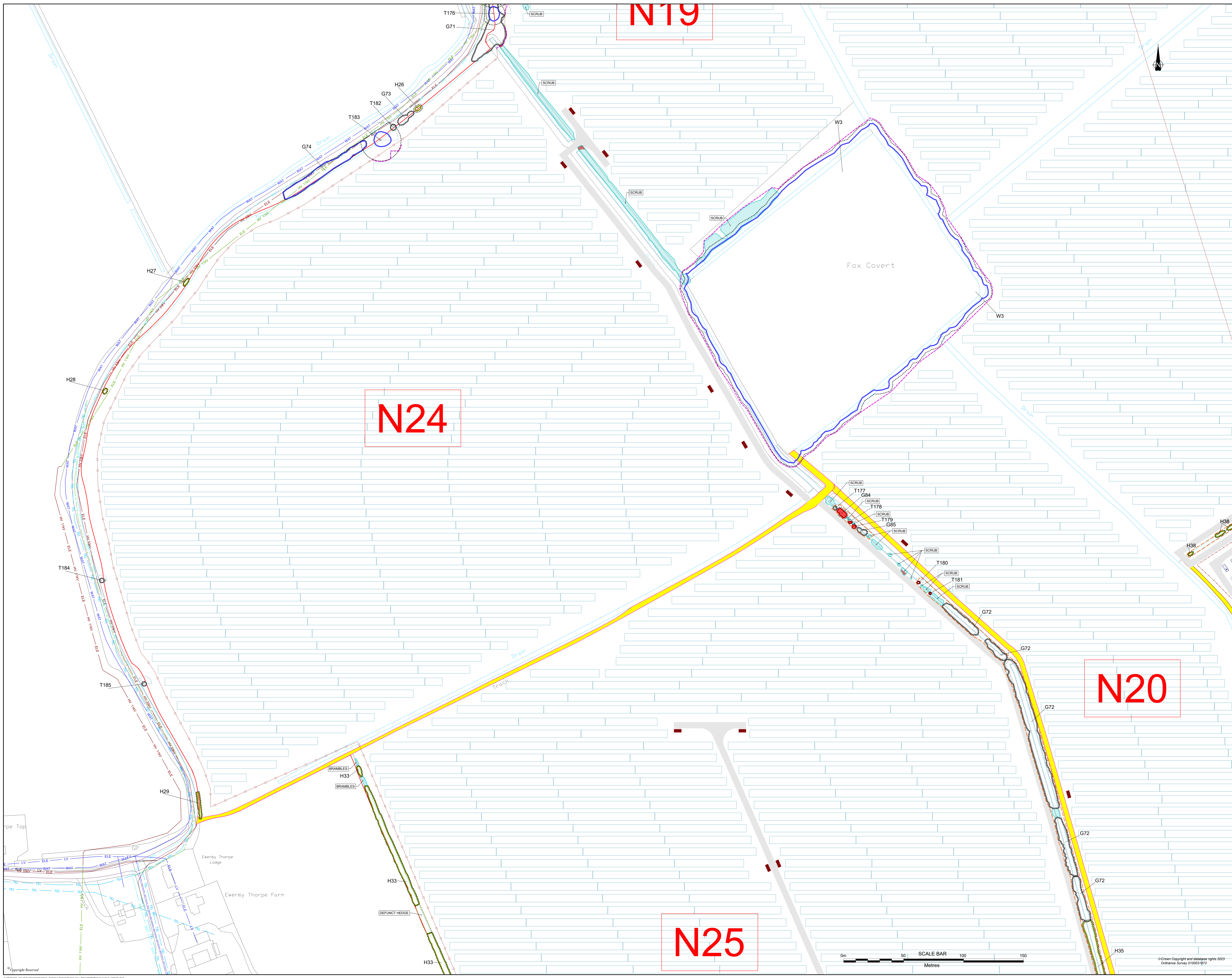


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PROJECT							
BEACON FEN ENERGY PARK							
DRAWING TITLE							
TREE PROTECTION PLAN SHEET 5 OF 12							
DRG No.	ST19595-106	REV	A	DATE CODE			
DRG SIZE	A0	SCALE	1:1000	DATE	27/07/2023		
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS		

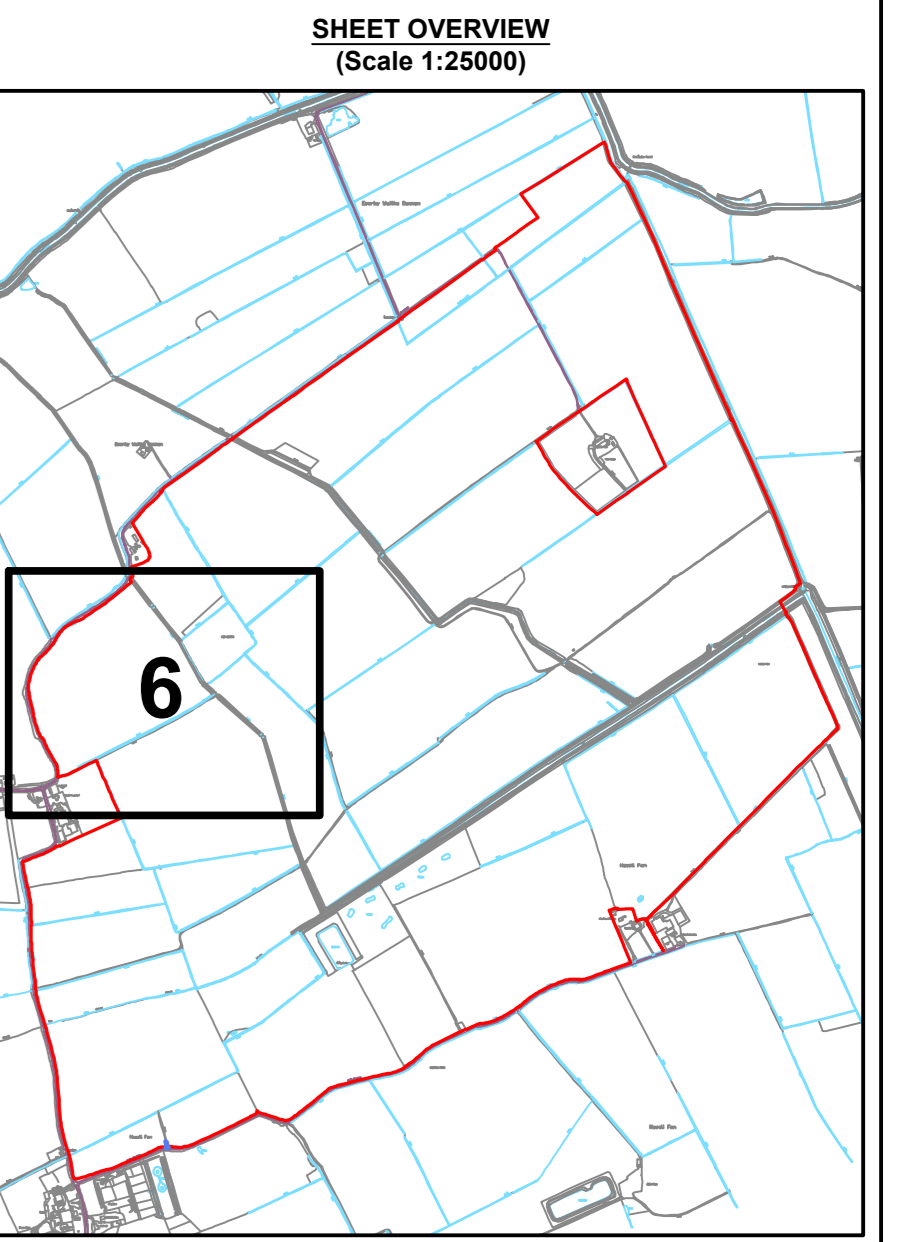


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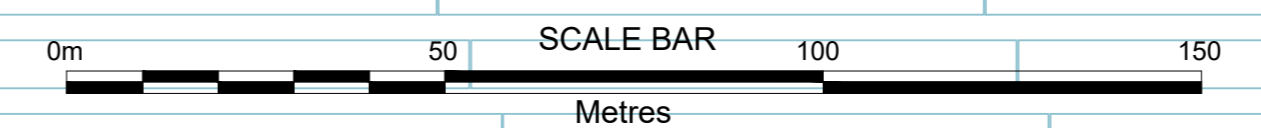




- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T181/W181 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT
- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S)**  
 LCA-2023-01-BEACONFEN-DETAILVIEW\_ENERGY-PARK-LAYOUT  
 PRELIMINARY-A(08).DWG



A	FIRST ISSUE	DATE	BY	CHK	APP
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PROJECT: BEACON FEN ENERGY PARK LTD					
PROJECT: BEACON FEN ENERGY PARK					
DRAWING TITLE: TREE PROTECTION PLAN SHEET 6 OF 12					
DRG NO:	ST19595-106	REV	A	DATE CODE	
DRG SIZE:	A0	SCALE:	1:1000	DATE:	27/07/2023
DRAWN BY:	MAB	CHECKED BY:	AR	APPROVED BY:	MS
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12

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N13

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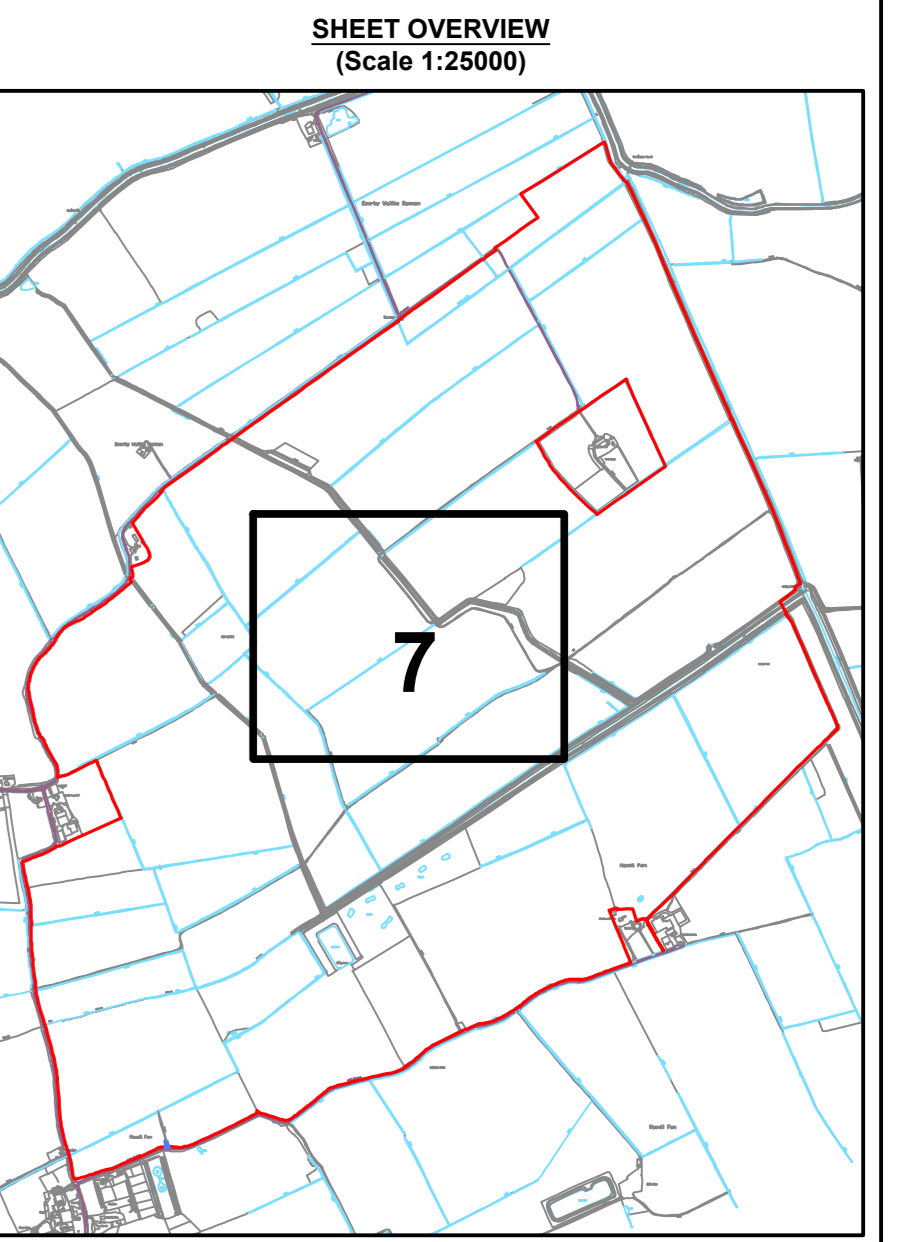
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- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION

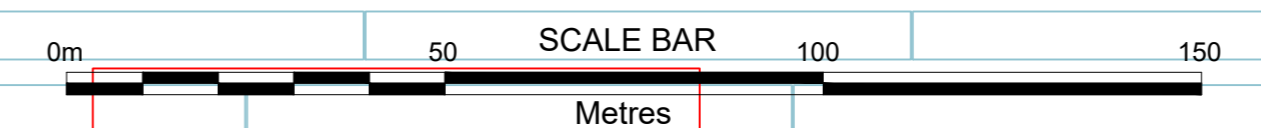
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS

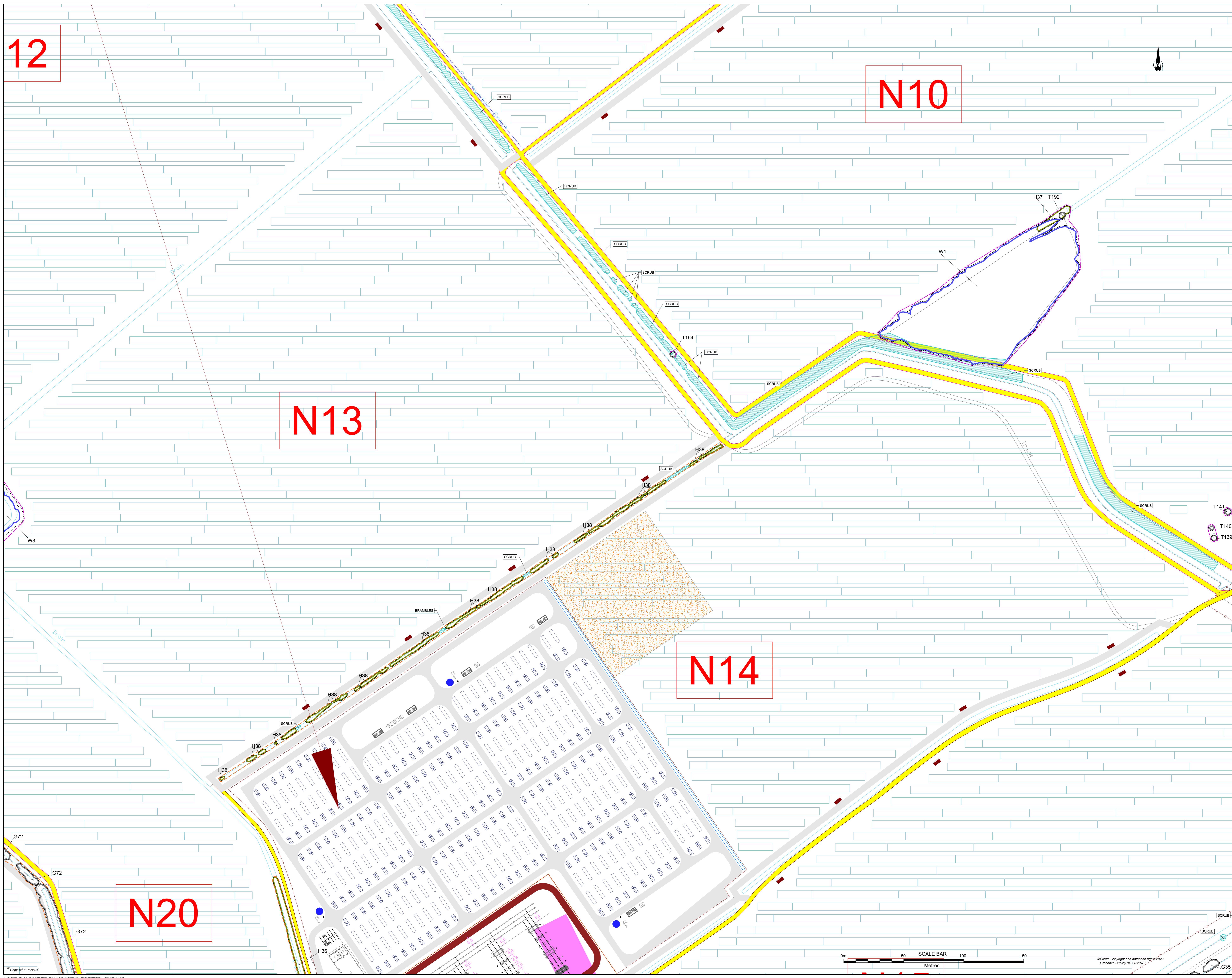
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 LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGYPAKLAYOUT  
 PRELIMINARY-A(08).DWG



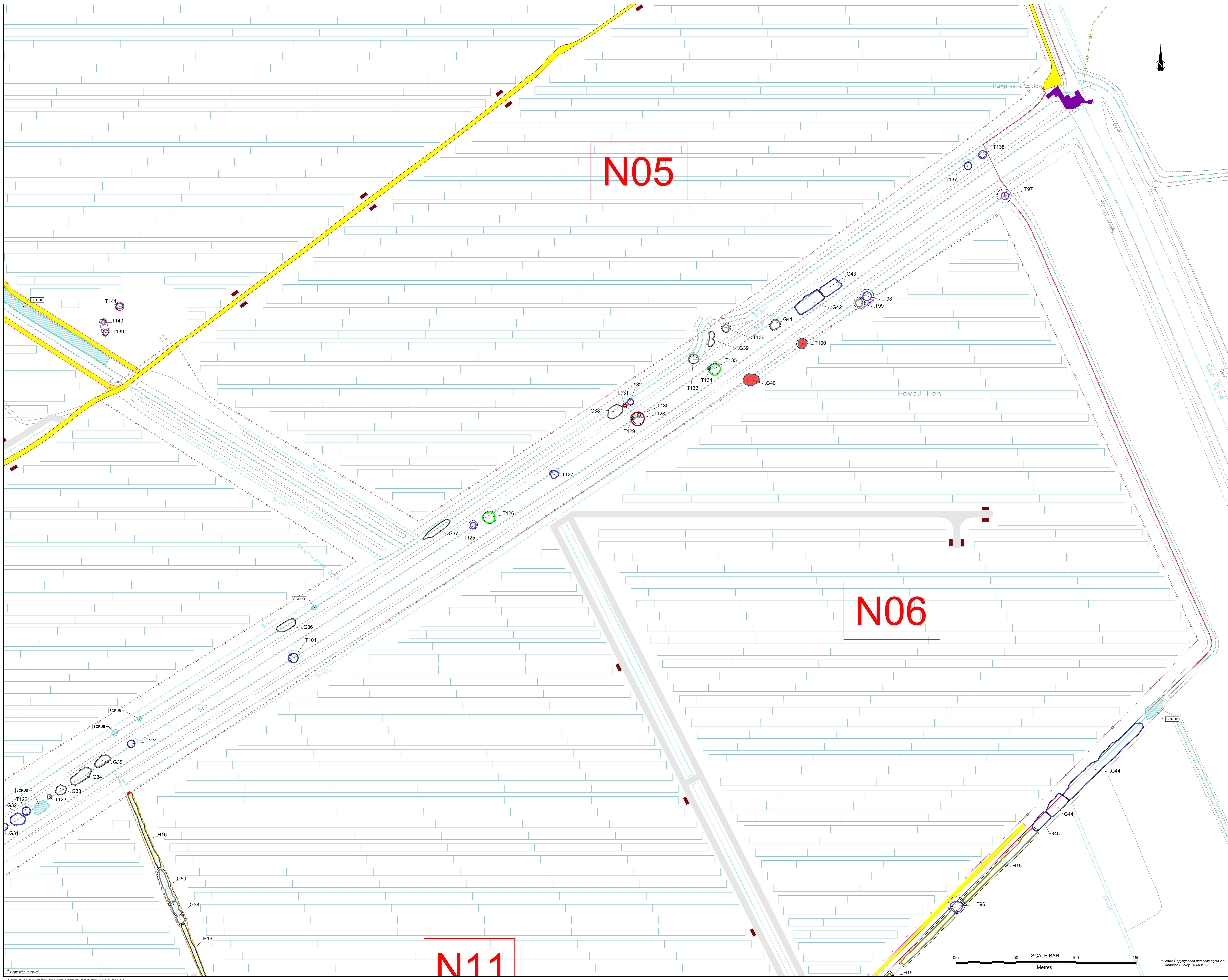
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PROJECT					
BEACON FEN ENERGY PARK					
DRAWING TITLE					
TREE PROTECTION PLAN SHEET 7 OF 12					
DRG NO.	ST19595-106	REV	A	DATE CODE	
DRG SIZE	A0	SCALE	1:1000	DATE	27/07/2023
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS



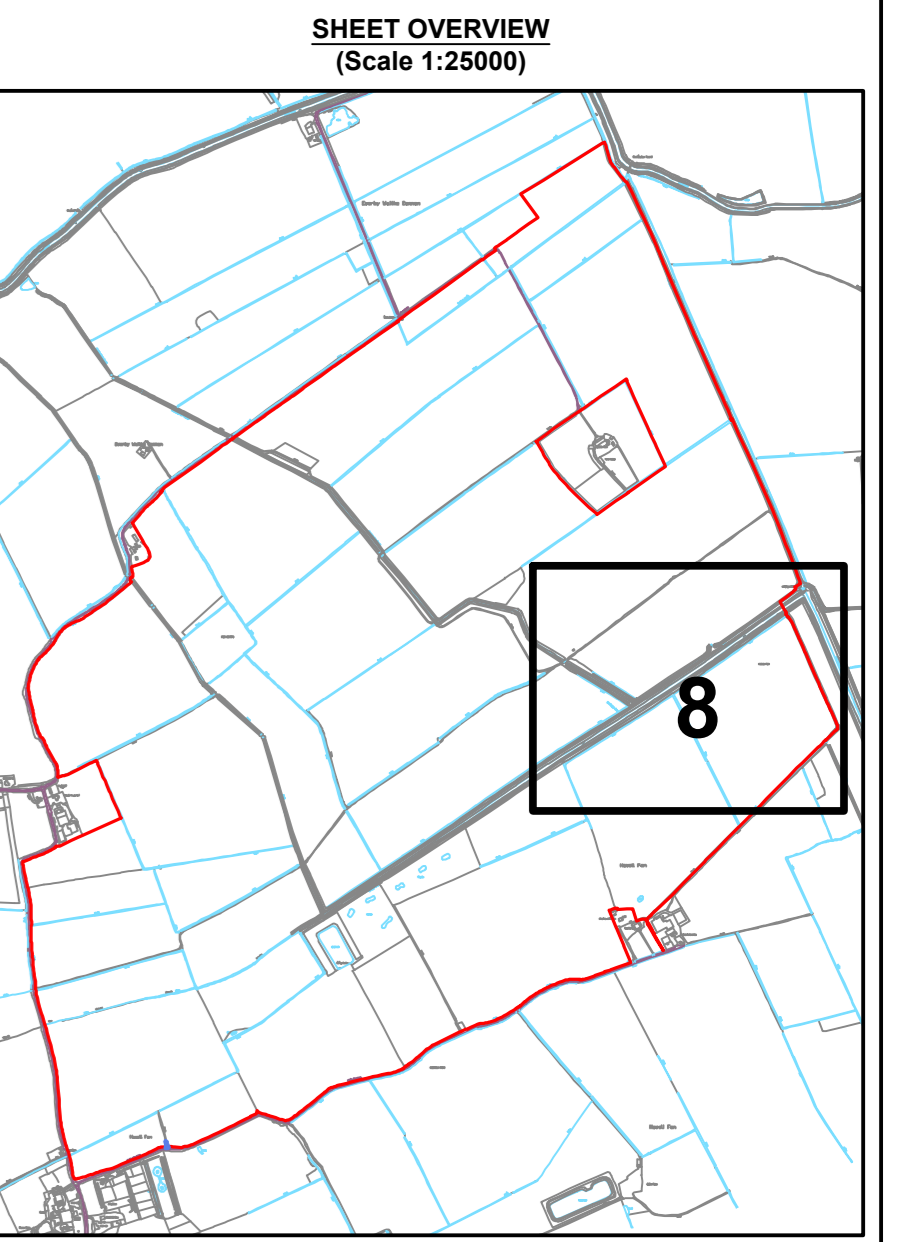
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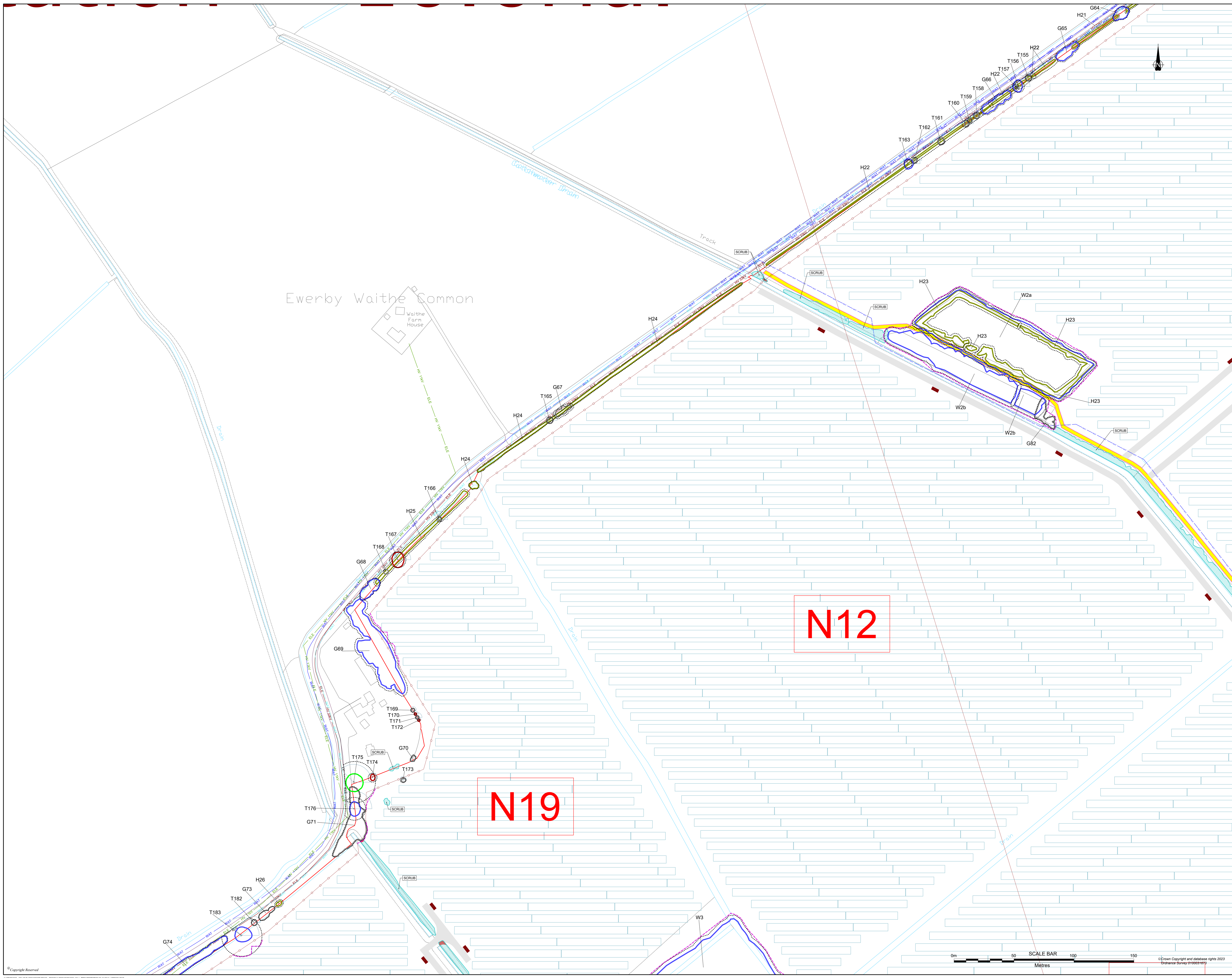


- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT
- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S)**  
 LCA-2023-01-BEACONFEN-DETAILVIEW\_ENERGYPAKLAYOUT  
 PRELIMINARY-A(08) DWG



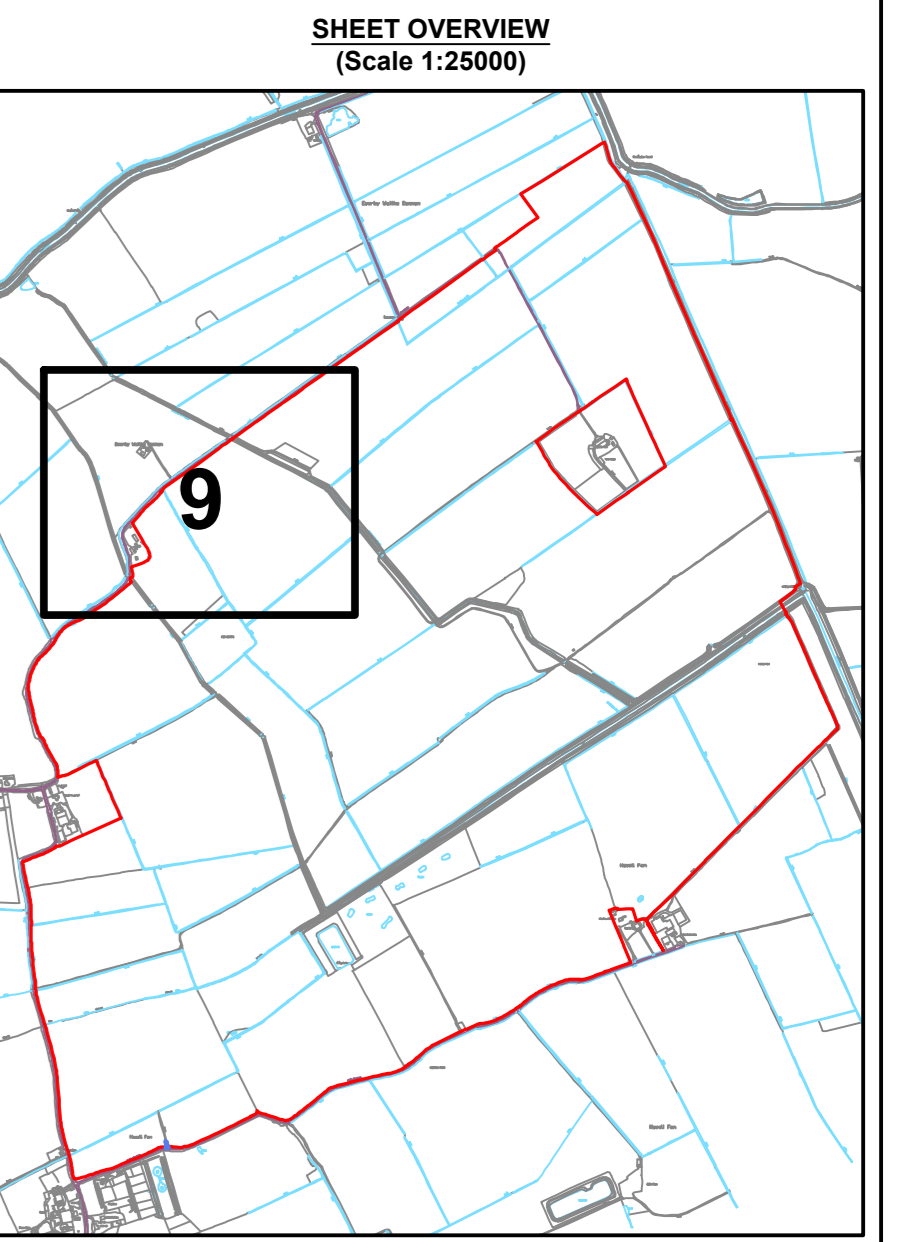
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REV	NO	DATE	BY	CHK	APP		
CLIENT							
BEACON FEN ENERGY PARK LTD							
PROJECT							
BEACON FEN ENERGY PARK							
DRAWING TITLE							
TREE PROTECTION PLAN SHEET 8 OF 12							
DRG NO	ST19595-106	REV	A	DATE	27/07/2023	DWT CODE	
DRG SIZE	A0	SCALE	1:1000	DATE	27/07/2023		
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS		





- KEY**
- SITE BOUNDARY
  - HEDGE
  - - - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T155/T156 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

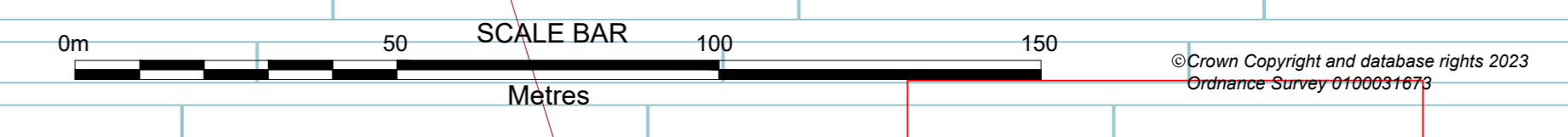
- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S)  
 LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGYPARKLAYOUT PRELIMINARY-A(08).DWG



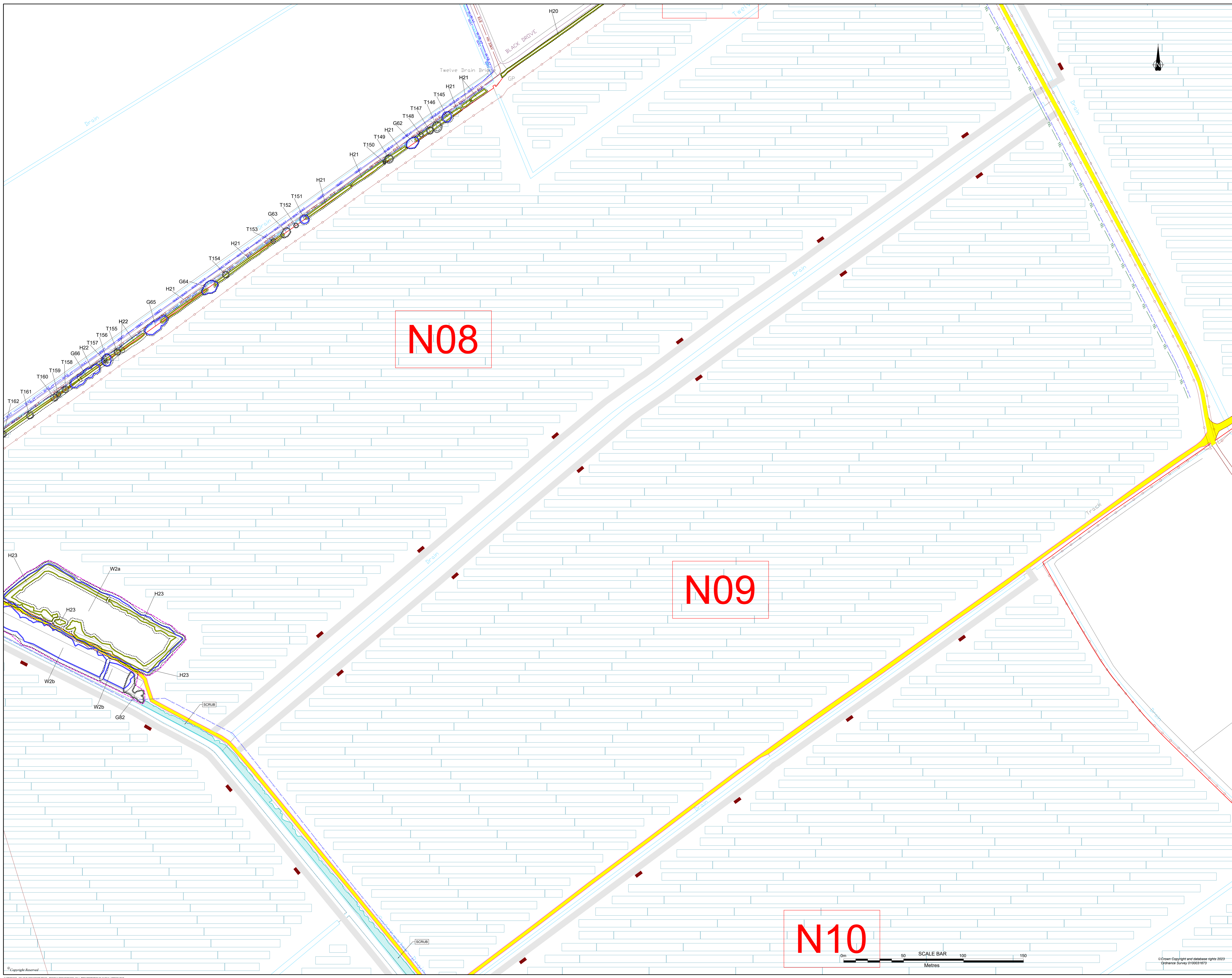
**N12**

**N19**

NO.	REV	DATE	BY	CHK	APP
A	FIRST ISSUE				
CLIENT					
BEACON FEN ENERGY PARK LTD					
PROJECT					
BEACON FEN ENERGY PARK					
DRAWING TITLE					
TREE PROTECTION PLAN SHEET 9 OF 12					
PROJ. NO.	ST19595-106	REV	A	DATE CODE	
PROJ. SIZE	A0	SCALE	1:1000	DATE	27/07/2023
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS

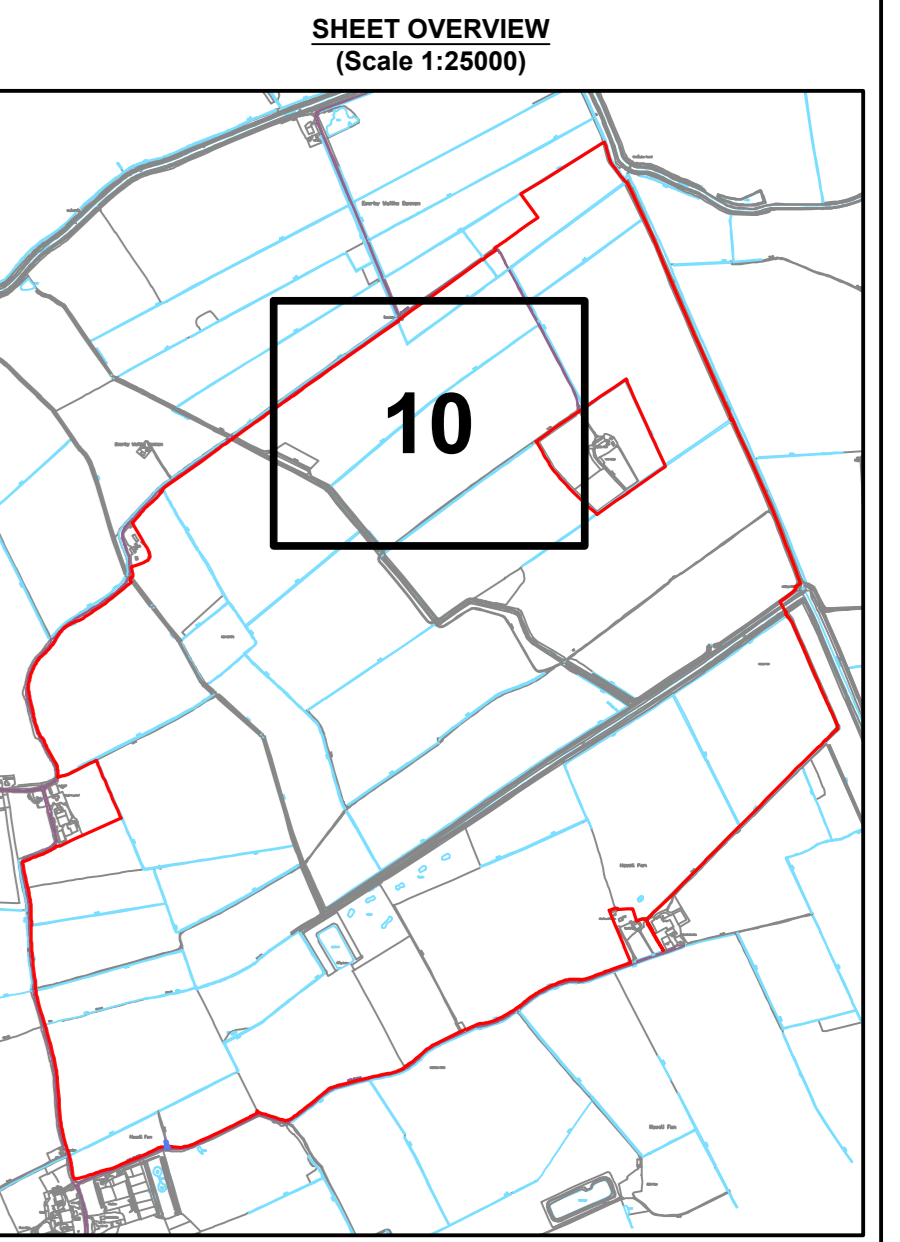






- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - ▨ SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - ▨ EXTENT OF PRUNING
  - LOCATION OF TREE PROTECTION FENCING
  - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - ▨ NO-DIG CONSTRUCTION
- TREES**
- Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T145/T146 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S)**
- LCA-2023-01-REACONFEN-DETAILEDVIEW\_ENERGYPAKLAYOUT  
 PRELIMINARY-A(08) DWG

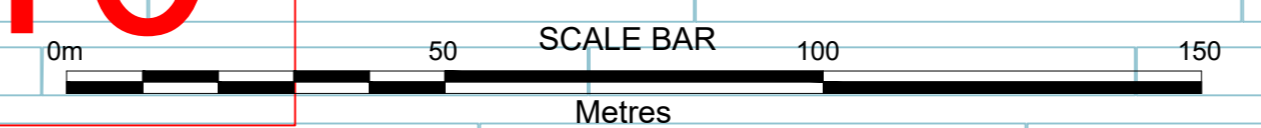


REV	DATE	BY	CHK	APP
A	FIRST ISSUE			
CLIENT				
BEACON FEN ENERGY PARK LTD				
PROJECT				
BEACON FEN ENERGY PARK				
DRAWING TITLE				
TREE PROTECTION PLAN SHEET 10 OF 12				
PROJ No:	ST19595-106	REV	A	DATE CODE
PROJ SIZE	A0	SCALE	1:1000	DATE
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY

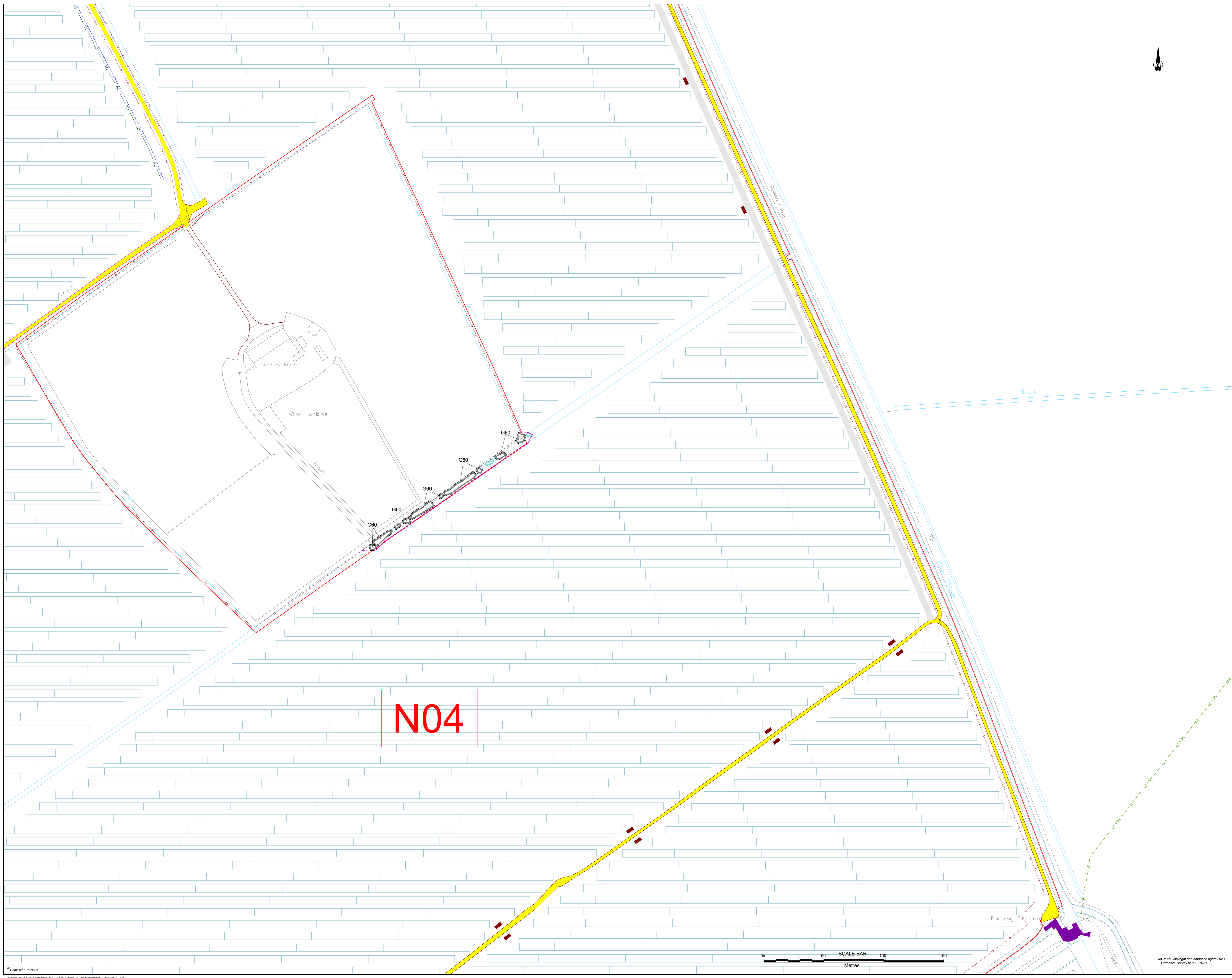
N08

N09

N10

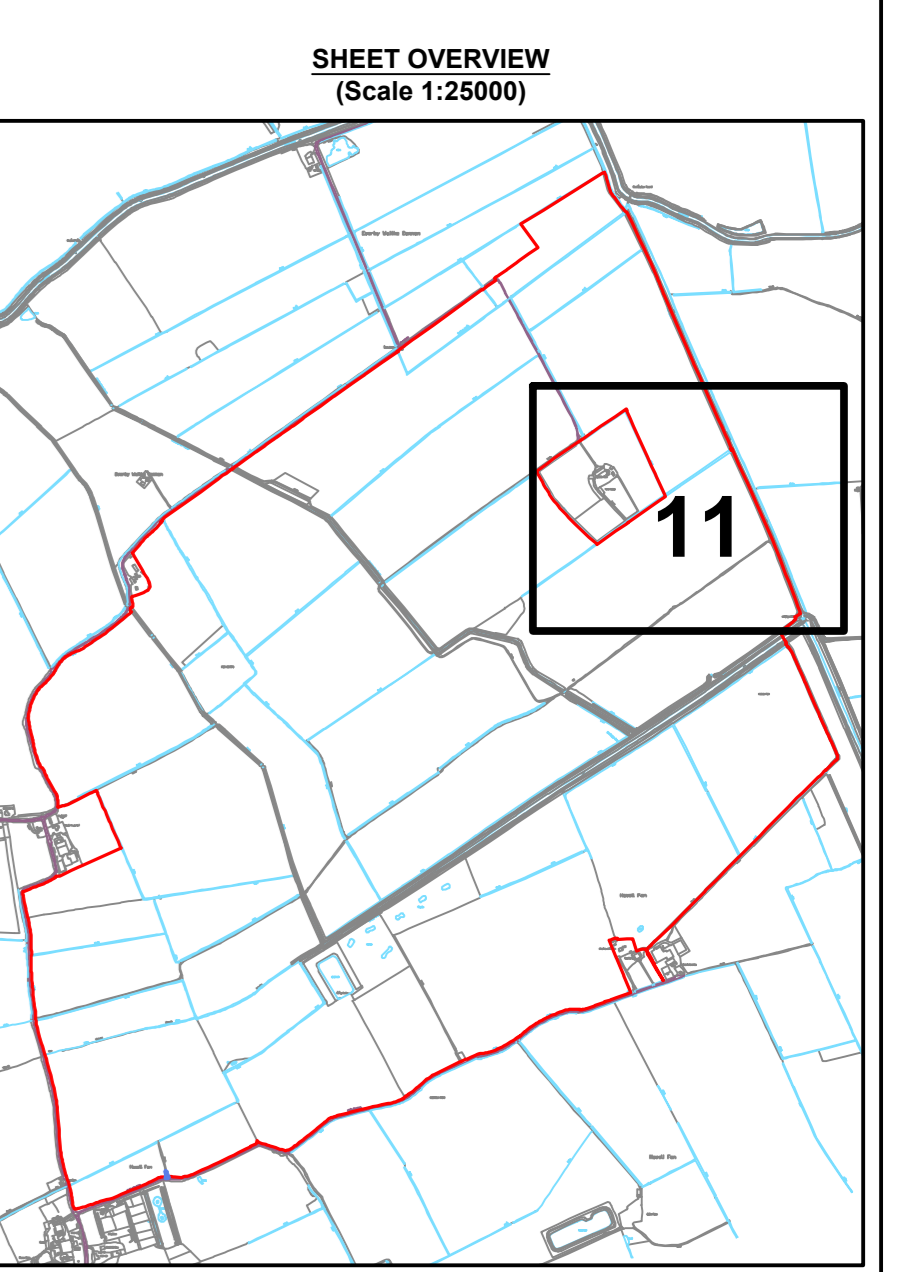




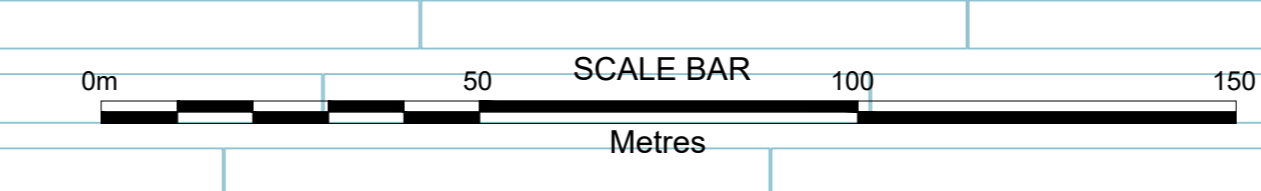


- KEY**
- SITE BOUNDARY
  - HEDGE
  - HEDGE - DEFUNCT
  - SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - /// EXTENT OF PRUNING
  - - - LOCATION OF TREE PROTECTION FENCING
  - - - LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - /// NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
 Where RPA is not visible it extends to the same distance as the canopy.  
 The original of this drawing was produced in colour - a monochrome copy should not be relied upon.
- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - Fence
  - Existing track
  - Internal track
  - FOOTPATH
  - U/G ELEC CABLE 33kV
  - U/G ELEC CABLE 11kV
  - U/G LV CABLE
  - O/H ELEC CABLE 11kV
  - WATER MAIN
  - DECOMMISSIONED WATER MAIN
  - BT TELECOMMS
  - PLANNED BT TELECOMMS
- REFERENCED DRAWING(S)  
 LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGYPAKLAYOUT  
 PRELIMINARY-A(08).DWG

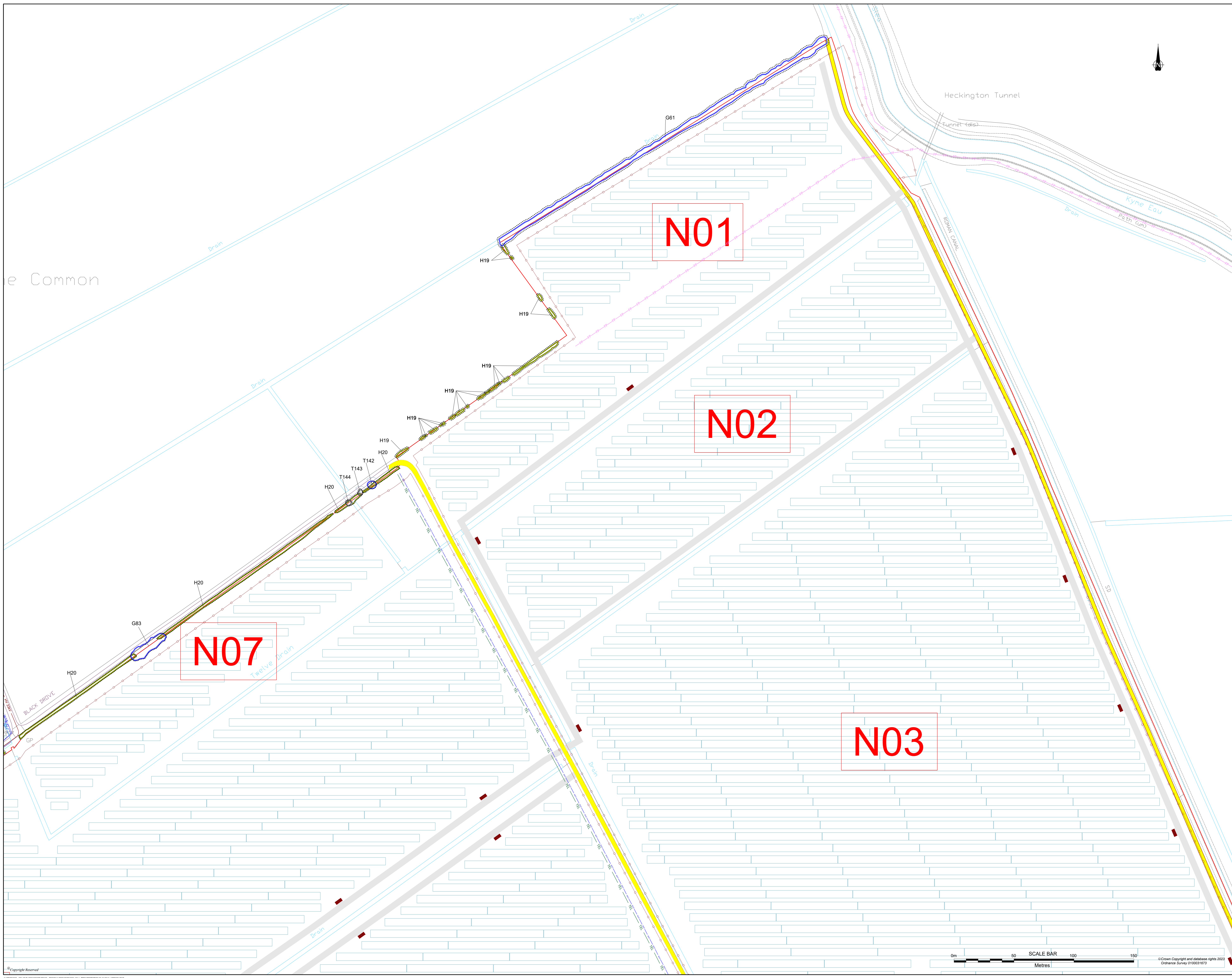


**N04**



A		FIRST ISSUE		DATE	BY	CHK	APP
REV	NO	DATE	BY	CHK	APP		
CLIENT							
BEACON FEN ENERGY PARK LTD							
PROJECT							
BEACON FEN ENERGY PARK							
DRAWING TITLE							
TREE PROTECTION PLAN SHEET 11 OF 12							
PROJ No:	ST19595-106	REV	A	DATE CODE			
PROJ SIZE	A0	SCALE	1:1000	DATE	27/07/2023		
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS		

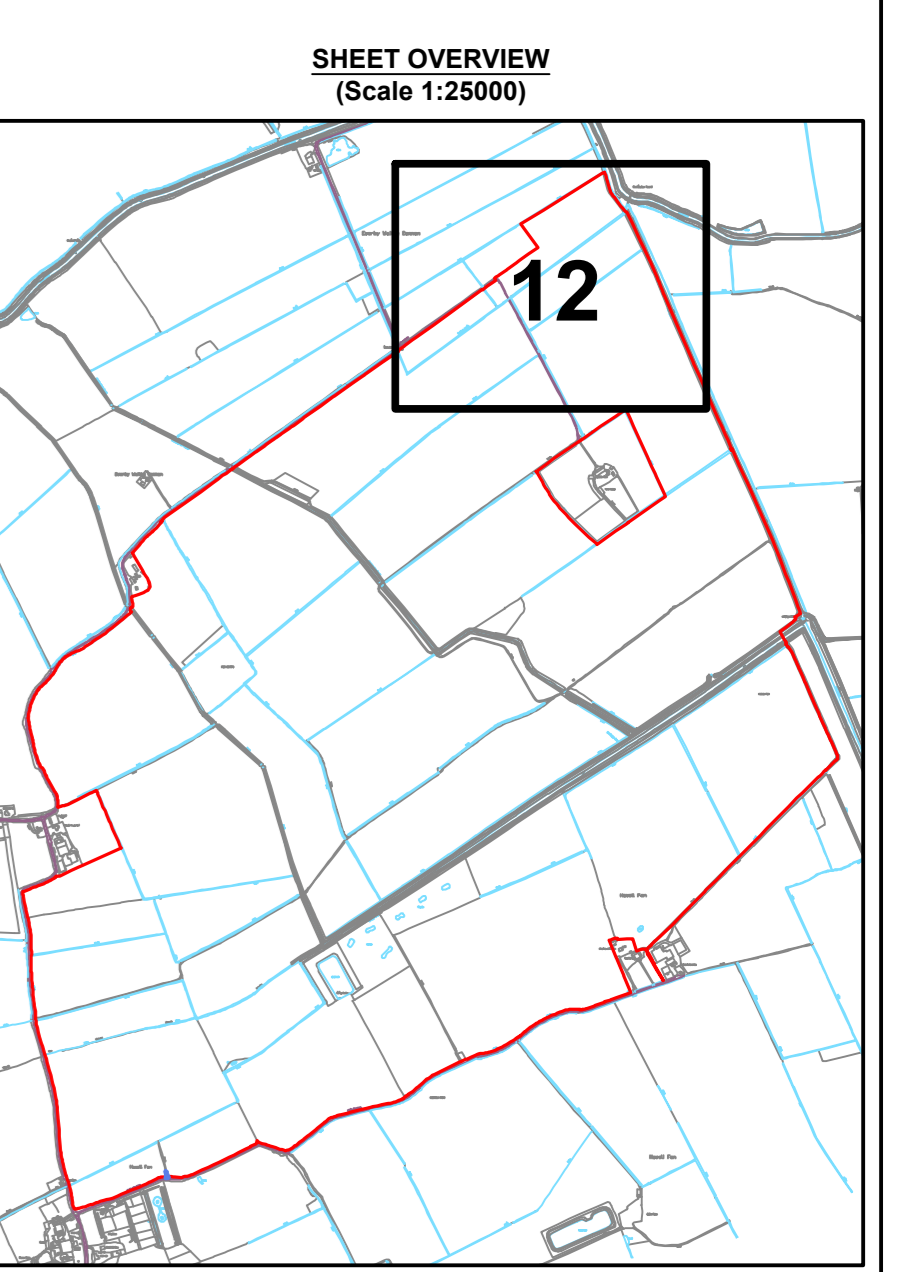




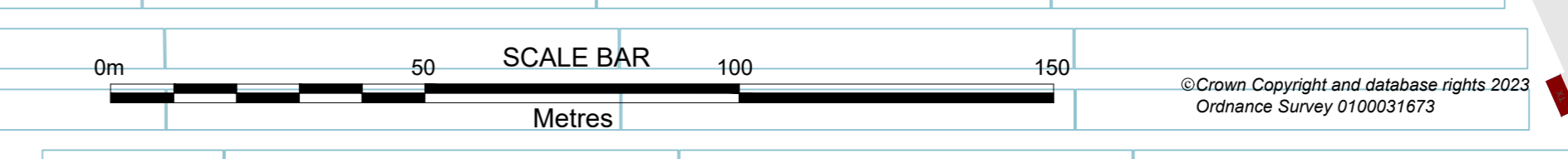
- KEY**
- SITE BOUNDARY
  - HEDGE
  - - - HEDGE - DEFUNCT
  - ▨ SCRUB
  - TREES REMOVED DUE TO CONDITION AND/OR TO ENABLE DEVELOPMENT
  - ▨ EXTENT OF PRUNING
  - ▨ LOCATION OF TREE PROTECTION FENCING
  - ▨ LOCATION OF 3-STRAND POST AND WIRE FENCING FOR HEDGEROW PROTECTION
  - ▨ NO-DIG CONSTRUCTION
- TREES**  
 Quality categories based on BS5837:2012 Trees in relation to design, demolition and construction - Recommendations  
 RPA - Root Protection Area  
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- CATEGORY A CROWN SPREAD
  - CATEGORY B CROWN SPREAD
  - CATEGORY C CROWN SPREAD
  - CATEGORY U CROWN SPREAD
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER ZONE
  - T143/T144 TREE/TREE GROUP/ WOODLAND/HEDGE NUMBER
  - POTENTIAL DIRECT OBSTRUCTION OF SUNLIGHT

- KEY - PROPOSED SITE LAYOUT**
- Constraints :**
- Transformer station
  - Construction compound
  - 400 kV cable route easement 30m
  - ▨ Fence
  - ▨ Existing track
  - ▨ Internal track
  - ▨ FOOTPATH
  - ▨ U/G ELEC CABLE 33kV
  - ▨ U/G ELEC CABLE 11kV
  - ▨ U/G LV CABLE
  - ▨ O/H ELEC CABLE 11kV
  - ▨ WATER MAIN
  - ▨ DECOMMISSIONED WATER MAIN
  - ▨ BT TELECOMMS
  - ▨ PLANNED BT TELECOMMS

REFERENCED DRAWING(S)  
 LCA-2023-01-BEACONFEN-DETAILEDVIEW\_ENERGYPAKLAYOUT  
 PRELIMINARY-A(08).DWG



NO.	REV	DATE	BY	CHK	APP
A	FIRST ISSUE				
CLIENT					
BEACON FEN ENERGY PARK LTD					
PROJECT					
BEACON FEN ENERGY PARK					
DRAWING TITLE					
TREE PROTECTION PLAN SHEET 12 OF 12					
DRG NO.	ST19595-106	REV	A	DATE	27/07/2023
DRG SIZE	A0	SCALE	1:1000	DATE	27/07/2023
DRAWN BY	MAB	CHECKED BY	AR	APPROVED BY	MS





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