

# **A1 in Northumberland: Morpeth to Ellingham**

**Scheme Number: TR010041**

## **6.7 Environmental Statement – Appendix 7.5 Arboricultural Report**

### **Part A**

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009

June 2020

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning  
(Applications: Prescribed Forms and  
Procedure) Regulations 2009**

**The A1 in Northumberland: Morpeth to Ellingham  
Development Consent Order 20[xx]**

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**Environmental Statement - Appendix**

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Rev 0	June 2020	Application Issue



Highways England (the Applicant)

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# **A1 IN NORTHUMBERLAND: MORPETH TO FELTON**

TR010041

**6.1 ENVIRONMENTAL STATEMENT**

**APPENDIX 7.5: ARBORICULTURAL REPORT**

**CONFIDENTIAL**

**PROJECT NO. 70044136**

**OUR REF. NO. HE551459-WSP-EGN-M2F-RP-LE-1942**

**DATE: JANUARY 2020**

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## 1. INTRODUCTION

- 1.1.1. This report describes the outcome of the assessment of likely significant arboricultural effects arising from the A1 in Northumberland: Morpeth to Felton Scheme (the Scheme) upon the existing baseline arboricultural resource.
- 1.1.2. This report describes the baseline arboricultural conditions within the Study Area, the mitigation measures required to prevent, reduce or offset any significant negative arboricultural effects and the likely residual effects after these measures have been employed.
- 1.1.3. This report (and its associated figures and appendices) is intended to be read in support of the wider Environmental Statement (ES). Arboricultural Impacts are assessed to inform relevant chapters while likely significant arboricultural effects are presented as supporting information. It is recognised that trees can have multiple, separate and overlapping values such as landscape value and ecological value. Therefore, landscape visual, ecological or other effects associated with trees may be implied within this report but are formally assessed within the respective chapters.

**Table 1-1 - Competent Expert Evidence**

Name	Role	Qualifications and Professional Membership	Experience
Dominic Waller	Author	BSc Arboriculture and Amenity Forestry Institute of Chartered Foresters (Associate Member) BTEC National Diploma Arboriculture	18 Years Post Qualification Experience 18 months of experience relevant to EIA including: HS2 Spalding Western Relief Road Aquind Interconnector
Neil Davies	Reviewer	MSc Forestry – pending Level 4 diploma in Arboriculture (tech Cert) Member of Royal Forestry Society	22 years industry experience, 7 of which in EIA including: A1 Coal House to Metro Centre A30 Higher Carblake to Temple Forder Valley Link Road

## 1.2. DESCRIPTION OF THE SCHEME

- 1.2.1. The Scheme includes approximately 6.6 km online widening and approximately 6 km of new offline highway. The existing carriageway would be widened on its current line up to Priest's

Bridge, from where the proposed offline section of the Scheme would move west of the current road and pass west of Tindale Hill and Causey Park Bridge. Just north of Burgham Park, it would re-join the line of the existing carriageway and widening would continue along the existing road northwards, until it meets the existing dual carriageway north of Felton.

- 1.2.2. It has been confirmed that the project is a Nationally Significant Infrastructure Project (NSIP) under the Planning Act (2008) and will therefore require a Development Consent Order (DCO) application to be made. It has been identified that the Scheme is likely to result in significant environmental effects and that an EIA is required in support of the DCO application and will be prepared under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.

### 1.3. LEGISLATIVE FRAMEWORK

- 1.3.1. Legislation of specific relevance to this report is outlined below:

#### **TREE PRESERVATION ORDERS**

- 1.3.2. The Town and Country Planning Act 1990 places a duty upon local planning authorities to make provision for the preservation and planting of trees when granting permission for new development<sup>1</sup>. It also empowers local planning authorities to make Tree Preservation Orders (TPO) where it is expedient in the interests of amenity to make provision for the preservation of trees and woodlands<sup>2</sup>.

#### **Purpose of a Tree Preservation Order**

- 1.3.3. The purpose of a TPO is to protect specific trees, groups of trees and woodlands for the purpose of amenity. In the Secretary of State's view 'Orders should be used to protect trees and woodlands if their removal would have a significant negative impact on the local environment and its enjoyment by the public'<sup>3</sup>.
- 1.3.4. A TPO does not prevent the removal of trees in order to implement development. It does however prevent their unauthorised removal and ensures that they can be fully considered when determining whether development is appropriate and acceptable.
- 1.3.5. A TPO makes it a statutory offence to carry out any of the following works to trees without the formal consent of the Local Planning Authority (LPA):

**a. Cutting down**

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<sup>1</sup> Town and Country Planning Act 1990. s.13(197)(a)(b). Norwich: TSO

<sup>2</sup> Town and Country Planning Act 1990. s.13(198). Norwich: TSO

<sup>3</sup> Department for Communities and Local Government, 2014. Conserving and Enhancing the Historic Environment. [Online] Available at: <https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment#what-is-a-conservation-area> [Accessed 14 March 2019]

- b.** Topping
- c.** Lopping
- d.** Uprooting
- e.** Wilful damage
- f.** Wilful destruction

### **Amenity Value**

- 1.3.6. Trees which are to be included within a TPO should exhibit a minimum level of current or future amenity value. This should be assessed by the LPA in a structured and consistent manner with Government advice making reference to the following requirements.

### **Visibility**

- 1.3.7. Trees should be visible, in whole or in part, from a public place such as a road, footpath or publicly accessible land.

### **Value**

- 1.3.8. Public visibility is in itself not sufficient to warrant inclusion within a TPO. Arboricultural features should also exhibit merit in terms of one or more of the following criteria:

- a.** Size and form
- b.** Future potential
- c.** Rarity, cultural or historical value
- d.** Contribution to, and relationship with, the landscape
- e.** Contribution to the character or appearance of a conservation area

### *Other Factors*

- 1.3.9. Other factors such as nature conservation may be considered when making a TPO but on their own would not warrant making an Order.

## **CONSERVATION AREAS**

- 1.3.10. A conservation area is an area which has been designated because of its special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance<sup>4</sup>. Trees have the ability to positively contribute towards the character, appearance or general amenity of a conservation area and, if not protected by a tree preservation order, are protected by the provisions in section 211 of the Town and Country Planning Act 1990.

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<sup>4</sup> Department for Communities and Local Government, 2014. Conserving and Enhancing the Historic Environment. [Online] Available at: <https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment#what-is-a-conservation-area> [Accessed 20 March 2019]

1.3.11. Section 211 of the Town and Country Planning Act 1990 makes it a statutory offence to carry out any of the following works to trees<sup>5</sup> located within a conservation area without first providing the LPA with six weeks' notice of intent<sup>6</sup>:

- a. Cutting down
- b. Topping
- c. Lopping
- d. Uprooting
- e. Wilful damage
- f. Wilful destruction

1.3.12. Although the LPA must normally be given six weeks' notice of intent to carry out work to trees in a conservation area, certain exemptions exist. These include, but are not limited to, the following criteria:

- a. The making safe of dangerous trees where there is an immediate risk of serious harm
- b. The removal of dead wood or dead trees
- c. Work necessary to abate an actionable legal nuisance
- d. Where work is necessary to implement a grant of full planning consent

1.3.13. It is therefore essential that, unless a valid exemption clearly applies, Northumberland Council is given six weeks' notice prior to undertaking any pruning or felling works to, or any development activities within the Root Protection Area (RPA), of any tree protected by virtue of a conservation area.

## EXEMPTIONS

1.3.14. Within Tree Preservation Orders and Conservation Area Legislation, where planning permission is granted or where tree protection legislation is disapplied, the need for permission to carry out trees works may not arise. However, the LPA should be advised prior to work being undertaken that affects protected trees, so that their records remain accurate and to ensure there are no misunderstandings that may lead to inadvertent prosecution.

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<sup>5</sup> Except for trees whose stem diameter at 1.5 metres (m) above ground level:

- does not exceed 75 mm; or
- has a stem diameter of 100 mm or less and is to be removed for the sole purpose of improving the growth of other trees (e.g. thinning as part of forestry operations).

<sup>6</sup> This does not apply to trees which are already protected by a TPO; these trees are subject to the procedures and controls for any tree covered by such an Order.



## ASH DIEBACK

- 1.3.15. Plant health legislation is influenced and governed by international<sup>7</sup> and European legislation<sup>8</sup> to protect against international spread of pest and disease.
- 1.3.16. The Plant Health Act 1967 empowers government to pass secondary legislation to control “*pests and diseases injurious to agricultural or horticultural crops, or to trees or bushes*”<sup>9</sup>.
- 1.3.17. Under the Act ‘Pests and diseases’ are:
- “taken as references to insects, bacteria, fungi and other vegetable or animal organisms, viruses and all other agents causative of any transmissible disease of agricultural or horticultural crops or of trees or bushes, and also as including references to pests in any stage of existence”*<sup>10</sup>.
- 1.3.18. Section 1(2)(a) defines The Forestry Commission as the competent Authority for “...the protection of forest trees and timber from attack by pests (“timber” for this purpose including all forest products)”, whereas section 1(2)(b) identifies the Secretary of State (currently Defra) as the Competent Authority for all plants. Section 3 concerns control of spread of Pests and disease.
- 1.3.19. The Plant Health (Forestry) (Amendment) Order 2012 was made as an emergency order on 29<sup>th</sup> October 2012 to grant the Forestry Commission powers as the Competent Authority and bring in legal controls for *Chalara fraxinea*/*H. fraxineus*. This amended the Plant Health (Forestry) Order 2005 to include provisions for this disease. Detailed background information is contained within the explanatory notes of the 2012 order.
- 1.3.20. On 22<sup>nd</sup> November 2012, The Plant Health (England) (Amendment) Order 2012 empowered the Secretary of State to be Competent Authority with regards to *Chalara fraxinea*/*H. fraxineus*. The order ‘amends the Plant Health (England) Order 2005 (S.I. 2005/2530) to include measures to prevent the introduction and spread of *Chalara fraxinea* T. Kowalski, including its teleomorph *Hymenoscyphus pseudoalbidus*<sup>11</sup>, a cause of ash dieback’<sup>12</sup>.
- 1.3.21. Specifically, The Plant Health (England) (Amendment) Order 2012:
- a.** prohibits the landing in or the spread within England of *Chalara fraxinea* T. Kowalski (article 2(7)).
  - b.** prohibits the landing in or the movement within England of plants of *Fraxinus* L. intended for planting, which are infected with *Chalara fraxinea* T. Kowalski (article 2(8)).

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<sup>7</sup> International Plant Protection Convention (IPPC) 1997, International Standards for Phytosanitary Measures

<sup>8</sup> European Council Directive 2000/29/EC

<sup>9</sup> Plant Health Act 1967 s1(1)

<sup>10</sup> Ibid s1(1)a

<sup>11</sup> *Hymenoscyphus pseudoalbidus* is now considered to be a synonym (old name) of *H. fraxinea*.

<sup>12</sup> The Plant Health (England) (Amendment) Order 2012 - Explanatory note

- c. imposes additional requirements on the landing in or movement within England of plants of *Fraxinus* L. intended for planting (article 2(9) to (12)).
- d. imposes additional requirements on the consignment from England to other parts of the European Union of plants of *Fraxinus* L. intended for planting (article 2(13)).<sup>13</sup>

1.3.22. In practice the legal controls are described by the Forestry Commission (as Competent authority):

- a. prohibits all imports of ash plants, trees and seeds into Great Britain until further notice (because no pest-free areas are established).
- b. prohibits all movements of plant-passported ash plants, trees and seeds within Great Britain until further notice (because no pest-free areas are in place).
- c. continues to permit logs, woodchips and firewood, which pose a very low risk of disease transmission especially when they are kiln dried, to be imported from EU countries. In the unlikely event that this material is found to contain infection, action such as destruction will be ordered.
- d. continues to permit movements within Great Britain of all ash timber, which poses a very low risk of disease transmission.
- e. continues to permit imports of sawn ash timber from certain countries abroad under existing regulations against the forestry pest Emerald Ash Borer (EAB). These require the material to be accompanied by official phytosanitary (plant health) certificates declaring that the material either originated in areas known to be free of EAB, or that the wood is bark-free (which addresses the Chalara risk as well) before entering Great Britain. Imported woodchips and bark of ash material have the same certification requirements as for wood, but the alternative to originating in an area of pest freedom is that the material has been processed into pieces of not more than 2.5cm thickness and width.

## 1.4. POLICY FRAMEWORK

1.4.1. National planning policies of specific relevance to this report are outlined below:

### NATIONAL POLICY

1.4.2. National policy relevant to the potential effects on arboricultural features is outlined in **Table 1-2**.

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<sup>13</sup> ibid

**Table 1-2 - Relevant National Policy**

Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
National Policy Statement for National Networks (NPS NN)	<p>The National Policy Statement for National Networks (NPS NN) also includes relevant guidance in chapter 5: Generic impacts. Paragraph 5.32 of this chapter supports the NPPF by stating:</p> <p>“The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss.”</p> <p>Paragraph 5.32 of the NPS NN further states that in instances where such trees would be affected by the proposed development then the applicant should either provide proposals for their conservation or give reasons for their loss.</p>	<p>Arboricultural features must be given due consideration during the design and approvals process.</p> <p>The Scheme should seek to avoid the loss or deterioration of ancient woodland and ancient or veteran trees unless there are wholly exceptional reasons and a suitable compensation strategy exists.</p>
National Planning Policy Framework (2019)	<p>The National Planning Policy Framework (NPPF) includes relevant guidance in chapter 15: Conserving and Enhancing the Natural Environment.</p> <p>Paragraph 170(b) recognises the economic and other benefits that trees and woodlands provide and the fact that they should be considered as part of a planning decision;</p> <p>Paragraph 175(c) identifies the principle that ‘development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly</p>	<p>Arboricultural features must be given due consideration during the design and approvals process.</p> <p>The Scheme should seek to avoid the loss or deterioration of ancient woodland and ancient or veteran trees unless there are wholly exceptional reasons and a suitable compensation strategy exists.</p>

Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
	exceptional reasons and a suitable compensation strategy exists <sup>14</sup> .	

## LOCAL POLICY

- 1.4.3. Local planning policy is administered by Northumberland County Council (NCC).
- 1.4.4. Local policy is currently contained in The Northumberland Consolidated Planning Policy Framework as of 14 March 2019 the NCC website states this document:

‘details the planning policy documents that are currently used to determine and guide planning applications in Northumberland.

This framework includes a number of planning policy documents put in place by the former County Council and District/Borough Councils. These policies are still being used to guide and determine planning applications by the Council, and are called ‘saved policies.

This framework is updated when new planning policy documents are adopted by the Council. The planning policies detailed in the framework will gradually be replaced by the new policies contained within the Northumberland Local Plan that is currently being prepared by the Council.’<sup>15</sup>

- 1.4.5. Within this document Annex B, Section A stipulates which policy documents apply and are used to determine planning applications. Relevant policies are identified in **Table 1-3**.

**Table 1-3 - Relevant adopted local policy in The Northumberland Consolidated Planning Policy Framework**

Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
<b>Alnwick District Local Development</b>	<b>Objective 7</b> Protect and enhance the quality and unique character of the countryside and landscape and the geological and biological	The Scheme would seek to avoid the loss or deterioration of ancient

<sup>14</sup> “For example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat.”

<sup>15</sup> <https://www.northumberland.gov.uk/Planning/Planning-policy/Policies.aspx> accessed 14 March 2019

Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
<p><b>Framework - Core Strategy Development Plan Document</b> Adopted October 2007</p>	<p>diversity of the natural environment throughout the district.</p> <p><b>Objective 8</b> Prevent the unnecessary loss of valuable open land to development. Open land can be important for: farming, landscape quality, local character, recreation, functional floodplain, or ground water protection.</p> <p><b>Policy S3</b> Sustainability Criteria</p> <p><b>Policy S12</b> Protecting and Enhancing Biodiversity and Geodiversity</p> <p><b>Policy S13</b> Landscape Character</p> <p><b>Policy S14</b> Development in the Open Countryside</p>	<p>woodland and ancient or veteran trees unless there are wholly exceptional reasons and a suitable compensation strategy exists.</p> <p>The overall effect of tree/woodland loss will be assessed against the benefits of the Scheme and the compensation/mitigation proposals</p>
<p><b>Castle Morpeth District Local Plan 1991-2006</b> Adopted February 2003</p>	<p><b>Policy C14</b></p> <p>The council will make Castle Morpeth a more attractive place to live, work and take recreation by improving the landscape, nature conservation and visual amenity of the area through appropriate programmes of afforestation, hedgerow planting and woodland management.</p> <p><b>Policy C15</b></p> <p>Developers will be required to:</p> <ul style="list-style-type: none"> <li>i) Provide landscaping including tree planting and hedgerows, particularly indigenous broadleaved species, wherever appropriate, in new development.</li> <li>ii) Protect existing trees and hedgerows on sites where development is in progress. Tree preservation orders will be declared as necessary</li> </ul> <p>Developers should pay particular attention to the landscape of the borough to the east of the A1 and to support and, where appropriate, initiate suitable planting Schemes both directly and in support of the green initiative.</p>	<p>The Scheme would avoid or mitigate tree loss through avoidance and protection of trees while also compensating through planting/afforestation.</p> <p>Landscape impacts should be minimised.</p>

- 1.4.6. NCC is currently processing a new overarching policy document for the Authority - the Northumberland Local Plan. This plan is currently undergoing examination and the Proposed adoption date of is March 2020.
- 1.4.7. Relevant proposed policies are laid out in **Table 1-4**. These proposed policies are not yet adopted but, (perhaps being a more recent reflection of the LPA's position) may influence responses to applications and may, in practice, supersede those adopted policies in **Table 1-2**.

**Table 1-4 - Relevant Local policy in the Northumberland Local Plan - Publication Draft January 2019**

Proposed Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
Table 3.1 Strategic Objectives in Northumberland - Environment	To conserve and enhance Northumberland's distinctive and valued natural, historic, water and built environments, ensuring that these assets continue to be experienced and valued by and residents and visitors to the county and protected from inappropriate development.	The Scheme would avoid or mitigate tree loss through avoidance and protection while compensating through planting/afforestation.  Landscape impacts should be minimised.
Policy QOP 2 Good design and amenity	3. In order to provide a high standard of amenity and minimise any adverse impacts on amenity, development proposals will need to ensure that:  b. Trees, other green and blue infrastructure and soft landscaping of amenity value are retained and are introduced where they would enhance amenity of the development;	Amenity including visual amenity impacts would be minimised.
Policy QOP 4 Landscaping and trees	1. Where relevant, new development will be expected to incorporate well-designed landscaping and respond appropriately to any existing landscape features.  2. Development proposals should ensure that:	The Scheme would seek to avoid the loss or deterioration of trees and woodland unless a suitable compensation strategy exists.



Proposed Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
	<p>a. Landscaping design is of a high quality, in accordance with the principles set out in Policy QOP 1;</p> <p>b. Existing features which contribute towards the character of the area, or amenity, are retained wherever possible and sympathetically incorporated into the overall design of the Scheme;</p> <p>c. Any hard or soft landscaping is appropriate, functional and well-integrated into the design of the development;</p> <p>d. Trees, and other spaces and features that provide green and blue infrastructure, are preserved, enhanced and introduced into the landscaping scheme wherever possible;</p> <p>e. There is no loss of existing trees which are valuable in terms of amenity, biodiversity or the landscape;</p> <p>f. Any tree lost is replaced on-site or at a suitable location in the local area;</p> <p>g. Any protected vegetation, including trees within Conservation Areas, trees with Tree Preservation Orders (TPOs), protected habitats and important hedgerows, are preserved in accordance with the relevant national legislation, policy and guidance;</p> <p>h. Planting schemes are compatible and appropriate to the site and its use; species that may damage other vegetation or wildlife should be avoided; and</p> <p>i. There will be no unacceptable damage to vegetation which is to be retained as part of the landscaping scheme during construction; and</p> <p>j. Provision is made for the long term maintenance of new landscaped areas.</p> <p>3. The Council will protect trees and woodlands which are of a high amenity value</p>	<p>The overall effect of tree/woodland loss will be assessed against the benefits of the Scheme and the compensation/mitigation proposals</p>

Proposed Policy	Relevant Policy Objectives	Significance of impact of the Scheme on policy objective
	<p>through TPOs and planning conditions where appropriate. Where the loss of a protected tree is granted permission, replacement compensatory planting will be required.</p> <p>4. Development resulting in the loss or deterioration of ancient woodland and ancient or veteran trees will not be permitted unless wholly exceptional reasons exist to justify any loss or deterioration and a suitable compensatory strategy has been proposed.</p>	
Table 10.1	NCC recognises Ancient Woodland and Trees of National Importance	Emphasises that these features will be regarded as High Value within the assessment

## OTHER GUIDANCE

1.4.8. Other guidance of specific relevance to this report is outlined below:

### British Standard BS 5837:2012

1.4.9. British Standard BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (BS 5837:2012) provides recommendations and guidance on the relationship between trees and design, demolition and construction processes. It sets out principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures and is applicable whether or not planning consent is required.

### Ancient Woodland and Veteran Trees: Protecting them from Development

1.4.10. The Forestry Commission and Natural England provides guidance on 13 October 2013 the protection of ancient woodland and veteran trees from development<sup>16</sup>. This guidance was updated on 05 November 2018 and advises the following should be undertaken in relation to ancient and veteran trees and ancient woodland:

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<sup>16</sup> <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>, updated 05 November 2018, accessed 18 November 2018



- a.** Consult Inventories including the ancient woodland inventory, the ancient tree inventory and the wood pasture and parkland inventory.
- b.** Assess potential impacts.
- c.** Provide evidence of the ancient woodland status and impacts to make an informed decision.
- d.** Provide mitigation by:
  - i. A buffer zone of semi-natural habitat should be left of at least 15 m between any development and ancient woodland
  - ii. A buffer zone should be left between any veteran, ancient or aged tree and proposed development of at least 15 times the diameter of its stem or 5 m from the edge of its canopy, if that is greater. improving the condition of the woodland
  - iii. Putting up screening barriers to protect woodland or ancient and veteran trees from dust and pollution
  - iv. Noise or light reduction measures
  - v. Protecting ancient and veteran trees by designing open space around them
  - vi. Identifying and protecting trees that could become ancient and veteran trees in the future
  - vii. Rerouting footpaths
  - viii. Removing invasive species
- e.** Provide compensation for loss or damage (as a last resort) by:
  - i. Planting new native woodland or wood pasture
  - ii. Restoring or managing other ancient woodland, including plantations on ancient woodland sites, and wood pasture
  - iii. Connecting woodland and ancient and veteran trees separated by development with green bridges, tunnels or hedgerows
  - iv. Long-term management plans for new woodland and ancient woodland
  - v. Managing ancient and veteran trees
  - vi. Planting individual trees that could become veteran and ancient trees in future
  - vii. Monitoring the ecology of the site over an agreed period

1.4.11. Within this report these processes have been adopted with regards to arboricultural impacts. Details of compensation are described in detail within **Chapter 7: Landscape and Visual** and **Chapter 9: Biodiversity** of this ES.

## 2. METHODOLOGY

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### 2.1. ASSESSMENT METHODOLOGY

- 2.1.1. This assessment has been undertaken in accordance with guidance provided within The Design Manual for Roads and Bridges. Volume 11: Environmental Assessment Section 2, Part 5<sup>17</sup>; the significance of arboricultural effects has been identified using guidance provided within **Tables 2.1 to 2.4**.
- 2.1.2. This assessment identifies the arboricultural impacts and effects of the Scheme during both construction and operation. For the purposes of this assessment construction is defined as the period during which all site clearance, development and soft-landscaping activities are taking place; Operation is defined as 15 years after construction works have ceased.
- 2.1.3. This assessment provides an understanding of the likely arboricultural effects associated with the Scheme. It utilises information which is available readily available either as a desk-study or from the walkover survey. This form of assessment represents an effective method of highlighting potentially significant impacts which may influence detailed design.

### 2.2. STUDY AREA

- 2.2.1. The arboriculture Study Area is defined as the area within which arboricultural features may experience effects associated with the construction of the Scheme. It is the Order Limits at the time of survey (March 2018) plus a 15 m buffer. This buffer ensures that arboricultural features which are outside the Order Limits but whose RPAs may be affected by construction activities are recorded and considered. The Study Area is shown in Figure B1 of **Appendix B** of this report.
- 2.2.2. The 15 m buffer accounts for the maximum size of a Root Protection Area (RPA) as specified in British Standard BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* and also the Buffer Zone for ancient woodland. It does not account for the RPA of Ancient and Veteran trees which is proportionately larger, however, this is considered on a case by case basis.
- 2.2.3. The Development Control Order boundary defines the legal boundary for permanent and temporary works. This boundary has changed since the Study Area was used for survey. Features not surveyed are discussed in Baseline Conditions. Figure B1 showing the difference is contained within **Appendix B** of this report.

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<sup>17</sup> Highways Agency (2008).

## 2.3. VALUE/SENSITIVITY

- 2.3.1. In accordance with relevant guidance<sup>1819</sup> topic specific descriptors and criteria for identifying the value of arboricultural features has been utilised details of which are provided in **Table 2-1**.

**Table 2-1 - Criteria for Value/Sensitivity of the Arboricultural Resource**

	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
Very High	N/A	N/A	Unlikely to apply to arboricultural elements. Includes features of international value and importance.
High	A	>40 years	Trees, groups or woodlands which, because of their great age, size or habitat continuity are of exceptional value as arboricultural, landscape, conservation or cultural features (e.g. ancient or veteran trees and ancient woodland).
Medium	A	>40 years	<p>Trees, groups or woodlands of identifiable arboricultural, landscape or cultural value.</p> <p>Trees that are of particularly good examples of their species, especially if rare or unusual (e.g. notable specimens);</p> <p>Trees that are essential components of groups, or of formal or semi-formal arboricultural features;</p> <p>Trees, groups, or woodlands of particular visual importance as arboricultural and/or landscape features.</p>
Low	B	20+ years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. the presence of significant though remediable defects)

<sup>18</sup> BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations

<sup>19</sup> The Design Manual for Roads and Bridges. Volume 11: Environmental Assessment Section 2, Part 5, Highways Agency (2008).

	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
			<p>including unsympathetic past management and storm damage);</p> <p>Trees lacking the special quality necessary to merit category A designation;</p> <p>Trees present in numbers, usually 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;</p> <p>Trees with material conservation or other cultural value.</p>
Very Low	C	<20 years	<p>Trees with a stem diameter of less than 150 mm;</p> <p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories;</p> <p>Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits;</p> <p>Trees with no material conservation or other cultural value.</p>
Unsuitable	U	<10 years	<p>Trees that present a hazard or risk to people or property</p> <p>Trees 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;</p> <p>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse;</p> <p>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline;</p>

	BS 5837 Category	Remaining Life Expectancy	Typical Tree Quality and Value Descriptors
			Trees infected with pathogens of significance to the health and/or safety of other trees nearby.

### Sub-categories

- 2.3.2. The value associated with each arboricultural feature is defined by its sub-category. Sub-categories vary depending upon the overall value of the arboricultural feature, carry equal weight, do not influence retention priority and are simply included to indicate the primary value(s) associated with each surveyed feature. The sub-categories assigned to each arboricultural feature are identified within the Arboricultural Survey Schedule included in **Appendix A** of this report.

**Table 2-2 - Sub-Categories Associated with High Value Category A Arboricultural Features**

Sub-category	Area of value	Estimated remaining life expectancy (years)	Description
1	Arboricultural	>40	Trees that are of particularly good examples of their species (e.g. notable specimens), especially if rare or unusual; or those that are essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principle trees within an avenue).
2	Landscape	>40	Trees, groups, or woodlands of particular visual importance as arboricultural and/or landscape features.
3	Cultural	>40	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. ancient trees, veteran trees and ancient woodland).

**Table 2-3 - Sub-Categories Associated with Low Value Category B Arboricultural Features**

Sub-category	Area of value	Estimated remaining life expectancy (years)	Description
1	Arboricultural	>20	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. the presence of significant though remediable defects including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the special quality necessary to merit category A designation.
2	Landscape	>20	Trees present in numbers, usually 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.

**Table 2-4 - Sub-categories Associated with very Low-Value C category Arboricultural Features**

Sub-category	Area of value	Estimated remaining life expectancy (years)	Description
1	Arboricultural	>20	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
2	Landscape	>20	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.

Sub-category	Area of value	Estimated remaining life expectancy (years)	Description
3	Cultural	>20	Trees with no material conservation or other cultural value.

2.3.3. Arboricultural effects have been identified on the basis that all relevant mitigation measures have been undertaken. All likely significant effects will be discussed.

## 2.4. ASSESSMENT OF IMPACTS

2.4.1. A 15 m buffer has been allowed between where works associated with the construction and operation of the Scheme are in proximity to trees. as a worst-case scenario, within this area it is assumed that trees cannot be retained, and mitigation is not feasible.

2.4.2. This Impact assessment considers the magnitude of change to the arboricultural resource. Impacts may be adverse or beneficial. The criteria within **Table 2-5** have been applied.

**Table 2-5 - Magnitude of Impact and Typical Descriptors**

Magnitude of Impact	Typical Description and Criteria
Major	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (Adverse).
Major beneficial	Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality (Beneficial).
Moderate adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements (Adverse).
Moderate beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality (Beneficial).
Minor adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements (Adverse).
Minor beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact



Magnitude of Impact	Typical Description and Criteria
	on attribute or a reduced risk of negative impact occurring (Beneficial).
Negligible adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements (Adverse).
Negligible beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements (Beneficial).
No Change	No loss or alteration of characteristics, features or elements; no observable impact in either direction.

2.4.3. Within the impact assessment, impacts are an approximation and the following limitations apply:

- a. The quantifications provided are based on generalised tree crown spreads and approximations of canopy cover for tree groups and woodlands, using survey data.
- b. Morphology and condition of trees in the field will vary and change over time.
- c. Positions of trees and woodlands have not been plotted using a topographical survey therefore “borderline” trees may subsequently be included or excluded from impacts.
- d. There may be instances where 15 m working space is not needed and other cases where this is exceeded. Detailed design should seek to avoid impacts and adjust working space where possible. At this stage a precautionary approach has been adopted.
- e. There may be cases where digitised crowns slightly over or underestimate canopy cover<sup>20</sup>.

## 2.5. ASSESSMENT OF SIGNIFICANT EFFECTS

2.5.1. This assessment provides an understanding of the likely arboricultural effects associated with the Scheme. It utilises information which is available readily available either as a desk-study or from the walkover survey. In accordance with relevant guidance topic specific descriptors and criteria for identifying the value of arboricultural features have been utilised, the Impacts are assessed as described in **Section 2.4** above.

2.5.2. The combination of value and the magnitude of impact indicate the likely significant effects that may arise as a consequence of the Scheme. The descriptors are contained within **Table 2-6**.

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<sup>20</sup> Canopy cover is the area or percentage of ground covered by tree crowns.



**Table 2-6 - Significance of Effect**

<b>MAGNITUDE OF IMPACT (DEGREE OF CHANGE)</b>						
<b>ARBORICULTURAL VALUE (SENSITIVITY)</b>		<b>No Change</b>	<b>Negligible</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>
	<b>Very High</b>	Neutral	Slight	Moderate or Large	Large or Very Large	Large
	<b>High</b>	Neutral	Slight	Slight or Moderate	Moderate or Large	Large or Very Large
	<b>Medium</b>	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	<b>Low</b>	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
	<b>Very Low</b>	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

- 2.5.3. Arboricultural effects have been identified on the basis that all relevant mitigation measures have been undertaken. Only significant effects will be discussed.
- 2.5.4. Significant effects are defined on a basis of professional judgement. They include those which affect nationally or locally important receptors. These include not only ancient or veteran trees and ancient woodland but also effects which are potentially important to local stakeholders in terms of public and private amenity. These effects may include impacts to protected trees or the loss of large numbers of very low-quality features where this may affect the enjoyment of the area by residents or members of the travelling public. Significant arboricultural effects are those which should be considered as part of the design or decision-making process.
- 2.5.5. For details of individual features refer to the Tree Survey Schedule in **Appendix A** and The Tree Constraints Plans in Figure B3 in **Appendix B** of this report.
- 2.5.6. For identification of trees likely to be removed refer to The Tree Protection Plan on Figures B4a and B4b in **Appendix B.4** of this report.

## **2.6. METHOD OF BASELINE DATA COLLECTION**

### **DESK STUDY**

- 2.6.1. A desk-study has been undertaken as a means of identifying any statutory and non-statutory constraints which may apply to arboricultural features within the Study Area. The desk-based review has considered the following sources:

### **Tree Preservation Orders and Conservation Areas**

- 2.6.2. Northumberland County Council is responsible for implementing any legal controls imposed through TPOs and conservation areas within the Study Area. Confirmation regarding the statutory status of arboricultural features within the Study Area was obtained from NCC Central Registry Team, on 03 March 2018.

### **Notable, Ancient and Veteran Trees**

- 2.6.3. The presence of locally notable, ancient and veteran trees within the Study Area was checked using the Woodland Trust's Ancient Tree Inventory<sup>21</sup> on 14 March 2019.

### **Ancient Woodland**

- 2.6.4. The presence of ancient woodlands within the Study Area was checked using Natural England's Multi Agency Geographical Information for the Countryside (MAGIC) map<sup>22</sup> on 14 March 2019.

### **Historical Records**

- 2.6.5. The history of Coronation Avenue was researched using the British Newspaper Archive<sup>23</sup>.

### **SITE VISIT / SURVEYS**

- 2.6.6. A walkover survey of arboricultural features within the Study Area was undertaken on weeks commencing 23 April, 4 June, 16 July and 17 September 2018.
- 2.6.7. The arboricultural survey was undertaken in accordance with British Standard BS 5837:2012 (BS 5837) with Ordnance Survey Master Map forming the base mapping. The arboricultural survey was undertaken in accordance with the following criteria:
- a.** Arboricultural features have been recorded as groups or wooded areas where this has been deemed appropriate. Groups have been recorded on the basis that they form distinct arboricultural features either aerodynamically, visually or because they contain trees of similar cultural and biodiversity value.
  - b.** Arboricultural features have been inspected using the Visual Tree Assessment methodology as purported by Mattheck and Breoler (Mattheck & Breloer, 2006).
  - c.** Arboricultural features have been awarded a quality (sensitivity) value based upon guidance provided within British Standard BS 5837:2012 *Trees in relation to design, demolition and construction* – Recommendation (BS 5837:2012) Table 1.
  - d.** The walkover survey was carried out from ground level only.

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<sup>21</sup> [www.ati.woodlandtrust.org.uk](http://www.ati.woodlandtrust.org.uk)

<sup>22</sup> [www.magic.gov.uk](http://www.magic.gov.uk)

<sup>23</sup> <https://www.britishnewspaperarchive.co.uk/> accessed April 2019.

- e.** No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- f.** Tree heights and canopy spreads have been estimated to the nearest metre.

- 2.6.8. Where access allows, stem diameters have been measured in accordance with Annex C of BS 5837:2012. Diameters of single stem trees on level ground have been measured at 1.5 m above ground level. The diameters of other commonly encountered stems have been measured where most appropriate and this is recorded within the schedule.
- 2.6.9. The combined stem diameters for multi-stemmed trees have been calculated in accordance with BS 5837:2012 paragraph 4.6.1. Apart from ancient and veteran trees all root protection areas have been calculated as an area equivalent to a circle with a radius 12 times the stem diameter. For ancient and veteran trees root protection areas have been calculated as an area equivalent to a circle with a radius 15 times the stem diameter.

## **2.7. ASSESSMENT ASSUMPTIONS AND LIMITATIONS**

- 2.7.1. This assessment has been undertaken based upon the following assumptions:
- a.** That all arboricultural features within the footprint of the highway will need to be removed
  - b.** A buffer of 15 m has been applied to the outside of the Scheme Order Limits. This is to take into account any trees whose root protection areas may extend within the Scheme but are growing on third party land.
  - c.** The amount of tree impacted in this area and degree of impact will be assessed via detailed site survey and “micro siting” at detailed design stage.
  - d.** That where the proposed working area encroaches into the root protection area of adjacent arboricultural features then this will result in adverse impacts including root severance and soil compaction. It is further assumed that these impacts will have such a large adverse impact on affected trees that they will become unsustainable and therefore need to be removed.
  - e.** That all arboricultural features identified for retention can be sustainably protected during construction period and can therefore be retained.
- 2.7.2. The following limitations apply to this assessment:
- a.** Arboricultural survey data is of a preliminary nature and has been collected during a walkover survey. Only defects visible from the ground have been noted and some features may not have been inspected closely due to access difficulties, the presence of dense ivy or vegetation or safety constraints. However, this it would not be expected that this would affect the outcome of the assessment.
  - b.** The survey has only been undertaken from land within the client’s ownership, from public land or from areas where formal access has been arranged.
  - c.** Safety related features have recorded on the basis that the arboricultural features will be subject to a normal programme of tree hazard assessment and only those features which materially affect the quality of the feature or pose a real and immediate safety concern have been recorded.

- d.** The assessment has been undertaken without the benefit of a detailed design. Design information relating to items such as sightlines, signs, street lighting, fences, underground services, ancillary structures and permanent access routes. Features such as these may all require additional tree removal which has not been considered at this stage.
- e.** Working space requirements greater or smaller than those which have been assumed may increase or decrease the number and area of arboricultural features which have been identified as needing to be removed. Working space requirements will be further developed during detailed design and construction and specific areas of tree removal will be finalised.
- f.** Arboricultural survey data is typically valid for a period of two years unless otherwise stated. Significant environmental events (such as extreme weather conditions) or changes to the Scheme may render it invalid within a shorter timescale.
- g.** Records held on the Ancient Tree Inventory are collected on a voluntary basis, therefore the absence of records does not demonstrate the absence of ancient, veteran or notable trees but may simply indicate a gap in recording coverage.
- h.** Whilst arboricultural surveys are not seasonally limited it is the case that certain pests and diseases may be more or less evident at different times of the year. This is especially true of certain wood decaying fungi such as the Giant Polypore (*Meripilus giganteus*) where fruiting bodies are short-lived and the early stages of root decay may not result in other identifiable symptoms. Walkover survey data is therefore based upon observations made at the time of the site visit and may be subject to change should further or more detailed inspections be undertaken.
- i.** The position of arboricultural features has not been recorded on a topographical survey but has been estimated using aerial photography. The position and extent of these features should be regarded as approximate only.

### **Ash Dieback Survey**

- 2.7.3. A survey of Duke's Bank Wood, an ancient semi-natural woodland, was undertaken on 17 and 18 September to determine the constraints and impacts of Ash Dieback at this location. The report associated with this survey is contained in **Appendix C.3** of this report.

### 3. PREAPPLICATION ENGAGEMENT

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#### PREScribed CONSULTees

- 3.1.1. In line with s42 Planning Act 2008 and The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009<sup>24</sup>, prescribed consultees identified for preapplication engagement on tree and woodland impacts are:
- a.** Natural England – All proposed applications likely to affect land in England
  - b.** The Forestry Commission – All proposed applications likely to affect the protection or expansion of forests and woodlands.

#### NON-PREScribed CONSULTees

- 3.1.2. The woodland trust is neither a statutory, nor a prescribed consultee but is the UK's leading charity lobbying for protection of ancient woodland, and ancient and veteran trees. It is believed that they will therefore be affected by the Scheme so they have been consulted.

#### OTHER INTERESTS

- 3.1.3. The Forestry Commission are also the Competent Authority for "...the protection of forest trees and timber from attack by pests ("timber" for this purpose including all forest products)"<sup>25</sup>. They have therefore been consulted on management of Ash Dieback within the Study Area.
- 3.1.4. Meeting Notes are contained in **Appendix C.2** of this report and **Appendix 4.2: Environmental Consultation, Volume 1** of this ES (**Application Document Reference: TR010041/APP/6.1**).

#### DETAILS OF PREAPPLICATION ENGAGEMENT

##### Forestry Commission and Natural England

- 3.1.5. With regards to wider ecological impacts Natural England have been consulted as part of **Chapter 9: Biodiversity** of this ES, however, Natural England were invited to join the consultation with the Forestry Commission as Duke's Bank Wood is both an ancient woodland and a SSSI.
- 3.1.6. Both Natural England and the Forestry Commission attended a meeting on the 31 October 2018 with the Applicant.
- 3.1.7. The meeting discussed the following points:
- a.** Scheme overview as of October 2018 and key design elements

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<sup>24</sup> Schedule 1, column 1 and Column 2.

<sup>25</sup> Plant Health Act 1967 s1(2)(a)(i)

**b.** Overview of arboricultural resource and key receptors namely:

- i. Duke's Bank Wood.
- ii. High and Medium value features.
- iii. Coronation Avenue.

**c.** Potential Impacts to key receptors

**d.** Ancient woodland salvage and ancient woodland compensation

**e.** Felling licences and other local Forestry Commission interests

**f.** Ash dieback impacts constraints and licencing.

**The Woodland Trust**

3.1.8. The Woodland Trust was invited on the 14 March to attend a consultation meeting with the Applicant. A meeting took place on 28 March 2019 at the Woodland Trust's Grantham office.

3.1.9. The following points were presented and discussed:

**a.** Scheme overview as of March 2019 and key design elements

**b.** Overview of arboricultural resource and key receptors namely:

- i. Duke's Bank Wood.
- ii. High and Medium value features.
- iii. Coronation Avenue.

**c.** Potential Impacts to key receptors

**d.** Ancient woodland salvage and ancient woodland compensation

**e.** Felling licences and other local Forestry Commission interests

**f.** Ash dieback impacts constraints and licencing.

**SUMMARY OF RESPONSES**

**Forestry Commission and Natural England**

- 3.1.10. Ongoing discussion between the Applicant's ecology team and Natural England has enabled the joint development of an Ancient Woodland Strategy (refer to **Appendix 9.21: Ancient Woodland Strategy, Volume 7** of this ES (**Application Document Reference: TR010041/APP/6.7**)). Both the Forestry Commission and Natural England consider the partial loss of part of Duke's Bank Wood undesirable but accept the effects of the Scheme on Duke's Bank Wood. They have both been engaged in compensation as part of the Ancient Woodland Strategy, in particular, the need for a suitable ratio for replacement (confirmed as 12:1) and that the need for a management plan was emphasised. This has been addressed within the Ancient Woodland Strategy (refer to **Appendix 9.21: Ancient Woodland Strategy, Volume 7** of this ES (**Application Document Reference: TR010041/APP/6.7**)).
- 3.1.11. Although ash dieback typically presents a significant constraint to soil translocation as it will contain infected material, all agreed that translocation is desirable and the risks were low, given the short distance of translocation and mode of infection by Ash dieback. The



translocation of materials is therefore acceptable in principle, with an agreed method of movement of ash material, under the approved terms of a Statutory Plant Health Notice (SPHN) issued by the Forestry Commission.

### **The Woodland Trust**

- 3.1.12. The Woodland Trust have previously confirmed they object to the Scheme impacts on ancient woodland. This was also confirmed at the meeting.
- 3.1.13. The Woodland Trust also confirmed they do not support ancient woodland translocation or salvage as this inherently requires the damage of ancient woodland.
- 3.1.14. The Woodland Trust seek avoidance of impacts as a primary means of mitigation. Design should minimise land area required for access and construction, they also would wish to see that soil is protected and remediated in situ within the ancient woodland area.
- 3.1.15. Replanting of trees is considered compensation. The Woodland Trust also state that they believe no net loss or net gain of biodiversity cannot be achieved for ancient woodland.

### **FOLLOW UP ACTIONS**

- 3.1.16. Follow up action is to be undertaken to agree a SPHN with the Forestry Commission. Completion of a method statement and agreement for a SPHN to enable controlled and bio-secure processing and transportation of ash material is needed at detailed design.
- 3.1.17. Detailed design would take the Ancient Woodland Strategy (refer to **Appendix 9.21: Ancient Woodland Strategy, Volume 7** of this ES (**Application Document Reference: TR010041/APP/6.7**)) forward and develop a management plan in discussion with the Forestry Commission and Natural England.
- 3.1.18. Detailed design would minimise the footprint of construction within Duke's Bank Wood.

## 4. BASELINE CONDITIONS

### 4.1. DESK STUDY

#### TREE PRESERVATION ORDERS AND CONSERVATION AREAS

4.1.1. The desk study identified the following Tree Preservation Orders (TPO's)

**Table 4-1 - Northumberland County Council TPOs within the Study Area**

TPO Number	TPO Name	Potential Trees Affected
TPO 882585	(Floodgate Wood, Espley) Tree Preservation Order 1966	W23, H11, H15, T182, T185, T186, T187, T190, T192, T195, T196, T199, T200, T203

4.1.2. This TPO is 53 years old. While W23 was found to contain mature trees, it appears site clearance or damage to trees has historically taken place as significant gaps can be seen from aerial images and on site. The tree features are of value as they form part of the coronation avenue. The northern end of the Woodland is more dense and mature.

4.1.3. A copy of the TPO is contained in **Appendix C.1** of this report.

**Table 4-2 - Conservation Areas Within the Study Area**

Conservation Area Name	Location	Potential Trees Affected
Felton Conservation Area	Felton	None

4.1.4. Felton Conservation area covers the majority of Felton Village on the north bank of the River Coquet. Only a small portion (an access route) of the Study Area extends into this conservation area. A layout plan is contained within **Appendix C.1** of this report.

4.1.5. This access route follows the road named Riverside, an existing highway. Trees on this road were not surveyed as traffic will use the existing road. No construction or site clearance and therefore no impacts to trees were expected.

4.1.6. Where abnormal loads will use this route, a survey will be required at detailed design to understand potential impacts.



## ANCIENT WOODLAND

- 4.1.7. Ancient woodland is defined as any area that has been continuously wooded<sup>26</sup> since 1600 AD and accounts for approximately 2% of the United Kingdom's land area<sup>27</sup>. It is valued for its wildlife which may include rare or threatened species, its soils, its amenity value and its importance as a cultural, historical and landscape resource. Ancient woodland takes hundreds of years to establish and is an irreplaceable resource.
- 4.1.8. Ancient woodland includes both ancient semi-natural woodland (ASNW) and plantations on ancient woodland sites (PAWS). Ancient semi-natural woodland consists predominately of naturally regenerating trees which are native to the site. Trees within ASNW will be well suited to local environmental conditions, will be closely integrated into the ecology of the woodland and may represent a unique genetic resource.
- 4.1.9. Plantations on ancient woodland sites are those woodlands where the native trees have been removed and replaced with imported coniferous or broadleaved trees. These woodlands will still exhibit ancient woodland features including soils, flora and fauna and other historic features.
- 4.1.10. There is no distinction between ASNW and PAWS insofar as they are both identified as ancient woodland for the purposes of the NPPF<sup>28</sup>. The cultural and conservation values associated with ASNW and PAWS mean that they should automatically be assigned category A3 when undertaking a quality assessment in accordance with BS 5837:2012 table 1<sup>29</sup>. The existing condition of ancient woodland should not influence its quality assessment as if poor, this can usually be improved with appropriate management<sup>30</sup>.
- 4.1.11. Due to the irreplaceable nature of ancient woodland any loss or deterioration can only be partially compensated. Compensation measures must be determined on a site-specific basis and may include planting new native woodland and the implementation of positive management activities.
- 4.1.12. For the purposes of this report, ancient woodland is regarded as a high value finite resource which is of national importance.

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<sup>26</sup> This excludes the presence of open areas within the woodland and the periodic felling of trees either over its full extent or in part. Neither of these features/actions will necessarily negatively impact upon the value of the woodland and, in the instance of open areas, often has a positive effect on diversity of habitat.

<sup>27</sup> The Woodland Trust. *Ancient Woodland*. [online] Available at: <https://www.woodlandtrust.org.uk/visiting-woods/trees-woods-and-wildlife/woodland-habitats/ancient-woodland/> [Accessed 7 December 2017].

<sup>28</sup> Department for Communities and Local Government, *Guidance – Natural Environment* [online] Available at: <https://www.gov.uk/guidance/natural-environment> [Accessed 23 April 2019].

<sup>29</sup> British Standards Institute, 2012. *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations*. London: BSI.

<sup>30</sup> Department for Communities and Local Government, *Guidance – Ancient woodland and veteran trees; protecting them from development* [Online] Available at: <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences> [Accessed 23 April 2019].

- 4.1.13. A review of Defra's MAGIC website<sup>31</sup> (which provides geographic information about the natural environment from across UK government) on 14 March 2019 identified the following designated ancient woodlands within the Study Area:

**Table 4-3 - Designated Ancient Woodland in Study Area**

Name of Woodland	Grid Reference	Easting and Northing	Reference Features
Duke's Bank Wood	NZ1714999759	417149,599759	W120, W121, W122

- 4.1.14. The location and boundary of Duke's Bank Wood is shown in Figures B3 and B4 within **Appendix B** of this report.
- 4.1.15. Natural England and Forestry Commission guidance (referred to commonly as "Standing Advice") is a material planning consideration in planning decisions affecting ancient woodland, ancient trees and veteran trees<sup>32</sup>.
- 4.1.16. The general principles of that guidance are that no development will be permitted within 15 m of ancient woodland sites as a minimum. Consequently, a buffer zone of a minimum of 15 m shall be used except where pollution may impact the woodland<sup>33</sup> then a larger buffer zone is needed.
- 4.1.17. The proposed development will pass through the ancient woodland. An ancient woodland strategy has been developed in consultation with Natural England, including salvage of soils and the associated seed bank.

### ANCIENT AND VETERAN TREES

- 4.1.18. An ancient tree is defined as one 'that has passed beyond maturity and is old, or aged, in comparison with other trees of the same species'. Similarly, it may also be defined as one that has all or several of the following characteristics<sup>34</sup>,

- a.** Biological, aesthetic or cultural interest because of its great age
- b.** A growth stage that is described as ancient or post-mature

<sup>31</sup> <https://magic.defra.gov.uk/MagicMap.aspx>

<sup>32</sup> <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>

<sup>33</sup> Where pollution arises as part of the proposed development outside the buffer, pollution may drift into contact with the woodland. Impact of this may be difficult to determine. Where proximal pollution can be expected this should be assessed for impacts.

<sup>34</sup> The Woodland Trust. *Ancient Tree Guide No.4: What are ancient, veteran and other trees of special interest?* [pdf] Ancient Tree Forum. Available at: <http://www.ancienttreeforum.co.uk/resources/ancient-tree-guides/what-are-ancient-veteran-and-other-trees-of-special-interest/> [Accessed March 14 2019].

**c.** A chronological age that is old relative to others of the same species<sup>35</sup>

- 4.1.19. A veteran tree is one that possesses the physical characteristics of an ancient tree but which is not aged in comparison with other trees of the same species. Thus, a veteran tree may not necessarily be particularly old but, due to the rigours of life, may exhibit signs of ancientness.
- 4.1.20. Ancient and veteran trees are of considerable interest due to their cultural, historical, landscape and conservation values. They can be found in many locations including woodlands, wood pastures, parklands, hedgerow, orchards and other areas.
- 4.1.21. The cultural, historical, landscape and conservation values associated with ancient and veteran trees mean that they should automatically be assigned category A3 when undertaking a quality assessment in accordance with BS 5837:2012 Table 1<sup>36</sup>. The ability of such trees to provide many important benefits even if not alive means that this assessment criterion should apply whether physiologically declining or dead<sup>37</sup>.
- 4.1.22. The Ancient Tree Inventory (ATI) is administered by the Woodland Trust with support from volunteers and trained verifiers. The absence of a recorded tree on the ATI should not be taken as the absence of ancient or veteran trees within the Study Area.
- 4.1.23. A review of the ATI<sup>38</sup> on 14 March 2019 confirmed that the following ancient or veteran trees were recorded within the Study Area. Site survey has not identified and potential veteran or ancient trees outside the ancient woodland areas.

**Table 4-4 - Ancient and Veteran Trees Identified Through Desk Study**

Feature Reference	Species	ATI Reported Girth	Location	Easting Northing	Type
W120	Sycamore	6.02m at 0.1m	NZ17529979	417520, 599790	Veteran

<sup>35</sup> Owen, K. and Alderman, D., 2008. *The minimum girth of Ancient Trees*.

<sup>36</sup> British Standards Institute, 2012. *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations*. London: BSI.

<sup>37</sup> The woodland Trust. *Ancient Tree Guides No.3: Trees and development*. [pdf] Ancient Tree Forum. Available at: <http://www.ancienttreeforum.co.uk/wp-content/uploads/2015/02/ancient-tree-guide-3-development.pdf> [Accessed March 14 2019].

<sup>38</sup> Available at <https://ati.woodlandtrust.org.uk/>

W120	Hybrid sessile and English oak	5.61m at 0.1m	NZ17559981	417550, 599810	Veteran
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## NOTABLE TREES

4.1.24. The ancient tree forum suggests Notable Trees are usually:

- a. mature trees which stand out in their local environment because
- b. they are large by comparison with other trees around them
- c. they are often taller than ancient trees
- d. they may be fatter than many veteran trees but do not have any obvious veteran characteristics

4.1.25. In parts of the UK where trees are less common, a tree that is relatively small may be notable because it is significant in its local environment. Some more common trees may be relatively young e.g. Wellingtonias, but still appear remarkably large. Most notable trees will be worthy of recognition regionally or locally.<sup>39</sup>

4.1.26. Review of the ATI shows two notable trees have been recorded. These are shown in **Table 4-5**.

**Table 4-5 - Notable Trees Identified Through Desk Study**

Feature Reference	Species	ATI Reported Girth	Location	Easting Northing	Type
W120	Sycamore	3.7 m at 0.2 m	NZ17599977	417550,599770	Notable
W120	Holly	1.08 m at 0.2 m	NZ17559977	417550,599770	Notable

<sup>39</sup> The Woodland Trust. *Ancient Tree Guide No.4: What are ancient, veteran and other trees of special interest?* [pdf] Ancient Tree Forum. Available at: <http://www.ancienttreeforum.co.uk/resources/ancient-tree-guides/what-are-ancient-veteran-and-other-trees-of-special-interest/> [Accessed March 14 2019].

## 4.2. SITE SURVEY

- 4.2.1. In total, 980 arboricultural features were surveyed. A survey schedule of all features is contained within **Appendix A** of this report.
- 4.2.2. Tree locations are identified with a unique reference. This reference within the schedule at **Appendix A** may be cross-referenced with the Tree Constraints Plans shown on Figure B3 within **Appendix B** of this report.
- 4.2.3. **Table 4-6** summarises the Baseline Arboricultural Resource for the whole Study Area.

**Table 4-6 - Overall Baseline Arboricultural Conditions**

BS5837 Category	DMRB Value (Sensitivity)	Tree	Group	Linear Group	Hedge	Wooded Area	Shrubs	Grand Total
A	High	30	1	-	-	3	-	34
A	Medium	14	2	1	-	2	-	19
B	Low	406	24	18	55	31	-	534
C	Very Low	234	70	8	49	8	14	383
U	none	9	-	-	-	-	1	10
<b>Grand Total</b>		<b>693</b>	<b>97</b>	<b>27</b>	<b>104</b>	<b>44</b>	<b>15</b>	<b>980</b>

## HIGH VALUE FEATURES

- 4.2.4. 34 High Value arboricultural features were identified. Most were associated with Duke's Bank Wood (W120, W121, W122) including those identified in desk study.
- 4.2.5. T643-T666 and G119 are trees located on an earth bank approximately fifteen metres south of, and to the eastern end of, Duke's Bank Wood and are officially situated outside the ancient woodland boundary. It is possible these trees grow on an historic boundary of Duke's Bank Wood and are directly associated with the woodland and are, under the precautionary principle, considered ancient woodland. This needs to be discounted prior to any impacts occurring in this location.
- 4.2.6. Other veteran trees and an ancient Sycamore (T685) with a stem diameter of 1600 mm were identified. Nine trees of this type were recorded.

**Table 4-7 - Summary of High Value Features**

Feature Reference	Reason for Valuation
T666, T665, T664, T663, T662, T661, T660, T659, T658, T656, T655, T654, T653, T652, T651, T650, T649, T646, T645, T644, T643. G119	Mature ash trees associated with Duke's Bank Wood, perhaps forming a historic boundary
W122, W121, W120.	Ancient woodland forming Duke's Bank Wood
T91, T457, T688, T685, T684, T682, T681, T690, T701	Potential Ancient and/or Veteran Trees.
T19-T394	Cumulative Value of Low Value Features forming Coronation Avenue

- 4.2.7. An avenue of tree extends from Warreners House in the south of the Study Area to Earsdon Moor.
- 4.2.8. Over 300 Low Value trees are mature Lime and Beech trees that make up the avenue between Warreners House and Tritlington Church of England First School. Horse Chestnuts are planted North of Tritlington School.
- 4.2.9. The Scoping Reports suggests that in The Royal Record<sup>40</sup> that an avenue was planted to commemorate George VI coronation in 1936.
- 4.2.10. On the 17 December 1937, The Morpeth Herald reported 'The president of the Northumberland County Federation of Womens Institutes, Mrs Baker Cresswell, of Hauxley, Planted the last of 152 Horse Chestnut trees, representing the number of branches on the county, on the Great North Road, near Tritlington Schools. The trees will add to the beauty of the approach to Morpeth from the north.'
- 4.2.11. Several press archives from the Morpeth Herald in late 1953 and early 1954 report of the W.I. planting trees at the same location '*The Coronation Avenue of trees north of Tritlington School has been slightly extended and has had dead and damaged trees replaced and is now, said the chairman, a worthy commemoration of two coronations*'.

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<sup>40</sup> The Coronation Planting Committee (1939)



- 4.2.12. The horse chestnuts north of Tritlington Church of England First School were therefore planted around 1936-37 and renovated in 1953/54. It would appear that these trees have been replaced over the years. Aerial photography shows a significant number of trees North of Tritlington Church of England First School prior to 2012, perhaps 152. Site survey and later aerial imagery show approximately 68 trees remain. Many of these do not appear sizeable enough to originate from 1936 and many are whitebeam or rowan. However, it is possible that these trees are the original trees as poor growing conditions may account for their relatively small size. It is more likely the trees are more recent replacements.
- 4.2.13. It is therefore clear that these horse chestnuts, or at least their location, are the Coronation Avenue. What is not yet clear is whether the beech and lime trees between Warreners house and Tritlington Church of England First School originate from 1936 but were planted under another coronation Scheme or whether they are not related to a coronation at all. The size of these limes and beech trees suggests they may originate from 1936 but no evidence yet suggests a royal connection. On a precautionary basis it is assumed all trees are planted for the Coronation in 1936.
- 4.2.14. Overall these features form a high value feature due to their scale, historic status and condition. The horse chestnut component clearly has a historic connection but is depleted and in poor condition.

#### **MEDIUM VALUE FEATURES**

- 4.2.15. 19 Medium Value arboricultural features were identified including two woodlands (W23 and W24). Other Medium Value features include a linear group of mature oak trees (LG76) and other large mature trees not qualifying for ancient or veteran status.

#### **LOW VALUE FEATURES**

- 4.2.16. 534 Low Value arboricultural features were identified. However, as discussed, within this group are approximately 300 trees that make up Coronation Avenue, a High Value Feature. Individually these trees were mature and of significant value however due to numbers present, loss of an individual is unlikely to be significant.
- 4.2.17. Other trees within this category were mature trees, woodland and hedges, that while of significant age were not locally or regionally distinctive to be valued in a higher category. Examples include mature field hedges, mature trees or established early matures trees with potential to become Medium Value trees. Mature plantation woodland was also assessed as Low value.

#### **VERY LOW VALUE FEATURES**

- 4.2.18. 383 Very Low Value arboricultural features were identified. These were predominantly:
- a.** Trees of limited merit
  - b.** Unmanaged hedges or hedges with gaps (not accounting for ecological value)
  - c.** Young or scrubby woodland or groups
  - d.** Planted areas of limited interest or value – highway group planting for example.



**e.** Trees in poor condition but not defective enough to be unsuitable

**UNSUITABLE FEATURES**

4.2.19. Ten unsuitable features were identified these are summarised in **Table 4-8**. These are trees that are of little or no value due to their condition that may also be a hazard to people or property nearby. Where trees were found to pose an immediate threat to the safe use of the highway, the relevant contact within the highway authority was made aware and appropriate action advised. The remaining trees listed in **Table 4-8** below also need to be removed as a matter of good practice but at the time of inspection did not pose an immediate threat.

**Table 4-8 - Unsuitable Features to be Removed**

Feature Reference	Reason for Unsuitability	Action Recommended
S550 - Hawthorn	Dead	Landowner Remove Tree
T30 - Oak	Ganoderma australe at base. cavity below ground. decayed branch at 1.5m creating decay column. outwardly healthy crown. Highways England notified 6pm 19.09.2018. ref. no. 1668-19.09.2018. North Gate House NE61 3BU	Landowner Remove Tree, Highway Authority notified 19-09-18
T31 - Beech	Meripulus at base. sparse crown. hazard to highway. notified Highways England at 6pm 19.09.2018. ref. no. 1668-19.09.2018. North Gate House NE61 3BU	Landowner Remove Tree, Highways Authority notified 19-09-18
T127 - Beech	Cavity with decay fungi at 1m	Landowner Remove Tree
T174 - Beech	Large cavity at 1m	Landowner Remove Tree
T178 - Beech	Cavity in main fork. included bark in same union	Landowner Remove Tree
T360 - Ash	Major branch failure on eastern side. stub is decayed through to cavity in stem. sparse crown.	Landowner Remove Tree

Feature Reference	Reason for Unsuitability	Action Recommended
T463 – Scots Pine	Suppressed and leaning to north. occluded split at 5m.	Landowner Remove Tree
T527 - Sycamore	Dying	Landowner Remove Tree
T618 - Ash	Dying tree	Landowner Remove Tree

4.2.20. T683 was identified as unsuitable but was a large, windblown, dead ash stump that may be of value as a deadwood resource, adjacent to other veteran trees.

### 4.3. FUTURE BASELINE

- 4.3.1. The assessment of the future baseline considers the level or change that may occur in the absence of the Scheme. This change may occur due to either natural or manmade causes.
- 4.3.2. Within the Study Area, the future baseline arboricultural resource is expected to be largely stable but significantly affected by ash dieback for the foreseeable future.
- 4.3.3. A high proportion of features (approximately 200) contained ash trees. This is both within ancient woodland such as Duke's Bank Wood (W120-W122), mature woodland such as W69 and in newly planted woodland such as W29. No other species is known to be comparably affected.
- 4.3.4. However, some ash trees showed greater resistance to the disease. While a steady decline in ash is expected, in the long term the ash population may recover as these resistant trees regenerate.
- 4.3.5. Planting of ash not selected for resistance in the future will prove unviable within the Study Area for the foreseeable future. This will further compound the issue, as dying trees will be replaced less than other species.
- 4.3.6. For all non-ash species, new regeneration can be expected both naturally and through planting schemes under good land management.
- 4.3.7. Natural loss of trees due to age and the presence of pests and diseases can also be expected. In roadside areas this loss may be relatively faster due to felling hazardous trees to manage roadside risks. This can be expected with Coronation Avenue and has been observed within the 1953/54 section of horse chestnuts.
- 4.3.8. In summary, in the absence of the Scheme, the arboricultural resource will remain largely stable with small fluctuations in numbers overall. Larger, longer-term fluctuations within the ash population can be expected.

## 5. POTENTIAL IMPACTS

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### 5.1. CONSTRUCTION

- 5.1.1. Potential arboricultural impacts during construction have been identified with reference to British Standard BS 5837:2012. Potential impacts during construction are wholly adverse and have been identified as including the following:
- a.** The removal of arboricultural features to facilitate construction
  - b.** The removal of arboricultural features to create a temporary construction compounds and access
  - c.** Damage to retained trees resulting from:
    - i. Severance of roots caused by excavation
    - ii. Damage to soil and roots caused by compaction
    - iii. Damage to soil and roots caused by pollutants and contaminated surface run-off
    - iv. The smothering of trees due to significant accumulations of dust
    - v. The inappropriate pruning of trees to facilitate access
- 5.1.2. The main impacts identified are as follows:
- a.** Loss of approximately 21% of woodland area within the Study Area – moderate adverse impact overall
  - b.** Loss of 45% of trees and small groups within the Study Area – a major adverse impact overall
  - c.** Loss 55% of surveyed hedges within the Study Area – a major adverse impact overall
- 5.1.3. Impacts will be permanent in cases where woodland and trees cannot be directly replaced.
- 5.1.4. The greatest impacts occur to large features such as coronation avenue, highway embankment planting adjacent to the existing A1 or woodlands/groups directly within the path of the new route.

**Table 5-1 - Potential Impact Summary**

Features Impacted	Direct/Indirect	Total Area of Canopy (ha)	Area of Impact (Canopy (ha))	Potential Loss within Study Area	Magnitude	Adverse or beneficial	Reversible	Temporary or Permanent	Period
Woodland Clearance	Direct	28.2	6.0	21%	Moderate	Adverse	No	Permanent	100 years +
Trees and Small Group Clearance	Direct	30.2	13.4	45%	Major	Adverse	Partially	Permanent	30 years +
Hedgerow Clearance	Direct	12.5	6.9	55%	Major	Adverse	Partially	Permanent	15 years +

## 5.2. OPERATION

- 5.2.1. This initial assessment may be refined during detailed design of the Scheme, to retain trees that are on the edge of the construction by altering/refining design or adjusting working areas.
- 5.2.2. In the absence of the Scheme, trees may be sustainable where traffic is not present, for example, a decaying veteran tree located in a field. However, this same tree may present a hazard if incorporated into the Scheme adjacent to a live carriageway. Future impacts may also be expected where trees moderately impacted by the Scheme fail to recover.
- 5.2.3. Tree growth in some locations may be incompatible with the new Scheme. Where trees are located near hard surfacing, principles contained within BS5837:2012 will be used to ensure a harmonious relationship between the Scheme and the tree. This shall avoid the future conflicts and potential damage to trees, as well as helping to preserve highway infrastructure. Common conflicts occur with street lighting, traffic signals, signage and footways. They may have a future impact on the trees where they create problems for the function and safety of the highway.
- 5.2.4. Part removal of groups and woodland will need to consider the location and stability of retained trees. Where a tree is exposed to new wind forces that it has not previously adapted to, it may not be structurally strong enough and collapse. This in turn may lead to additional loss of trees as well as incompatibility with the Scheme.
- 5.2.5. Increases in local traffic and proportionate increases in air pollution will impact retained trees.
- 5.2.6. Changes in microclimate and exposure to wind and sun may impact retained trees.
- 5.2.7. Cumulative impacts may occur from additional infrastructure that develops to support the current Scheme in the future.

## 6. DESIGN, MITIGATION AND ENHANCEMENT

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### ANCIENT WOODLAND COMPENSATION

- 6.1.1. 8.16 ha of new woodland adjacent to River Coquet and Coquet Valley Woodlands SSSI and ancient woodland is proposed. To supplement the woodland creation, salvage techniques will be undertaken where possible to take material from the ancient woodland donor site to the receptor area of the Woodland Creation Area. The proposed actions will help inoculate at least the Receptor Area of the Woodland Creation Area with propagules (seed, bulbs and mycorrhiza), as well as local, native woody species that have grown in the immediate area.
- 6.1.2. Following consultation with Natural England, it has been agreed that woodland creation shall be implemented in accordance with the **Ancient Woodland Strategy** (refer to **Appendix 9.23: Ancient Woodland Strategy, Volume 7** of this ES (**Application Document Reference: TR010041/APP/6.7**)).

### TREE PROTECTION

- 6.1.3. Trees up to 15 m outside of the Scheme Order Limits will be assessed prior to construction commencement to ensure that appropriate mitigation is in place to protect root protection areas. The exact location and extent of buffer and protection measures to be employed will be considered during detailed design.
- 6.1.4. Construction within ancient woodland areas have been reduced to the minimum practicable to facilitate construction
- 6.1.5. Trees would be protected using protective measures such as ground protection within the root protection areas (RPA) and fencing on the boundary of the RPA.
- 6.1.6. Excavations can be carried out using manual techniques to reduce soil disturbance.
- 6.1.7. No-dig construction can be prescribed at detailed design for access routes and footways to reduce or avoid root and soil disturbance.
- 6.1.8. Working areas can be minimised as far as is practicable to and access routes diverted away from sensitive arboricultural features.
- 6.1.9. Pruning would be carried out in accordance with BS3998:2010 Tree Work. Recommendations. To mitigate damage during trees works.
- 6.1.10. All Tree Works and Construction will be undertaken in accordance with BS5837:2012 *Trees in relation to design, demolition and construction. Recommendations*. All works to support mitigation of tree impacts will be incorporated into an Approved Arboricultural Method Statement at detailed design stage. This in turn will support the Construction Environmental Management Plan (CEMP).

## TREE PLANTING

- 6.1.11. Tree planting is proposed and has been agreed with Natural England for compensation to ancient woodland loss.
- 6.1.12. Replacement planting for ancient woodland is considered in the Ancient Woodland Strategy (refer to **Appendix 9.21: Ancient Woodland Strategy, Volume 7 of this ES (Application Document Reference: TR010041/APP/6.7))**).
- 6.1.13. Replacement planting is proposed as part of the Landscape Mitigation Masterplan (refer to **Figure 7.8: Landscape Mitigation Masterplan, Volume 5 of this ES (Application Document Reference: TR010041/APP/6.5))**).



## 7. ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

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### 7.1. ASSESSMENT OF ARBORICULTURAL EFFECTS

- 7.1.1. The effects of The Scheme on the baseline arboricultural resource have been assessed. The assessment identifies the likely effects during both construction and operation. Operation is defined for arboriculture purposes as a period of 15 years following completion of construction work.
- 7.1.2. The effects associated with construction and operation of the Scheme assumes implementation of the tree protection and mitigation measures identified in this report.
- 7.1.3. These impacts are assessed in combination with the sensitivity of the arboricultural resource to identify the likely significant effects. These are contained in **Table 7-1**.

**Table 7-1 - Likely Significant Effects – Trees, Groups, Hedges, Linear Groups, Shrubs and Wooded Areas**

BS5837:2012 Category	DMRB Value	Partial Removal	Remove	Retain	Construction Impact	Construction Effects	Operation Impacts	Operation Effects
<b>Trees</b>								
A	High	-	6	24	Moderate Adverse	Large Adverse	Negligible Adverse	Slight Adverse
A	Medium	-	4	10	Moderate Adverse	Moderate Adverse	Negligible Adverse	Slight Adverse
B	Low	-	240	165	Major Adverse	Moderate Adverse	Moderate Benefit	Slight Benefit
C	Very Low	-	110	124	Major Adverse	Slight Adverse	Moderate Benefit	Slight Benefit
U	Unsuitable	-	7	3	Minor Benefit	Neutral	Moderate Benefit	Neutral
<b>Trees Total</b>		<b>-</b>	<b>367</b>	<b>326</b>				
<b>Groups</b>								
A	High	-	-	1	No Change	Neutral	No Change	Neutral
A	Medium	-	1	1	Moderate Adverse	Large Adverse	No Change	Neutral
B	Low	3	11	10	Moderate Adverse	Moderate Adverse	Moderate Benefit	Slight Benefit
C	Very Low	2	25	43	Moderate Adverse	Slight Adverse	Moderate Benefit	Slight Benefit
<b>Groups Total</b>		<b>5</b>	<b>37</b>	<b>55</b>				
<b>Hedges</b>								
B	Low	7	30	18	Major Adverse	Moderate Adverse	Moderate Benefit	Slight Benefit
C	Very Low	6	19	24	Moderate Adverse	Slight Adverse	Moderate Benefit	Slight Benefit
<b>Hedges Total</b>		<b>13</b>	<b>49</b>	<b>42</b>				
<b>Linear Groups</b>								
A	Medium	-	1	-	Moderate Adverse	Large adverse	No Change	Neutral
B	Low	3	7	8	Moderate Adverse	Slight Adverse	Moderate Benefit	Slight Benefit
C	Very Low	1	1	6	Negligible	Neutral	Moderate Benefit	Slight Benefit

BS5837:2012 Category	DMRB Value	Partial Removal	Remove	Retain	Construction Impact	Construction Effects	Operation Impacts	Operation Effects
Linear Groups Total		4	9	14				
Shrubs								
C	Very low	-	6	8	Negligible	Neutral	Moderate Benefit	Slight Benefit
U	unsuitable	-	1	-	Negligible	Neutral	No Change	Neutral
Shrub Total		-	7	8				
Wooded Areas								
A	High	1	2	-	Major Adverse	Very Large Adverse	Moderate Adverse	Slight Adverse
A	Medium	-	1	1	Moderate Adverse	Moderate Adverse	Moderate Adverse	Slight Adverse
B	Low	5	8	18	Moderate Adverse	Slight Adverse	Moderate Benefit	Slight Benefit
C	Very Low	2	2	4	Negligible	Neutral	Moderate Benefit	Slight Benefit
Wooded Area Total		8	13	23				
Grand Total		30	482	468				

## 7.2. CONSTRUCTION EFFECTS

- 7.2.1. Effects of construction upon the arboricultural resource are expected to be adverse.

### VERY LARGE EFFECTS

- 7.2.2. Within the Scheme, Very Large Effects on individual receptors are those that are generally a consequence of significant loss of high value features such as ancient woodland or ancient/veteran trees. The following two features have been assessed to be significantly affected (Very Large Effect).

- 7.2.3. Wooded Areas

- a. W122 – Significant loss of priority habitat woodland. This effect is unlikely to be avoided as the woodland is located directly under the proposed new bridge at the River Coquet.
- W120 – loss of ancient woodland. This effect is unlikely to be avoided as the woodland is located directly under the proposed new bridge at the River Coquet. The haul road will also be located within this woodland on the east side.

### LARGE EFFECTS

- 7.2.4. Twelve features are expected to be significantly affected (Large effect).

#### Wooded Areas

- a. W23 – Significant loss of a protected woodland. This woodland is subject to a TPO and will be removed to accommodate the new road alignment. It is also linked/associated with W24 a mature medium value woodland.

#### Groups and Linear Groups

- a. G97 – Loss of mature group of trees – this is mature group of trees located at west moor. West moor junction will impact a large proportion of the trees, resulting in their removal.
- b. LG76 – Significant loss of line of mature oak trees. This is a line of mature oak trees within the limits of Causey Park Overbridge. Approximately 50% of the trees will be removed here.

#### Trees

- 7.2.5. The following trees are identified within a drainage area at the north of the Study Area. Options should be considered for redesign of the drainage feature at detailed design. Where this is not possible the trees will require removal.

- a. T690 – Loss of notable/veteran oak tree, 1400 mm stem diameter
- b. T688 – Loss of notable/veteran oak tree, 1100 mm stem diameter
- c. T685 – Loss of early ancient sycamore, 1600 mm stem diameter

- 7.2.6. The following tree has been identified within the work space however it is possible that this tree may not be impacted. If it is removed, then a Large Adverse Effect may be expected.

- a. T457 – Large veteran sycamore at risk, 1200 mm stem diameter

7.2.7. The following medium and high value trees will be lost or impacted. Those trees identified as veteran may be in poorer condition and therefore the effect of their loss may not be so significant to be defined as Very Large. Other trees such as T70 and T79 are assumed to be notable trees.

- a. T682 – Loss of veteran ash tree, 1050 mm diameter
- b. T91 – Potential veteran ash tree at risk, 1200 mm diameter
- c. T494 – Loss of mature oak tree, 1025 mm diameter
- d. T79 – Loss of mature elm tree, 800 mm diameter
- e. T71 - Loss of mature elm tree, 625 mm diameter

#### **MODERATE EFFECTS**

7.2.8. 296 features are moderately affected. High and Medium value features are affected as described below. High Value features are subject to Minor Impacts and Medium or Low Value features may be subject to Major impacts.

- a. W121 – Minor Impact on priority habitat woodland. This woodland is located on the north west side of the River Coquet crossing. Its margin is expected to be impacted.
- b. W5 – Potential loss of highway wooded area.
- c. W6 - Partial loss of highway wooded area.
- d. W13 – Potential loss of farm/residential wooded area due to creation of access road.
- e. W14 - Partial loss of highway wooded area.
- f. W25 - Potential loss/impact on highway wooded area.
- g. W70 – Partial Loss of mature plantation.
- h. W125 – Partial loss of wooded area.
- i. W128 – Impact/partial loss of wooded area.
- j. T92 – Potential impact on mature ash tree, 1000 mm diameter.
- k. T482 – loss of mature oak, 700 mm diameter.

7.2.9. Many features are Low Value features in isolation to be removed or only subject to Low Impacts.

7.2.10. Low Value hedges may be lost as a result of the Scheme.

7.2.11. Trees within Coronation Avenue are individually moderately affected but are considered cumulatively below.

#### **SLIGHT EFFECTS (NOT SIGNIFICANT)**

7.2.12. 200 features are slightly affected. Except for T675, most features are very low value trees that will be removed. Where features are large groups it is expected these can be replaced within 15 to 25 years.

*T675 - Potential impacts on a mature oak tree, 1300 mm diameter on the west side of the A1. Works are not shown in this area however the location may be used for access. A negligible impact is expected.*

## NEUTRAL EFFECTS (NOT SIGNIFICANT)

- 7.2.13. 432 features are not expected to be affected by the Scheme. Many of these are not within the current Order Limits due to iterative changes or being on the periphery of the Order Limits. 38 features are of very low value or are unsuitable for retention. The effect on these features is therefore neutral.

## 7.3. OPERATIONAL EFFECTS

### ADVERSE EFFECTS

- 7.3.1. Operational effects are expected to be **slight adverse** (not significant) to High and Medium Value retained features. These features are mature trees and woodland that cannot be replaced and therefore ongoing impacts such as increased air pollution, wind exposure, road surface run off and road salt may impact these features. For example, the woodland at Duke's Bank Wood will be adjacent to the new southbound carriageway and impacted by salt spray.
- 7.3.2. Impacts to Low and very low value features are expected to be mitigated through replacement planting during operation therefore a **slight beneficial** (not significant) effect can be expected as the new trees mature.

## 7.4. DISCUSSION

- 7.4.1. Effects are a product of Sensitivity of Receptor and Magnitude of Impact. There is some overlap between assessment due to slight variation between assessment of features, often through limited subjectivity. For example, G115 was assessed as a 1.5 ha very low value highway plantation, most or all of this group will be removed creating a major impact but the effect is only slight. W5 and W6 are also highway plantations, however these were assessed as low value with a 50 and 30 percent loss respectively (major impact) and therefore the effect of the Scheme on these woodland groups is moderate.
- 7.4.2. Consequently, some features of a similar type may be assessed or ranked differently but their difference is marginal. The examples in **paragraph 7.4.1** above can be argued that W5 and W6 are prominent landscape features whereas G115 simply serves as highway screening.

## 8. REPORT SUMMARY

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- 8.1.1. The Study Area comprises a typical rural landscape of trees, hedges and woodland around agricultural fields with small scale sporadic development outside the A1, such as farm houses and small hamlets.
- 8.1.2. Due to the nature of the landscape and the size of the Study Area, the arboricultural resource varies from formal planting to natural regeneration, from large highway plantation screens to aged or near ancient veteran trees. The resource is generally in good condition and of significant value to the local landscape and ecology.
- 8.1.3. 34 High Value features were identified. Six will be negatively impacted including two sections of Duke's Bank Wood. Four trees are at risk where Scheme design can't be altered.
- 8.1.4. 19 Medium Value Trees were identified. Nine are significantly affected.
- 8.1.5. Within the terms of DMRB, the majority of the resource is regarded as Low or Very Low Value, however, these features are not strictly 'low' value in usage of BS5837:2012 and perhaps in everyday use of the word. Within BS5837:2012 table 1, these trees are 'Trees lacking the special quality necessary to merit category A designation'. Within this usage a category B tree is a valuable tree that falls short of 'special'. This therefore includes mature trees and mature woodland that falls short of special but is intrinsically and extrinsically valuable. 534 Features were identified within this category.
- 8.1.6. Very low value trees also still have some value but their loss can normally be compensated or enhanced by replacement planting. 383 Features were identified in this category.
- 8.1.7. Although a high number of features were identified of significant value, 470 are not expected to be affected. Where the working areas are reduced below 15 m at from the edge of construction (used for impact assessment) those trees impacted are likely to reduce further in number.
- 8.1.8. Mitigation is expected to compensate on a 12:1 basis for the loss of site clearance at Duke's Bank Wood by implementation of the Ancient Woodland Strategy (refer to **Appendix 9.21: Ancient Woodland Strategy, Volume 7** of this ES (**Application Document Reference: TR010041/APP/6.7**)).
- 8.1.9. Replacement planting is proposed as part of the Landscape Mitigation Masterplan (refer to **Figure 7.8: Landscape Mitigation Masterplan, Volume 5** of this ES (**Application Document Reference: TR010041/APP/6.5**)).
- 8.1.10. Overall the Scheme is expected to have a Moderate Adverse Significant Effect on the arboricultural resource.
- 8.1.11. When considering loss of ancient woodland, ancient trees and veteran trees, this is a Large Adverse Significant Effect.



- 8.1.12. All Tree Works and Construction will be undertaken in accordance with BS5837:2012 Trees in relation to design, demolition and construction. Recommendations.
- 8.1.13. An Arboricultural Method Statement is recommended at detailed design stage to ensure mitigation is achieved. This in turn will support the CEMP.

## 9. BIBLIOGRAPHY

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# Appendix A

## SURVEY SCHEDULE

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Key:								
REFERENCE NUMBER:	Individual reference number							
TYPE:	T - Tree	G - Group	W - Woodland	H - Hedge	LG- Linear Group	S - Shrub		
SPECIES:	Species listed by common name							
HEIGHT:	Overall height (m)							
DIAMETER:	Stem diameter (mm) calculated in accordance with BS 5837 paragraph 4.6.1. An average stem diameter is provided for groups, woodlands and hedges. * Denotes an estimated stem diameter							
NO. OF STEMS:	Number of stems (individual trees only)							
LCH:	Lowest crown height (m)							
PRELIMINARY MANAGEMENT RECOMMENDATIONS:	Retain, Remove, or Action Required – Action required in the absence of the Scheme due to a significant defect.							
AGE CLASS:	Young - < 1/3rd estimated life expectancy		Semi-mature – 1/3rd to 2/3rd estimated life expectancy		Mature - > 2/3rd estimated life expectancy		Veteran – a tree which exists significantly beyond its normal life expectancy	
PHYSIOLOGICAL CONDITION:	Good		Fair		Poor		Dead	
STRUCTURAL CONDITION:	Good		Fair		Poor			
ESTIMATED REMAINING CONTRIBUTION:	>10 years		10+ years		20+ years		40+ years	
CATEGORY:	BS 5837 Category - A, B, C, U		BS 5837 Sub-category - 1, 2, 3					
RPA RADIUS	The radius of the circular Root Protection Area associated with the tree as measured from the centre of the stem (m)							
ENVIRONMENTAL STATUS	Ancient woodland (ASNW), ancient tree (AT), veteran tree (VT), notable tree (NT),							
LEGAL STATUS	Tree within conservation area or subject to a tree preservation order.							

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G1	Ash	8.5	200	>20	2	1.5	Semi-Mature	Good	Good	-	10+	C	1	Hawthorn understory.	2.4	-	Major	Very Low	Remove	-	-
G2	Mixed	12	300	>20	5	1	Semi-mature	Good	Good	-	20+	B	2	Mixed highway planting - pine, sycamore, ash.	3.6	-	No Change	Low	Retain	-	-
G3	Ash	4.5	175	3	2	0.5	Semi-Mature	Fair	Fair	-	10+	C	1	Coppiced.	2.1	-	Major	Very Low	Remove	-	-
G7	Leyland cypress	20	650	10	2	0	Mature	Good	Good	-	20+	B	2	Includes understory of Monterey cypress, beech (semi mature), cotoneaster.	7.8	-	Major	Low	Remove	-	-
G8	See Notes	3	100	>20	1	0	Mature	Fair	Fair	-	10+	C	2	Variety of shrub species, cotoneaster, rhododendron, berberis, lilac, dogwood variety.	1.2	-	Major	Very Low	Remove	-	-
G10	See Notes	7	150	>20	2.5	0	Mature	Fair	Fair	-	10+	C	3	Multiple trees and shrubs species including tulip tree, plum, cherry, dogwood, elder.	1.8	-	Major	Very Low	Remove	-	-
G11	Cypress	7	250	20	1	0	Mature	Fair	Fair	-	20+	C	2	Includes elm on edge perpendicular to highway.	3	-	Major	Very Low	Remove	-	-
G12	See Notes	11	300	>20	3	0	Mature	Fair	Fair	-	20+	C	2	Variety of species, including Monterey cypress, goat willow, dragon claw willow.	3.6	-	No Change	Very Low	Retain	-	-
G17	Mixed	12	300	7	4	4	Semi-Mature	Good	Good	-	20+	C	2	Mixed group of pine and ash.	3.6	-	Negligible	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G18	Mixed	10	150	>20	4	0.5	Semi-Mature	Good	Fair	-	10+	C	3	Mixed group of scrub hawthorn, blackthorn, cherry and beech.	1.8	-	Major	Very Low	Remove	-	-
G19	Mixed	13	500	>20	6	0.5	Mature	Good	Good	-	20+	B	3	Mixed group of ash, elm and scrub over gorse.	6	-	Minor	Low	Partial Removal	-	-
G20	Hawthorn	6	250	13	3.5	0.5	Mature	Good	Fair	-	10+	C	2	-	3	-	Major	Very Low	Remove	-	-
G21	Hawthorn	6	300	4	3	1	Over-Mature	Fair	Fair	-	10+	B	2	Old specimens with veteran qualities.	3.6	-	Major	Low	Remove	-	-
G26	Mixed	9	250	>20	4	0	Semi-Mature	Fair	Fair	-	20+	B	3	Stream side mature alder group merging in to highway planting.	3	-	Major	Low	Remove	-	-
G27	Goat Willow	9	400	4	1	0	Mature	Good	Good	-	20+	B	3	-	4.8	-	Major	Low	Remove	-	-
G28	Goat Willow	9	400	4	1	0	Mature	Good	Good	-	20+	B	3	-	4.8	-	Major	Low	Remove	-	-
G30	Elm	13	150	17	2	0	Semi-Mature	Good	Good	-	10+	C	3	-	1.8	-	No Change	Very Low	Retain	-	-
G32	Beech	14	450	>20	6	1	Mature	Good	Good	-	20+	B	2	Screen comprising beech and Scots pine in school playing field.	5.4	-	Moderate	Low	Partial Removal	-	-
G34	Hawthorn	4	200	10	1.5	1	Mature	Fair	Fair	-	10+	C	1	Some dead individuals within group.	2.4	-	No Change	Very Low	Retain	-	-
G35	Hawthorn	3.5	225	10	1.5	0	Mature	Fair	Fair	-	20+	C	2	Some dead branches.	2.7	-	Major	Very Low	Remove	-	-
G36	Holly	5	350	5	3	1	Over-Mature	Good	Fair	-	10+	C	1	Hawthorn and holly group.	4.2	-	Negligible	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G37	Ash	13	700	>20	5	0		Good	Fair	-	20+	B	2	Hawthorn understory, occasional wounds, dead branches, broken branches.	8.4	-	No Change	Low	Retain	-	-
G38	Hawthorn	5	250	10	1.5	0	Mature	Fair	Fair	-	20+	C	2	Includes gorse.	3	-	No Change	Very Low	Retain	-	-
G39	Sycamore	17	700	2	6	0.5	Mature	Good	Good	-	20+	B	1	No access. surveyed from distance.	8.4	-	No Change	Low	Retain	-	-
G41	Mixed	14	500	>20	5	3	Semi-Mature	Good	Good	-	20+	C	2	Plantation on garden boundary, perhaps as noise barrier. Smaller spruce pine and sycamore with larger Monterey cypress.	6	-	No Change	Very Low	Retain	-	-
G42	Ash	13	600	3	6	2	Mature	Fair	Fair	-	20+	B	3	Two ashes, one sycamore.	7.2	-	No Change	Low	Retain	-	-
G43	Mixed	5	100	>20	2	0.5	Young	Good	Good	-	10+	C	3	Young plantation of birch, lime, oak, scots pine, hawthorn and cherry.	1.2	-	Negligible	Very Low	Retain	-	-
G45	Mixed	12	500	>20	5	1	Mature	Good	Good	-	20+	B	2	Mixed residential planting. No access.	6	-	No Change	Low	Retain	-	-
G47	Leyland cypress	18	600	5	3.5	0.5	Mature	Good	Good	-	20+	C	2	-	7.2	-	No Change	Very Low	Retain	-	-
G48	Alder	8	575	4	4	1	Mature	Fair	Good		20+	C	3	Three alders and 1 birch.	6.9	-	No Change	Very Low	Retain	-	-
G49		7	350	5	2	0	Mature	Poor	Fair	-	<10	C	1	-	4.2	-	No Change	Very Low	Retain	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G50	See Notes	12	400	>20	5	1	Mature	Good	Good	-	20+	C	2	Mixed group of ash, sycamore elm over hawthorn hedge.	4.8	-	No Change	Very Low	Retain	-	-
G51	Ash	12	400	>20	5	1	Mature	Good	Good	-	20+	C	2	Mixed group of ash and sycamore.	4.8	-	No Change	Very Low	Retain	-	-
G52	Beech	12	400	6	5	2	Mature	Good	Good	-	20+	B	2	Copper beech and Leyland cypress.	4.8	-	No Change	Low	Retain	-	-
G54	Hawthorn	6	200	>20	1	0.5	Mature	Fair	Fair	-	20+	B	3	Scrub group of hawthorn, blackthorn and gorse on either side of stream.	2.4	-	Major	Low	Remove	-	-
G55	Spruce	12	400	4	3	2	Mature	Good	Good	-	20+	C	2	Spruce and pine.	4.8	-	No Change	Very Low	Retain	-	-
G56	Mixed	15	400	>20	5	1	Mature	Good	Good	-	20+	C	2	Pine, spruce, ash and sycamore.	4.8	-	Moderate	Very Low	Partial Removal	-	-
G57	Ash	12	200	>20	3.5	0.5	Semi-Mature	Fair	Good	-		C	2	Low crown density in ash suggesting possibly dieback. other species including goat willow, oak.	2.4	-	No Change	Very Low	Retain	-	-
G58	Mixed	10	300	>20	3	2	Semi-Mature	Good	Fair	-	20+	C	2	Pine ash and elm.	3.6	-	No Change	Very Low	Retain	-	-
G59	Mixed	8	150	>20	3	0.5	Young	Good	Good	-	20+	B	2	Mixed.	1.8	-	No Change	Low	Retain	-	-
G60	Mixed	8	400	20	2	0	Mature	Fair	Fair	-	10+	C	3	Blackthorn, elder, hazel, hawthorn, Holly.	4.8	-	No Change	Very Low	Retain	-	-
G61	Scots Pine	15	300	>20	4	2.5	Mature	Good	Good	-	20+	B	2	-	3.6	-	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G62	Mixed	20	750	>20	10	0	Mature	Good	Good	-	40+	A	2	Garden woodland of oak, ash, larch and elm.	9	-	No Change	Medium	Retain	-	-
G63	Ash	10	250	10	5	1	Semi-Mature	Fair	Fair	-	10+	C	3	-	3	-	No Change	Very Low	Retain	-	-
G64		4	75	>20	1.5	0	Mature	Good	Fair	-	10+	C	3	-	0.9	-	No Change	Very Low	Retain	-	-
G65	Spruce	12	300	>20	3	0	Semi-Mature	Fair	Fair	-	20+	B	3	Spruce and pine plantation.	3.6	-	Minor	Low	Partial Removal	-	-
G66	Mixed	6	100	>20	3	0	Semi-Mature	Fair	Fair	-		C	3	Blackthorn, hawthorn, oak.	1.2	-	No Change	Very Low	Retain	-	-
G68	Elm	9	100	>20	3	0.5	Semi-Mature	Good	Good	-	<10	C	3	-	1.2	-	No Change	Very Low	Retain	-	-
G73	Ash	12	400	3	5	2	Mature	Good	Good	-	20+	C	3	-	4.8	-	No Change	Very Low	Retain	-	-
G75	Ash	12	500	8	6	0	Mature	Fair	Fair	-	10+	C	3	Ash with dieback. Two mature sycamore in group of similar size.	6	-	Major	Very Low	Remove	-	-
G78	Mixed	3	100	>20	1	0	Mature	Fair	Fair	-	20+	C	3	Blackthorn group.	1.2	-	No Change	Very Low	Retain	-	-
G82	Mixed	8	200	>20	3	1	Mature	Fair	Fair	-	10+	C	3	Shrubs and occasional young trees.	2.4	-	Major	Very Low	Remove	-	-
G83	Alder	12	850	>20	5	1	Mature	Good	Good	-	20+	B	3	-	10.2	-	No Change	Low	Retain	-	-
G84	Ash	10	300	3	4	1.5	Semi-Mature	Good	Good	-	20+	B	3	-	3.6	-	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G85	Sycamore	8	200	>20	3	1.5	Semi-Mature	Good	Fair	-	10+	C	2	Planted on top of bank, crown lifted to 1m, screen to caravan park.	2.4	-	Major	Very Low	Remove	-	-
G86	Ash	11	400	>20	5	2.5	Mature	Fair	Fair	-	20+	B	3	-	4.8	-	Major	Low	Remove	-	-
G88	Ash	10	300	3	4	1.5	Mature	Fair	Fair	-	10+	C	3	-	3.6	-	Moderate	Very Low	Partial Removal	-	-
G89	Goat Willow	7	200	2	4	0.5	Mature	Good	Good	-	10+	B	3	-	2.4	-	No Change	Low	Retain	-	-
G90	Mixed	4	150	>20	2	0	Semi-Mature	Fair	Fair	-	10+	C	3	Mixed group of goat willow and hawthorn scrub.	1.8	-	No Change	Very Low	Retain	-	-
G91	See Notes	4	75	>20	0.5	0	Mature	Fair	Fair	-	10+	C	3	Dense group of blackthorn and hawthorn.	0.9	-	Major	Very Low	Remove	-	-
G92	Mixed	8	150	>20	3	0	Young	Good	Good	-	20+	C	2	Ash, Rowan, Oak, Cherry, Hawthorn, Scots Pine.	1.8	-	Major	Very Low	Remove	-	-
G93	Mixed	13	400	>20	5	1	Mature	Good	Good	-	20+	B	2	Ash, horse chestnut, hawthorn, poplar.	4.8	-	Major	Low	Remove	-	-
G94	Spruce	10	250	>20	3	1	Semi-Mature	Fair	Fair	-	20+	C	3	-	3	-	Major	Very Low	Remove	-	-
G95	Ash	7	200	>20	2	0	Semi-Mature	Good	Fair	-	10+	C	3	-	2.4	-	Major	Very Low	Remove	-	-
G96	Ash	7	150	4	2	1	Young	Good	Fair	-	10+	C	2	-	1.8	-	Major	Very Low	Remove	-	-
G98	Elm	5	100	4	2	1	Young	Good	Fair	-	10+	C	2	-	1.2	-	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G99	Hawthorn	2.5	150	6	3	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	1.8	-	No Change	Very Low	Retain	-	-
G100	Hawthorn	2.5	150	6	3	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	1.8	-	No Change	Very Low	Retain	-	-
G101	Hawthorn	3	100	7	2	0	Mature	Fair	Fair	-	10+	C	3	Hawthorn hedge remnant mixed with gorse.	1.2	-	No Change	Very Low	Retain	-	-
G102	Mixed	4	175	>20	2	1	Semi-Mature	Fair	Fair	-	10+	C	3	Ash with Hawthorn and gorse.	2.1	-	No Change	Very Low	Retain	-	-
G103	Willow	9	200	>20	4	0	Mature	Fair	Fair	-	20+	B	2	Group of sycamore, willow.	2.4	-	Major	Low	Remove	-	-
G104	Hawthorn	3	75	>20	5	0	Mature	Fair	Fair	-	20+	C	2	Large shrub group in hedgerow.	0.9	-	Major	Very Low	Remove	-	-
G105	Hawthorn	3	75	>20	5	0	Mature	Fair	Fair	-	20+	C	2	Large shrub group in hedgerow.	0.9	-	Major	Very Low	Remove	-	-
G106	Hawthorn	3	75	>20	5	0	Mature	Fair	Fair	-	20+	C	2	Large shrub group in hedgerow.	0.9	-	No Change	Very Low	Retain	-	-
G107	Ash	7.5	350	5	4	1	Mature	Fair	Poor	-	10+	C	3	-	4.2	-	No Change	Very Low	Retain	-	-
G108	Alder	7	400	9	2	0.5	Mature	Fair	Fair	-	10+	C	3	Low spreading form.	4.8	-	No Change	Very Low	Retain	-	-
G109	Goat Willow	3	75	>20	2	0	Mature	Fair	Fair	-	20+	C	3	Shrubby mass.	0.9	-	No Change	Very Low	Retain	-	-
G111	Mixed	4	100	>20	2	0	Mature	Fair	Fair	-	10+	C	3	Alder coppice stools, hawthorn scrub.	1.2	-	Major	Very Low	Remove	-	-
G112	Mixed	4	200	>20	3	0	Semi-Mature	Fair	Fair	-	20+	C	2	Highway planting	2.4	-	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G113	Mixed	5	100	>20	4	1	Semi-Mature	Fair	Fair	-	10+	C	2	No access. Mixed group of semi-mature trees and scrub	1.2	-	Major	Very Low	Remove	-	-
G114	Mixed	12	300	>20	5	1	Semi-Mature	Fair	Fair	-	10+	C	2	No access driven survey. Highway embankment planting of ash, sycamore, beech, hawthorn, oak.	3.6	-	No Change	Very Low	Retain	-	-
G115	Mixed	10	300	>20	5	0	Semi-Mature	Good	Fair	-	10	C	2	Highway embankment planting.	3.6	-	Major	Very Low	Remove	-	-
G119	Mixed	13	300	>20	5	0.5	Mature	Fair	Fair	-	20+	A +	3	-	3.6	-	No Change	High	Retain	ASN W	-
G123	Mixed	13	300	>20	2	0	Semi-Mature	Good	Good	-	20+	B	2	Highway planting.	3.6	-	Major	Low	Remove	-	-
G124	Mixed	12	300	>20	3	0.5	Semi-Mature	Good	Good	-	20+	C	2	Highway embankment planting.	3.6	-	No Change	Very Low	Retain	-	-
G126	Spruce	1	25	>20	0.5	0	Young	Good	Good	-	20+	C	3	Newly planted spruce plantation.	0.3	-	No Change	Very Low	Retain	-	-
G129	Mixed	10	200	>20	4	1	Semi-Mature	Fair	Fair	-	10+	C	2	Ash, pine, sycamore and oak.	2.4	-	Major	Very Low	Remove	-	-
G130	Mixed	9	200	>20	2	0.5	Semi-Mature	Good	Fair	Thin suppressed trees	20+	C	2	Highway embankment planting.	2.4	-	No Change	Very Low	Retain	-	-
G131	Alder	10	100	>20	1	0.5	Semi-Mature	Good	Good	-	20+	C	3	Roadside planting.	1.2	-	Negligible	Very Low	Retain	-	-
G137	Scots Pine	10	150	>20	3	0.5	Semi-Mature	Good	Good	-	20+	C	3	Roadside planting.	1.8	-	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
G138	Mixed	10	100	>20	1.5	1	Semi-Mature	Good	Good	-	20+	C	2	Ash and pine.	1.2	-	Negligible	Very Low	Retain	-	-
G139	Mixed	8	200	>20	3	2	Semi-Mature	Good	Good	-	20+	C	2	-	2.4	-	No Change	Very Low	Retain	-	-
G140	Hawthorn	7	75	>20	1	0.5	Young	Fair	Fair	-	20+	C	2	Highway screen/ hedge.	0.9	-	No Change	Very Low	Retain	-	-
G143	Mixed	10	200	>20	2	0.5	Semi-Mature	Good	Fair	-	20+	C	2	Highway embankment planting.	2.4	-	No Change	Very Low	Retain	-	-
G144	Mixed	7	200		3	1	Semi-Mature	Fair	Fair	-	10+	C	2	Driven survey, no access. Ash sycamore and pine.	2.4	-	Negligible	Very Low	Retain	-	-
G698	Beech	10	0	2	4.5	0.5	Semi-Mature	Good	Fair	-	20+	C	3	-	0	-	No Change	Very Low	Retain	-	-
H3	Hawthorn	1.5	800	>20	1	0	Mature	Good	Good	-	10+	C	2	-	9.6	-	Major	Very Low	Remove	-	-
H4	Beech	4	100	20	1.5	0	Young	Good	Good	-	20+	C	2	Some hazel and some copper beech.	1.2	-	Major	Very Low	Remove	-	-
H5	Hawthorn	1.5	200	>20	1.5	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	-	-
H6	Hawthorn	1.5	200	>20	1.5	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	-	-
H7	Hawthorn	1.5	200	>20	5	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	-	-
H8	Hawthorn	1.5	200	>20	5	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	-	-
H9	Beech	6	300	>20	1	0	Semi-Mature	Good	Good	-	10+	C	2	-	3.6	-	Major	Very Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
H9	Hawthorn	2.5	100	>20	1.5	0	Mature	Good	Good	-	20+	B	2	-	1.2	-	Major	Low	Remove	-	-
H10	Mixed	3	100	>20	2.5	0	Mature	Good	Good	-	10+	C	3	Blackthorn and hawthorn group/hedge.	1.2	-	Major	Very Low	Remove	-	-
H11	Hawthorn	1.5	200	>20	5	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	TPO	-
H12	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	-	1.2	-	Major	Low	Remove	-	-
H13	Hawthorn	1.5	200	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	-	-
H14	Hawthorn	1.5	200	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	-	-
H15	Hawthorn	1.5	200	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	TPO	-
H16	Hawthorn	1.5	200	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Minor	Low	Partial Removal	-	-
H17	Hawthorn	1.5	200	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	No Change	Low	Retain	-	-
H18	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	Major	Low	Remove	-	-
H19	Hawthorn	1.5	175	>20	1	0	Mature	Good	Fair	-	20+	B	2	Includes blackthorn, some individuals managed more frequently than others	2.1	-	Moderate	Low	Partial Removal	-	-
H20	Hawthorn	2	200	>20	1.5	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Minor	Low	Partial Removal	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
H21	See Notes	3	300	>20	2.5	0	Mature	Fair	Fair	-	20+	B	2	Scrubby Hawthorne, holly, hazel, blackthorn, willow.	3.6	-	Moderate	Low	Partial Removal	-	-
H22	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	Major	Low	Remove	-	-
H23	Mixed	0	0	>20	1.5	0	Mature	Fair	Fair	-	20+	C	2	No access.	2	-	Major	Very Low	Remove	-	-
H24	Hawthorn	1.5	100	>20	1	0	Mature	Good	Fair	-	20+	B	2	Gaps in places.	1.2	-	Major	Low	Remove	-	-
H25	Mixed	5	200	>20	3	0	Mature	Good	Fair	-	20+	B	2	Hawthorn and blackthorn scrubby hedge	2.4	-	Major	Low	Remove	-	-
H26	Hawthorn	4	200	>20	3	0	Mature	Good	Fair	-	20+	B	2	Also, Blackstone gorse goat willow	2.4	-	Major	Low	Remove	-	-
H27	Hawthorn	1.5	100	>20	1	0	Mature	Good	Fair	-	20+	B	2	-	1.2	-	No Change	Low	Retain	-	-
H29	Hawthorn	1.5	100	>20	1	0	Mature	Good	Fair	-	20+	B	2	Large gaps in places.	1.2	-	No Change	Low	Retain	-	-
H31	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	Major	Low	Remove	-	-
H32	Hawthorn	1.5	100	>20	1	0	Mature	Good	Fair	-	20+	B	2	-	1.2	-	No Change	Low	Retain	-	-
H34	Hawthorn	2.5	75	>20	1	0	Mature	Good	Fair	-	10+	C	2	Some dead individuals. includes shrub rose and other minor shrubs (hazel, blackthorn)	0.9	-	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
H35	Hawthorn	1.5	200	>20	1	0	Mature	Good	Fair	-	20+	C	2	Hedge with occasional Hawthorne trees 2-3m high.	2.4	-	No Change	Very Low	Retain	-	-
H36	Hawthorn	3	250	>20	1	0	Mature	Good	Fair	-	20+	C	2	Includes holly.	3	-	Moderate	Very Low	Partial Removal	-	-
H37	Hawthorn	4	200	>20	2.5	0	Mature	Fair	Fair	-	20+	C	2	Broken hedge includes horse and brambles	2.4	-	No Change	Very Low	Retain	-	-
H38	Hawthorn	4.5	200	>20	2	0.5	Mature	Good	Good	-	20+	B	2	Unmanaged hedge. Surveyed from distance - no access.	2.4	-	Major	Low	Remove	-	-
H39	Hawthorn	4.5	200	>20	2	0.5	Mature	Good	Good	-	20+	B	2	Unmanaged hedge. Surveyed from distance - no access.	2.4	-	Major	Low	Remove	-	-
H40	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	No Change	Low	Retain	-	-
H42	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	C	3	Managed hedge.	1.2	-	Moderate	Very Low	Partial Removal	-	-
H44	Mixed	4	200	>20	1	0.5	Mature	Fair	Fair	-	<10	C	3	Remnant hedge - dead hawthorn and large gaps in places. hawthorn, gorse.	2.4	-	No Change	Very Low	Retain	-	-
H45	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	C	3	Managed hedge.	1.2	-	Moderate	Very Low	Partial Removal	-	-
H46	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	Major	Low	Remove	-	-
H47	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	Major	Low	Remove	-	-

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H48	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	No Change	Low	Retain	-	-
H49	Hawthorn	1.5	150	>20	1	0	Mature	Good	Good	-	20+	B	2	Driven Survey.	1.8	-	No Change	Low	Retain	-	-
H50	Mixed	4	200	>20	2	0	Semi-Mature	Fair	Fair	-	20+	C	2	-	2.4	-	No Change	Very Low	Retain	-	-
H51	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.2	-	Major	Low	Remove	-	-
H52	Hawthorn	3	200	>20	2	1	Mature	Fair	Fair	-	10+	C	3	Old hedge with remnant hawthorn trees and gaps.	2.4	-	No Change	Very Low	Retain	-	-
H53	Mixed	3	200	>20	2	0	Semi-Mature	Good	Good	-	10+	B	3	Unmanaged hedge - Hazel, hawthorn, blackthorn, rose	2.4	-	Major	Low	Remove	-	-
H54	Mixed	3	200	>20	1	0.5	Semi-Mature	Good	Good	-	10+	C	3	Managed hedge - Hazel, hawthorn, rose, blackthorn	2.4	-	Major	Very Low	Remove	-	-
H55	Mixed	3	200	>20	1	0.5	Semi-Mature	Good	Good	-	10+	C	3	Managed hedge - Hazel, hawthorn, blackthorn, rose	2.4	-	Moderate	Very Low	Partial Removal	-	-
H56	Hawthorn	2.5	75	>20	1	0	Semi-Mature	Good	Good	-	20+	C	3	Unmanaged hedge.	0.9	-	Negligible	Very Low	Retain	-	-
H57	Hawthorn	3	200	>20	3	1	Semi-Mature	Fair	Fair	-	10+	C	3	Old hedge with remnant hawthorn trees and gaps.	2.4	-	Major	Very Low	Remove	-	-
H59	Hawthorn	1.5	100	17	1	0	Mature	Fair	Fair	-	10+	C	1	Includes ash saplings, brambles.	1.2	-	No Change	Very Low	Retain	-	-

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H60	Ash	2.5	100	>20	1.5	0	Semi-Mature	Good	Fair	-	10+	C	1	Poorly maintained hedge with lots of new growth of ash, sycamore, beech	1.2	-	No Change	Very Low	Retain	-	-
H62	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	C	2	-	1.2	-	No Change	Very Low	Retain	-	-
H63	Holly	2.5	125	>20	1.5	0	Mature	Good	Good	-	20+	C	1	Occasional hawthorn.	1.5	-	No Change	Very Low	Retain	-	-
H64	Hawthorn	1.5	150	>20	1	0	Mature	Good	Good	-	20+	B	2	-	1.8	-	No Change	Low	Retain	-	-
H66	Mixed	2	150	>20	1.5	0	Mature	Good	Good	-	20+	B	2	-	1.8	-	Minor	Low	Partial Removal	-	-
H67	Hawthorn	2.5	75	>20	1	0	Semi-Mature	Good	Good	-	20+	C	3	Unmanaged hedge.	0.9	-	Major	Very Low	Remove	-	-
H70	Hawthorn	2.5	75	>20	1	0	Semi-Mature	Good	Good	-	20+	C	3	Managed hedge.	0.9	-	Major	Very Low	Remove	-	-
H71	Hawthorn	2.5	75	>20	1	0	Semi-Mature	Good	Good	-	20+	C	3	Managed hedge.	0.9	-	Moderate	Very Low	Partial Removal	-	-
H74	Hawthorn	2.5	75	>20	1	0	Semi-Mature	Good	Good	-	20+	C	3	Managed hedge.	0.9	-	Moderate	Very Low	Partial Removal	-	-
H78	Hawthorn	2.5	75	>20	2	0	Semi-Mature	Good	Good	-	20+	B	3	Unmanaged hedge with occasional trees - holly and ash.	0.9	-	Major	Low	Remove	-	-
H80	Goat Willow	7	150	>20	1.5	0	Mature	Good	Good	-	20+	C	3	-	1.8	-	No Change	Very Low	Retain	-	-
H81	Hawthorn	2.5	150	>20	2	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	1.8	-	No Change	Low	Retain	-	-

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H82	Hawthorn	1.5	150	>20	1	0	Mature	Good	Good	-	20+	B	2	-	1.8	-	No Change	Low	Retain	-	-
H85	Hawthorn	2	75	>20	1	0	Mature	Good	Good	-	20+	C	2	Managed hedge.	0.9	-	No Change	Very Low	Retain	-	-
H86	Hawthorn	2	75	>20	1	0	Mature	Good	Good	-	20+	C	2	Managed hedge.	0.9	-	No Change	Very Low	Retain	-	-
H90	Hawthorn	1.5	100	>20	1	0	Mature	Good	Good	-	20+	B	3	Managed hedge.	1.2	-	Moderate	Low	Partial Removal	-	-
H91	Hawthorn	1.5	150	>20	1	0	Mature	Good	Good	-	20+	B	2	-	1.8	-	No Change	Low	Retain	-	-
H94	Hawthorn	3	100	>20	2	0	Mature	Good	Good	-	20+	B	3	Unmanaged hedge.	1.2	-	Negligible	Low	Retain	-	-
H95	Hawthorn	6	300	>20	1.5	0.5	Mature	Good	Good	-	20+	B	3	Unmanaged hedge with occasional trees.	3.6	-	Major	Low	Remove	-	-
H96	Hawthorn	3	150	>20	1.5	0.5	Semi-Mature	Good	Good	-	10+	C	3	Unmanaged hedge.	1.8	-	No Change	Very Low	Retain	-	-
G97	Mixed	24	800	>20	10	1	Mature	Good	Good		40+	A	2	Ash, oak, Turkey oak overstory with hawthorn, elm holly and elder understory.	0	-	Major	Medium	Remove	-	-
H97	Hawthorn	2	75	>20	1	0	Mature	Good	Fair	-	20+	C	2	-	0.9	-	Major	Very Low	Remove	-	-
H98	Hawthorn	1.5	125	>20	1	0	Mature	Good	Good	-	20+	C	2	-	1.5	-	Major	Very Low	Retain	-	-
H99	Hawthorn	2.5	75	>20	1	0	Mature	Good	Good	-	10+	C	3	Managed hedge with gaps.	0.9	-	No Change	Very Low	Retain	-	-

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H100	Hawthorn	1.5	75	>20	1	0	Mature	Good	Good	-	10+	C	3	Managed hedge.	0.9	-	No Change	Very Low	Retain	-	-
H101	See Notes	2.5	75	>20	1.5	0	Mature	Good	Good	-	20+	B	3	Blackthorn managed hedge.	0.9	-	No Change	Low	Retain	-	-
H102	See Notes	2.5	75	>20	1.5	0	Mature	Good	Good	-	20+	B	3	Blackthorn managed hedge.	0.9	-	No Change	Low	Remove	-	-
H103	Hawthorn	1.5	100	>20	1	0	Mature	Good	Good	-	10+	C	3	Managed hedge.	1.2	-	Major	Very Low	Remove	-	-
H104	Hawthorn	1.5	75	>20	0.5	0	Mature	Good	Good	-	10+	C	3	Managed hedge.	0.9	-	Major	Very Low	Remove	-	-
H105	Hawthorn	4	100	>20	2	0	Mature	Good	Good	-	20+	B	2	Unmanaged kedge with occasional young ash and oak.	1.2	-	Major	Low	Remove	-	-
H106	Hawthorn	6	100	>20	2	0	Mature	Good	Good	-	20+	C	3	Unmanaged hedge of uniform hawthorns.	1.2	-	Major	Very Low	Remove	-	-
H107	Hawthorn	2	100	>20	0.5	0	Mature	Good	Good	-	20+	B	2	-	1.2	-	Major	Low	Remove	-	-
H108	Hawthorn	2	100	>20	0.5	0	Mature	Good	Good	-	40+	B	2	-	1.2	-	Major	Low	Remove	-	-
H109	Hawthorn	1.5	200	>20	1	0	Mature	Good	Good	-	20+	B	2	Managed hedge.	2.4	-	Major	Low	Remove	-	-
H110	See Notes	2	75	>20	2	0	Mature	Fair	Fair	-	20+	C	3	-	0.9	-	Major	Very Low	Remove	-	-
H110	Hawthorn	1.5	100	>20	1	0	Mature	Fair	Fair	-	20+	C	3	Managed Hedgerow.	1.2	-	Major	Very Low	Remove	-	-



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H111	Hawthorn	3.5	100	>20	2	0	Mature	Fair	Fair	-	20+	B	3	Three semi mature ash.	1.2	-	Major	Low	Retain	-	-
H113	Hawthorn	1.5	100	>20	0.5	0	Mature	Fair	Fair	-	20+	C	3	Hedge remnant.	1.2	-	No Change	Very Low	Retain	-	-
H114	Hawthorn	2	75	>20	0.5	0	Mature	Fair	Fair	-	10+	C	3	Hedge with small ash trees.	0.9	-	No Change	Very Low	Remove	-	-
H115	Hawthorn	2	100	>20	1	0	Mature	Good	Good	-	20+	B	3	Managed hedgerow.	1.2	-	Major	Low	Remove	-	-
H116	Hawthorn	1.5	100	>20	1	0	Mature	Good	Good	-	20+	C	3	Managed hedgerow.	1.2	-	Major	Very Low	Retain	-	-
H117	Hawthorn	1.5	100	>20	1	0	Mature	Fair	Fair	-	20+	C	3	Managed hedgerow.	1.2	-	No Change	Very Low	Retain	-	-
H118	Hawthorn	1.5	100	>20	1	0	Mature	Fair	Fair	-	20+	C	3	Managed hedgerow.	1.2	-	Negligible	Very Low	Remove	-	-
H119	Hawthorn	1.5	100	>20	1	0	Mature	Fair	Fair	-	20+	C	3	Managed hedgerow.	1.2	-	Major	Very Low	Partial Removal	-	-
H120	Hawthorn	2	100	>20	1	0	Over-Mature	Fair	Fair	-	20+	B	3	Old field boundary hedgerow with gaps caused by livestock.	1.2	-	Minor	Low	Retain	-	-
H121	Hawthorn	2	100	>20	0.5	0.5	Over-Mature	Fair	Fair	-	20+	B	3	Field boundary hedge with gaps due to livestock.	1.2	-	No Change	Low	Retain	-	-
H122	Mixed	0	200	>20	1	0	Mature	Fair	Fair	-	20+	B	2	Field boundary of shrubs and fencing to ancient wood.	2	-	Negligible	Low	Retain	ASN W	-
H123	Hawthorn	2	75	>20	1	0	Mature	Good	Good	-	20+	B	3	Managed hedgerow.	0.9	-	No Change	Low	Retain	-	-



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H124	Hawthorn	5	75	>20	0.5	0.5	Semi-Mature	Good	Good	-	20+	C	3	Managed hedgerow.	0.9	-	Negligible	Very Low	Remove	-	-
H125	Hawthorn	2	75	>20	0.5	0.5	Mature	Good	Good	-	20+	C	3	Managed hedge.	0.9	-	Major	Very Low	Retain	-	-
H126	Hawthorn	2.5	75	>20	0.5	0.5	Mature	Good	Good	-	20+	C	3	Managed hedge.	0.9	-	No Change	Very Low	Retain	-	-
H127	Hawthorn	2.5	75	>20	0.5	0.5	Mature	Good	Good	-	20+	C	3	Managed hedge.	0.9	-	No Change	Very Low	Retain	-	-
H128	Hawthorn	2	100	15	0.5	0.5	Mature	Good	Fair	-	20+	B	3	-	1.2	-	No Change	Low	Retain	-	-
LG1	Mixed	8	250	>20	3	0.5	Semi-mature	Good	Good	-	20+	C	2	Mixed highway verge planting. Ash, goat willow, cherry, hawthorn.	3	-	Negligible	Very Low	Remove	-	-
LG2	Ash	6	200	>20	2.5	1	Semi-Mature	Fair	Fair	-	10+	C	2	Scrubby row of young/ semi mature trees.	2.4	-	Major	Very Low	Retain	-	-
LG28	Sycamore	10	700	10	4	4	Mature	Good	Good	-	40+	B	2	-	8.4	-	No Change	Low	Retain	-	-
LG30	Sycamore	10	450	3	2.5	0.5	Mature	Good	Fair	-	10+	C	2	Two sycamores and one elm.	5.4	-	No Change	Very Low	Partial Removal	-	-
LG33	Hawthorn	5	200	>20	3	1	Mature	Fair	Fair	-	10+	C	2	Linear group of hawthorns. Some healthy, some with cavities and a some dead. Short section of hedgerow at points.	2.4	-	Minor	Very Low	Retain	-	-
LG41	Horse Chestnut	12	400	>20	5	1	Semi-Mature	Good	Fair	-	20+	B	2	-	4.8	-	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
LG43	Ash	12	450	>20	6	1	Mature	Fair	Fair	-	20+	C	3	Mixed aged group over hawthorn and scrub hedge.	5.4	-	No Change	Very Low	Remove	-	-
LG58	Mixed	12	550	>20	7	0.5	Mature	Good	Fair	-	20+	B	2	Mixed boundary group of sycamore, ash, cherry, alder, hawthorn and hazel.	6.6	-	Major	Low	Retain	-	-
LG61	Leyland cypress	7	350	7	3	0	Mature	Good	Fair	-	10+	C	2	High hedge with hawthorn.	4.2	-	No Change	Very Low	Retain	-	-
LG65	Sycamore	12	500	3	6	1	Mature	Good	Good	-	20+	B	2	-	6	-	No Change	Low	Remove	-	-
LG68	Mixed	12	550	5	6	1	Mature	Good	Fair	-	20+	B	3	Mixed group of ash and alder over hazel and hawthorn.	6.6	-	Major	Low	Remove	-	-
LG69	Oak	12	550	5	6	1	Mature	Good	Fair	-	20+	B	3	-	6.6	-	Major	Low	Retain	-	-
LG72	Ash	12	700	5	7	1	Mature	Fair	Fair	-	10+	B	3	Mature ash over hawthorn group.	8.4	-	No Change	Low	Retain	-	-
LG73	Mixed	15	600	8	6	0.5	Mature	Good	Fair	-	20+	B	3	Mixed group of ash and sycamore over hawthorn and elder.	7.2	-	No Change	Low	Retain	-	-
LG75	Lime	14	450	14	6	0	Mature	Good	Good	-	20+	B	2	Dense basal growth	5.4	-	Negligible	Low	Remove	-	-
LG76	Oak	14	600	>20	7	1	Mature	Good	Good	-	40+	A	2	-	7.2	-	Major	Medium	Remove	-	-
LG77	Mixed	10	400	>20	5	1	Mature	Fair	Fair	-	20+	B	3	Mixed trees in hedge line. Ash, elm and cherry.	4.8	-	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
LG79	Mixed	20	400	>20	5	0	Mature	Good	Fair	-	20+	B	3	Ash, hawthorn, elm hedge with occasional trees.	4.8	-	Major	Low	Retain	-	-
LG83	Sycamore	15	600	>20	6	4	Mature	Good	Fair	-	20+	B	2	Roadside shelter belt of sycamore and ash with hawthorn understory.	7.2	-	Negligible	Low	Partial Removal	-	-
LG84	Mixed	14	600	>20	7	4	Mature	Good	Good	-	20+	B	2	Hawthorn and blackthorn hedge with overstory of mature oaks and ash.	7.2	-	Moderate	Low	Retain	-	-
LG87	Oak	10	400	7	7	0.5	Mature	Good	Fair	-	20+	B	3	-	4.8	-	No Change	Low	Partial Removal	-	-
LG88	Mixed	12	400	>20	7	4	Mature	Good	Good	-	20+	B	2	Hawthorn and blackthorn hedge with overstory of mature oaks and ash	4.8	-	Moderate	Low	Partial Removal	-	-
LG89	Mixed	2.5	150	>20	1	0	Young	Good	Good	-	20+	B	2	Managed hedge.	1.8	-	Moderate	Low	Remove	-	-
LG92	Oak	14	600	3	6	0	Mature	Good	Fair	-	20+	B	2	Growing in hedge line.	7.2	-	Major	Low	Remove	-	-
LG93	Oak	14	600	12	7	0	Mature	Good	Fair	-	20+	B	2	Mainly oaks with occasional ash. Growing in hedge line.	7.2	-	Major	Low	Retain	-	-
LG112	Ash	8	300	13	4	0	Semi-Mature	Fair	Fair	-	10+	C	3	Branches cut back on south side.	3.6	-	No Change	Very Low	Retain	-	-
LG129	Ash	10	150	6	3	5	Mature	Fair	Fair	-	10+	C	1	-	1.8	-	No Change	Very Low	Retain	-	-
S117	See Notes	3	75	>20	3	0	Mature	Fair	Fair	-	20+	C	3	-	0.9	2.5	No Change	Very Low	Retain	-	-
S118	See Notes	3	75	>20	3	0	Mature	Fair	Fair	-	20+	C	3	Group of blackthorn and hawthorn.	0.9	2.5	No Change	Very Low	Retain	-	-

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S428	Hawthorn	2	125	1	1	0	Semi-Mature	Good	Fair	-	10+	C	3	-	1.5	7.0	No Change	Very Low	Remove	-	-
S543	Hawthorn	4	150	1	2.5	0	Mature	Good	Fair	-	10+	C	3	-	1.8	10.1	Major	Very Low	Retain	-	-
S544	Hawthorn	6	150	1	2.5	0	Mature	Good	Fair	-	10+	C	3	-	1.8	10.1	No Change	Very Low	Retain	-	-
S545	Hawthorn	4	150	2	2	0	Semi-Mature	Good	Fair	-	10+	C	3	-	1.8	10.1	No Change	Very Low	Remove	-	-
S546	Hawthorn	4	150	2	2	0	Mature	Good	Fair	-	10+	C	3	-	1.8	10.1	Major	Very Low	Retain	-	-
S547	Hawthorn	4	75	1	1	0	Young	Good	Fair	-	10+	C	3	-	0.9	2.5	No Change	Very Low	Remove	-	-
S550	Hawthorn	4	150	1	2	0	Dead	Poor	Poor	-	10+	U	U	-	1.8	10.1	Major	none	Retain	-	-
S570	Hawthorn	3	100	1	2	0	Mature	Fair	Fair	-	10+	C	3	-	1.2	4.5	No Change	Very Low	Remove	-	-
S572	Hawthorn	4	150	2	2	0	Mature	Good	Fair	-	10+	C	3	-	1.8	10.1	Major	Very Low	Remove	-	-
S574	Hawthorn	4	100	1	1	0	Mature	Good	Fair	-	10+	C	3	-	1.2	4.5	Major	Very Low	Remove	-	-
S575	Hawthorn	4	150	1	2	0	Mature	Good	Fair	-	10+	C	3	-	1.8	10.1	Major	Very Low	Remove	-	-
S577	Hawthorn	4	100	1	1	0	Mature	Good	Fair	-	10+	C	3	-	1.2	4.5	Major	Very Low	Retain	-	-
S596	Hawthorn	2	75	4	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	0.9	2.5	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T1	Ash	10	150	1	2	1	Mature	Good	Good	-	20+	C	1	-	1.8	10.1	Major	Very Low	Remove	-	-
T2	Ash	10	400	1	4.5	1	Mature	Good	Good	-	20+	C	1	-	4.8	72.3	Major	Very Low	Remove	-	-
T3	Ash	7	150	6	2	1	Young	Good	Fair	-	20+	C	1	Subsidiary stem.	1.8	10.1	Major	Very Low	Remove	-	-
T4	Ash	12	300	1	3	0	Semi-Mature	Good	Good	-	10+	B	1	-	3.6	40.7	Major	Low	Remove	-	-
T5	Sycamore	13	600	1	6	2	Mature	Good	Good	-	40+	B	1	-	7.2	162.8	Major	Low	Remove	-	-
T6	Sycamore	13	600	1	6	2	Mature	Good	Good	-	40+	B	1	-	7.2	162.8	Major	Low	Remove	-	-
T7	Ash	10	250	1	3	1	Semi-Mature	Good	Good	-	10+	B	1	-	3	28.2	Major	Low	Remove	-	-
T8	Sycamore	13	600	1	6	2	Mature	Good	Good	-	40+	B	1	Basal growth	7.2	162.8	Major	Low	Remove	-	-
T9	Sycamore	13	600	1	5.5	2	Mature	Good	Good	-	40+	B	1	-	7.2	162.8	Major	Low	Remove	-	-
T10	Sycamore	13	700	1	6	3	Mature	Good	Good	-	40+	B	1	-	8.4	221.6	Major	Low	Remove	-	-
T11	Sycamore	12	600	1	5	2	Mature	Good	Good	-	40+	B	1	Minor wounds, recently pruned,	7.2	162.8	Major	Low	Remove	-	-
T12	Ash	5	100	1	2	0.5	Young	Fair	Fair	-	<10	C	1	As young, may succumb to Chalara. minor crown dieback visible.	1.2	4.5	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T13	Sycamore	12	400	1	5	2	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T14	Copper Beech	9	400	1	3.5	0.5	Mature	Good	Fair	-	40+	A	1	Minor branch wound and possible rot, pruned,	4.8	72.3	No Change	Medium	Retain	-	-
T15	Apple	5	250	1	2.5	1	Mature	Good	Poor	-	<10	C	1	Recently collapsed.	3	28.2	No Change	Very Low	Retain	-	-
T16	Horse Chestnut	10	650	1	6	4	Mature	Good	Good	-	20+	B	1	Pruning wounds with minor decay.	7.8	191.1	No Change	Low	Retain	-	-
T17	Beech	6	400	1	3	1	Semi-Mature	Good	Good	-	10+	C	1	-	4.8	72.3	Major	Very Low	Remove	-	-
T18	Goat Willow	8	700	1	3.5	0.5	Mature	Good	Good	-	10+	C	1	-	8.4	221.6	No Change	Very Low	Retain	-	-
T19	Goat Willow	8	200	2	3	0.5	Mature	Good	Good	-	10+	C	1	-	2.4	18.0	Major	Very Low	Remove	-	-
T20	Horse Chestnut	10	650	1	6	4	Mature	Good	Good	-	20+	B	1	Pruning wounds with minor decay.	7.8	191.1	No Change	Low	Retain	-	-
T21	Horse Chestnut	10	650	1	6	4	Mature	Good	Good	-	20+	B	1	Pruning wounds with minor decay.	7.8	191.1	No Change	Low	Retain	-	-
T22	Copper Beech	13	700	1	5.5	2.5	Mature	Good	Good	-	40+	B	1	Possible competition with adjacent horse chestnuts.	8.4	221.6	No Change	Low	Retain	-	-
T23	Apple	6	400	1	3	2	Mature	Good	Good	-	10+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T24	Leyland cypress	9	250	1	1.5	4	Semi-Mature	Fair	Fair	-	10+	C	1	-	3	28.2	No Change	Very Low	Retain	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T25	Spruce	9	250	1	1.5	4	Semi-Mature	Fair	Fair	-	10+	C	1	-	3	28.2	No Change	Very Low	Retain	-	-
T26	Eucalyptus	10	400	1	4	4	Mature	Poor	Poor	-	<10	C	1	Spare crown.	4.8	72.3	No Change	Very Low	Retain	-	-
T27	Goat Willow	8	200	2	3	0.5	Mature	Good	Good	-	10+	C	1	-	2.4	18.0	Major	Very Low	Remove	-	-
T28	Goat Willow	8	200	2	3	0.5	Mature	Good	Good	-	10+	C	1	-	2.4	18.0	Major	Very Low	Remove	-	-
T29	Goat Willow	8	200	2	3	0.5	Mature	Good	Fair	-	10+	C	1	Broken branch.	2.4	18.0	Major	Very Low	Remove	-	-
T30	Oak	15	1000	1	6	1.5	Mature	Good	Poor	-	40+	U	U	Ganoderma australe at base. cavity below ground. decayed branch at 1.5m creating decay column. outwardly healthy crown. he notified 6pm 19.09.2018. ref. no. 1668-19.09.2018. North Gate House NE61 3BU	12	452.3	Major	none	Remove	-	-
T31	Beech	15	600	1	6	3.5	Over-Mature	Poor	Poor	Remove	<10	U	U	Meripilus giganteus at base. sparse crown. hazard to highway. notified he at 6pm 19.09.2018. ref. no. 1668-19.09.2018. North Gate House NE61 3BU	7.2	162.8	Major	none	Remove	-	-
T32	Cypress	14	700	1	2	1	Mature	Good	Good	-	20+	B	1	-	8.4	221.6	Major	Low	Remove	-	-
T33	Horse Chestnut	12	400	1	3	0.5	Mature	Fair	Fair	-	10+	C	1	-	4.8	72.3	Major	Very Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T34	Ash	15	600	1	6	3	Mature	Fair	Fair	-	20+	C	1	No access. surveyed from distance.	7.2	162.8	Major	Very Low	Remove	-	-
T35	Lime	16	450	1	4	0.5	Mature	Good	Good	Stem diameter estimated	40+	B	2	Telecoms wire to west side, pole in north.	5.4	91.6	Major	Low	Remove	-	-
T36	Beech	18	700	1	6	2	Mature	Good	Good	Crown raised several times in past. occlusion forming from previous pruning.	40+	B	2	-	8.4	221.6	Major	Low	Remove	-	-
T37	Lime	16	650	1	6	0.5	Mature	Good	Good	Epicormic growth through out stem and canopy, consider removal at base.	40+	B	2	-	7.8	191.1	Major	Low	Remove	-	-
T38	Beech	18	900	1	9	0	Mature	Good	Good	-	40+	B	2	Natural crown break at 3 m results in open grown form.	10.8	366.4	Major	Low	Remove	-	-
T39	Lime	16	700	1	6	0	Mature	Good	Good	Dense epicormi	40+	B	2	-	8.4	221.6	Major	Low	Remove	-	-

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										c growth prevents close inspection, consider removal of this growth. stem diameter estimated.											
T40	Beech	18	900	1	8	3	Mature	Good	Good	Natural pollard at 3m forms four main stems.	40+	B	2	-	10.8	366.4	Major	Low	Remove	-	-
T41	Lime	11	650	1	6	0	Mature	Good	Good	-	40+	B	2	Consider removing epicormic growth at base. Manhole cover within RPA to south of stem.	7.8	191.1	Major	Low	Remove	-	-
T42	Beech	18	750	1	10	0	Mature	Good	Good	-	40+	B	2	-	9	254.4	Major	Low	Remove	-	-
T43	Sycamore	4.5	150	6	4	0	Young	Good	Good	-	20+	C	2	Small collection of self set coppice stools, typical regrowth from flailed stems.	1.8	10.1	Major	Very Low	Remove	-	-
T44	Mixed	7	300	>20	4	0	Semi-Mature	Good	Good	-	20+	C	2	Mixed roadside scrub and semi mature trees.	0	0	Negligible	Very Low	Retain	-	-

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T44	Lime	12	450	1	8	0	Semi-Mature	Good	Good	-	40+	B	2	Epicormic growth in south side forming collide stool.	5.4	91.6	Negligible	Low	Retain	-	-
T45	Beech	16	700	1	8	3	Mature	Good	Good	-	40+	B	2	Overhead lines to east. self pollard at 2m	8.4	221.6	Major	Low	Remove	-	-
T46	Beech	12	550	1	6	2	Semi-Mature	Good	Good	-	40+	B	2	-	6.6	136.8	Major	Low	Remove	-	-
T47	Beech	14	500	1	8	2	Mature	Good	Good	-	40+	B	2	Overhead lines to south.	6	113.0	Major	Low	Remove	-	-
T48	Lime	16	525	1	5	0	Semi-Mature	Good	Good	-	40+	C	2	Poor form, self-pollard at 2m, low growth habit. dense epicormic growth. stem diameter estimated.	6.3	124.6	Major	Very Low	Remove	-	-
T49	Beech	16	600	1	6	1	Mature	Good	Good	-	40+	B	2	Bifurcation at 2m.	7.2	162.8	Major	Low	Remove	-	-
T50	Lime	18	525	1	6	0	Mature	Good	Good	Consider removal of epicormic growth at base	40+	B	2	Dense epicormic growth at base.	6.3	124.6	Major	Low	Remove	-	-
T51	Beech	16	650	1	8	4	Mature	Good	Good	-	40+	B	2	-	7.8	191.1	Major	Low	Remove	-	-
T52	Lime	16	650	1	6	0	Mature	Good	Good	-	40+	B	2	Manhole cover within RPA to south east of stem.	7.8	191.1	Major	Low	Remove	-	-
T53	Beech	18	775	1	8	3	Mature	Good	Good	-	40+	B	2	Extensive history of pruning on roads side of stem.	9.3	271.7	Major	Low	Remove	-	-
T54	Lime	16	600	1	8	0	Mature	Good	Good	Consider	40+	B	2	Dense epicormic growth at base.	7.2	162.8	Major	Low	Remove	-	-

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										removal of epicormic growth at base											
T55	Elm	12	300	3	4	0	Semi-Mature	Good	Good	-	10+	C	2	Roughly the age and height were Dutch elm disease will take effect.	3.6	40.7	Major	Very Low	Remove	-	-
T56	Lime	11	300	1	4	0	Young	Good	Good	-	40+	C	2	Scrubby self set tree.	3.6	40.7	Major	Very Low	Remove	-	-
T57	Rowan	8	200	1	4	0	Semi-Mature	Fair	Fair	-	10+	C	2	Remains of suspected dryads saddle found in occlusion wound on east side of stem at 1.75m.	2.4	18.0	Major	Very Low	Remove	-	-
T58	Lime	16	575	1	8	0	Mature	Good	Good	Consider removal of epicormic growth at base	40+	B	2	Dense epicormic growth at base.	6.9	149.5	Major	Low	Remove	-	-
T59	Lime	12	525	1	5	0	Mature	Good	Good	-	40+	B	2	Bifurcation at 3m.	6.3	124.6	Major	Low	Remove	-	-
T60	Beech	12	600	1	9	5	Mature	Good	Good	-	40+	B	2	Crown is biased over road. old pruning wound at 1m in stem causes stem bulge. stem diameter estimated at 700.	7.2	162.8	Major	Low	Remove	-	-
T61	Beech	16	325	1	6	1	Mature	Good	Good	-	40+	B	2	-	3.9	47.7	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T62	Lime	14	550	1	6	0	Mature	Good	Good	-	40+	B	2	Browsed by livestock on west side. dense epicormic growth at base. bifurcation at 2m. stem diameter estimated.	6.6	136.8	Major	Low	Remove	-	-
T63	Lime	12	600	1	8	0	Semi-Mature	Good	Fair	Consider removal of epicormic growth at base	40+	C	2	Trifurcation at 2m. dense epicormic growth at base.	7.2	162.8	Major	Very Low	Remove	-	-
T64	Beech	16	375	1	8	2	Mature	Good	Good	-	40+	B	2	-	4.5	63.6	Major	Low	Remove	-	-
T65	Elm	18	450	1	5	2	Mature	Good	Good	-	40+	B	2	No obvious sign of Dutch elm disease.	5.4	91.6	Major	Low	Remove	-	-
T66	Beech	18	500	1	8	0	Mature	Good	Good	-	40+	B	2	-	6	113.0	Major	Low	Remove	-	-
T67	Beech	14	775	1	6	2	Mature	Good	Good	-	40+	B	2	Self pollard at 2m.	9.3	271.7	Major	Low	Remove	-	-
T68	Beech	16	575	1	6	1	Mature	Good	Good	-	40+	B	2	Crown raised over road and gate	6.9	149.5	Major	Low	Remove	-	-
T69	Lime	14	400	1	4	0	Semi-Mature	Good	Good	-	40+	C	2	Remaining dominant stem from coppice stool	4.8	72.3	Major	Very Low	Remove	-	-
T70	Lime	10	325	1	4	0	Semi-Mature	Good	Good	Dominant stem from coppice / epicormic stool.	20+	C	2	Consider removal of epicormic growth at base	3.9	47.7	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T71	Elm	18	625	1	4	2	Mature	Good	Good	-	40+	A	2	Outstanding tree. no sign of Dutch elm disease.	7.5	176.7	Major	Medium	Remove	NT	-
T72	Mixed	2	75	>20	1	0	Mature	Fair	Fair	-	20+	C	3	Mixed group of scrub, gorse and hawthorn.	6	113.0	Moderate	Very Low	Retain	-	-
T72	Beech	14	500	1	5	2	Mature	Good	Good	-	40+	C	2	Large old wound on north side at base.	6	113.0	Moderate	Very Low	Retain	-	-
T73	Beech	16	325	1	6	1	Mature	Good	Good	-	40+	B	2	-	3.9	47.7	Major	Low	Remove	-	-
T74	Lime	14	600	1	5	0	Mature	Good	Good	-	40+	B	2	Dense epicormic growth at base. stem diameter estimated.	7.2	162.8	Major	Low	Remove	-	-
T75	Beech	16	600	1	6	3	Mature	Good	Good	-	40+	B	2	Memorial at base and in stem. crown biased over field.	7.2	162.8	Major	Low	Remove	-	-
T76	Beech	18	600	1	8	1	Mature	Good	Good	-	40+	B	2	Thorn hedge at base. stem diameter estimated. self pollard at 2m.	7.2	162.8	Major	Low	Remove	-	-
T77	Lime	14	250	4	4	0	Semi-Mature	Good	Good	Consider removal of epicormic growth.	40+	C	2	Coppice stool, dense epicormic growth at base.	3	28.2	Major	Very Low	Remove	-	-
T78	Beech	18	750	1	8	1	Mature	Good	Good	-	40+	B	2	Bifurcation at 3m.	9	254.4	Major	Low	Remove	-	-
T79	Elm	22	800	1	8	5	Mature	Good	Good	-	40+	A	2	Outstanding example.	9.6	289.5	Major	Medium	Remove	NT	-
T80	Beech	16	700	1	6	3	Mature	Good	Good	-	40+	B	2	-	8.4	221.6	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T81	Lime	16	500	1	4	3	Mature	Good	Good	Consider removal of epicormic growth at base	40+	B	2	Buried services within RPA.	6	113.0	Major	Low	Remove	-	-
T82	Lime	16	600	1	6	2	Mature	Good	Good	-	40+	B	2	Epicormic growth at base. stem diameter estimated.	7.2	162.8	Major	Low	Remove	-	-
T83	Rowan	8	250	1	4	3	Semi-Mature	Fair	Fair	-	10+	C	2	Over pruned, thin crown.	3	28.2	Major	Very Low	Remove	-	-
T84	Beech	20	575	1	10	2	Mature	Good	Good	-	40+	B	2	Bifurcation at 3m.	6.9	149.5	Major	Low	Remove	-	-
T85	Lime	18	600	1	6	2	Mature	Good	Good	Consider removal of epicormic growth	40+	B	2	Dense epicormic growth at base. stem diameter estimated.	7.2	162.8	Major	Low	Remove	-	-
T86	Lime	16	450	1	6	0	Mature	Good	Good	Consider removal of epicormic growth	40+	B	2	Dense epicormic growth at base. stem diameter estimated.	5.4	91.6	Major	Low	Remove	-	-
T87	Rowan	10	225	4	3	2	Mature	Good	Fair	-	20+	C	2	Regrowth from coppice stool.	2.7	22.9	Major	Very Low	Remove	-	-
T88	Lime	14	400	1	4	1	Mature	Good	Good	-	40+	B	2	Epicormic growth throughout canopy.	4.8	72.3	Major	Low	Remove	-	-
T89	Beech	14	550	1	7	0	Mature	Good	Good	-	40+	C	2	Heavily pruned on south west side for overhead	6.6	136.8	Major	Very Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
														lines. large wound at base, underground services.							
T90	Beech	10	625	1	6	1.5	Mature	Fair	Fair	-	20+	B	1	-	7.5	176.7	Major	Low	Remove	-	-
T91	Ash	22	1200	1	10	2	Over-Mature	Poor	Poor	-	10+	A	3	In decline and multiple branch stubs from large broken branches. potential veteran if not in terminal decline.	14.4	651.4	Moderate	High	Remove	VT	-
T92	Ash	22	1000	1	13	2	Over-Mature	Good	Good	-	20+	A	1	-	12	452.3	Moderate	Medium	Retain	-	-
T93	Ash	16	550	1	6	3	Mature	Good	Good	-	20+	B	1	-	6.6	136.8	Major	Low	Remove	-	-
T94	Ash	15	750	1	6	2.5	Mature	Good	Fair	-	20+	B	1	Target canker on branches. slight lifting bark on main stem.	9	254.4	Major	Low	Remove	-	-
T95	Ash	13	350	1	5	1.5	Semi-Mature	Good	Good	-	20+	B	1	-	4.2	55.4	Major	Low	Remove	-	-
T96	Beech	10	625	1	6	1.5	Mature	Good	Fair	-	20+	B	1	Bark inclusion in main fork.	7.5	176.7	Major	Low	Remove	-	-
T97	Beech	0	625	1	6	3	Mature	Good	Good	-	40+	B	2	Large vehicle impact wound at base on west side.	7.5	176.7	Major	Low	Remove	-	-
T98	Lime	16	500	1	6	3	Mature	Good	Good	-	40+	B	2	Epicormic throughout canopy.	6	113.0	Major	Low	Remove	-	-
T99	Horse Chestnut	8	450	1	5	1.5	Mature	Fair	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T100	Lime	10	450	1	5	1.5	Mature	Fair	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T101	Beech	16	500	1	6	0	Mature	Good	Good	-	40+	B	2	Crown break at 3m into natural pollard.	6	113.0	Major	Low	Remove	-	-
T102	Hawthorn	6	250	1	5	1.5	Mature	Good	Fair	-	10+	C	2	-	3	28.2	Major	Very Low	Remove	-	-
T103	Hawthorn	6	250	1	5	1.5	Mature	Good	Fair	-	10+	C	2	-	3	28.2	Major	Very Low	Remove	-	-
T104	Hawthorn	6	250	1	5	1.5	Mature	Good	Fair	-	10+	C	2	-	3	28.2	Major	Very Low	Remove	-	-
T105	Hawthorn	6	250	1	5	1.5	Mature	Good	Fair	-	10+	C	2	-	3	28.2	Major	Very Low	Remove	-	-
T106	Lime	10	450	1	5	1.5	Mature	Fair	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T107	Beech	10	625	1	5	1.5	Mature	Fair	Good	-	20+	B	2	-	7.5	176.7	Major	Low	Remove	-	-
T108	Lime	10	450	2	5	1.5	Mature	Good	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T109	Beech	12	600	1	5	2	Mature	Good	Good	-	20+	B	2	-	7.2	162.8	Major	Low	Remove	-	-
T110	Lime	10	600	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	7.2	162.8	Major	Low	Remove	-	-
T111	Lime	10	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T112	Beech	13	600	1	5	1.5	Semi-Mature	Fair	Good	-	20+	B	2	-	7.2	162.8	Major	Low	Remove	-	-
T113	Beech	10	750	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	9	254.4	Major	Low	Remove	-	-
T114	Lime	10	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T115	Beech	10	550	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6.6	136.8	Major	Low	Remove	-	-
T116	Rowan	7	300	1	4	4	Mature	Poor	Fair	-	10+	C	1	-	3.6	40.7	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T117	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T118	Beech	11	400	1	4	5	Mature	Good	Good	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T119	Lime	11	550	1	6	1	Mature	Good	Good	-	20+	B	2	-	6.6	136.8	Major	Low	Remove	-	-
T120	Lime	10	400	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T121	Beech	15	750	1	6	2	Mature	Good	Good	-	20+	B	2	Branch with included bark at 4m.	9	254.4	Major	Low	Remove	-	-
T122	Lime	11	700	1	6	1	Mature	Good	Good	-	20+	B	2	-	8.4	221.6	Major	Low	Remove	-	-
T123	Beech	10	650	1	6	1.5	Mature	Good	Good	-	20+	B	2	Codominant at 1.5m.	7.8	191.1	Major	Low	Remove	-	-
T124	Beech	12	700	1	6	3	Mature	Fair	Fair	-	10+	C	2	Early leaf fall.	8.4	221.6	Major	Very Low	Remove	-	-
T125	Lime	10	450	1	5	1	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T126	Lime	11	700	1	6	1	Mature	Good	Good	-	20+	B	2	-	8.4	221.6	Major	Low	Remove	-	-
T127	Beech	14	750	1	7	2.5	Mature	Fair	Poor	Remove	<10	U	U	Cavity with decay fungi at 1m.	9	254.4	Major	none	Remove	-	-
T128	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T129	Lime	10	500	1	5	1	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T130	Rowan	5	250	1	2.5	1.5	Mature	Fair	Fair	-	10+	C	1	-	3	28.2	Major	Very Low	Remove	-	-
T131	Lime	10	450	1	5	1	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T132	Beech	10	500	1	7	1.5	Mature	Good	Good	-	20+	B	2	Possible included bark at 3m.	6	113.0	Major	Low	Remove	-	-
T133	Lime	12	600	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	7.2	162.8	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T134	Lime	10	400	1	5	1	Mature	Good	Good	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T135	Lime	8	400	1	4	1.5	Mature	Good	Fair	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T136	Lime	8	350	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	4.2	55.4	Major	Low	Remove	-	-
T137	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T138	Lime	10	400	1	5	1.5	Mature	Good	Fair	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T139	Beech	13	750	1	6	2	Mature	Fair	Fair	Remove	20+	B	2	Included bark in stem at base. possibly from decay wound. small leaf size.	9	254.4	Major	Low	Remove	-	-
T140	Lime	10	500	1	5	2	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T141	Lime	8	300	1	3	2	Semi-Mature	Good	Good	-	10+	C	2	-	3.6	40.7	Major	Very Low	Remove	-	-
T142	Beech	12	700	1	6	1.5	Mature	Good	Good	-	20+	B	2	-	8.4	221.6	Major	Low	Remove	-	-
T143	Lime	10	450	1	5	1	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T144	Lime	10	350	1	4.5	1	Mature	Good	Fair	-	20+	C	2	-	4.2	55.4	Major	Very Low	Remove	-	-
T145	Beech	11	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T146	Lime	8	300	1	3	2	Semi-Mature	Fair	Fair	-	10+	C	2	-	3.6	40.7	Major	Very Low	Remove	-	-
T147	Lime	10	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T148	Beech	12	750	1	6	1.5	Mature	Good	Good	-	20+	B	2	-	9	254.4	Major	Low	Remove	-	-
T149	Beech	13	500	1	5	2	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T150	Lime	10	350	1	4	0	Mature	Good	Good	-	20+	B	2	-	4.2	55.4	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T151	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T152	Beech	13	450	1	7	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T153	Lime	10	400	1	5	1	Mature	Good	Good	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T154	Beech	13	750	1	7	1	Mature	Good	Good	-	20+	B	2	-	9	254.4	Major	Low	Remove	-	-
T155	Oak	10	900	1	6	1	Over-Mature	Fair	Poor	-	10+	B	1	Broken branch, cavity and missing crown.	10.8	366.4	Major	Low	Remove	-	-
T156	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T157	Beech	13	600	1	7	2	Mature	Fair	Fair	-	20+	B	2	-	7.2	162.8	Major	Low	Remove	-	-
T158	Lime	12	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T159	Oak	14	1000	1	8	1.5	Over-Mature	Fair	Fair	-	20+	B	1	Broken branch.	12	452.3	Major	Low	Remove	-	-
T160	Lime	11	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T161	Beech	10	500	1	6	1	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T162	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T163	Beech	13	800	1	7	1	Mature	Fair	Fair	-	10+	B	2	-	9.6	289.5	Major	Low	Remove	-	-
T164	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T165	Beech	12	500	1	5	1.5	Mature	Fair	Fair	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T166	Lime	10	500	1	5	1	Mature	Fair	Fair	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T167	Beech	10	800	1	7	1.5	Mature	Good	Fair	-	20+	B	2	Included bark in northern branch at 1m.	9.6	289.5	Major	Low	Remove	-	-
T168	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T169	Elm	10	350	1	3	1	Semi-Mature	Good	Good	-	10+	C	2	-	4.2	55.4	Major	Very Low	Remove	-	-
T170	Beech	12	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T171	Lime	10	450	1	5	1	Mature	Good	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T172	Beech	13	450	1	6	1.5	Mature	Good	Fair	-	20+	B	2	Codominant at 1m.	5.4	91.6	Major	Low	Remove	-	-
T173	Lime	10	450	1	5	1.5	Mature	Fair	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T174	Beech	11	600	1	5	1.5	Mature	Fair	Poor	Remove	<10	U	U	Large cavity at 1m.	7.2	162.8	Major	none	Remove	-	-
T175	Lime	10	400	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T176	Lime	10	450	1	5	1.5	Mature	Fair	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T177	Lime	10	450	1	5	1.5	Mature	Good	Fair	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T178	Beech	12	600	1	5	1.5	Mature	Good	Poor	Remove tree or southern branch	<10	U	U	Cavity in main fork. included bark in same union.	7.2	162.8	Major	none	Remove	-	-
T179	Lime	10	400	1	4	1.5	Mature	Good	Good	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	-
T180	Beech	11	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T181	Lime	10	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T182	Lime	10	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	TPO
T183	Lime	10	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T184	Beech	12	550	1	4	1	Mature	Good	Fair	-	20+	B	2	Co-dominant stem.	6.6	136.8	Major	Low	Remove	-	-
T185	Lime	12	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	TPO



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T186	Beech	8	300	1	4	0.5	Semi-Mature	Good	Fair	-	20+	C	1	-	3.6	40.7	Major	Very Low	Remove	-	TPO
T187	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	TPO
T188	Lime	10	450	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	5.4	91.6	Major	Low	Remove	-	-
T189	Beech	13	500	1	6	0.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T190	Lime	10	400	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	4.8	72.3	Major	Low	Remove	-	TPO
T191	Lime	10	500	1	5	1	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T192	Lime	12	500	1	5	0.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	TPO
T193	Beech	12	800	1	6	2	Mature	Good	Fair	-	20+	B	2	Co-dominant stem.	9.6	289.5	Major	Low	Remove	-	-
T194	Lime	13	550	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6.6	136.8	Major	Low	Remove	-	-
T195	Lime	12	500	1	6	1	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	TPO
T196	Beech	13	600	1	6	1	Mature	Good	Fair	-	20+	B	2	-	7.2	162.8	Major	Low	Remove	-	TPO
T197	Lime	14	500	2	6	1	Mature	Good	Fair	-	20+	B	2	Large twin stem tree.	6	113.0	Major	Low	Remove	-	-
T198	Beech	13	725	1	6	2	Mature	Good	Good	-	20+	B	2	-	8.7	237.7	Major	Low	Remove	-	-
T199	Lime	13	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	TPO
T200	Beech	13	600	1	6	0.5	Mature	Good	Good	-	20+	B	2	-	7.2	162.8	Major	Low	Remove	-	TPO
T201	Lime	13	550	1	5.5	1.5	Mature	Good	Good	-	20+	B	2	-	6.6	136.8	Major	Low	Remove	-	-
T202	Lime	12	500	1	5	0.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T203	Lime	13	500	1	6	0.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	TPO
T204	Lime	11	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T205	Lime	12	500	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	6	113.0	Major	Low	Remove	-	-
T206	Beech	14	650	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	7.8	191.1	Major	Low	Remove	-	-
T207	Beech	14	650	1	6	0.5	Mature	Good	Good	-	20+	B	1	Ivy on stem.	7.8	191.1	Major	Low	Remove	-	-
T208	Lime	15	550	1	7	0.5	Mature	Good	Good	-	20+	B	1	Stem not visible access limited	6.6	136.8	Major	Low	Remove	-	-
T209	Lime	15	375	1	7	0.5	Mature	Good	Good	-	20+	B	1	Stem not visible basal growth.	4.5	63.6	Major	Low	Remove	-	-
T210	Birch	10	300	2	6	1.5	Mature	Fair	Fair	-	10+	C	3	Suppressed by adjacent lime tree. growing west.	3.6	40.7	Major	Very Low	Remove	-	-
T211	Beech	15	650	1	7	0.5	Mature	Good	Good	-	20+	B	1	-	7.8	191.1	Major	Low	Remove	-	-
T212	Horse Chestnut	10	350	1	5	0.5	Semi-Mature	Good	Good	-	20+	B	1	-	4.2	55.4	Major	Low	Remove	-	-
T213	Lime	14	650	1	6	0.5	Mature	Good	Good	-	20+	B	1	Dense basal growth obscured stem.	7.8	191.1	Major	Low	Remove	-	-
T214	Beech	15	675	1	7	0.5	Mature	Good	Good	-	20+	B	1	Fluting and lack of buttressing on stem.	8.1	206.1	Major	Low	Remove	-	-
T215	Lime	18	550	1	7	0.5	Mature	Good	Good	-	20+	B	1	Dense basal growth, obscured stem.	6.6	136.8	Major	Low	Remove	-	-
T216	Elm	13	300	3	6	0	Semi-Mature	Good	Good	-	10+	C	3	-	3.6	40.7	Major	Very Low	Remove	-	-
T217	Lime	15	550	1	7	0.5	Mature	Good	Good	-	20+	B	1	Dense basal growth, obscured stem.	6.6	136.8	Major	Low	Remove	-	-
T218	Beech	15	775	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	9.3	271.7	Major	Low	Remove	-	-
T219	Beech	15	600	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	7.2	162.8	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T220	Lime	15	550	1	7	0.5	Mature	Good	Good	-	20+	B	1	Dense basal growth, obscured stem.	6.6	136.8	No Change	Low	Retain	-	-
T221	Lime	15	550	1	7	0.5	Mature	Good	Good	-	20+	B	1	Dense basal growth, obscured stem.	6.6	136.8	Major	Low	Remove	-	-
T222	Beech	15	675	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	8.1	206.1	No Change	Low	Retain	-	-
T223	Beech	15	600	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	7.2	162.8	Major	Low	Remove	-	-
T224	Lime	15	500	1	7	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	6	113.0	No Change	Low	Retain	-	-
T225	Lime	15	600	1	7	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	7.2	162.8	Major	Low	Remove	-	-
T226	Beech	15	600	1	6	0.5	Mature	Poor	Good	Pass to landowner.	20+	B	1	No access for close inspection. sparse crown.	7.2	162.8	No Change	Low	Retain	-	-
T227	Lime	15	600	1	7	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	7.2	162.8	No Change	Low	Retain	-	-
T228	Beech	15	600	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	7.2	162.8	No Change	Low	Retain	-	-
T229	Beech	15	600	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	7.2	162.8	No Change	Low	Retain	-	-
T230	Lime	15	550	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem.	6.6	136.8	No Change	Low	Retain	-	-
T231	Lime	15	600	1	7	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	7.2	162.8	No Change	Low	Retain	-	-
T232	Beech	15	475	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	5.7	102.0	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T233	Beech	15	600	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	7.2	162.8	No Change	Low	Retain	-	-
T234	Lime	15	450	1	7	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem.	5.4	91.6	No Change	Low	Retain	-	-
T235	Lime	15	600	1	7	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	7.2	162.8	No Change	Low	Retain	-	-
T236	Beech	15	625	1	6	0	Mature	Good	Good	-	20+	B	1	-	7.5	176.7	No Change	Low	Retain	-	-
T237	Beech	15	400	1	6	0.5	Mature	Good	Good	-	20+	B	1	No access.	4.8	72.3	No Change	Low	Retain	-	-
T238	Lime	15	500	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem.	6	113.0	No Change	Low	Retain	-	-
T239	Lime	15	500	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	6	113.0	No Change	Low	Retain	-	-
T240	Beech	15	650	1	6	0	Mature	Good	Good	-	20+	B	1	-	7.8	191.1	No Change	Low	Retain	-	-
T241	Lime	12	500	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem.	6	113.0	No Change	Low	Retain	-	-
T242	Lime	12	500	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	6	113.0	No Change	Low	Retain	-	-
T243	Elm	17	625	1	4	1.5	Mature	Good	Good	-	20+	B	1	-	7.5	176.7	No Change	Low	Retain	-	-
T244	Beech	15	400	1	6	0.5	Mature	Good	Good	-	20+	B	1	No access.	4.8	72.3	No Change	Low	Retain	-	-
T245	Lime	14	500	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem.	6	113.0	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T246	Lime	12	400	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	4.8	72.3	No Change	Low	Retain	-	-
T247	Lime	12	400	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	4.8	72.3	No Change	Low	Retain	-	-
T248	Beech	15	825	1	7	0	Mature	Good	Good	-	20+	A	1	-	9.9	307.9	No Change	Medium	Retain	-	-
T249	Lime	12	425	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem.	5.1	81.7	No Change	Low	Retain	-	-
T250	Lime	12	400	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	4.8	72.3	No Change	Low	Retain	-	-
T251	Lime	12	400	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem. no access.	4.8	72.3	No Change	Low	Retain	-	-
T252	Beech	15	500	1	6	0.5	Mature	Good	Good	-	20+	B	1	No access.	6	113.0	No Change	Low	Retain	-	-
T253	Beech	15	500	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	6	113.0	No Change	Low	Retain	-	-
T254	Lime	12	400	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth obscured stem.	4.8	72.3	No Change	Low	Retain	-	-
T255	Beech	9	400	1	6	0	Mature	Good	Good	-	20+	B	1	No close access.	4.8	72.3	No Change	Low	Retain	-	-
T256	Beech	12	550	1	6	0	Mature	Good	Good	-	20+	B	1	-	6.6	136.8	No Change	Low	Retain	-	-
T257	Beech	13	500	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth - obscured stem.	6	113.0	No Change	Low	Retain	-	-
T258	Beech	15	600	1	6	0.5	Mature	Good	Good	-	20+	B	1	-	7.2	162.8	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T259	Elm	13	525	1	6	0	Mature	Good	Good	-	20+	B	1	-	6.3	124.6	No Change	Low	Retain	-	-
T260	Lime	14	550	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth- obscured stem.	6.6	136.8	No Change	Low	Retain	-	-
T261	Lime	14	550	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth- obscured stem. no access.	6.6	136.8	No Change	Low	Retain	-	-
T262	Beech	12	825	1	6	2	Mature	Good	Good	-	20+	B	1	-	9.9	307.9	No Change	Low	Retain	-	-
T263	Horse Chestnut	10	350	1	4	1.5	Semi-Mature	Good	Good	-	20+	B	1	-	4.2	55.4	No Change	Low	Retain	-	-
T264	Lime	13	525	1	6	0	Mature	Good	Good	-	20+	B	1	Basal growth - obscured stem.	6.3	124.6	No Change	Low	Retain	-	-
T265	Beech	12	825	1	8	4	Mature	Good	Good	-	20+	B	1	-	9.9	307.9	No Change	Low	Retain	-	-
T266	Elm	14	750	1	6	4	Mature	Good	Good	-	20+	B	1	-	9	254.4	No Change	Low	Retain	-	-
T267	Whitebeam	10	450	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	Major	Low	Remove	-	-
T268	Whitebeam	10	575	1	4	3	Mature	Good	Good	-	20+	B	1	-	6.9	149.5	Moderate	Low	Remove	-	-
T269	Whitebeam	10	450	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	No Change	Low	Retain	-	-
T270	Whitebeam	10	450	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	Minor	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T271	Whitebeam	10	475	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.7	102.0	Major	Low	Remove	-	-
T272	Horse Chestnut	11	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T273	Horse Chestnut	10	350	1	4	1	Mature	Good	Good	-	20+	B	1	-	4.2	55.4	Major	Low	Remove	-	-
T274	Whitebeam	10	450	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	Major	Low	Remove	-	-
T275	Whitebeam	10	450	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	Major	Low	Remove	-	-
T276	Horse Chestnut	10	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T277	Horse Chestnut	10	350	1	4	0.5	Mature	Good	Good	-	20+	B	1	-	4.2	55.4	Major	Low	Remove	-	-
T278	Horse Chestnut	10	250	1	4	2	Mature	Good	Good	-	20+	B	1	-	3	28.2	Major	Low	Remove	-	-
T279	Horse Chestnut	10	375	1	4	2	Mature	Good	Good	-	20+	B	1	-	4.5	63.6	Major	Low	Remove	-	-
T280	Horse Chestnut	9	250	1	3	1	Mature	Good	Good	-	20+	B	1	-	3	28.2	Major	Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T281	Horse Chestnut	12	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T282	Horse Chestnut	10	300	1	5	1	Mature	Good	Good	-	20+	B	1	-	3.6	40.7	Major	Low	Remove	-	-
T283	Horse Chestnut	10	450	1	4	2	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	Major	Low	Remove	-	-
T284	Horse Chestnut	12	400	1	6	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T285	Horse Chestnut	12	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T286	Horse Chestnut	10	450	1	4	2	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	Major	Low	Remove	-	-
T287	Whitebeam	8	375	1	4	3	Mature	Good	Good	-	20+	B	1	-	4.5	63.6	Major	Low	Remove	-	-
T288	Whitebeam	10	400	1	4	3	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T289	Horse Chestnut	10	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T290	Whitebeam	10	525	1	4	3	Mature	Good	Good	-	20+	B	1	-	6.3	124.6	Major	Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T291	Horse Chestnut	12	400	1	7	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T292	Whitebeam	10	450	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	Major	Low	Remove	-	-
T293	Whitebeam	11	400	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T294	Whitebeam	11	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T295	Horse Chestnut	12	400	1	6	0	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T296	Whitebeam	10	525	1	4	3	Mature	Good	Good	-	20+	B	1	-	6.3	124.6	Negligible	Low	Retain	-	-
T297	Horse Chestnut	11	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T298	Horse Chestnut	12	400	1	5	1	Mature	Fair	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T299	Whitebeam	10	500	1	4	3	Mature	Good	Good	-	20+	B	1	-	6	113.0	No Change	Low	Retain	-	-
T300	Horse Chestnut	13	400	1	7	0	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T301	Whitebeam	10	475	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.7	102.0	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T302	Whitebeam	10	500	1	4	2	Mature	Good	Good	-	20+	B	1	-	6	113.0	No Change	Low	Retain	-	-
T303	Whitebeam	10	450	1	4	3	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	No Change	Low	Retain	-	-
T304	Horse Chestnut	12	400	1	7	0	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T305	Whitebeam	10	475	1	4	2	Mature	Good	Good	-	20+	B	1	-	5.7	102.0	No Change	Low	Retain	-	-
T306	Horse Chestnut	10	400	1	5	0.5	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T307	Whitebeam	10	375	1	4	2	Mature	Good	Good	-	20+	B	1	-	4.5	63.6	No Change	Low	Retain	-	-
T308	Horse Chestnut	12	400	2	6	0	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T309	Whitebeam	10	375	1	4	3	Mature	Good	Good	-	20+	B	1	-	4.5	63.6	No Change	Low	Retain	-	-
T310	Horse Chestnut	10	475	1	4	1.5	Mature	Good	Good	-	20+	B	1	-	5.7	102.0	No Change	Low	Retain	-	-
T311	Whitebeam	10	400	1	4	3	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T312	Horse Chestnut	12	400	1	5	0	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T313	Horse Chestnut	11	300	1	5	1	Mature	Good	Good	-	20+	B	1	-	3.6	40.7	No Change	Low	Retain	-	-
T314	Horse Chestnut	12	450	1	5	2	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	No Change	Low	Retain	-	-
T315	Horse Chestnut	12	300	1	5	2	Mature	Good	Good	-	20+	B	1	-	3.6	40.7	No Change	Low	Retain	-	-
T316	Whitebeam	12	400	1	5	1	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T317	Whitebeam	8	325	1	5	3	Mature	Fair	Good	-	20+	C	2	-	3.9	47.7	No Change	Very Low	Retain	-	-
T318	Horse Chestnut	10	350	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	4.2	55.4	No Change	Low	Retain	-	-
T319	Whitebeam	10	300	1	5	2	Mature	Fair	Good	-	10+	B	1	-	3.6	40.7	No Change	Low	Retain	-	-
T320	Horse Chestnut	8	300	1	5	1	Semi-Mature	Poor	Fair	-	<10	C	2	Dying back.	3.6	40.7	No Change	Very Low	Retain	-	-
T321	Whitebeam	10	425	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	5.1	81.7	No Change	Low	Retain	-	-
T322	Horse Chestnut	10	200	1	5	0.5	Semi-Mature	Fair	Good	-	20+	B	2	No close access.	2.4	18.0	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T323	Horse Chestnut	10	300	1	5	0.5	Semi-Mature	Good	Good	-	20+	B	2	No close access.	3.6	40.7	No Change	Low	Retain	-	-
T324	Horse Chestnut	10	300	1	5	0.5	Mature	Good	Good	-	20+	B	2	No close access.	3.6	40.7	No Change	Low	Retain	-	-
T325	Whitebeam	10	500	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	6	113.0	No Change	Low	Retain	-	-
T326	Horse Chestnut	10	275	1	5	1.5	Mature	Good	Good	-	20+	B	2	-	3.3	34.2	No Change	Low	Retain	-	-
T327	Horse Chestnut	10	425	1	5	0.5	Mature	Good	Good	-	20+	B	1	-	5.1	81.7	No Change	Low	Retain	-	-
T328	Whitebeam	10	475	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	5.7	102.0	No Change	Low	Retain	-	-
T329	Horse Chestnut	10	300	1	5	0.5	Mature	Good	Good	-	20+	B	2	No close access.	3.6	40.7	No Change	Low	Retain	-	-
T330	Whitebeam	10	425	1	5	1.5	Mature	Good	Fair	-	20+	B	1	Previously uprooted away from carriageway. 5 degree lean to SE. small wound at base.	5.1	81.7	No Change	Low	Retain	-	-
T331	Horse Chestnut	10	450	1	5	0.5	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	No Change	Low	Retain	-	-
T332	Ash	10	250	1	4	1.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	3	28.2	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T333	Oak	13	500	1	8	2	Mature	Good	Fair	-	40+	B	1	-	6	113.0	Major	Low	Remove	-	-
T334	Ash	13	700	1	6	4.5	Over-Mature	Fair	Fair	-	20+	B	1	-	8.4	221.6	No Change	Low	Retain	-	-
T335	Oak	10	1000	1	7	0	Mature	Good	Good	-	40+	B	1	-	12	452.3	No Change	Low	Retain	-	-
T336	Ash	15	750	1	6	4.5	Mature	Good	Fair	-	20+	B	1	-	9	254.4	No Change	Low	Retain	-	-
T337	Ash	12	500	1	6	4.5	Mature	Fair	Fair	-	20+	B	1	-	6	113.0	No Change	Low	Retain	-	-
T338	Ash	15	750	1	6	4.5	Mature	Good	Fair	-	20+	B	1	-	9	254.4	No Change	Low	Retain	-	-
T339	Ash	15	750	1	6	4.5	Mature	Good	Fair	-	20+	B	1	-	9	254.4	No Change	Low	Retain	-	-
T340	Ash	15	750	1	6	4.5	Mature	Good	Poor	-	10+	C	1	Large cavity at base.	9	254.4	No Change	Very Low	Retain	-	-
T341	Ash	12	350	3	6	4.5	Mature	Good	Fair	-	20+	B	1	-	4.2	55.4	No Change	Low	Retain	-	-
T342	Ash	15	1000	1	8	4.5	Mature	Good	Fair	-	20+	B	1	-	12	452.3	No Change	Low	Retain	-	-
T343	Ash	9	500	1	6	4.5	Mature	Good	Fair	-	20+	B	1	-	6	113.0	Major	Low	Remove	-	-
T344	Ash	15	750	1	6	4.5	Mature	Good	Fair	-	20+	B	1	-	9	254.4	Major	Low	Remove	-	-
T345	Ash	12	600	1	6	4.5	Mature	Good	Fair	-	20+	B	1	-	7.2	162.8	Major	Low	Remove	-	-
T346	Ash	15	600	1	6	4.5	Mature	Good	Poor	-	20+	B	1	Inonotus hispidus at base.	7.2	162.8	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T347	Ash	15	750	1	6	4.5	Mature	Good	Fair	-	20+	B	1	Tear out wound with woodpecker hole at 5m.	9	254.4	No Change	Low	Retain	-	-
T348	Ash	14	700	1	4.5	1	Mature	Fair	Poor	-	10+	B	2	Wounds, dead branches.	8.4	221.6	Negligible	Low	Retain	-	-
T349	Ash	8	500	1	6	4.5	Mature	Good	Fair	-	20+	B	1	-	6	113.0	Major	Low	Remove	-	-
T350	Ash	12	700	1	6	5	Mature	Fair	Fair	-	20+	C	2	-	8.4	221.6	Major	Very Low	Remove	-	-
T351	Ash	9	600	1	4	3	Over-Mature	Poor	Poor	-	10+	B	3	Severe canker throughout.	7.2	162.8	Major	Low	Remove	-	-
T352	Ash	14	400	2	6	4	Mature	Fair	Fair	-	10+	C	2	-	4.8	72.3	Major	Very Low	Remove	-	-
T353	Ash	14	950	1	6	4	Mature	Fair	Fair	-	20+	B	1	Some dead branches, minor dieback at top of crown	11.4	408.2	Major	Low	Remove	-	-
T354	Ash	10	400	1	4	2	Mature	Poor	Fair	-	10+	C	3	-	4.8	72.3	Major	Very Low	Remove	-	-
T355	Ash	10	500	1	4	2	Mature	Fair	Fair	-	10+	C	3	-	6	113.0	Major	Very Low	Remove	-	-
T356	Ash	12	600	1	4	2	Mature	Fair	Fair	-	10+	C	3	-	7.2	162.8	Major	Very Low	Remove	-	-
T357	Ash	10	475	1	4	1	Mature	Fair	Fair	-	10+	C	3	-	5.7	102.0	Major	Very Low	Remove	-	-
T358	Ash	9	500	1	5	0.5	Mature	Poor	Poor	-	10+	C	3	Previously collapsed or retrenched.	6	113.0	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T359	Ash	9	500	1	5	0.5	Over-Mature	Poor	Poor	-	10+	C	3	Decayed stump 4m high with basal growth regeneration to 9m.	6	113.0	Major	Very Low	Remove	-	-
T360	Ash	15	825	1	8	3	Over-Mature	Poor	Poor	-	<10	U	U	Major branch failure on eastern side. stub is decayed through to cavity in stem. sparse crown.	9.9	307.9	Major	none	Remove	-	-
T361	Ash	15	825	1	8	3	Over-Mature	Fair	Fair	-	10+	B	3	Inonotus hispidus at 3m.	9.9	307.9	Major	Low	Remove	-	-
T362	Sycamore	8	500	1	4	2	Mature	Good	Fair	-	10+	C	3	-	6	113.0	Major	Very Low	Remove	-	-
T363	Ash	8	475	1	4	2	Semi-mature	Poor	Fair	-	<10	C	3	Dying back.	5.7	102.0	Major	Very Low	Remove	-	-
T364	Ash	10	300	1	3	0.5	Mature	Poor	Fair	-	<10	C	1	Chalara present, dagger shaped lesion on branches and low crown density.	3.6	40.7	Major	Very Low	Remove	-	-
T365	Oak	11	700	1	8	1.5	Mature	Good	Good	-	40+	B	1	-	8.4	221.6	Minor	Low	Retain	-	-
T366	Ash	15	600	1	5	3	Mature	Good	Fair	-	10+	C	1	No access. surveyed from neighbouring land. not clearly visible.	7.2	162.8	Major	Very Low	Remove	-	-
T367	Sycamore	15	750	1	4.5	0.5	Mature	Good	Fair	-	40+	B	1	-	9	254.4	Major	Low	Remove	-	-
T368	Ash	6	1700	1	2	2	Semi-Mature	Good	Fair	-	40+	B	2	Broken branch (minor), crown disturbed by adjacent hawthorn bushes.	20.4	1307.4	Major	Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T369	Oak	12	550	1	5	1.5	Mature	Good	Good	-	20+	B	2	Top of crown snapped out.	6.6	136.8	No Change	Low	Retain	-	-
T370	Sycamore	10	250	1	3	0	Mature	Good	Fair	-	20+	C	1	-	3	28.2	No Change	Very Low	Retain	-	-
T371	Sycamore	10	250	1	3	0	Mature	Good	Fair	-	20+	C	1	-	3	28.2	No Change	Very Low	Retain	-	-
T372	Sycamore	5	150	2	1.5	0.5	Semi-Mature	Fair	Fair	-	10+	C	2	-	1.8	10.1	No Change	Very Low	Retain	-	-
T373	Sycamore	9	400	10	4	3	Mature	Good	Poor	-	10+	C	2	Crown top snapped out.	4.8	72.3	No Change	Very Low	Retain	-	-
T374	Sycamore	9	500	10	4	3	Mature	Good	Fair	-	20+	C	2	-	6	113.0	No Change	Very Low	Retain	-	-
T375	Sycamore	12	300	1	3	2.5	Mature	Fair	Fair	-	20+	C	1	Decay in buttresses and on middle stem due to wounding.	3.6	40.7	No Change	Very Low	Retain	-	-
T376	Sycamore	9	400	3	3	0.5	Mature	Fair	Fair	-	10+	C	2	-	4.8	72.3	No Change	Very Low	Retain	-	-
T377	Sycamore	6	250	1	1.5	0.5	Semi-Mature	Fair	Poor	-	10+	C	1	Topped.	3	28.2	No Change	Very Low	Retain	-	-
T378	Sycamore	6.5	350	1	3	1.5	Mature	Poor	Poor	-	<10	C	3	-	4.2	55.4	No Change	Very Low	Retain	-	-
T379	Oak	10	700	1	6	3	Mature	Fair	Fair	-	20+	C	2	Decay and cavity in northern branch.	8.4	221.6	No Change	Very Low	Retain	-	-
T380	Sycamore	9	300	3	3	0.5	Mature	Fair	Fair	-	10+	C	2	-	3.6	40.7	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T381	Hawthorn	5	250	2	1.5	1.5	Mature	Poor	Poor	-	<10	C	1	Dry, cracked on majority of stems.	3	28.2	No Change	Very Low	Retain	-	-
T382	Sycamore	11	400	1	5	4	Mature	Fair	Fair	-	10+	C	2	-	4.8	72.3	No Change	Very Low	Retain	-	-
T383	Sycamore	4.5	200	3	2.5	1	Mature	Good	Good	-	20+	C	2	-	2.4	18.0	No Change	Very Low	Retain	-	-
T384	Oak	10	900	1	4.5	0	Over-Mature	Fair	Poor	-	20+	A	3	Fruiting body at 1m, Very Large cavity at 2m, major dead wood, potential veteran trees	10.8	366.4	Major	Low	Remove	-	-
T385	Whitebeam	10	425	1	4	1.5	Mature	Fair	Fair	-	10+	C	2	-	5.1	81.7	No Change	Very Low	Retain	-	-
T386	Horse Chestnut	10	450	1	5	0.5	Mature	Good	Good	-	20+	B	1	-	5.4	91.6	No Change	Low	Retain	-	-
T387	Hawthorn	4	200	1	1.5	0	Mature	Good	Good	-	20+	C	1	-	2.4	18.0	No Change	Very Low	Retain	-	-
T388	Hawthorn	3.5	175	1	1	0.5	Mature	Good	Fair	-	10+	C	1	-	2.1	13.8	No Change	Very Low	Retain	-	-
T389	Ash	14	800	1	6	0.5	Over-Mature	Fair	Fair	-	20+	B	1	Cavities and pruning wounds, minor dead wood	9.6	289.5	No Change	Low	Retain	-	-
T390	Sycamore	14	500	1	5	1.5	Mature	Good	Good	-	20+	B	1	No access. surveyed from distance.	6	113.0	No Change	Low	Retain	-	-
T391	Ash	18	600	3	7	4	Over-Mature	Good	Fair	-	20+	B	1	No access. surveyed from distance.	7.2	162.8	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T392	Ash	6	825	1	3	2	Over-Mature	Fair	Poor	-	10+	C	3	Pollarded at 6m.	9.9	307.9	No Change	Very Low	Retain	-	-
T393	Ash	15	750	1	8	1	Mature	Good	Good	-	20+	B	1	-	9	254.4	No Change	Low	Retain	-	-
T394	Ash	7	1000	1	4	1.5	Over-Mature	Poor	Poor	-	10+	C	3	Previously collapsed tree regenerating from high stump.	12	452.3	No Change	Very Low	Retain	-	-
T395	Ash	10	350	1	5	2.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	4.2	55.4	Major	Very Low	Remove	-	-
T396	Ash	10	150	1	2	1	Semi-Mature	Fair	Fair	-	10+	C	3	-	1.8	10.1	Major	Very Low	Remove	-	-
T397	Ash	10	275	1	5	2.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	3.3	34.2	Major	Very Low	Remove	-	-
T398	Hawthorn	3	100	1	1	1	Semi-Mature	Fair	Fair	-	10+	C	3	-	1.2	4.5	Major	Very Low	Remove	-	-
T399	Hawthorn	3	100	1	1	1	Semi-Mature	Fair	Fair	-	10+	C	3	-	1.2	4.5	Major	Very Low	Remove	-	-
T400	Hawthorn	4	200	1	2	1.5	Mature	Good	Good	-	10+	C	3	-	2.4	18.0	Major	Very Low	Remove	-	-
T401	Oak	12	900	1	8	2.5	Mature	Good	Good	-	40+	A	2	No access to closely inspect.	10.8	366.4	No Change	Medium	Retain	-	-
T402	Ash	9	475	1	4	0.5	Mature	Fair	Poor	-	10+	C	3	Failed stem regenerated as pollard.	5.7	102.0	No Change	Very Low	Retain	-	-
T403	Oak	6	500	1	4	0.5	Mature	Fair	Poor	-	10+	C	3	-	6	113.0	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T404	Ash	9	350	1	3	1.5	Semi-Mature	Fair	Poor	-	10+	C	3	-	4.2	55.4	No Change	Very Low	Retain	-	-
T405	Oak	14	650	1	7.5	3	Mature	Good	Good	-	20+	B	3	-	7.8	191.1	Negligible	Low	Retain	-	-
T406	Oak	13	700	1	6	2	Mature	Fair	Fair	-	20+	B	2	-	8.4	221.6	No Change	Low	Retain	-	-
T407	Oak	10	375	1	6	2	Mature	Fair	Fair	-	20+	C	2	-	4.5	63.6	No Change	Very Low	Retain	-	-
T408	Oak	13	700	1	6	2	Mature	Fair	Fair	-	20+	B	2	-	8.4	221.6	No Change	Low	Retain	-	-
T409	Oak	13	575	1	6	2	Mature	Poor	Fair	-	20+	C	3	Dieback in crown.	6.9	149.5	No Change	Very Low	Retain	-	-
T410	Oak	13	825	1	7	2	Mature	Fair	Fair	-	20+	B	2	Decay at base.	9.9	307.9	No Change	Low	Retain	-	-
T411	Oak	13	300	1	3	2	Semi-Mature	Poor	Fair	-	20+	C	3	Dieback in crown.	3.6	40.7	No Change	Very Low	Retain	-	-
T412	Cherry	7	250	1	2	1.5	Semi-Mature	Good	Fair	-	10+	C	2	-	3	28.2	No Change	Very Low	Retain	-	-
T413	Oak	13	300	1	3	2	Semi-Mature	Fair	Fair	-	20+	C	3	High crown.	3.6	40.7	No Change	Very Low	Retain	-	-
T414	Oak	8	350	1	4	2	Mature	Fair	Fair	-	20+	C	3	-	4.2	55.4	No Change	Very Low	Retain	-	-
T415	Elm	8	275	1	3	2	Semi-Mature	Fair	Fair	-	20+	C	3	-	3.3	34.2	No Change	Very Low	Retain	-	-
T416	Ash	9	550	1	3	3	Semi-Mature	Fair	Fair	-	20+	C	3	-	6.6	136.8	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T417	Elm	7	400	1	3	3	Semi-Mature	Fair	Fair	-	20+	C	3	-	4.8	72.3	No Change	Very Low	Retain	-	-
T418	Elm	9	550	1	3	2	Mature	Good	Good	-	10+	B	1	-	6.6	136.8	No Change	Low	Retain	-	-
T419	Ash	9	300	1	3	3	Semi-Mature	Fair	Fair	-	20+	C	3	-	3.6	40.7	No Change	Very Low	Retain	-	-
T420	Sycamore	9	300	1	3	3	Semi-Mature	Fair	Fair	-	10+	C	3	-	3.6	40.7	No Change	Very Low	Retain	-	-
T421	Oak	9	400	1	6	2	Mature	Fair	Fair	-	20+	C	3	-	4.8	72.3	No Change	Very Low	Retain	-	-
T422	Ash	15	700	1	6	1	Mature	Fair	Fair	-	10+	C	3	-	8.4	221.6	No Change	Very Low	Retain	-	-
T423	Birch	13	450	1	6	1.5	Mature	Fair	Good	-	10+	B	3	-	5.4	91.6	No Change	Low	Retain	-	-
T424	Hawthorn	5	300	1	3	0.5	Mature	Good	Fair	-	10+	C	3	-	3.6	40.7	No Change	Very Low	Retain	-	-
T425	Hawthorn	5	225	1	2	1	Semi-Mature	Good	Fair	-	10+	C	3	-	2.7	22.9	No Change	Very Low	Retain	-	-
T426	Hawthorn	4	125	1	1	0.5	Semi-Mature	Good	Fair	-	10+	C	3	-	1.5	7.0	No Change	Very Low	Retain	-	-
T427	Alder	8	350	3	7	1	Mature	Fair	Fair	-	20+	B	3	-	4.2	55.4	No Change	Low	Retain	-	-
T429	Oak	8	400	1	4	1	Mature	Fair	Fair	-	20+	B	3	-	4.8	72.3	Major	Low	Remove	-	-
T430	Alder	8	350	1	5	1	Mature	Fair	Fair	-	20+	C	3	-	4.2	55.4	Major	Very Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T431	Alder	6	200	1	5	1	Semi-Mature	Fair	Fair	-	10+	C	3	-	2.4	18.0	Major	Very Low	Remove	-	-
T432	Oak	13	775	1	8	1	Mature	Good	Good	-	20+	B	3	-	9.3	271.7	Major	Low	Remove	-	-
T433	Oak	10	700	1	8	1.5	Mature	Good	Fair	-	20+	B	3	-	8.4	221.6	Major	Low	Remove	-	-
T434	Ash	10	550	1	6	1.5	Mature	Poor	Fair	-	<10	C	3	-	6.6	136.8	Major	Very Low	Remove	-	-
T435	Oak	10	800	1	8	1	Mature	Fair	Fair	-	20+	B	3	-	9.6	289.5	Major	Low	Remove	-	-
T436	Cherry	7	300	1	4	0	Mature	Poor	Poor	-	<10	C	3	Significant swept stem to east	3.6	40.7	Major	Very Low	Remove	-	-
T437	Cherry	8	350	1	5	1	Mature	Fair	Fair	-	20+	C	3	-	4.2	55.4	Major	Very Low	Remove	-	-
T438	Cherry	8	350	1	5	1	Mature	Fair	Fair	-	20+	C	3	-	4.2	55.4	Major	Very Low	Remove	-	-
T439	Cherry	7	300	1	4	2	Mature	Poor	Poor	-	<10	C	3	Crown on east side only. decay at base.	3.6	40.7	Major	Very Low	Remove	-	-
T440	Ash	10	550	1	6	1.5	Mature	Fair	Fair	-	10+	C	3	-	6.6	136.8	Major	Very Low	Remove	-	-
T441	Oak	10	600	1	6	2	Mature	Fair	Fair	-	10+	C	3	-	7.2	162.8	Major	Very Low	Remove	-	-
T442	Oak	10	600	1	6	2	Mature	Fair	Fair	-	10+	C	3	-	7.2	162.8	Major	Very Low	Remove	-	-
T443	Ash	10	550	1	7	1	Mature	Fair	Fair	-	10+	C	3	-	6.6	136.8	Major	Very Low	Remove	-	-
T444	Oak	10	900	1	6	2	Mature	Good	Good	-	20+	B	3	-	10.8	366.4	No Change	Low	Retain	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T445	Ash	10	700	1	5	2	Mature	Fair	Fair	-	10+	C	3	Re-growing coppice stool. decay at base.	8.4	221.6	No Change	Very Low	Retain	-	-
T446	Cherry	9	650	1	4	1	Over-Mature	Poor	Poor	-	<10	C	3	Old decaying tree.	7.8	191.1	No Change	Very Low	Retain	-	-
T447	Ash	7	350	1	3	1	Semi-Mature	Fair	Fair	-	10+	C	1	-	4.2	55.4	No Change	Very Low	Retain	-	-
T448	Sycamore	18	900	2	7	1	Over-Mature	Good	Good	-	40+	A	1	Large twin stemmed specimen.	10.8	366.4	No Change	Medium	Retain	-	-
T449	Sycamore	18	900	2	7	1	Over-Mature	Good	Good	-	40+	A	1	Large twin stemmed specimen.	10.8	366.4	No Change	Medium	Retain	-	-
T450	Spruce	5	150	1	3	1	Semi-Mature	Good	Good	-	10+	C	1	-	1.8	10.1	No Change	Very Low	Retain	-	-
T451	Birch	11	450	1	6	1.5	Over-Mature	Good	Fair	-	10+	B	1	Small cavity at 2.5m.	5.4	91.6	No Change	Low	Retain	-	-
T452	Birch	9	150	1	3	3	Semi-Mature	Fair	Fair	-	10+	B	1	-	1.8	10.1	No Change	Low	Retain	-	-
T453	Oak	11	700	1	7	0	Mature	Fair	Fair	-	20+	B	1	Previously pruned, poor occlusion and small decay cavities. tear out wound on main stem with cavity behind wound.	8.4	221.6	No Change	Low	Retain	-	-
T454	Birch	10	350	3	6	2	Mature	Good	Good	-	10+	C	3	Ivy in crown	4.2	55.4	Major	Very Low	Remove	-	-
T455	Ash	12	400	1	5	0.5	Mature	Fair	Fair	-	10+	C	3	Hawthorn growing through tree.	4.8	72.3	Negligible	Very Low	Retain	-	-
T456	Ash	12	325	1	5	0.5	Mature	Fair	Fair	-	10+	C	3	-	3.9	47.7	No Change	Very Low	Retain	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T457	Sycamore	10	1200	1	6	2	Over-Mature	Good	Fair	-	20+	A+	3	Top of crown absent. potential veteran tree.	14.4	651.4	Major	High	Remove	-	-
T458	Beech	7.5	750	1	4	0	Mature	Fair	Fair	-	20+	B	2	Three major branches starting right above ground level.	9	254.4	Major	Low	Remove	-	-
T459	Beech	4	175	1	2	1.5	Semi-Mature	Good	Fair	-	20+	C	1	-	2.1	13.8	Major	Very Low	Remove	-	-
T460	Sycamore	17	800	1	4	2.5	Mature	Good	Good	-	40+	B	1	-	9.6	289.5	No Change	Low	Retain	-	-
T461	Lime	12	300	6	3.5	1.5	Mature	Fair	Good	-	20+	C	1	Coppice.	3.6	40.7	No Change	Very Low	Retain	-	-
T462	Scots Pine	12	450	1	4	8	Mature	Good	Fair	-	10+	C	1	-	5.4	91.6	No Change	Very Low	Retain	-	-
T463	Scots Pine	12	400	1	3	8	Semi-Mature	Fair	Poor	Remove	<10	U	U	Suppressed and leaning to north. occluded split at 5m.	4.8	72.3	No Change	none	Retain	-	-
T464	Scots Pine	12	450	1	4	8	Mature	Good	Fair	-	10+	C	1	-	5.4	91.6	No Change	Very Low	Retain	-	-
T465	Scots Pine	10	350	1	4	8	Mature	Good	Fair	-	10+	C	1	-	4.2	55.4	No Change	Very Low	Retain	-	-
T466	Scots Pine	10	350	1	4	8	Mature	Good	Fair	-	10+	C	1	-	4.2	55.4	No Change	Very Low	Retain	-	-
T467	Scots Pine	9	350	1	4	2.5	Mature	Good	Fair	-	10+	C	1	-	4.2	55.4	No Change	Very Low	Retain	-	-
T468	Sycamore	5	250	1	2.5	1.5	Semi-Mature	Fair	Fair	-	10+	C	1	-	3	28.2	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T469	Sycamore	5	250	1	2.5	1.5	Semi-Mature	Fair	Fair	-	10+	C	1	-	3	28.2	No Change	Very Low	Retain	-	-
T470	Sycamore	5	250	1	3.5	1.5	Semi-Mature	Fair	Fair	-	10+	C	1	-	3	28.2	No Change	Very Low	Retain	-	-
T471	Ash	12	475	1	6	2	Mature	Fair	Fair	-	10+	C	3	-	5.7	102.0	No Change	Very Low	Retain	-	-
T472	Sycamore	15	675	1	5	3	Mature	Good	Good	-	20+	B	1	-	8.1	206.1	No Change	Low	Retain	-	-
T473	Sycamore	6	325	1	2	3	Mature	Fair	Fair	-	10+	C	3	-	3.9	47.7	No Change	Very Low	Retain	-	-
T474	Oak	15	500	1	6	3	Mature	Good	Fair	-	20+	B	1	Ivy and epicormic growth in crown.	6	113.0	No Change	Low	Retain	-	-
T475	Oak	15	500	1	6	3	Mature	Good	Fair	-	20+	B	1	Ivy and epicormic growth in crown.	6	113.0	Major	Low	Remove	-	-
T476	Oak	15	800	1	8	2	Mature	Good	Fair	-	40+	B	1	Ivy and epicormic growth in crown	9.6	289.5	Major	Low	Remove	-	-
T477	Oak	12	500	1	8	2	Mature	Fair	Fair	-	20+	B	1	Ivy and epicormic growth in crown. relatively small crown.	6	113.0	Major	Low	Remove	-	-
T478	Oak	9	400	1	3	3	Mature	Fair	Poor	-	10+	C	3	Suppressed.	4.8	72.3	Major	Very Low	Remove	-	-
T479	Oak	13	500	1	8	2	Mature	Good	Good	-	40+	B	1	Ivy on stem and in crown.	6	113.0	Major	Low	Remove	-	-
T480	Oak	18	600	1	8	3	Mature	Good	Good	-	40+	B	1	Ivy on stem and in crown.	7.2	162.8	Major	Low	Remove	-	-
T481	Oak	18	700	1	8	3	Mature	Good	Good	-	40+	B	1	Ivy on stem and in crown.	8.4	221.6	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T482	Oak	18	700	1	8	3	Mature	Good	Good	-	40+	A	1	Ivy on stem and in crown.	8.4	221.6	Major	Medium	Remove	-	-
T483	Ash	12	475	1	6	2	Mature	Fair	Fair	-	10+	C	3	-	5.7	102.0	Major	Very Low	Remove	-	-
T484	Oak	12	400	1	6	3	Mature	Fair	Fair	-	20+	B	1	Laetoporous sulphureus on main stem.	4.8	72.3	Major	Low	Remove	-	-
T485	Oak	12	400	1	6	3	Mature	Fair	Fair	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T486	Oak	12	350	1	6	3	Mature	Fair	Fair	-	20+	B	1	Lost main crown, side branch has taken over.	4.2	55.4	Major	Low	Remove	-	-
T487	Oak	15	500	1	6	3	Mature	Fair	Fair	-	20+	B	1	-	6	113.0	Major	Low	Remove	-	-
T488	Oak	12	350	1	6	3	Mature	Fair	Fair	-	20+	B	1	-	4.2	55.4	Major	Low	Remove	-	-
T489	Oak	15	500	1	6	3	Mature	Fair	Fair	-	20+	B	1	-	6	113.0	Major	Low	Remove	-	-
T490	Oak	18	700	1	8	3	Mature	Fair	Fair	-	20+	B	1	-	8.4	221.6	Major	Low	Remove	-	-
T491	Oak	15	500	1	6	3	Mature	Good	Good	-	20+	B	1	-	6	113.0	Major	Low	Remove	-	-
T492	Oak	18	700	1	8	3	Mature	Good	Good	-	40+	B	1	-	8.4	221.6	Major	Low	Remove	-	-
T493	Ash	15	550	1	7	1.5	Mature	Fair	Fair	-	10+	C	3	-	6.6	136.8	Major	Very Low	Remove	-	-
T494	Oak	20	1025	1	8	1	Mature	Good	Fair	-	40+	A	3	Major deadwood, Inonotus dryadeus on western side.	12.3	475.2	Major	Medium	Remove	VT	-
T495	Oak	20	650	1	6	1	Mature	Good	Poor	-	10+	B	1	Decay column to 3m, large branch stub on west.	7.8	191.1	Major	Low	Remove	-	-
T496	Ash	20	1000	1	10	1	Over-Mature	Fair	Fair	-	20+	B	1	Target canker, major deadwood.	12	452.3	Major	Low	Remove	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T497	Oak	10	475	1	2	1	Mature	Fair	Fair	-	10+	C	3	-	5.7	102.0	Major	Very Low	Remove	-	-
T498	Sycamore	20	1000	1	8	3	Mature	Fair	Good	-	20+	B	1	Minor included union at 3m	12	452.3	No Change	Low	Retain	-	-
T499	Sycamore	20	775	1	6	3	Mature	Fair	Good	-	20+	B	1	-	9.3	271.7	No Change	Low	Retain	-	-
T500	Sycamore	12	400	1	4	3	Mature	Good	Fair	-	20+	C	3	-	4.8	72.3	Major	Very Low	Remove	-	-
T501	Oak	13	700	1	5	2	Mature	Fair	Fair	-	20+	B	3	Ivy on stem and in crown.	8.4	221.6	Major	Low	Remove	-	-
T502	Ash	11	450	1	4	2.5	Mature	Poor	Poor	-	<10	C	3	-	5.4	91.6	Major	Very Low	Remove	-	-
T503	Ash	8	350	1	4	1	Semi-Mature	Fair	Fair	-	10+	C	3	-	4.2	55.4	No Change	Very Low	Retain	-	-
T504	Oak	12	500	1	6	3	Mature	Good	Good	-	20+	B	1	-	6	113.0	No Change	Low	Retain	-	-
T505	Ash	8	350	1	4	3	Semi-Mature	Fair	Fair	-	10+	C	3	-	4.2	55.4	No Change	Very Low	Retain	-	-
T506	Lime	11	400	1	5	0.5	Semi-Mature	Good	Fair	-	10+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T507	Lime	11	400	1	5	0.5	Semi-Mature	Good	Fair	-	10+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T508	Lime	11	400	1	5	0.5	Semi-Mature	Good	Fair	-	10+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T509	Sycamore	15	650	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	7.8	191.1	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T510	Sycamore	15	550	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	6.6	136.8	No Change	Low	Retain	-	-
T511	Sycamore	15	400	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T512	Oak	18	800	1	8	0	Mature	Good	Fair	-	20+	B	3	-	9.6	289.5	No Change	Low	Retain	-	-
T513	Sycamore	15	400	1	5	1.5	Mature	Good	Good	-	20+	B	1	-	4.8	72.3	No Change	Low	Retain	-	-
T514	Hawthorn	9	300	1	4	0.5	Mature	Good	Good	-	20+	B	3	-	3.6	40.7	No Change	Low	Retain	-	-
T515	Oak	14	600	3	7	0.5	Mature	Good	Good	-	20+	B	3	One large tree with two smaller oaks under crown.	7.2	162.8	Negligible	Low	Retain	-	-
T516	Oak	14	800	2	7	0.5	Mature	Good	Good	-	20+	B	3	-	9.6	289.5	Major	Low	Remove	-	-
T517	Oak	14	650	1	5	0.5	Mature	Good	Good	-	10+	B	3	-	7.8	191.1	Major	Low	Remove	-	-
T518	Oak	14	700	1	5	0.5	Mature	Fair	Fair	-	10+	C	3	Cavity at base.	8.4	221.6	Major	Very Low	Remove	-	-
T519	Sycamore	15	500	1	6	1	Mature	Good	Fair	-	20+	B	3	-	6	113.0	No Change	Low	Retain	-	-
T520	Ash	14	800	2	5	0.5	Mature	Fair	Fair	-	10+	C	3	Decay fungi Inonotus hispidus at 4m	9.6	289.5	No Change	Very Low	Retain	-	-
T521	Ash	14	700	1	4	0.5	Mature	Fair	Fair	-	10+	C	3	Cavity at base.	8.4	221.6	No Change	Very Low	Retain	-	-
T522	Ash	10	550	1	4	0.5	Mature	Fair	Fair	-	10+	C	3	Cavity at base.	6.6	136.8	Negligible	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T523	Ash	10	550	1	4	0.5	Mature	Fair	Fair	-	10+	C	3	Cavity at base.	6.6	136.8	No Change	Very Low	Retain	-	-
T524	Ash	12	450	1	5	0	Mature	Good	Good	-	10+	C	3	-	5.4	91.6	Major	Very Low	Remove	-	-
T525	Sycamore	10	400	1	5	1.5	Mature	Fair	Fair	-	10+	C	3	-	4.8	72.3	Major	Very Low	Remove	-	-
T526	Sycamore	10	450	2	5	2	Mature	Good	Fair	-	20+	B	3	-	5.4	91.6	No Change	Low	Retain	-	-
T527	Sycamore	10	350	1	2	2	Mature	Poor	Fair	-	<10	U	U	Dying.	4.2	55.4	No Change	none	Retain	-	-
T528	Sycamore	13	650	1	6	1	Mature	Good	Good	-	20+	B	3	-	7.8	191.1	No Change	Low	Retain	-	-
T529	Sycamore	13	675	1	6	1	Mature	Good	Good	-	20+	B	3	Hide built into crown.	8.1	206.1	No Change	Low	Retain	-	-
T530	Goat Willow	9	400	5	5	0	Mature	Good	Good	-	10+	C	3	-	4.8	72.3	No Change	Very Low	Retain	-	-
T531	Sycamore	13	700	1	4	0.5	Mature	Good	Good	-	20+	B	1	-	8.4	221.6	Moderate	Low	Remove	-	-
T532	Ash	10	300	2	3	2.5	Mature	Fair	Fair	-	10+	C	1	-	3.6	40.7	Major	Very Low	Remove	-	-
T533	Sycamore	6	800	1	2	2	Dead	Poor	Poor	-	<10	C	3	Dead pollard with decay at base.	9.6	289.5	Moderate	Very Low	Remove	-	-
T534	Elm	13	500	3	6	1	Mature	Good	Good	-	10+	C	3	-	6	113.0	Major	Very Low	Remove	-	-
T535	Sycamore	12	550	1	3	0	Mature	Fair	Fair	-	20+	B	2	Low spreading form, fence attached to stem.	6.6	136.8	Moderate	Low	Remove	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T536	Goat Willow	7	400	1	4	0.5	Mature	Good	Good	-	10+	C	3	-	4.8	72.3	Major	Very Low	Remove	-	-
T537	Sycamore	12	550	1	3	0	Mature	Fair	Fair	-	20+	B	2	Top broken out, tear-out wounds and dieback, dead stubs, fluting at base.	6.6	136.8	No Change	Low	Retain	-	-
T538	Sycamore	12	550	1	3	0	Mature	Fair	Fair	-	20+	B	2	-	6.6	136.8	No Change	Low	Retain	-	-
T539	Hawthorn	7	200	1	2.5	1	Mature	Good	Good	-	20+	C	2	-	2.4	18.0	No Change	Very Low	Retain	-	-
T540	Ash	6	100	1	2	1	Semi-Mature	Fair	Fair	-	20+	C	2	-	1.2	4.5	Minor	Very Low	Retain	-	-
T541	Ash	10	300	2	4	2	Semi-Mature	Fair	Fair	-	20+	C	3	-	3.6	40.7	Major	Very Low	Remove	-	-
T542	Ash	10	100	10	4	2	Mature	Good	Fair	-	10+	C	3	One mature tree c. 300m surrounded by smaller trees c.100mm.	1.2	4.5	No Change	Very Low	Retain	-	-
T548	Ash	6	250	6	2	0.5	Young	Fair	Fair	-	10+	C	3	-	3	28.2	No Change	Very Low	Retain	-	-
T549	Ash	4	125	1	1	0.5	Young	Fair	Fair	-	10+	C	3	-	1.5	7.0	No Change	Very Low	Retain	-	-
T551	Ash	12	400	2	4	1.5	Mature	Good	Fair	-	20+	B	1	-	4.8	72.3	Major	Low	Remove	-	-
T552	Alder	12	200	>20	6	0	Mature	Good	Good	-	20+	B	3	Multi-stemmed.	2.4	18.0	No Change	Low	Retain	-	-
T553	Oak	12	875	1	6	0.5	Mature	Good	Fair	-	20+	B	3	-	10.5	346.3	No Change	Low	Retain	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T554	Hawthorn	8	250	1	3	1	Mature	Good	Good	-	20+	B	1	-	3	28.2	No Change	Low	Retain	-	-
T555	Oak	3	700	1	2	0.5	Mature	Poor	Poor	-	10+	B	3	Regenerating stump with some veteran features.	8.4	221.6	No Change	Low	Retain	-	-
T556	Oak	16	1000	2	5	0.5	Mature	Good	Good	-	40+	B	3	-	12	452.3	No Change	Low	Retain	-	-
T557	Ash	16	800	1	6	0	Over-Mature	Fair	Fair	-	20+	B	3	-	9.6	289.5	No Change	Low	Retain	-	-
T558	Ash	16	700	1	6	0	Over-Mature	Fair	Fair	-	20+	B	3	-	8.4	221.6	No Change	Low	Retain	-	-
T559	Ash	10	800	1	5	1	Over-Mature	Fair	Fair	-	10+	B	3	Previously collapsed tree. regenerated stump.	9.6	289.5	No Change	Low	Retain	-	-
T560	Hawthorn	3	100	1	2	0	Semi-Mature	Fair	Fair	-	10+	C	3	-	1.2	4.5	No Change	Very Low	Retain	-	-
T561	Oak	12	1000	2	5	0.5	Mature	Fair	Fair	-	20+	B	3	Twin stemmed tree. possibly an old boundary tree.	12	452.3	Major	Low	Remove	-	-
T562	Ash	15	1500	2	6	0	Over-Mature	Fair	Fair	-	20+	B	3	Twin stemmed tree. large stump with stems 60cm hazard beam on east primary branch	18	1017.8	Major	Low	Remove	-	-
T563	Ash	13	700	2	6	0	Over-Mature	Fair	Fair	-	20+	B	3	-	8.4	221.6	Major	Low	Remove	-	-
T564	Oak	13	500	1	7	1	Mature	Good	Good	-	40+	B	2	No access.	6	113.0	No Change	Low	Retain	-	-
T565	Oak	13	500	1	7	1	Mature	Good	Good	-	40+	B	2	No access.	6	113.0	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T566	Oak	13	500	1	7	1	Mature	Good	Good	-	40+	B	2	No access.	6	113.0	No Change	Low	Retain	-	-
T567	Oak	13	500	1	7	1	Mature	Good	Good	-	40+	B	2	No access.	6	113.0	No Change	Low	Retain	-	-
T568	Oak	13	500	1	4.5	1	Mature	Fair	Fair	-	40+	B	2	No access.	6	113.0	No Change	Low	Retain	-	-
T569	Ash	8	700	1	5	1.5	Over-Mature	Fair	Poor	-	10+	C	2	No access.	8.4	221.6	No Change	Very Low	Retain	-	-
T571	Ash	6	200	2	1.5	1	Young	Fair	Fair	-	10+	C	3	-	2.4	18.0	Major	Very Low	Remove	-	-
T573	Ash	6	200	1	1.5	1	Young	Fair	Fair	-	10+	C	3	-	2.4	18.0	Major	Very Low	Remove	-	-
T576	Sycamore	6.5	200	2	2	1	Young	Fair	Poor	-	10+	C	3	-	2.4	18.0	Major	Very Low	Remove	-	-
T578	Ash	8	200	1	3	2	Semi-Mature	Fair	Fair	-	10+	C	3	-	2.4	18.0	Major	Very Low	Remove	-	-
T579	Ash	10	300	1	4.5	2	Mature	Fair	Fair	-	10+	C	2	-	3.6	40.7	Major	Very Low	Remove	-	-
T580	Willow	10	300	4	4	0.5	Mature	Poor	Poor	-	10+	C	3	-	3.6	40.7	No Change	Very Low	Retain	-	-
T581	Ash	6	200	1	2	1.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	2.4	18.0	No Change	Very Low	Retain	-	-
T582	Hawthorn	3	300	1	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	3.6	40.7	No Change	Very Low	Retain	-	-
T583	Hawthorn	2	150	1	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	1.8	10.1	No Change	Very Low	Retain	-	-

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T584	Hawthorn	2.5	200	1	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	2.4	18.0	No Change	Very Low	Retain	-	-
T585	Hawthorn	2	100	1	1	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	1.2	4.5	No Change	Very Low	Retain	-	-
T586	Hawthorn	5	300	1	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	3.6	40.7	No Change	Very Low	Retain	-	-
T587	Ash	8	200	2	3	1.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	2.4	18.0	No Change	Very Low	Retain	-	-
T588	Hawthorn	2	150	1	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	1.8	10.1	No Change	Very Low	Retain	-	-
T589	Hawthorn	3.5	150	2	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	1.8	10.1	No Change	Very Low	Retain	-	-
T590	Ash	6	200	2	2	1.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	2.4	18.0	No Change	Very Low	Retain	-	-
T591	Goat Willow	4	200	5	3	0.5	Over-Mature	Poor	Poor	-	10+	C	3	-	2.4	18.0	No Change	Very Low	Retain	-	-
T592	Sycamore	4	175	2	1.5	0.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	2.1	13.8	No Change	Very Low	Retain	-	-
T593	Willow	4	200	5	3	0.5	Over-Mature	Poor	Poor	-	10+	C	3	Old coppiced stump.	2.4	18.0	No Change	Very Low	Retain	-	-
T594	Sycamore	4	125	1	1.5	0.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	1.5	7.0	No Change	Very Low	Retain	-	-
T595	Ash	8	200	2	3	1.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	2.4	18.0	No Change	Very Low	Retain	-	-
T597	Hawthorn	5	300	1	2	0	Over-Mature	Fair	Fair	-	10+	C	3	Hedge remnant.	3.6	40.7	No Change	Very Low	Retain	-	-

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T598	Ash	4.5	75	1	1	1	Young	Fair	Fair	-	10+	C	3	-	0.9	2.5	No Change	Very Low	Retain	-	-
T599	Willow	9	400	1	4	0	Mature	Fair	Fair	-	10+	C	1	-	4.8	72.3	No Change	Very Low	Retain	-	-
T600	Goat Willow	9	250	8	5	0.5	Mature	Fair	Fair	-	10+	B	3	Stored coppice.	3	28.2	No Change	Low	Retain	-	-
T601	Goat Willow	8	200	6	5	0.5	Mature	Fair	Fair	-	10+	C	3	Stored coppice.	2.4	18.0	No Change	Very Low	Retain	-	-
T602	Goat Willow	8	100	4	2.5	0.5	Semi-Mature	Fair	Fair	-	10+	C	3	-	1.2	4.5	No Change	Very Low	Retain	-	-
T603	Goat Willow	8	200	8	5	0.5	Mature	Fair	Fair	-	10+	C	3	Stored coppice.	2.4	18.0	No Change	Very Low	Retain	-	-
T604	Ash	13	300	1	4.5	2	Mature	Fair	Fair	-	10+	C	2	-	3.6	40.7	Major	Very Low	Remove	-	-
T605	Ash	13	600	4	6	1.5	Mature	Fair	Fair	-	10+	C	3	-	7.2	162.8	Major	Very Low	Remove	-	-
T606	Ash	8	250	1	4	1.5	Semi-Mature	Fair	Fair	-	<10	C	3	-	3	28.2	Major	Very Low	Remove	-	-
T607	Ash	13	300	4	6	1.5	Mature	Fair	Fair	-	10+	C	3	-	3.6	40.7	Major	Very Low	Remove	-	-
T608	Ash	8	250	1	4	1.5	Semi-Mature	Fair	Fair	-	<10	C	3	-	3	28.2	Major	Very Low	Remove	-	-
T609	Beech	9	350	1	4	1.5	Semi-Mature	Good	Fair	-	10+	C	3	-	4.2	55.4	Major	Very Low	Remove	-	-
T610	Ash	20	800	1	6	1.5	Mature	Good	Fair	-	20+	B	3	-	9.6	289.5	Major	Low	Remove	-	-

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T611	Ash	20	800	1	6	1.5	Mature	Good	Fair	-	20+	B	3	-	9.6	289.5	Major	Low	Remove	-	-
T612	Ash	12	400	1	6	1.5	Mature	Good	Fair	-	10+	C	3	-	4.8	72.3	Major	Very Low	Remove	-	-
T613	Ash	10	350	1	5	1	Mature	Good	Good	-	20+	C	3	-	4.2	55.4	Major	Very Low	Remove	-	-
T614	Ash	3	75	1	1	1	Young	Fair	Poor	-	10+	C	2	-	0.9	2.5	Major	Very Low	Remove	-	-
T615	Ash	8	275	2	4	0.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.3	34.2	Major	Very Low	Remove	-	-
T616	Ash	7	225	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	2.7	22.9	Major	Very Low	Remove	-	-
T617	Ash	7	450	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	5.4	91.6	Major	Very Low	Remove	-	-
T618	Ash	4	100	2	2	0.5	Semi-Mature	Poor	Poor	-	<10	U	U	Dying tree.	1.2	4.5	Major	none	Remove	-	-
T619	Ash	7	175	1	4	1.5	Semi-Mature	Poor	Poor	-	20+	C	2	-	2.1	13.8	Major	Very Low	Remove	-	-
T620	Ash	7	175	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	2.1	13.8	Major	Very Low	Remove	-	-
T621	Ash	7	175	1	4	1.5	Semi-Mature	Poor	Poor	-	20+	C	2	-	2.1	13.8	Major	Very Low	Remove	-	-
T622	Ash	7	175	1	4	1.5	Semi-Mature	Poor	Poor	-	20+	C	2	-	2.1	13.8	Major	Very Low	Remove	-	-
T623	Rowan	3	100	2	1	0	Semi-Mature	Fair	Poor	-	10+	C	2	-	1.2	4.5	Major	Very Low	Remove	-	-

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T624	Ash	7	350	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	4.2	55.4	Major	Very Low	Remove	-	-
T625	Ash	7	350	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	4.2	55.4	Major	Very Low	Remove	-	-
T626	Ash	3	75	1	1	1	Young	Fair	Poor	-	10+	C	2	-	0.9	2.5	Major	Very Low	Remove	-	-
T627	Ash	10	325	1	4	0.5	Mature	Fair	Fair	-	20+	C	2	-	3.9	47.7	No Change	Very Low	Retain	-	-
T628	Ash	7	300	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.6	40.7	No Change	Very Low	Retain	-	-
T629	Ash	10	475	1	4	1	Mature	Fair	Fair	-	20+	C	2	-	5.7	102.0	No Change	Very Low	Retain	-	-
T630	Ash	6.5	300	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.6	40.7	No Change	Very Low	Retain	-	-
T631	Ash	7	400	1	4	1.5	Mature	Fair	Fair	-	20+	C	2	-	4.8	72.3	No Change	Very Low	Retain	-	-
T632	Cherry	6	375	1	5	2	Mature	Fair	Fair	-	20+	C	2	-	4.5	63.6	No Change	Very Low	Retain	-	-
T633	Cherry	6.5	275	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.3	34.2	No Change	Very Low	Retain	-	-
T634	Ash	6.5	300	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.6	40.7	No Change	Very Low	Retain	-	-
T635	Ash	6.5	300	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.6	40.7	No Change	Very Low	Retain	-	-
T636	Ash	6.5	300	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.6	40.7	No Change	Very Low	Retain	-	-



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T637	Cherry	6.5	300	1	4	1.5	Semi-Mature	Fair	Fair	-	20+	C	2	-	3.6	40.7	No Change	Very Low	Retain	-	-
T638	Alder	12	450	1	6	1	Over-Mature	Fair	Fair	-	20+	B	3	-	5.4	91.6	No Change	Low	Retain	-	-
T639	Ash	9	250	1	1	1	Semi-Mature	Fair	Fair	-	10+	C	3	-	3	28.2	Major	Very Low	Remove	-	-
T640	Ash	12	400	1	3	3	Mature	Fair	Fair	-	10+	C	3	-	4.8	72.3	Major	Very Low	Remove	-	-
T641	Ash	12	250	1	1	3	Mature	Poor	Poor	-	10+	C	3	-	3	28.2	Major	Very Low	Remove	-	-
T642	Oak	12	600	1	5	3	Mature	Fair	Fair	-	20+	B	2	-	7.2	162.8	No Change	Low	Retain	-	-
T643	Ash	12	450	1	4	5	Over-Mature	Fair	Fair	-	10+	A	3	Old boundary tree.	5.4	91.6	No Change	High	Retain	ASN W	-
T644	Ash	12	600	1	4	8	Over-Mature	Poor	Poor	-	10+	A	3	Old boundary tree.	7.2	162.8	No Change	High	Retain	ASN W	-
T645	Ash	15	900	1	6	1.5	Over-Mature	Poor	Fair	-	10+	A	3	Old boundary tree.	10.8	366.4	No Change	High	Retain	ASN W	-
T646	Ash	15	1100	1	6	1.5	Over-Mature	Poor	Fair	-	10+	A	3	Old boundary tree.	13.2	547.3	No Change	High	Retain	ASN W	-
T647	Ash	12	600	1	6	2	Over mature	Fair	Fair	-	20+	B	1	-	7.2	162.8	No Change	Low	Retain	ASN W	-
T648	Ash	14	450	1	2	2	Over Mature	Fair	Poor	-	20+	B	3	Cavity at base.	5.4	91.6	No Change	Low	Retain	ASN W	-
T649	Ash	15	525	1	5	1.5	Mature	Fair	Fair	-	20+	A	3	-	6.3	124.6	No Change	High	Retain	ASN W	-



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T650	Ash	10	225	3	4	1.5	Semi-Mature	Fair	Fair	-	20+	A	3	-	2.7	22.9	No Change	High	Retain	ASN W	-
T651	Ash	15	325	1	3	1.5	Mature	Fair	Fair	-	20+	A	3	-	3.9	47.7	No Change	High	Retain	ASN W	-
T652	Ash	15	900	1	3	1.5	Over-Mature	Poor	Fair	-	20+	A	3	Ivy on stem and throughout crown. sparse crown.	10.8	366.4	No Change	High	Retain	ASN W	-
T653	Ash	15	650	1	1	0.5	Mature	Fair	Fair	-	20+	A	3	-	7.8	191.1	No Change	High	Retain	ASN W	-
T654	Ash	18	450	1	2	0.5	Mature	Fair	Fair	-	20+	A	3	-	5.4	91.6	No Change	High	Retain	ASN W	-
T655	Ash	18	1100	1	5	0.5	Over-Mature	Fair	Fair	-	20+	A	3	Thinning crown, deadwood.	13.2	547.3	No Change	High	Retain	ASN W	-
T656	Ash	14	425	2	3	0.5	Mature	Fair	Fair	-	20+	A	3	Two stems with included bark union at ground level.	5.1	81.7	No Change	High	Retain	ASN W	-
T657	Sycamore	14	300	3	5	1.5	Mature	Good	Fair	-	20+	B	3	-	3.6	40.7	No Change	Low	Retain	ASN W	-
T658	Ash	18	1100	1	7	3	Over-Mature	Fair	Fair	-	20+	A	3	Ivy on stem, cavity at base with split in mainstem large branch cavity at 2.5m stem.	13.2	547.3	No Change	High	Retain	ASN W	-
T659	Ash	13	350	4	4	0.5	Mature	Fair	Fair	-	20+	A	3	-	4.2	55.4	No Change	High	Retain	ASN W	-
T660	Ash	11	250	1	5	3	Semi-Mature	Fair	Fair	-	20+	A	3	-	3	28.2	No Change	High	Retain	ASN W	-

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T661	Ash	15	625	1	4	2	Mature	Poor	Poor	-	20+	A	3	-	7.5	176.7	No Change	High	Retain	ASN W	-
T662	Ash	13	300	4	3	1.5	Mature	Fair	Fair	-	20+	A	3	-	3.6	40.7	No Change	High	Retain	ASN W	-
T663	Ash	7	300	2	3	0.5	Mature	Fair	Fair	-	20+	A	3	-	3.6	40.7	No Change	High	Retain	ASN W	-
T664	Ash	15	525	1	5	1	Mature	Good	Good	-	20+	A	3	-	6.3	124.6	No Change	High	Retain	ASN W	-
T665	Ash	15	1000	1	7	0.5	Over-Mature	Fair	Fair	-	20+	A	3	-	12	452.3	No Change	High	Retain	ASN W	-
T666	Ash	14	750	1	5	4	Over-Mature	Poor	Poor	-	20+	A	3	Snapped branches leading crown made up of regrowth, ivy throughout crown.	9	254.4	No Change	High	Retain	ASN W	-
T667	Ash	18	750	1	6	4	Over-Mature	Fair	Fair	-	20+	A	3	-	9	254.4	No Change	Medium	Retain	ASN W	-
T668	Oak	14	1050	1	7	2.5	Over-Mature	Good	Good	-	40+	B	3	Hedgerow tree	12.6	498.7	No Change	Low	Retain	-	-
T669	Sycamore	10	450	1	4.5	3	Mature	Good	Good	-	20+	B	3	-	5.4	91.6	No Change	Low	Retain	-	-
T670	Oak	13	900	1	5	2	Over-Mature	Good	Good	-	40+	B	3	-	10.8	366.4	No Change	Low	Retain	-	-
T671	Beech	14	1000	1	7	4	Over-Mature	Fair	Fair	-	20+	B	3	Main leader broken out	12	452.3	No Change	Low	Retain	-	-
T672	Horse Chestnut	14	1025	2	6	1.5	Over-Mature	Fair	Fair	-	20+	B	3	Two trees, cohesive around 4 m apart broken branches and stubs	12.3	475.2	Major	Low	Remove	-	-

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T673	Oak	14	1175	1	5	0.5	Over-Mature	Fair	Fair	-	40+	A	3	Wounds on buttress roots, large burr at 1.5m stag-headed, veteran features	14.1	624.5	No Change	Medium	Retain	-	-
T674	Oak	16	800	1	5	0.5	Mature	Fair	Fair	-	40+	B	3	-	9.6	289.5	No Change	Low	Retain	-	-
T675	Oak	14	1300	1	8	1.5	Over-Mature	Good	Good	-	40+	A	3	-	15.6	764.5	Negligible	Medium	Retain	-	-
T676	Ash	14	875	1	5	1	Mature	Good	Fair	-	20+	B	3	-	10.5	346.3	Minor	Low	Retain	-	-
T677	Scots Pine	5	125	1	2	0	Semi-Mature	Good	Good	-	20+	C	3	-	1.5	7.0	No Change	Very Low	Retain	-	-
T678	Ash	14	325	1	3	2	Mature	Fair	Fair	-	20+	C	3	-	3.9	47.7	No Change	Very Low	Retain	-	-
T679	Hazel	8	100	20	2	1	Mature	Fair	Fair	-	20+	C	3	-	1.2	4.5	No Change	Very Low	Retain	-	-
T680	Alder	8	200	1	2	1	Semi-Mature	Good	Good	-	20+	C	3	-	2.4	18.0	No Change	Very Low	Retain	-	-
T681	Oak	12	1050	1	6	2	Over-Mature	Good	Good	-	40+	A	3	Mature tree beginning to show veteran features.	12.6	498.7	No Change	High	Retain	-	-
T682	Ash	12	1050	1	5	2	Over-Mature	Fair	Poor	-	40+	A	3	Hollow ash tree with cavities - veteran tree.	12.6	498.7	Moderate	High	Remove	VT	-
T683	Ash	2	1600	1	0	0	Dead	Poor	Poor	-		U	U	Large decaying ash stump	19.2	1158.1	No Change	none	Retain	-	-
T684	Sycamore	16	1150	1	7	2	Over-Mature	Good	Fair	-	40+	A	3	Veteran sycamore with large cavity in main fork. Hollow at base.	13.8	598.2	No Change	High	Retain	VT	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T685	Sycamore	20	1600	1	7	1.5	Over-Mature	Good	Good	-	40+	A	3	Large veteran sycamore minor included in main fork, surface roots with decay. Exceptional tree.	19.2	1158.1	Major	High	Remove	AT/VT	-
T686	Oak	14	900	1	6	1	Over-Mature	Good	Good	-	40+	B	3	Mature tree large deadwood wounds on stem good condition.	10.8	366.4	Major	Low	Remove	-	-
T687	Oak	12	1100	2	2	1.5	Over-Mature	Poor	Fair	-	20+	B	3	Stag headed severed buttress roots with decay.	13.2	547.3	Major	Low	Remove	-	-
T688	Oak	15	1100	1	8	0.5	Over-Mature	Fair	Fair	-	40+	A	3	Broken branches, dieback, potential veteran tree.	13.2	547.3	Major	High	Remove	VT	-
T689	Ash	15	1000	1	5	1.5	Over-Mature	Fair	Fair	-	40+	B	3	Broken branches decay at base.	12	452.3	Major	Low	Remove	-	-
T690	Oak	19	1400	1	8	1	Over-Mature	Good	Good	-	40+	A	3	Broken branches large stub.	16.8	886.6	Major	High	Remove	AT	-
T691	Spruce	20	150	3	4	1.5	Over-Mature	Good	Good	-	20+	B	1	Three large late mature spruce.	1.8	10.1	No Change	Low	Retain	-	-
T692	Beech	10	150	1	2	1	Semi-Mature	Good	Good	-	20+	C	2	-	1.8	10.1	No Change	Very Low	Retain	-	-
T693	Ash	16	1000	1	7	5	Over-Mature	Fair	Fair	Remove, dying next to highway	10+	C	3	Suppressed by ivy dying back base not visible due to ivy.	12	452.3	No Change	Very Low	Retain	-	-
T694	Beech	10	150	1	2	1	Semi-Mature	Good	Good	-	20+	C	2	-	1.8	10.1	No Change	Very Low	Retain	-	-
T695	Beech	10	150	1	2	1	Semi-Mature	Good	Good	-	20+	C	2	-	1.8	10.1	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
T696	Beech	10	150	1	2	1	Semi-Mature	Good	Good	-	20+	C	2	-	1.8	10.1	No Change	Very Low	Retain	-	-
T697	Ash	16	1000	1	7	5	Over-Mature	Fair	Fair	Remove, dying next to highway	10+	C	3	Suppressed by ivy, dying back, base not visible due to ivy.	12	452.3	No Change	Very Low	Retain	-	-
T699	Ash	15	1000	1	5	2	Over-Mature	Fair	Poor	-	10+	B	3	Old tree with decay, dieback and broken branches	12	452.3	No Change	Low	Retain	-	-
T700	Ash	15	1000	1	6	1.5	Over-Mature	Good	Fair	-	40+	A	3	Basal swelling	12	452.3	No Change	Medium	Retain	-	-
T701	Oak	14	1550	1	9	2	Over-Mature	Good	Good	-	40+	A	3	Minor fire damage north east side	18.6	1086.8	No Change	High	Retain	AT	-
T702	Ash	15	300	1	4	2	Mature	Good	Fair	-	20+	B	3	Edge tree from site clearance	3.6	40.7	No Change	Low	Retain	-	-
T703	Oak	12	1000	1	7	3	Over-Mature	Poor	Fair	-	10+	B	3	Nearly dead, suitable location as deadwood	12	452.3	No Change	Low	Retain	-	-
T704	Sycamore	20	650	1	4	2	Over-Mature	Fair	Fair	The Applicant to review, leader die back and deadwood	10+	B	3	-	7.8	191.1	No Change	Low	Retain	-	-
T705	Sycamore	20	650	1	4	2	Over-Mature	Fair	Fair	-	10+	B	3	-	7.8	191.1	No Change	Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
W4	Beech	10	200	>20	2	0	Semi-Mature	Good	Good	-	40+	B	2	Highway plantation, beech woodland w/ occasional mature Scots pine and sycamore and ash	2.4	-	Minor	Low	Partial Removal	-	-
W5	Beech	10	200	>20	3	4	Semi-Mature	Good	Good	-	40+	B	2	Occasional Hawthorne, ash, Scots pine and sycamore. beech highway plantation	2.4	-	Major	Low	Remove	-	-
W6	Beech	10	200	>20	2	0	Semi-Mature	Good	Good	-	40+	B	2	Highway plantation, beech woodland w/ occasional mature Scots pine and sycamore	2.4	-	Major	Low	Remove	-	-
W13	Mixed	14	600	>20	5	2	Mature	Good	Good	-	20+	B	2	Woodland group. Shelter belt screening for private residences. Pine, ash, sycamore over hawthorn and elder.	7.2	-	Major	Low	Remove	-	-
W14	Beech	10	200	>20	2	0	Semi-Mature	Good	Good	-	40+	B	2	Highway plantation, beech woodland w/ occasional mature Scots pine and sycamore saplings	2.4	-	Major	Low	Remove	-	-
W15	Ash	7	200	>20	2	1	Young	Fair	Fair	-	10+	C	2	Ash plantation with Hawthorne, gorse, scots	2.4	-	Major	Very Low	Remove	-	-
W16	Mixed	15	400	>20	5	2	Mature	Fair	Fair	-	40+	B	2	Mixed woodland, including ash, birch, sycamore, no access= survey from distance.	4.8	-	Negligible	Low	Retain	-	-
W22	Larch	15	250	>20	1.5	1.5	Mature	Good	Good	-	20+	B	3	Part of woodland beyond red lined boundary	3	-	Moderate	Low	Partial Removal	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
W23	Mixed	20	700	>20	2	0.5	Mature	Good	Good	-	40+	A	3	Lime, hazel, ash, birch, oak	8.4	-	Major	Medium	Remove	TPO	-
W24	Mixed	20	700	>20	6	0.5	Mature	Good	Good	-	40+	A	3	Oak woodland with ash, hazel, cherry, hawthorn and spruce.	8.4	-	No Change	Medium	Retain	-	-
W25	Mixed	15	600	>20	5	1	Mature	Good	Good	-	20+	B	2	Not completely surveyed- no access	7.2	-	Major	Low	Remove	-	-
W29	See Notes	5	100	>20	1.5	0.5	Young	Good	Good	-	10+	C	2	Young plantation. Ash dieback present.	1.2	-	Minor	Very Low	Partial Removal	-	-
W31	Mixed	15	500	>20	6	1	Mature	Good	Good	-	20+	B	2	Mixed woodland plantation. Ash, horse chestnut, larch hawthorn	6	-	No Change	Low	Retain	-	-
W33	Mixed	15	500	>20	7	3	Mature	Good	Good	-	20+	B	2	Aspen and silver birch.	6	-	Minor	Low	Partial Removal	-	-
W40	Mixed	15	500	>20	6	1	Mature	Good	Good	-	20+	B	2	Mixed woodland plantation. Ash, horse chestnut, pine hawthorn	6	-	No Change	Low	Retain	-	-
W46	Mixed	12	500	>20	5	1	Mature	Good	Fair	-	20+	B	2	Woodland around agricultural/residential premises	6	-	No Change	Low	Retain	-	-
W53	Mixed	12	450	>20	5	1	Mature	Good	Good	-	20+	C	2	Area of scrub with frequent trees. Ash alder, and sycamore.	5.4	-	Minor	Very Low	Partial Removal	-	-
W67	Mixed	13	500	>20	5	0	Mature	Good	Good	-	20+	B	2	Driven Survey. Limited Access. Oak, ash, spruce.	6	-	No Change	Low	Retain	-	-
W69	Ash	15	600	5	7	0	Mature	Fair	Fair	-	20+	B	3	-	7.2	-	Moderate	Low	Partial Removal	-	-



Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
W70	Scots Pine	12	125	>20	2.5	1	Semi-Mature	Good	Good	-	20+	B	2	Pine plantation with occasional broadleaf trees	1.5	-	Major	Low	Remove	-	-
W71	Mixed	13	300	>20	4	1	Mature	Good	Good	-	20+	B	3	Corner of woodland group near/in Study Area	3.6	-	No Change	Low	Retain	-	-
W74	Larch	14	300	>20	5	0.5		Good	Good	-	20+	B	3	Golf course plantation - larch, spruce and pine. mature goat willows at southern end.	3.6	-	Negligible	Low	Retain	-	-
W76	Mixed	14	350	>20	5	1	Mature	Good	Good	-	20+	B	3	Mixed group - mainly ash with occasional larch and sycamore	4.2	-	No Change	Low	Retain	-	-
W77	Alder	10	400	>20	6	0.5	Semi-Mature	Fair	Fair	-	20+	B	3	Riparian group of alder in field	4.8	-	Minor	Low	Partial Removal	-	-
W79	Mixed	15	500	>20	4	0	Mature	Good	Good	-	20+	B	3	Mixed group of ash and pine	6	-	No Change	Low	Retain	-	-
W80	Spruce	12	400	>20	5	0	Mature	Good	Good	-	20+	B	3	Plantation, perhaps to shelter golf course	4.8	-	No Change	Low	Retain	-	-
W81	Mixed	10	400	>20	5	0	Semi-Mature	Good	Good	-	10+	C	2	Mixed Group of Trees. No safe Access. Drive Survey.	4.8	-	Negligible	Very Low	Retain	-	-
W87	Mixed	13	350	>20	3	1	Semi-Mature	Good	Good	-	20+	B	2	Ash, Pine, Spruce, Poplar, Sycamore, Oak.	4.2	-	No Change	Low	Retain	-	-
W116	Spruce	14	300	>20	1.5	1.5	Mature	Fair	Fair	-	20+	B	3	-	3.6	-	No Change	Low	Retain	-	-
W120	See Notes	16	500	>20	4	0	Over-Mature	Good	Good	-	40+	A	3	Duke's Bank Woodland. Designated ancient woodland	15	-	Major	High	Remove	ASN W	-

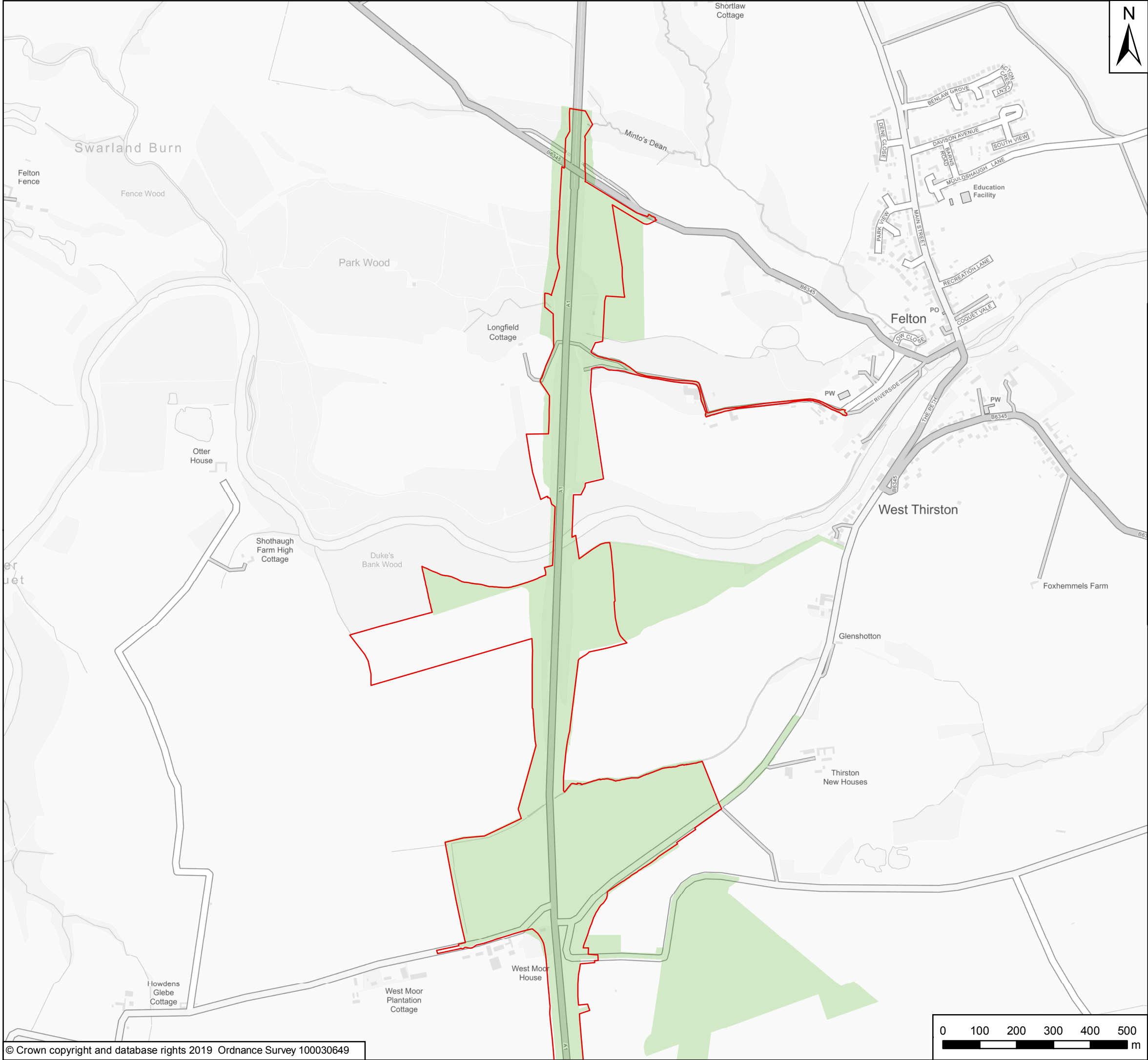
Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m <sup>2</sup> )	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
W121	Mixed	18	200	>20	4	0	Mature	Good	Good	-	40+	A	3	Ash woodland with intermittent coppice and regeneration	15	-	Minor	High	Partial Removal	ASN W	-
W122	Mixed	12	150	>20	2	0	Semi-Mature	Good	Good	-	40+	A	3	Regenerating young ash and alder, occasional larch site cleared, presumably for bridge maintenance	15	-	Major	High	Remove	ASN W	-
W125	Spruce	18	350	>20	3	4	Mature	Good	Good	-	20+	B	3	Spruce plantation	4.2	-	Major	Low	Remove	-	-
W127	Scots Pine	18	250	>20	1	1	Semi-Mature	Fair	Fair	-	20+	C	3	Scots pine plantation narrow stems suggests poor site	3	-	Major	Very Low	Remove	-	-
W128	Mixed	18	500	>20	4	0	Mature	Good	Good	-	40+	B	3	Mixed species woodland - Ash, Oak, Birch, Spruce, fir	6	-	Major	Low	Remove	-	-
W132	Spruce	17	400	>20	2.5	1.5	Mature	Good	Good	-	20+	B	3	Mature plantation. Norway spruce.	4.8	-	No Change	Low	Retain	-	-
W133	Spruce	12	300	>20	0.5	1	Mature	Good	Good	-	20+	B	3	Spruce Plantation	3.6	-	No Change	Low	Retain	-	-
W134	Oak	17	300	>20	3	12	Semi-Mature	Good	Good	-	40+	B	3	Oak stand	3.6	-	Negligible	Low	Retain	-	-
W135	Ash	16	300	>20	3	10	Mature	Good	Good	-	40+	B	3	Ash stand	3.6	-	Negligible	Low	Retain	-	-
W136	Spruce	1	25	>20	0.5	0	Young	Good	Good	-	<10	C	3	New spruce planting	0.3	-	No Change	Very Low	Retain	-	-
W141	Spruce	1	75	>20	0.5	0	Young	Good	Good	-	20+	C	3	Young newly planted spruce plantation	0.3	-	No Change	Very Low	Retain	-	-

Feature Reference	Species	Height (m)	Diameter (mm)	No of Stems	Crown Spread (m)	LCH (m)	Age Class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	ERC	Category	Sub Category	Notes	RPA Radius (m)	RPA Area (m²)	Impact	Sensitivity	Initial Impact Assessment- Remove/Retain	Environmental Status	Legal Status
W142	Mixed	15	200	>20	3	6	Mature	Fair	Fair	-	20+	B	3	Mixed stand of woodland. Birch and ash, pine	2.4	-	No Change	Low	Retain	-	-
W145	Spruce	1	75	>20	0.5	0.5	Young	Good	Good	-	10+	C	3	Young spruce plantation	0.3	-	No Change	Very Low	Retain	-	-
W146	Ash	18	200	>20	2	8	Mature	Fair	Fair	-	40+	B	3	Ash Woodland with silver birch	2.4	-	No Change	Low	Retain	-	-

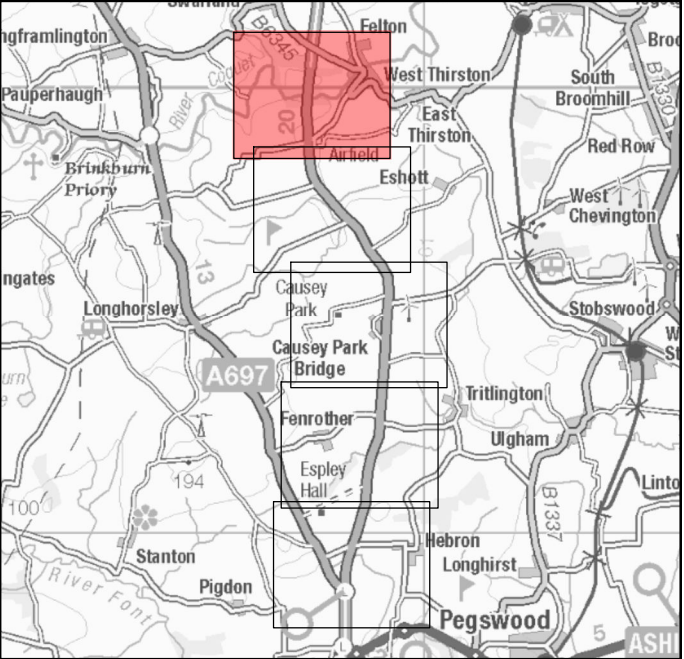
# Appendix B

PLANS

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- Key
- Order Limits
  - Aboricultural Study Area



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

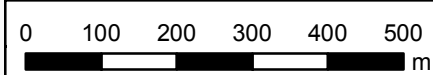
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B1 Study Area and Order Limits

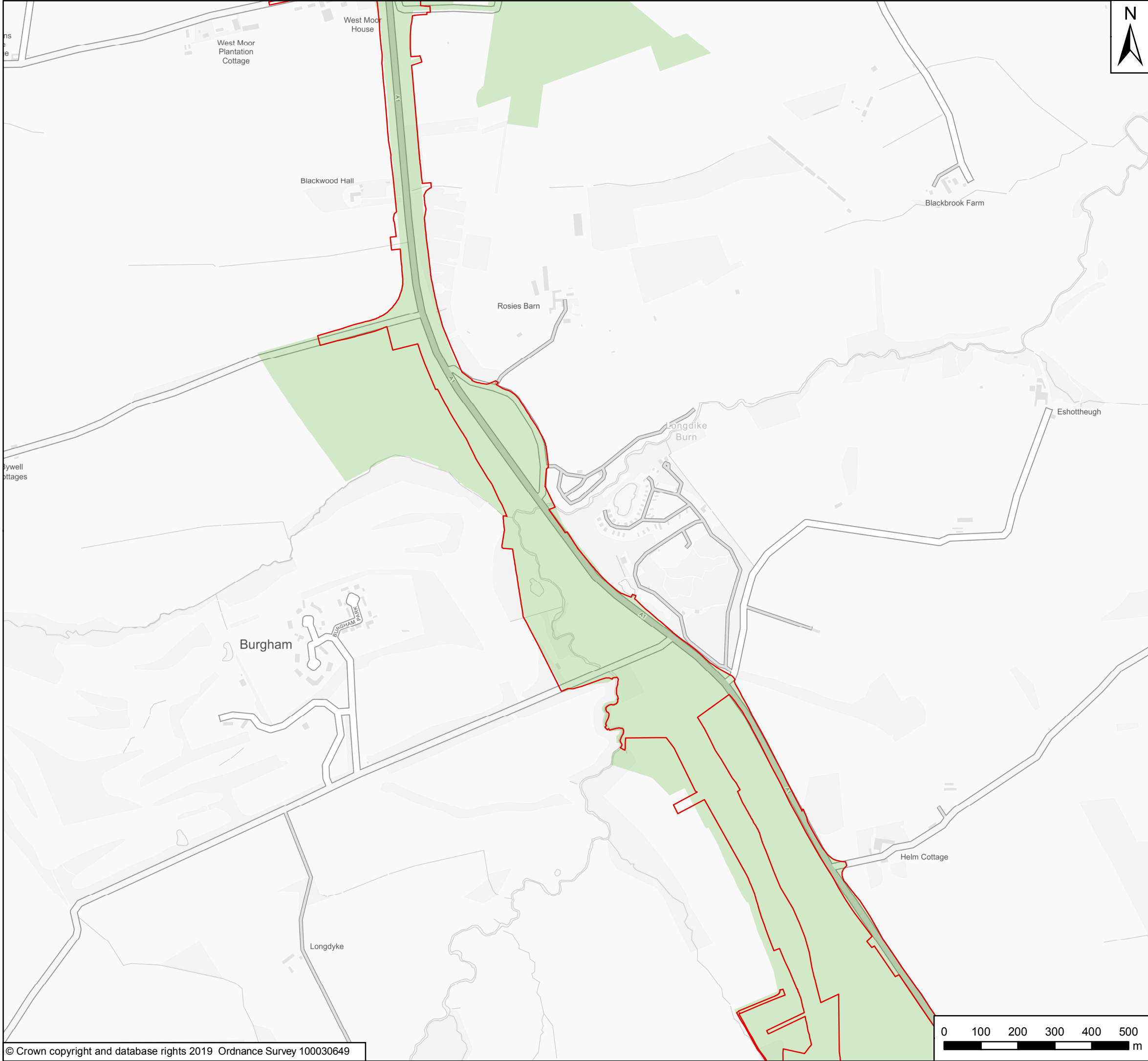
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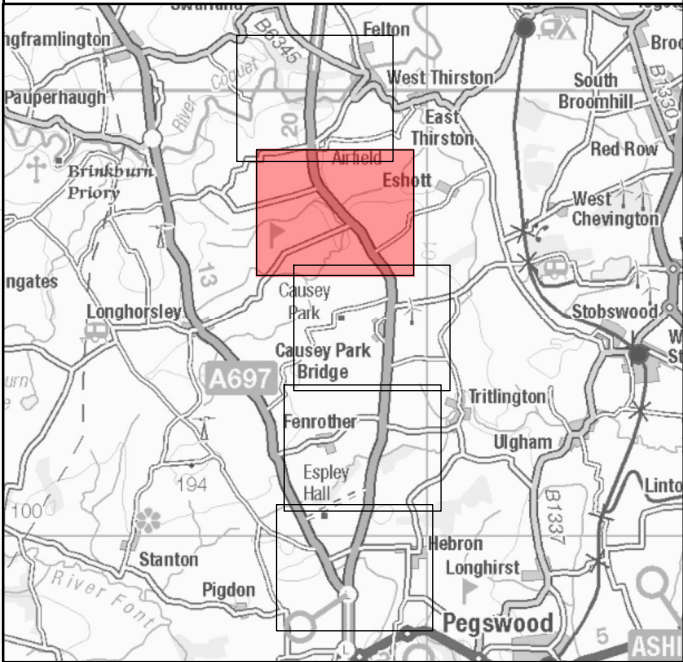
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M2F Location	Type	Role	Number
			Revision P02







- Key
- Order Limits
  - Aboricultural Study Area



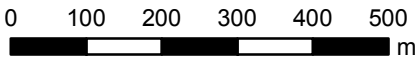
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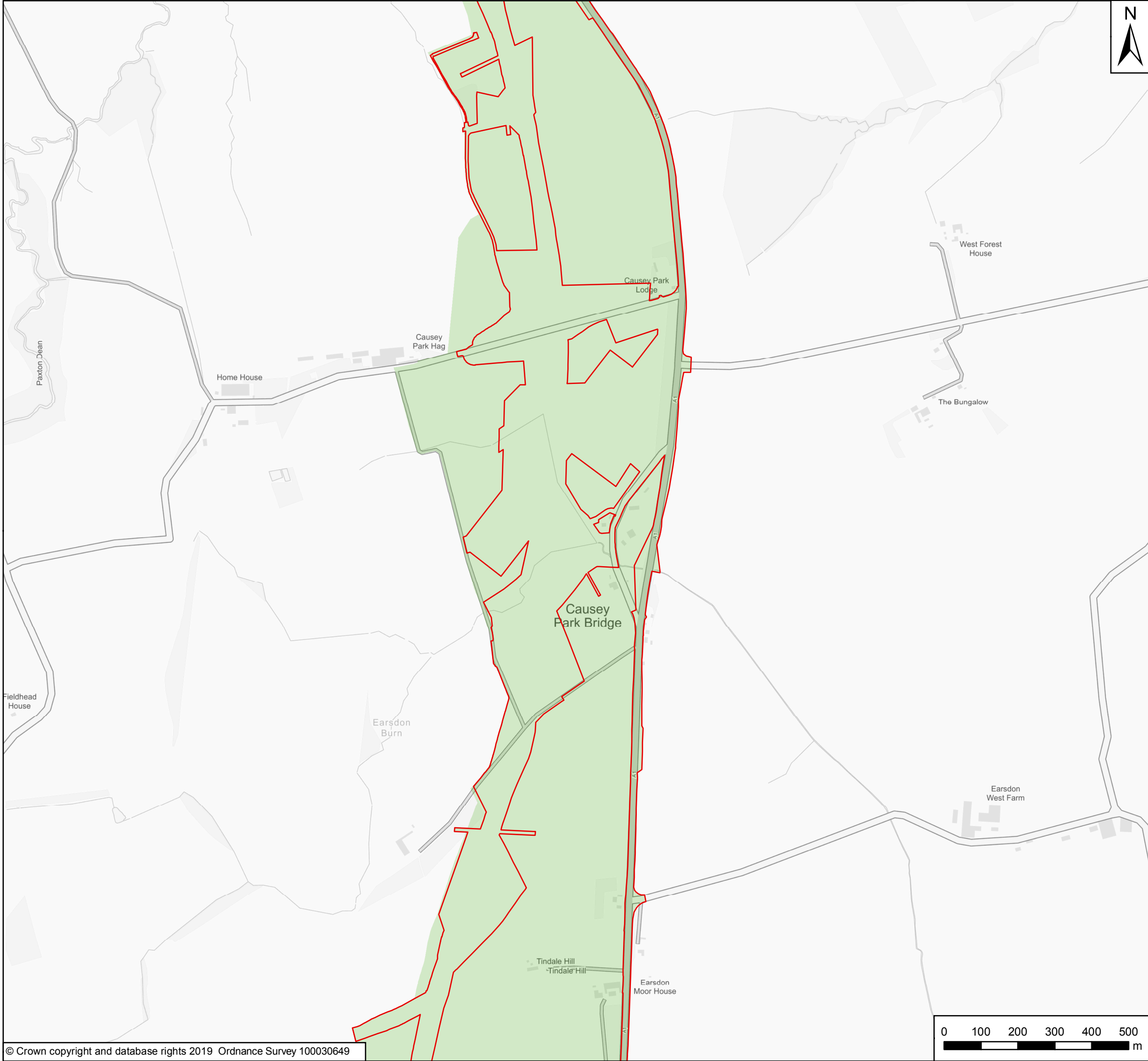
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A1 in Northumberland: Morpeth to Felton

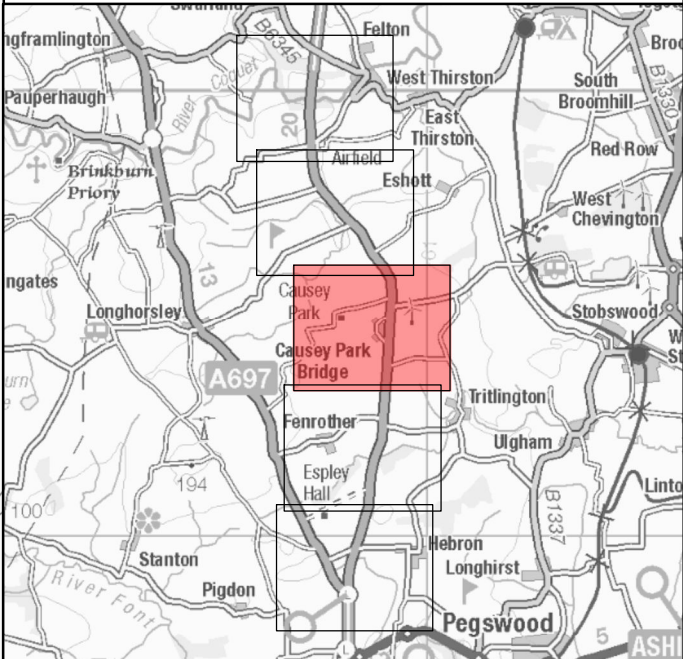
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Figure B1 Study Area and Order Limits

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M2F Location		Type	Role	Number
				Project Ref. No. 70044136
				Revision P02





- Key
- Order Limits
  - Arboricultural Study Area



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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client



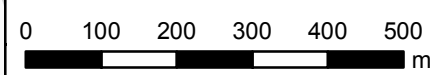
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B1 Study Area and Order Limits

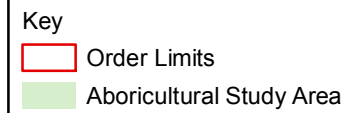
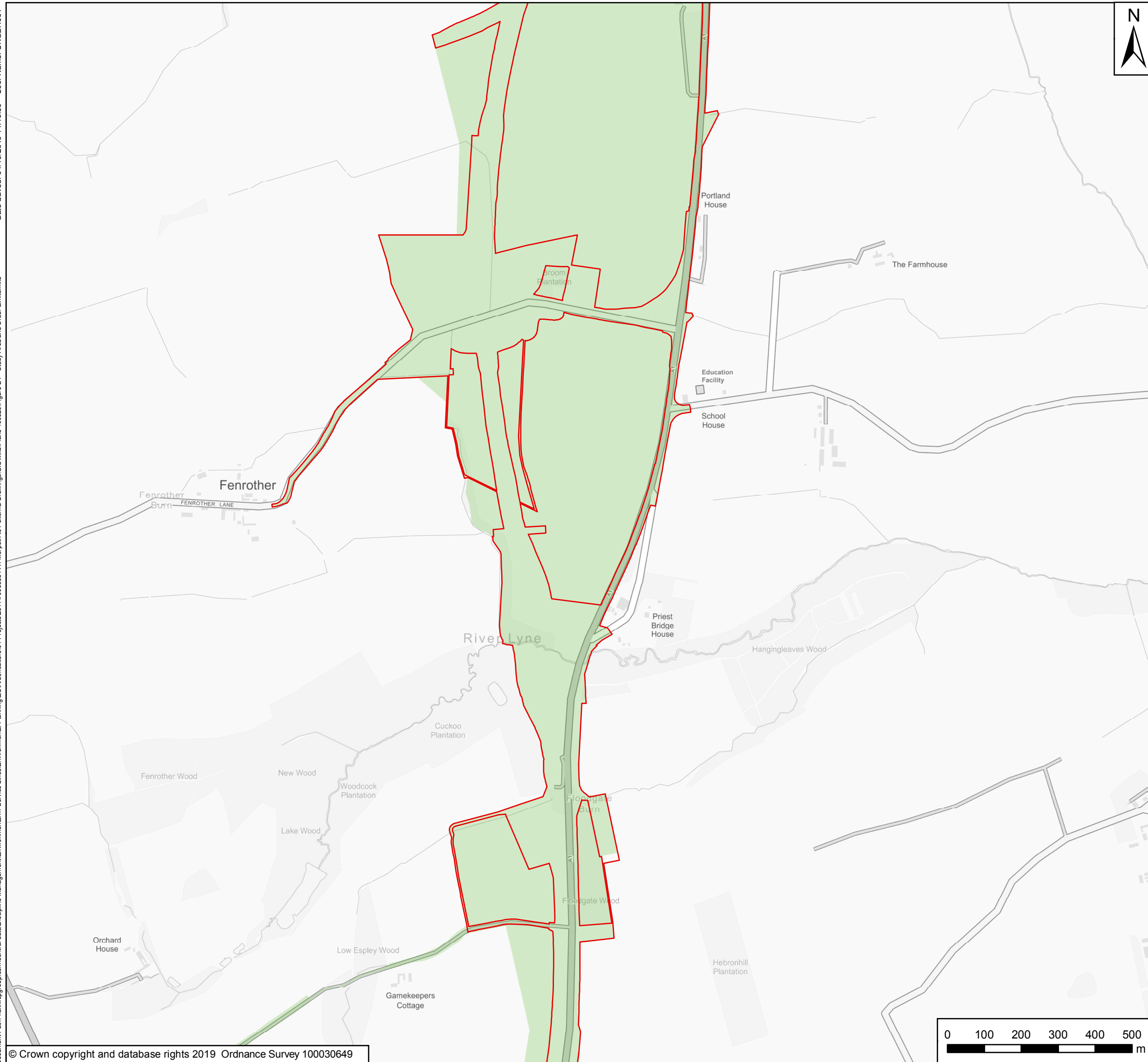
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Drawing Status For Information	Suitability S1
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Drawing Number Project HE551459	Originator WSP	Volume 6.3	Project Ref. No. 70044136
M2F Location	Type	Role	Number
			Revision P02







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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd


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
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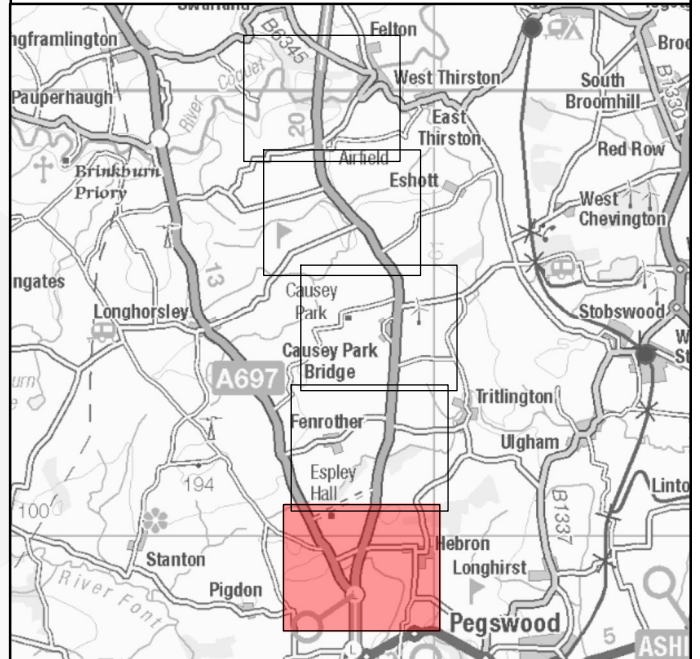
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For Information	S1

HE351459	WSP	6.3	Revision
M2F			P02
Location	Type	Role	Number



 Order Limits

 Aborigicultural Study Area



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd



## A1 in Northumberland: Morpeth to Felton

Figure B1 Study Area and Order Limits

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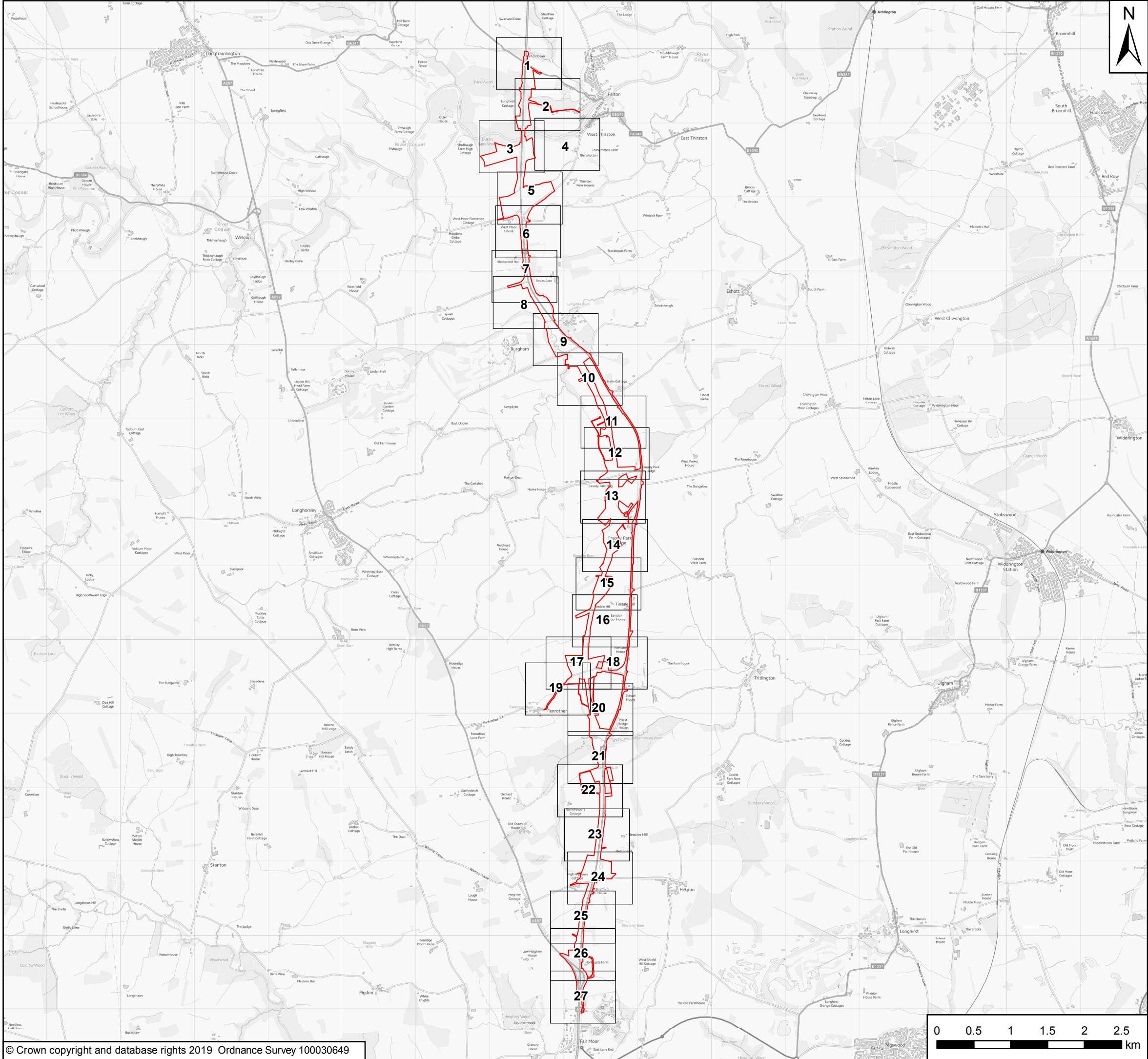
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Number

Revision

P02





Key

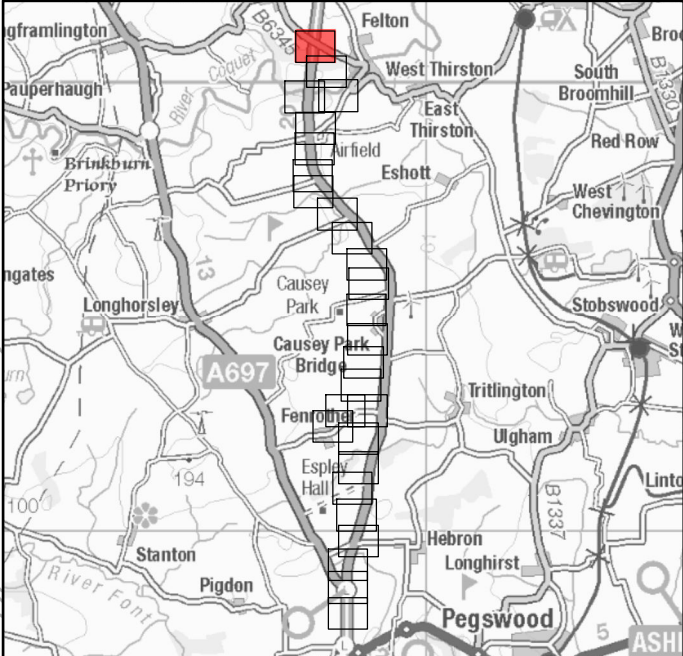
Order Limits

Map Sheet (labelled by page no.)

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P01	12/07/19	First Issue	GH	DW	DW
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Client					
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Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
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Drawing Status					Suitability
For Information					S1
Drawing Number		Originator		Project Ref. No.	
HE551459		WSP		70044136	
M2F		Type		Revision	
Location		Role		P02	
		Number			



- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
- Tree Category
- A
  - B
  - C
  - U



Rev	Date	Description	By	Chk'd	App'd
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P01	12/07/19	First Issue	GH	DW	DW

Client

Project Title  
A1 in Northumberland: Morpeth to Felton

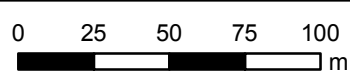
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Figure B3 Tree Constraints Plan

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Drawing Status  
For Information

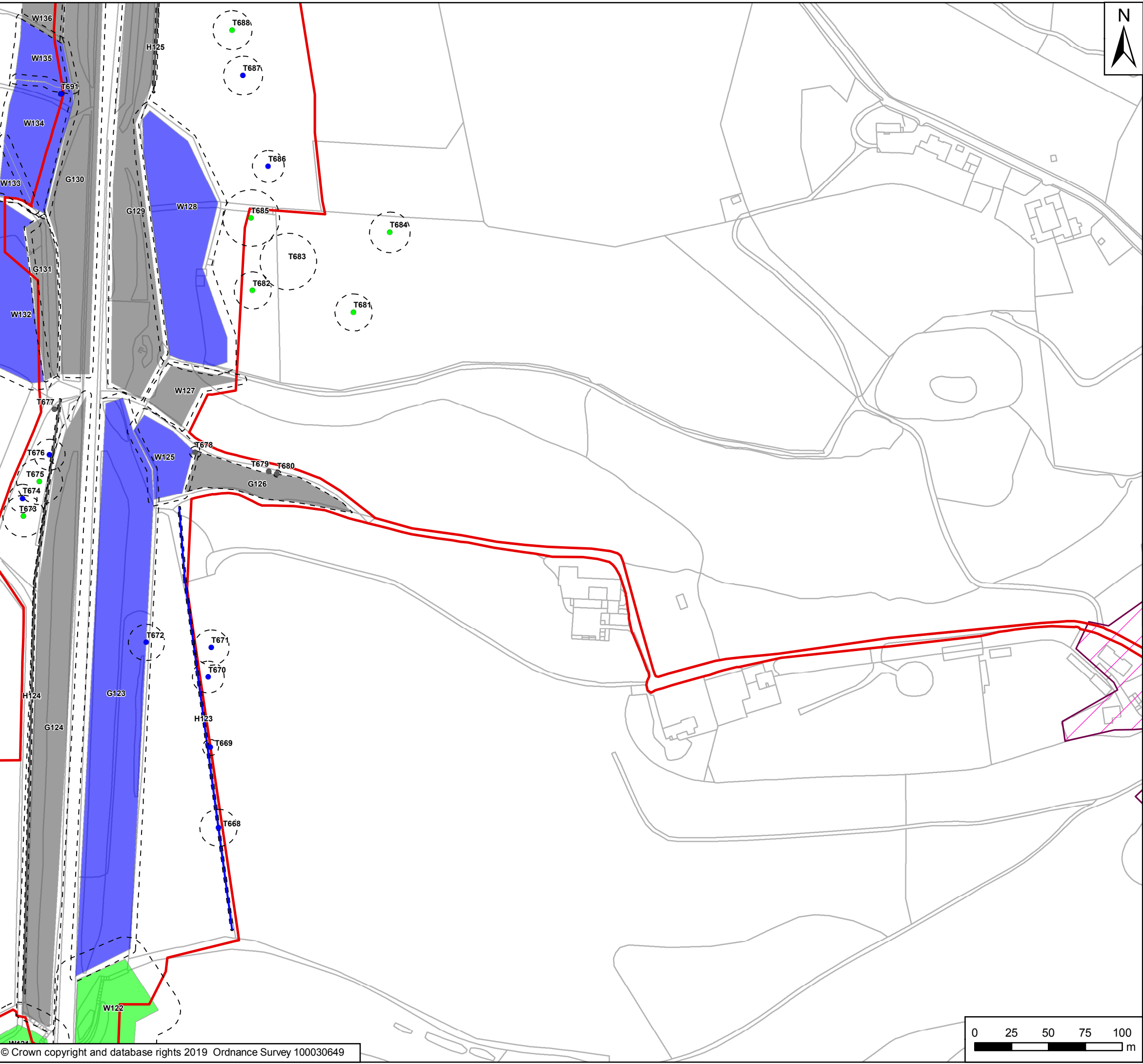
Suitability  
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Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F	Type	Role	Number
Location			P02





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Key

Order Limits

Tree Preservation Order/ Conservation Area

Dukes Bank Ancient Woodland

Root Protection Area

Tree Category

A

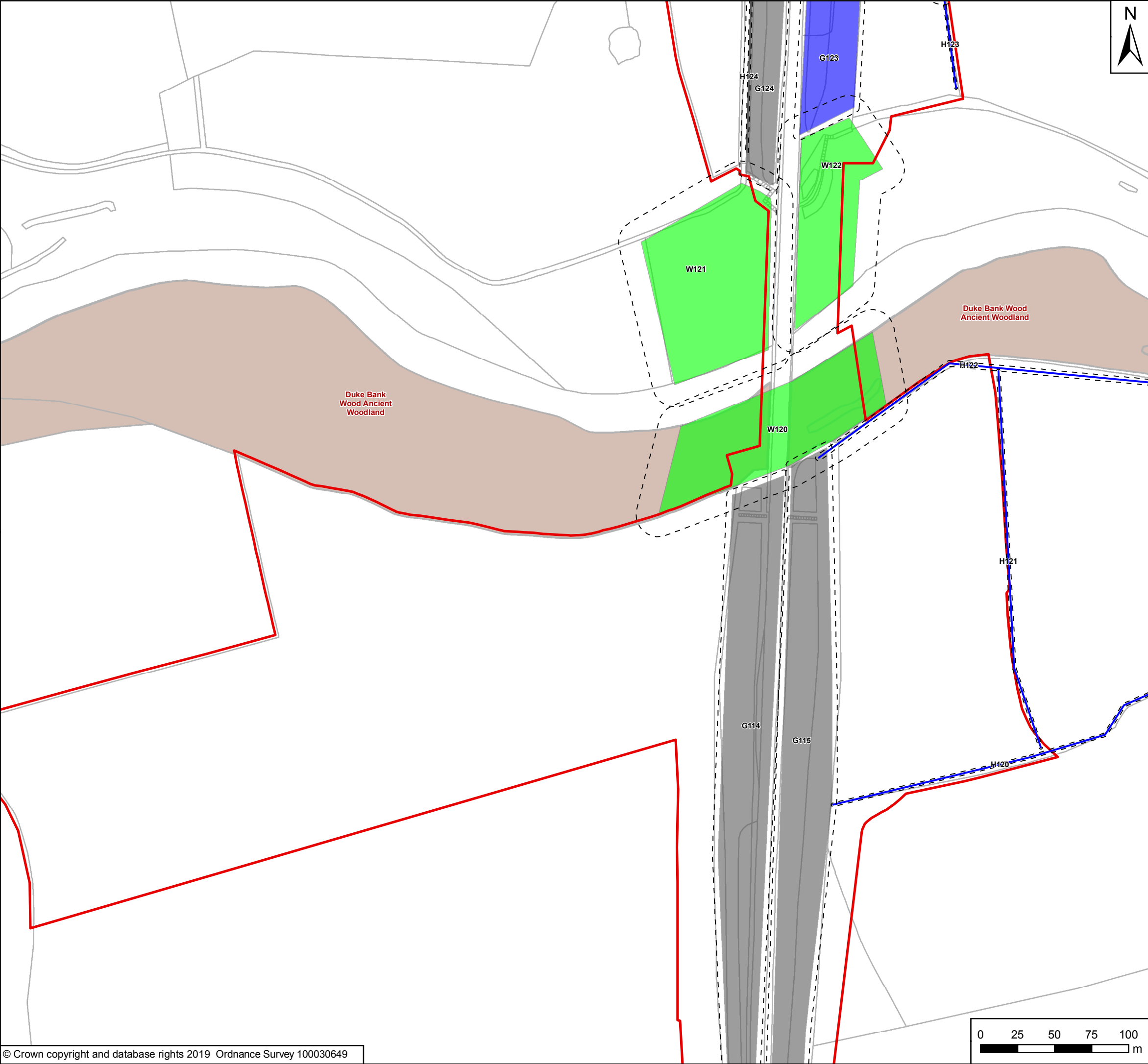
B

C

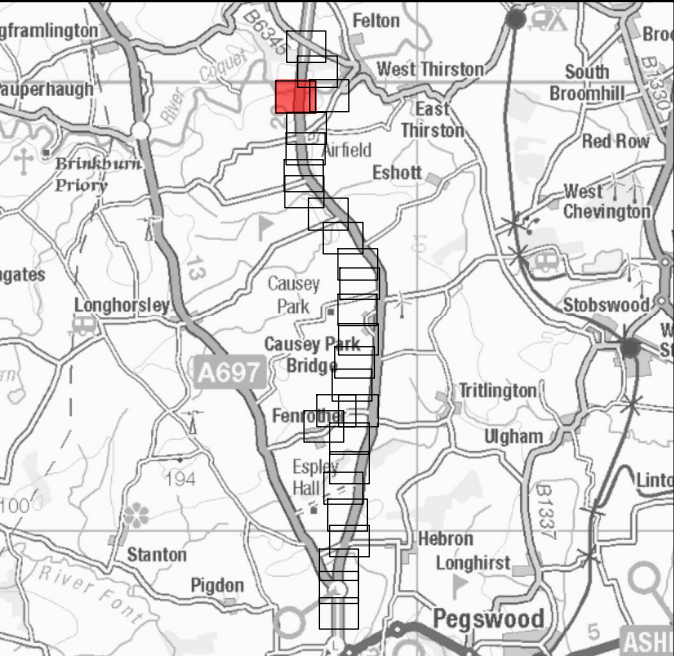
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P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
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Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B3 Tree Constraints Plan					
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For Information				S1	
Drawing Number		Originator		Project Ref. No.	
Project		WSP		70044136	
HE551459		6.2		Revision	
M2F				P02	
Location		Type	Role	Number	

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- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
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Rev	Date	Description	By	Chk'd	App'd

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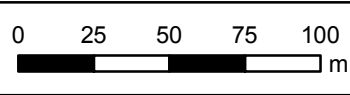
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B3 Tree Constraints Plan

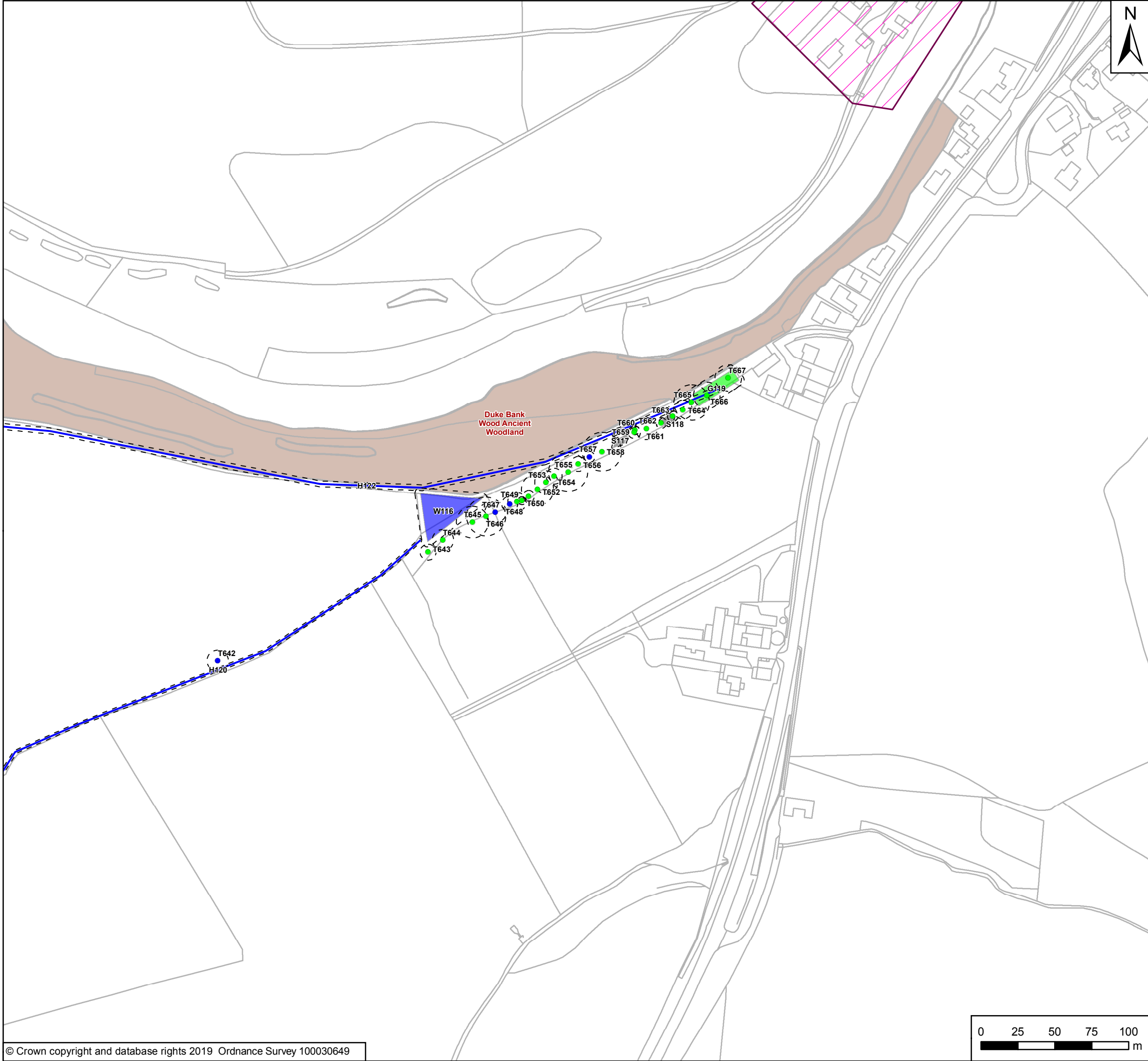
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Drawing Status	Suitability
For Information	S1

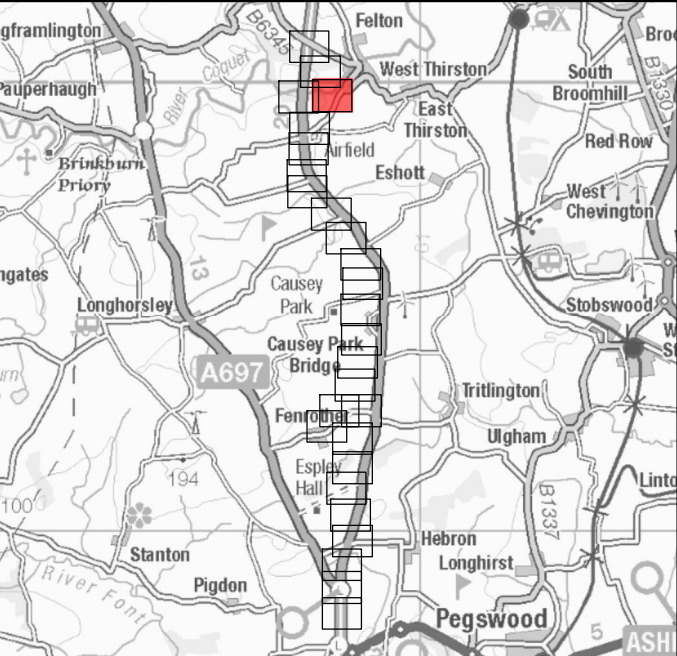
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M2F	Type	Role	Number
Location			P02







- Key**
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
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Rev	Date	Description	By	Chk'd	App'd

Client



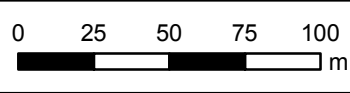
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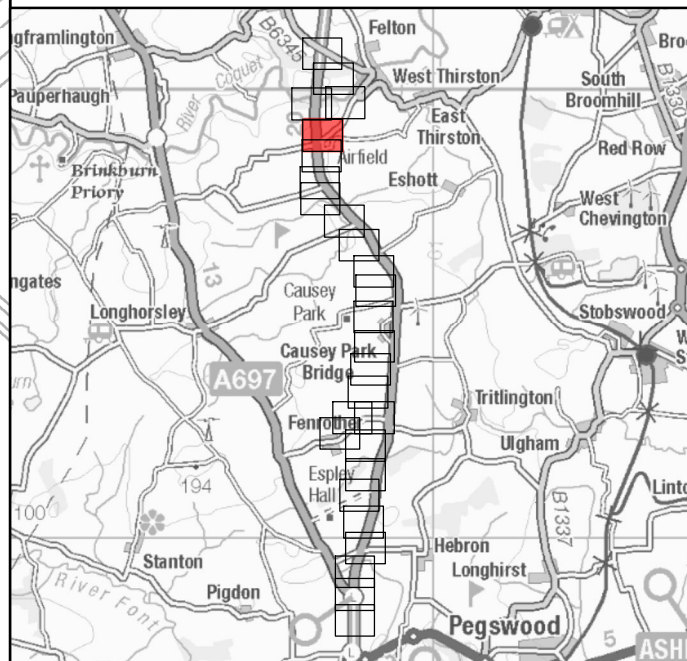
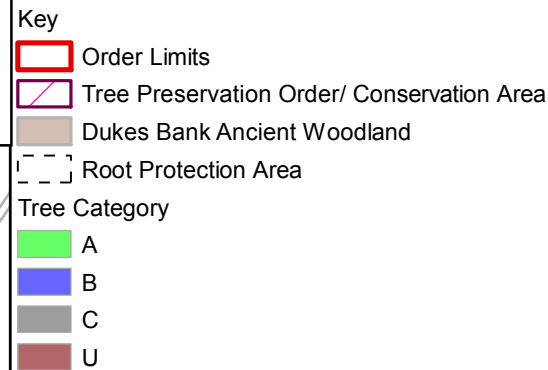
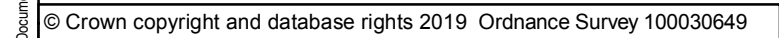
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Figure B3 Tree Constraints Plan

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Drawing Status	Suitability
For Information	S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F Location	Type	Role	Number
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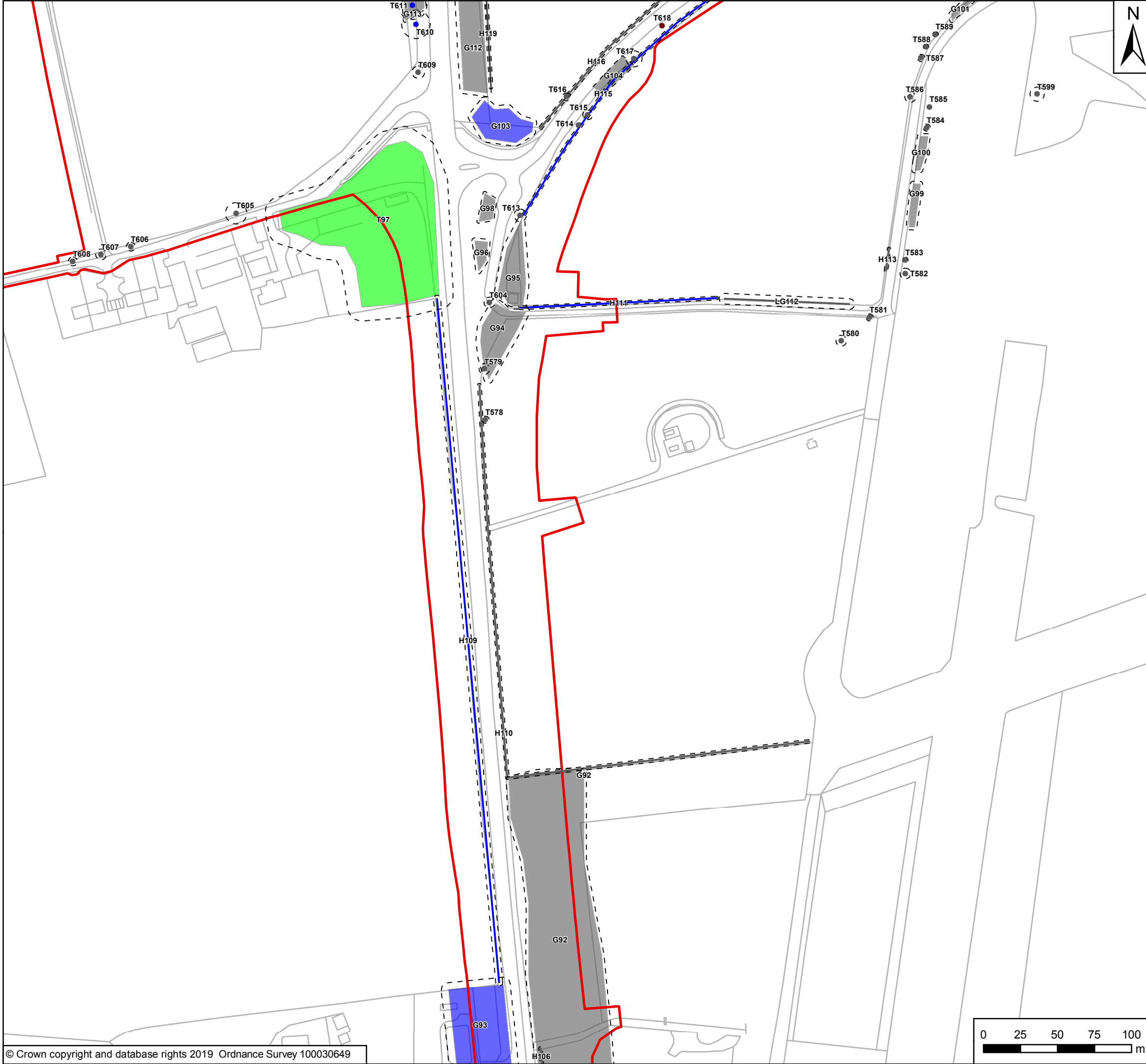
Project Title	A1 in Northumberland: Morpeth to Felton
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Drawing Title

Figure B3 Tree Constraints Plan

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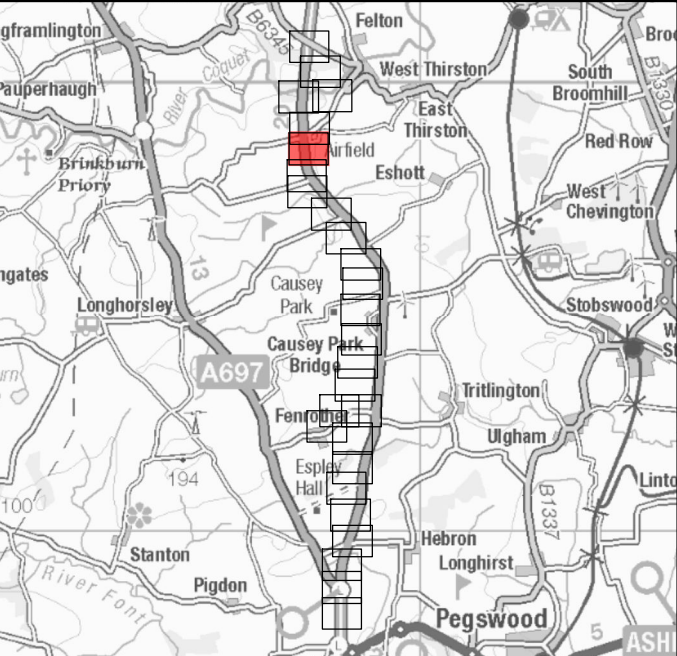


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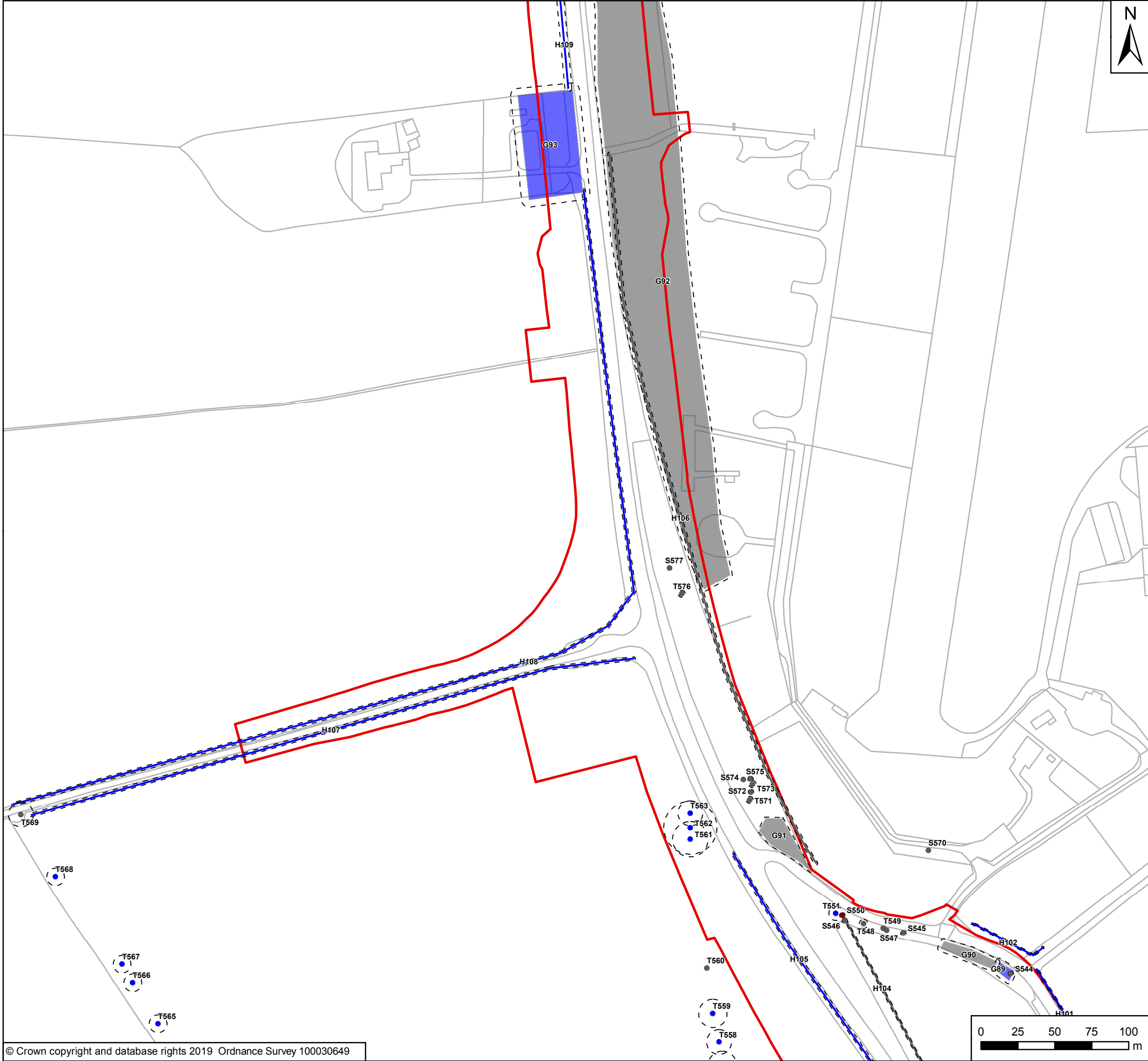
- Order Limits
- Tree Preservation Order/ Conservation Area
- Dukes Bank Ancient Woodland
- Root Protection Area

**Tree Category**

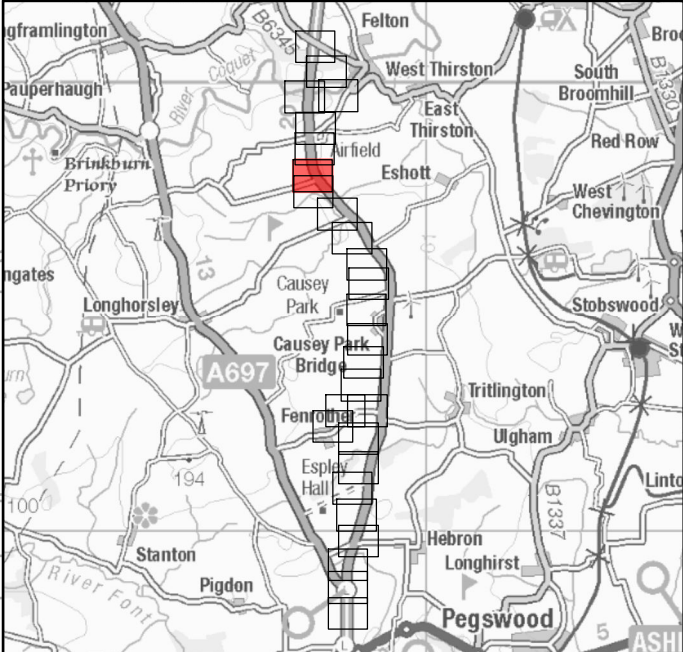
- A
- B
- C
- U



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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
Client					
Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B3 Tree Constraints Plan					
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Drawing Status				Suitability	
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Project		WSP		6.2	
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				70044136	
M2F				Revision	
Location		Type	Role	Number	
				P02	



- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
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Rev	Date	Description	By	Chk'd	App'd
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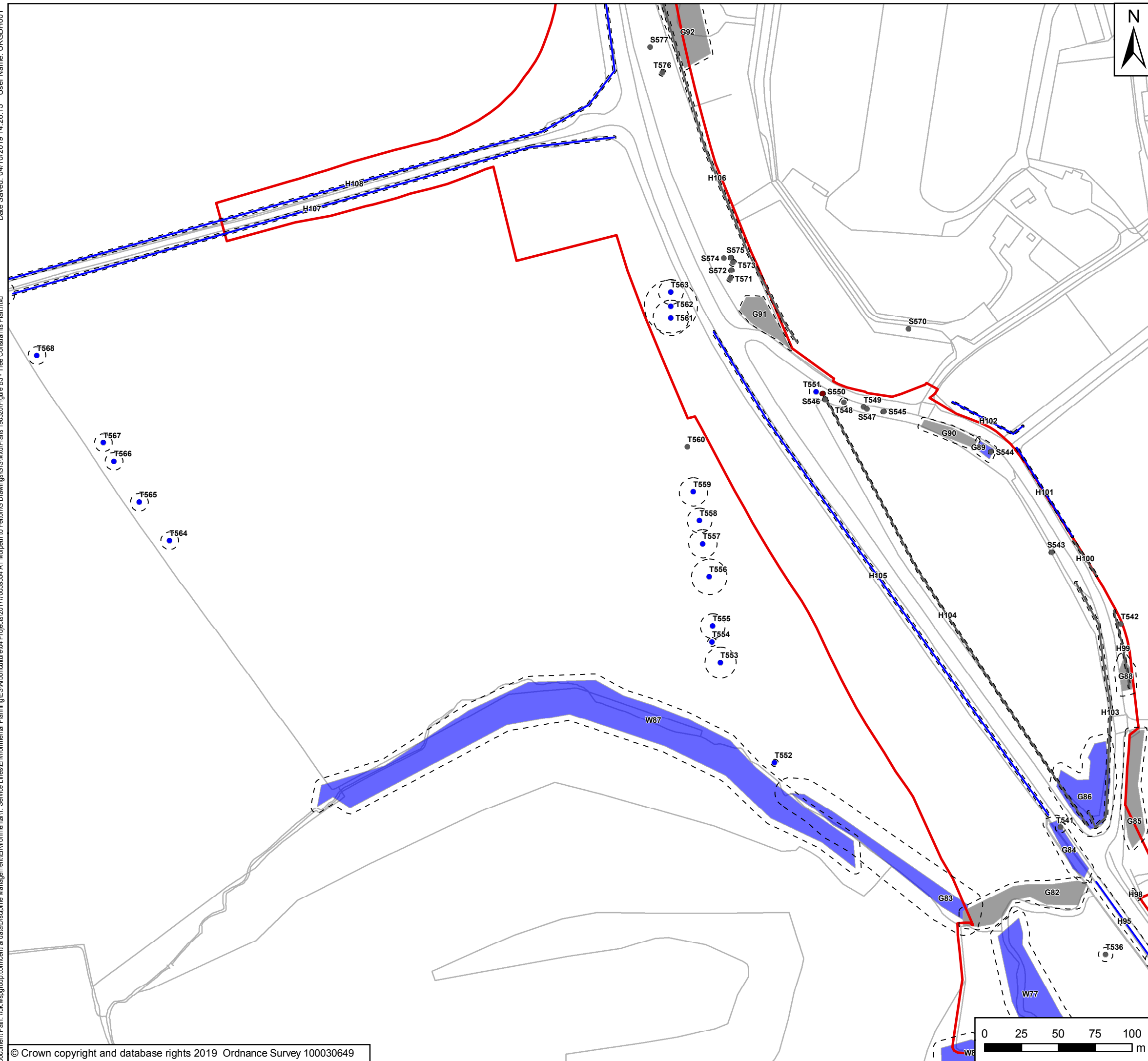
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B3 Tree Constraints Plan

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			Number	





Key

#### Order Limits

 Tree Preservation Order/ Conservation Area

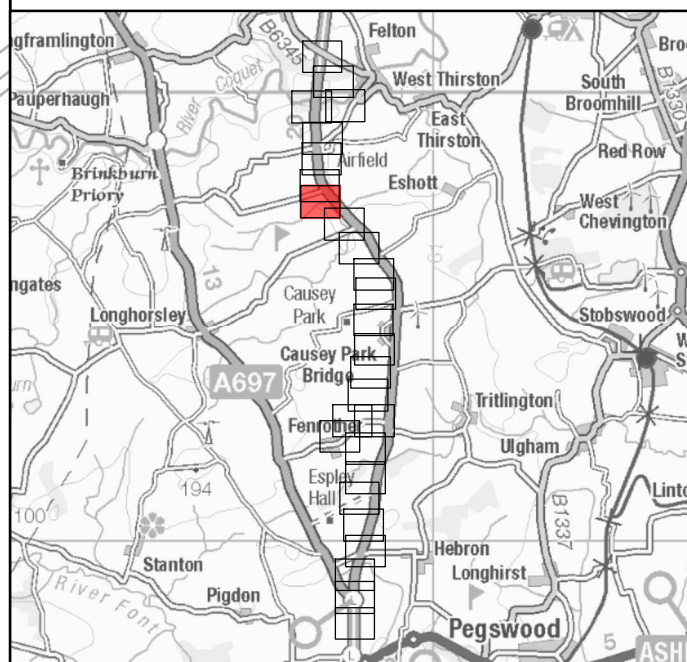
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Root Protection Area

Tree Category

 A B

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P01	12/07/19	First Issue	GH	DW	DW
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Project Title	
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## A1 in Northumberland: Morpeth to Felton

Drawing Title

Figure B3 Tree Constraints Plan

Scale 1:2,500	Drawn AD	Checked DW	Approved DW	Authorised DM
Original Size A3	Date 12/07/19	Date 12/07/19	Date 12/07/19	Date 12/07/19

Drawing Status
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### For Information

Suitability

S1

Drawing Number

Project  
HE551459

| Originator

WSP

| Volume

6.2

Project Ref. No.

70044136

Revision

D02

Location

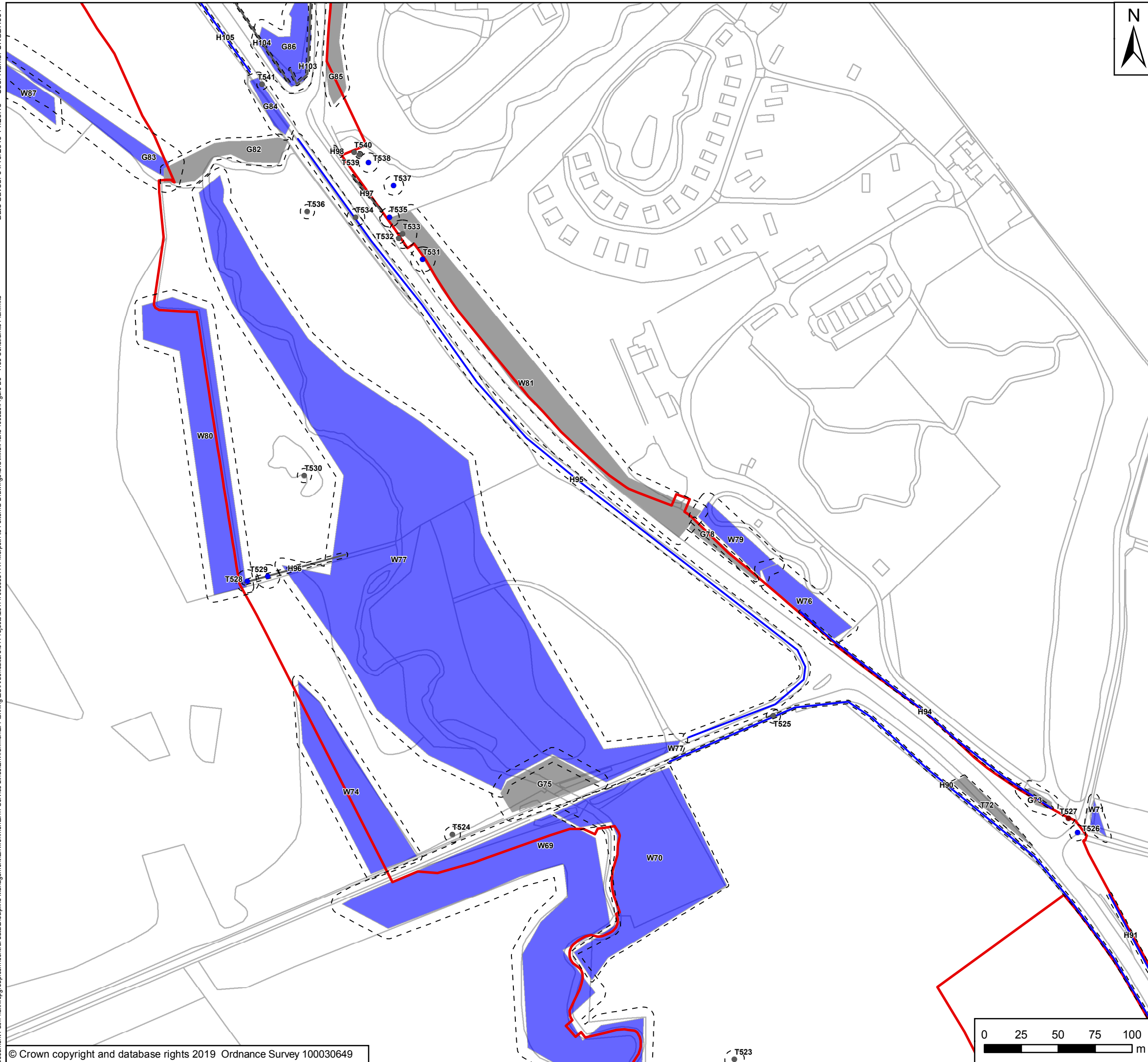
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



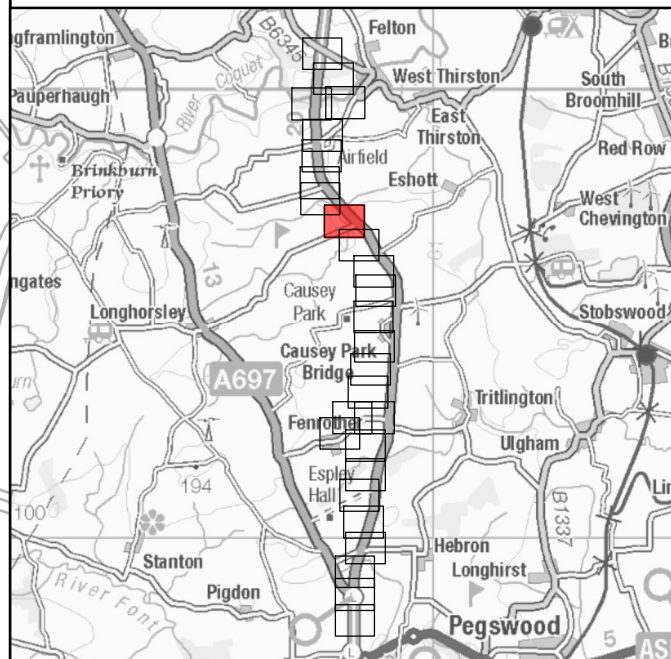
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**Key**

-  Order Limits
-  Tree Preservation Order/ Conservation Area
-  Dukes Bank Ancient Woodland
-  Root Protection Area

**Tree Category**

-  A
-  B
-  C
-  U



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Project Title	A1 in Northumberland: Morpeth to Felton
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Drawing Title

Figure B3 Tree Constraints Plan

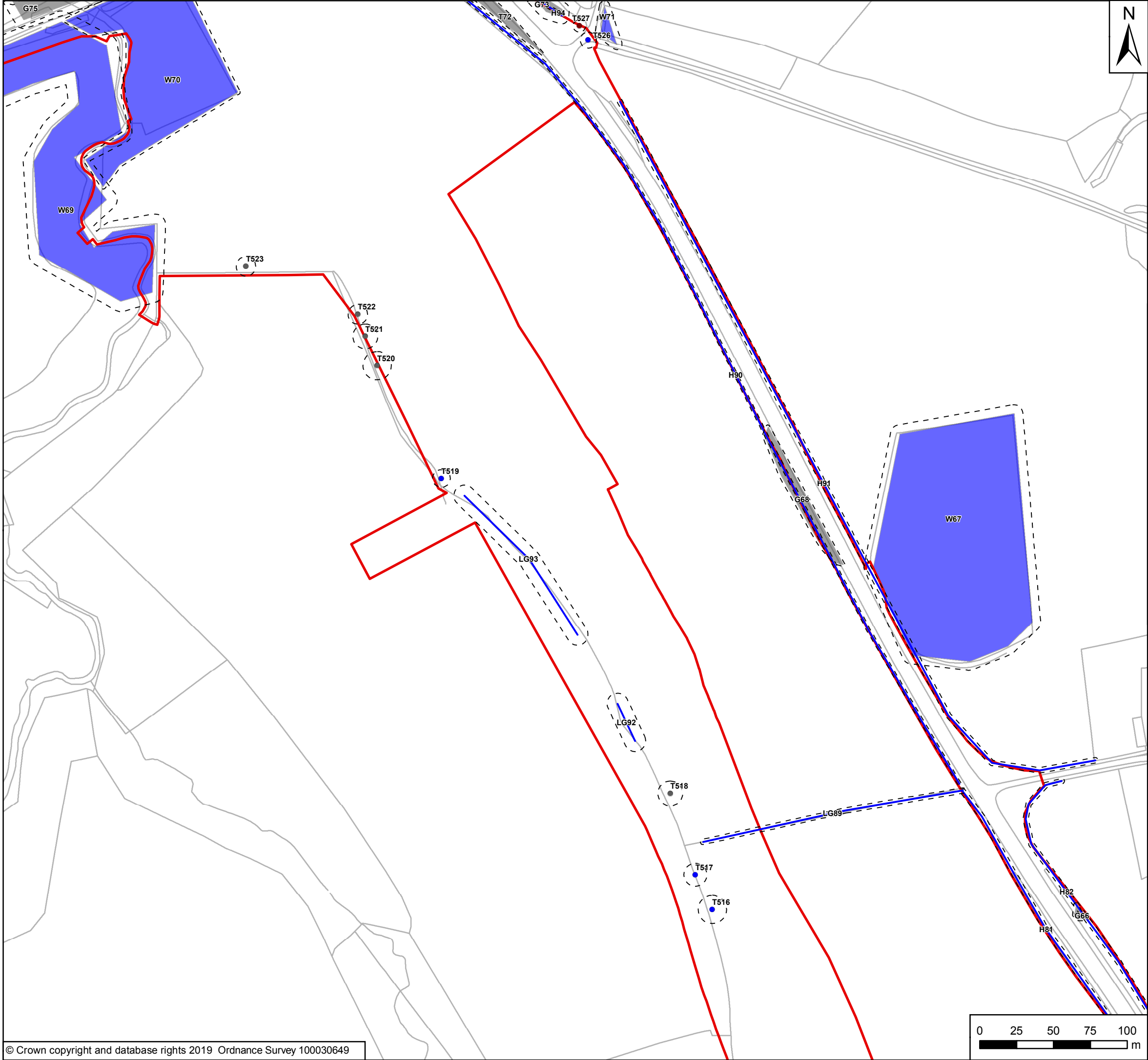
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Drawing Status	Suitability
For Information	S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
			Revision

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Location	Type	Role	Number	





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P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

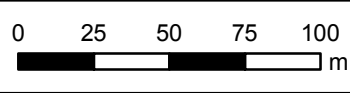
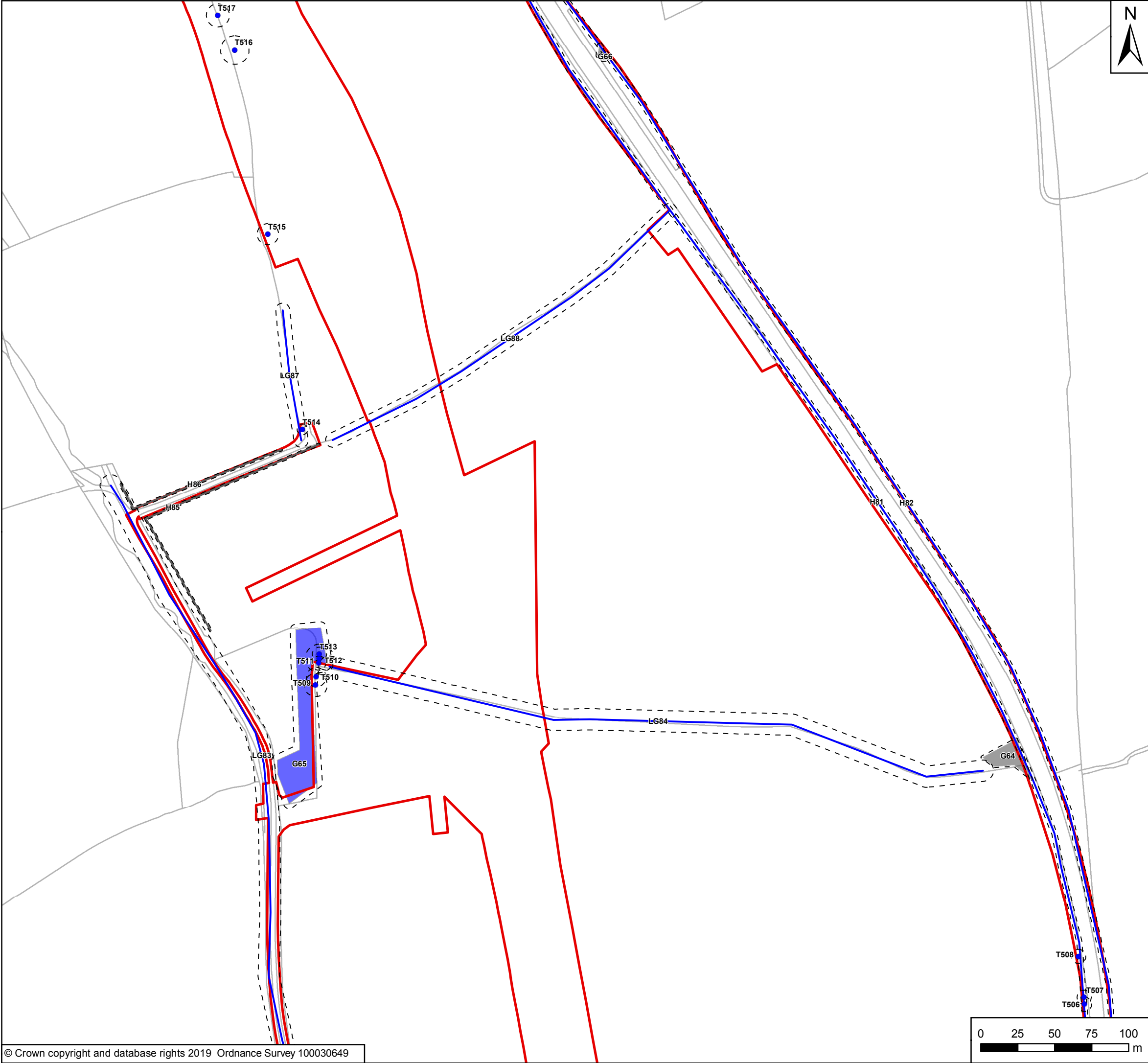
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Drawing Title  
Figure B3 Tree Constraints Plan

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Drawing Status	Suitability
For Information	S1

Drawing Number	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F	Type	Role	Number
Location			P02



N

Key

Order Limits

Tree Preservation Order/ Conservation Area

Dukes Bank Ancient Woodland

Root Protection Area

Tree Category

A

B

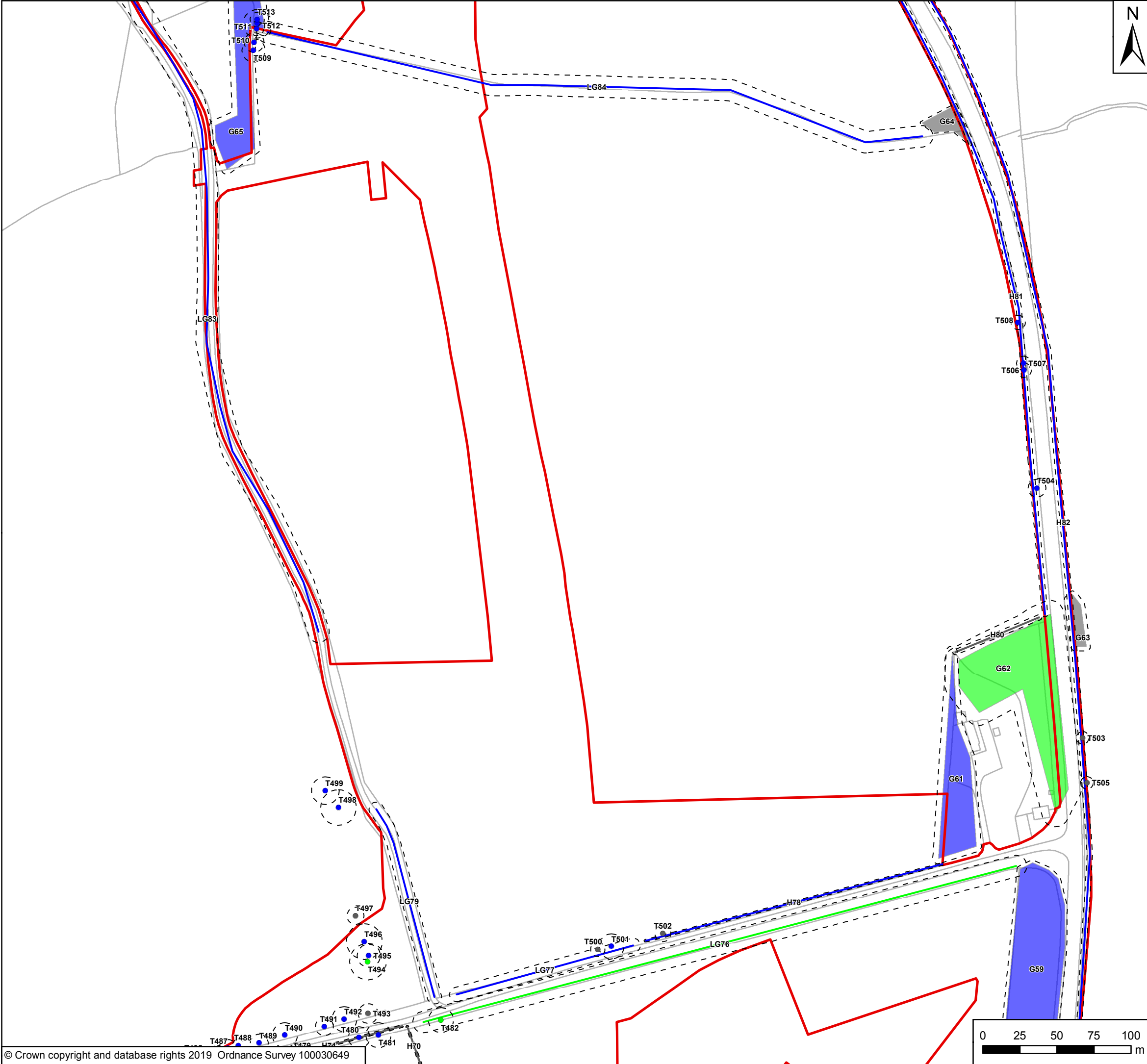
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P01	12/07/19	First Issue	GH	DW	DW
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Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B3 Tree Constraints Plan					
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Drawing Number		Originator		Project Ref. No.	
HE551459		WSP		70044136	
M2F		Type		Revision	
Location		Role		P02	
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N

Order Limits

Tree Preservation Order/ Conservation Area

Dukes Bank Ancient Woodland

Root Protection Area

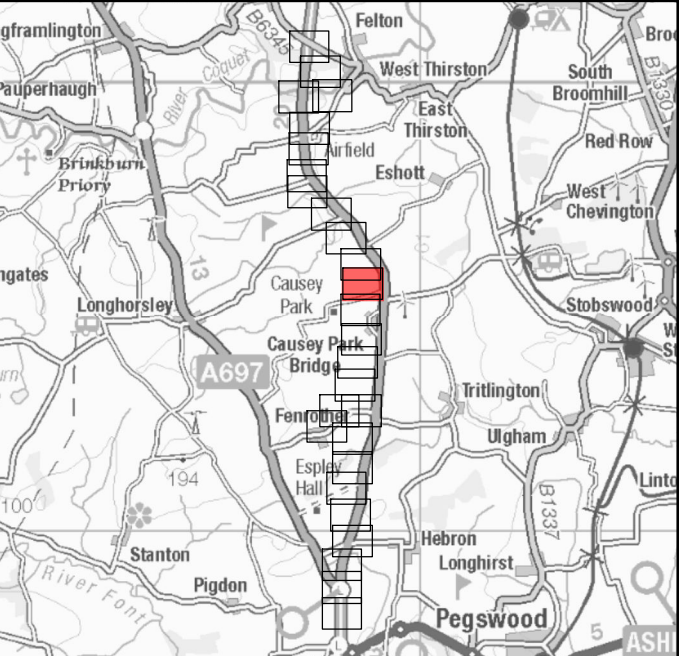
Tree Category

A

B

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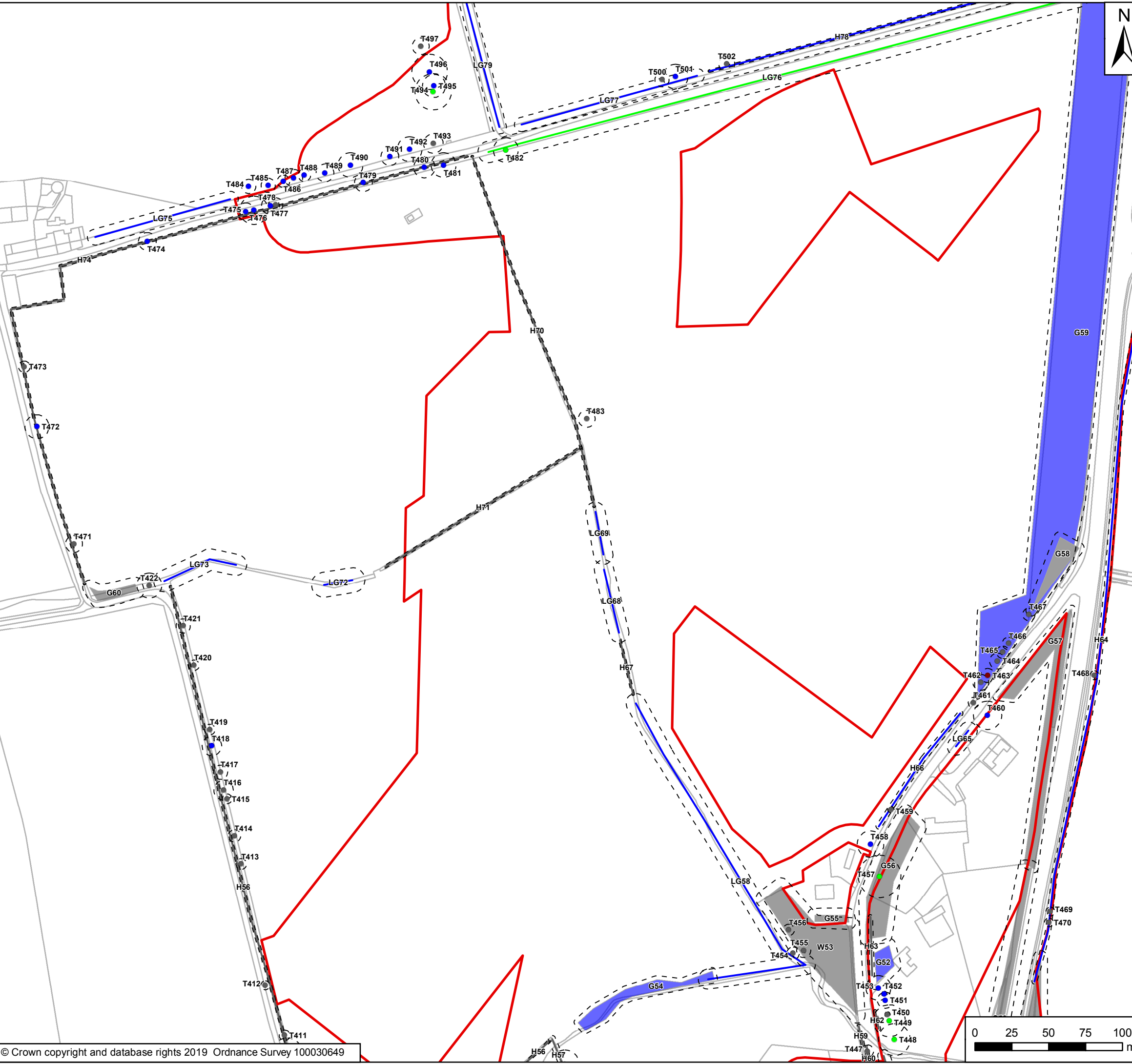
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Drawing Title  
Figure B3 Tree Constraints Plan

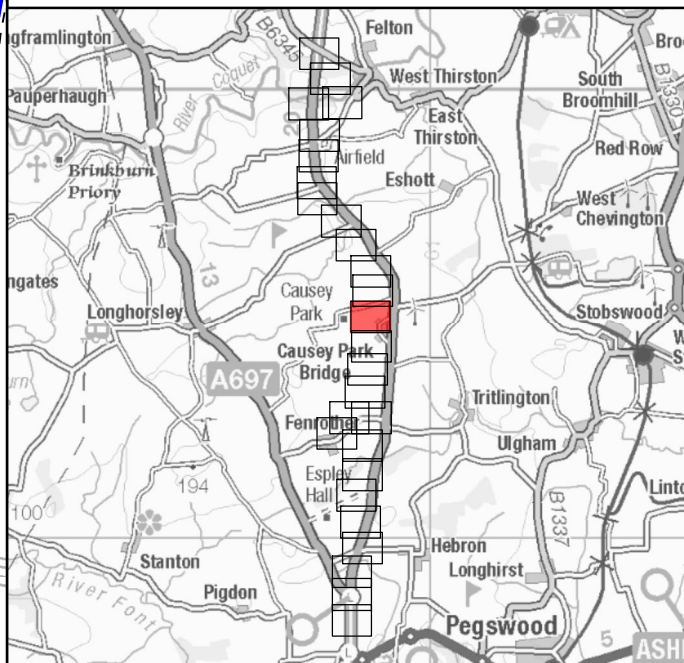
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Drawing Status	Suitability
For Information	S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F Location	Type	Role	Number
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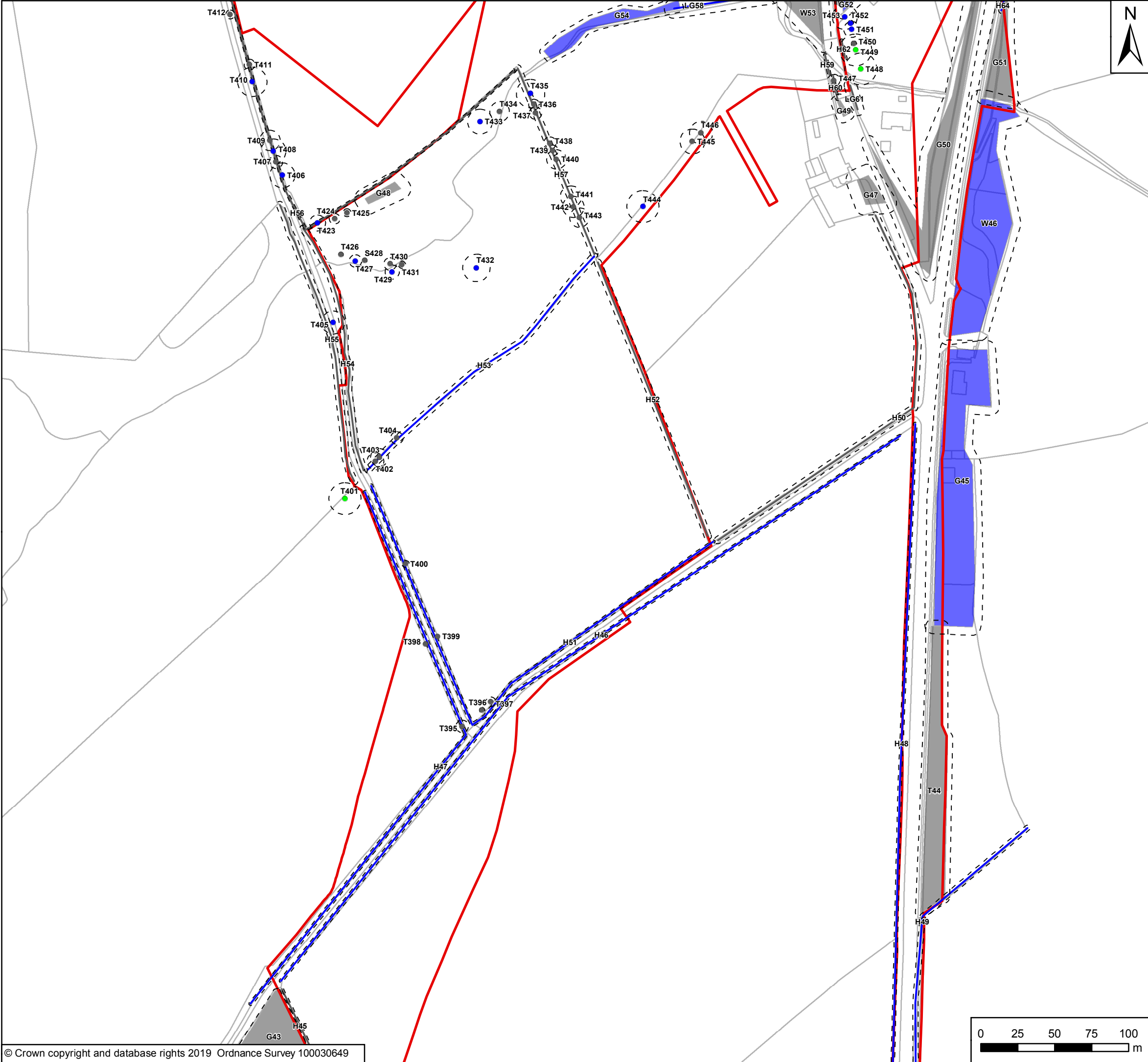
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Project Title  
A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B3 Tree Constraints Plan

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Original Size A3	Date 12/07/19	Date 12/07/19	Date 12/07/19	Date 12/07/19
Drawing Status  For Information				Suitability  S1
Drawing Number Project HE551459	Originator WSP		Volume 6.2	Project Ref. No. 70044136
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Type		Role	Number	





N

Order Limits

Tree Preservation Order/ Conservation Area

Dukes Bank Ancient Woodland

Root Protection Area

Tree Category

A

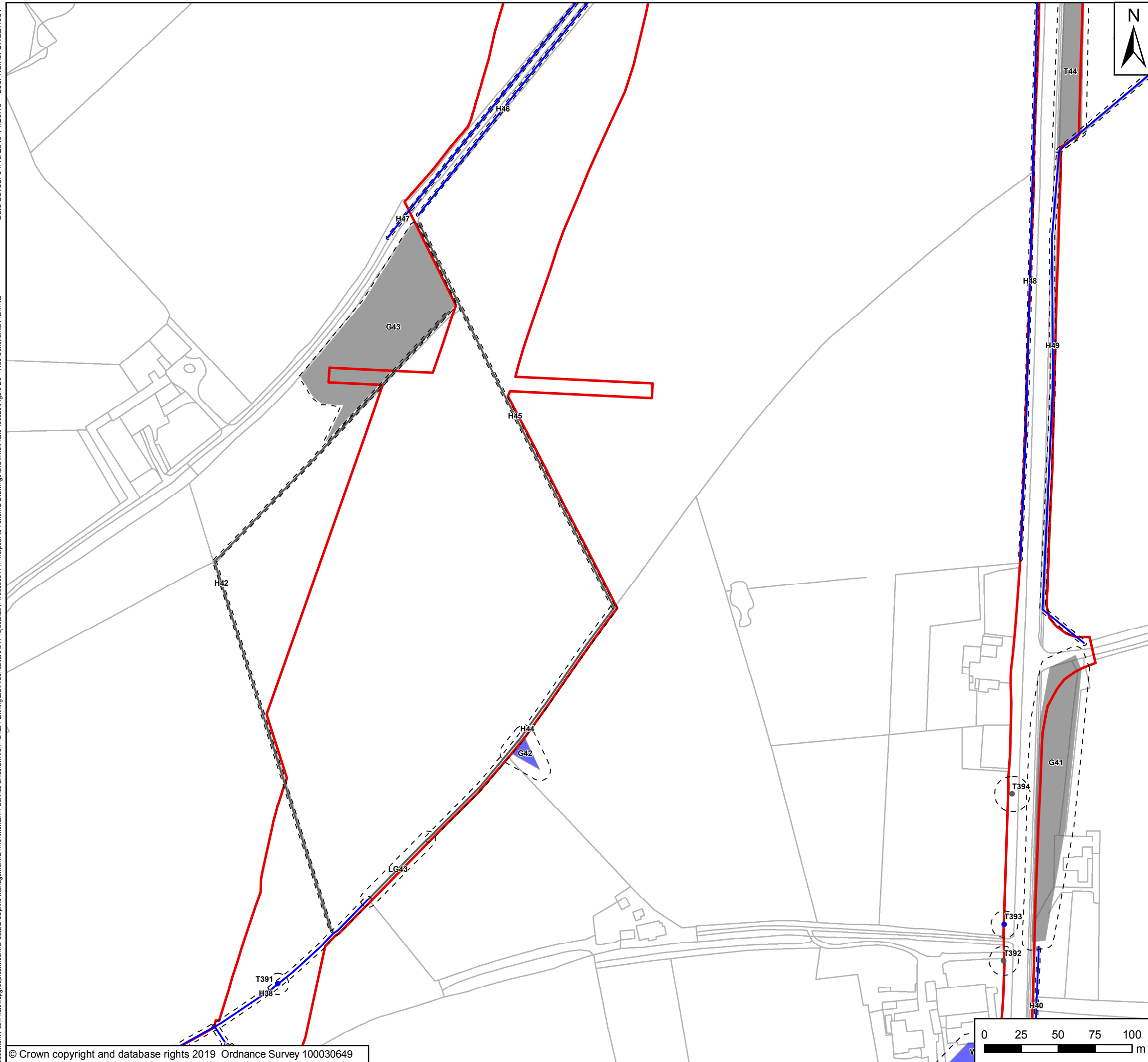
B

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Rev	Date	Description	By	Chk'd	App'd
Client					
Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B3 Tree Constraints Plan					
Scale	Drawn	Checked	Approved	Authorised	
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Drawing Status				Suitability	
For Information				S1	
Drawing Number		Originator		Volume	
Project		WSP		6.2	
HE551459				Project Ref. No.	
				70044136	
M2F				Revision	
Location		Type		Role	
				Number	
				P02	

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Project Title

**A1 in Northumberland: Morpeth to Felton**

Drawing Title

**Figure B3 Tree Constraints Plan**

Scale	Drawn	Checked	Approved	Authorised
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Drawing Status

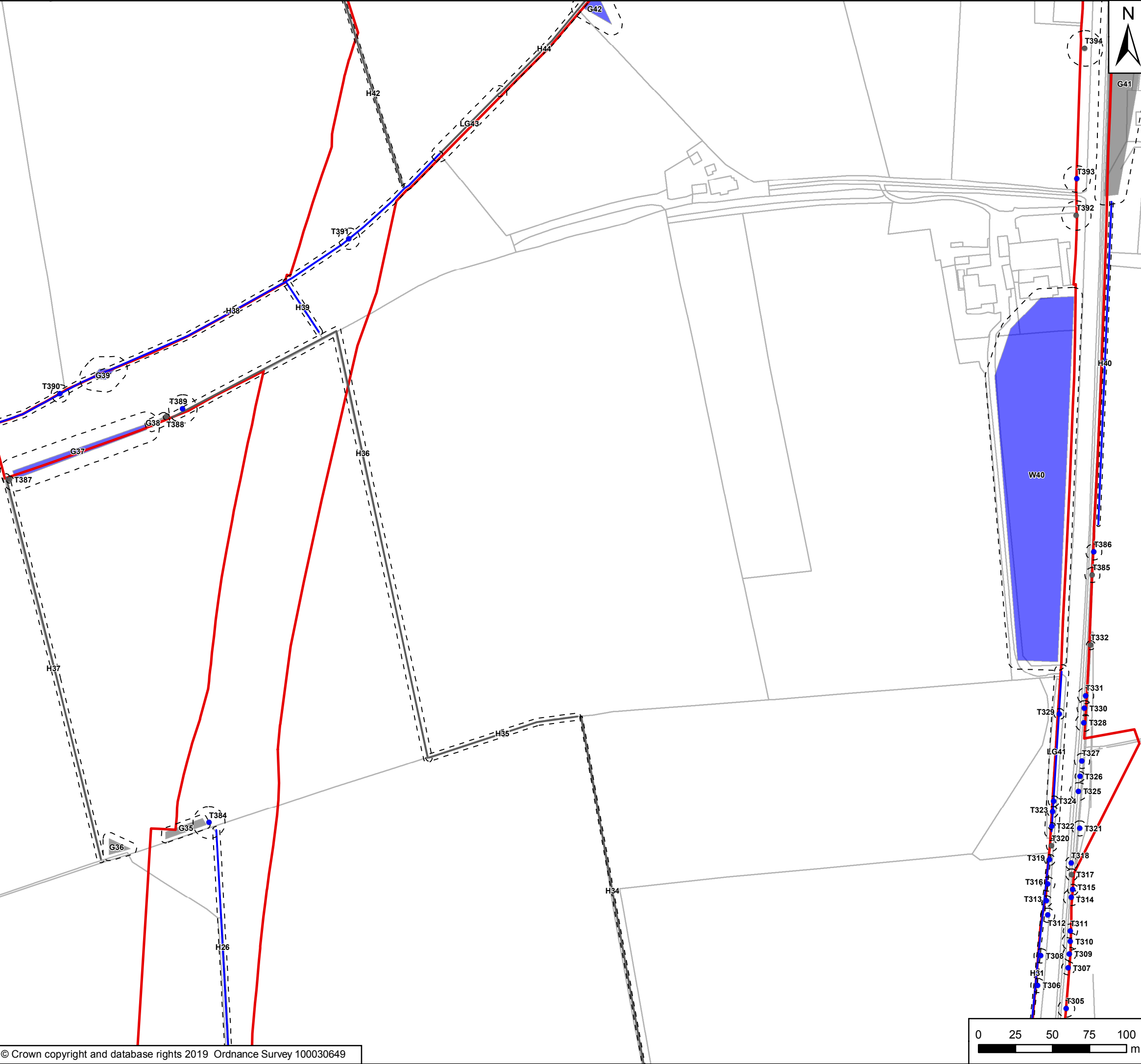
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Suitability

**S1**

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HE551459		WSP	6.2	70044136
M2F	Location	Type	Role	Number
				P02



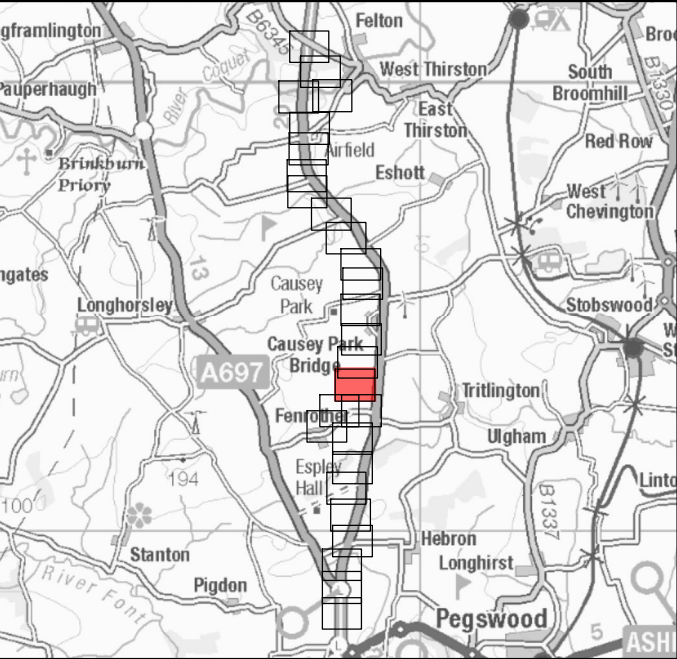


**Key**

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Rev	Date	Description	By	Chk'd	App'd

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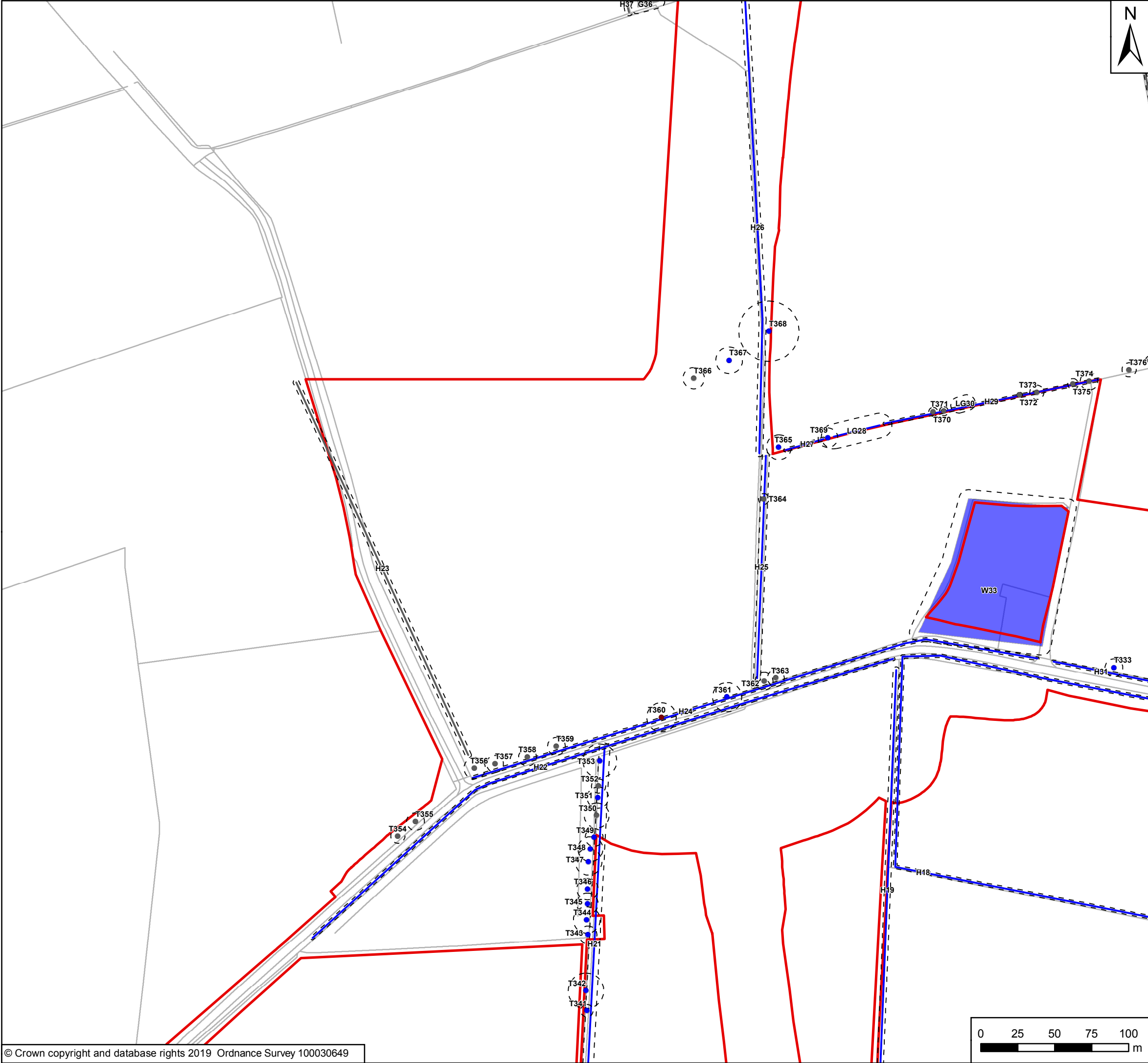
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Figure B3 Tree Constraints Plan

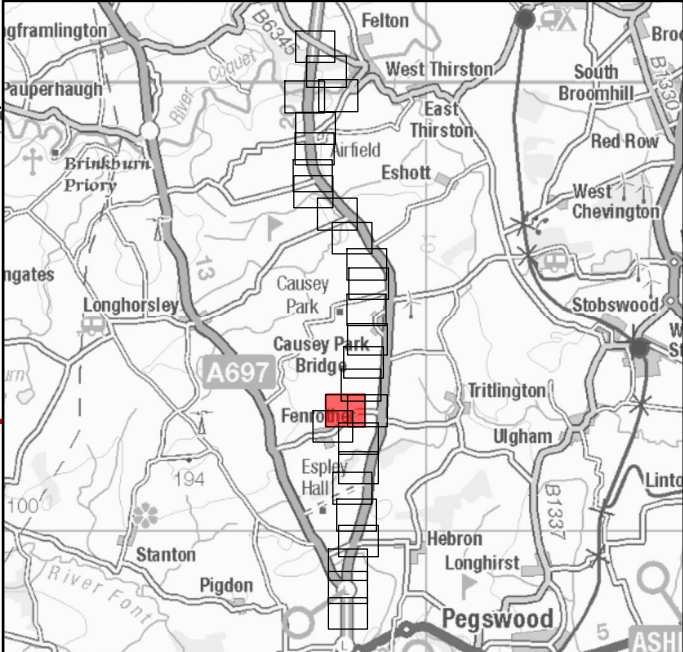
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Drawing Status	Suitability
For Information	S1

Drawing Number	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
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Location			P02



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Rev	Date	Description	By	Chk'd	App'd
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Project Title  
A1 in Northumberland: Morpeth to Felton

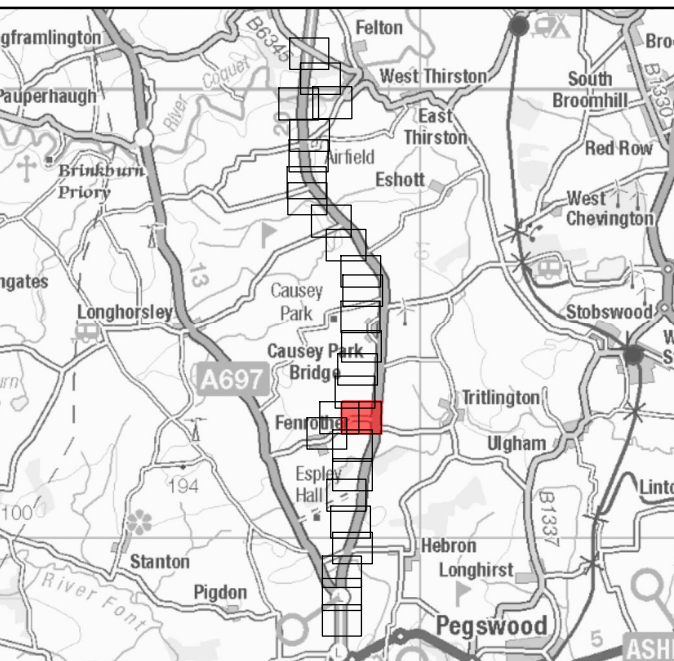
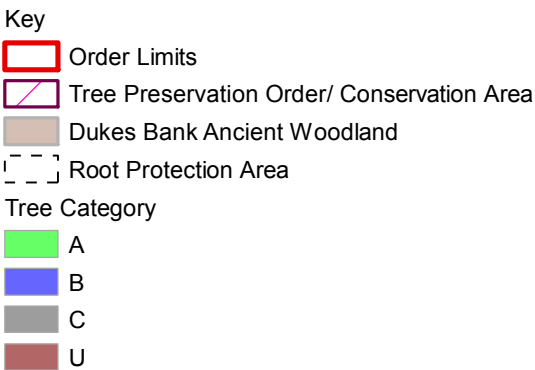
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Drawing Status  
For Information

Suitability  
S1

Drawing Number Project	HE551459	Originator	WSP	Volume	6.2	Project Ref. No.	70044136
M2F	Location	Type	Role	Number		Revision	P02



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Rev	Date	Description	By	Chk'd	App'd

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Project Title  
A1 in Northumberland: Morpeth to Felton

Drawing Title

### Figure B3 Tree Constraints Plan

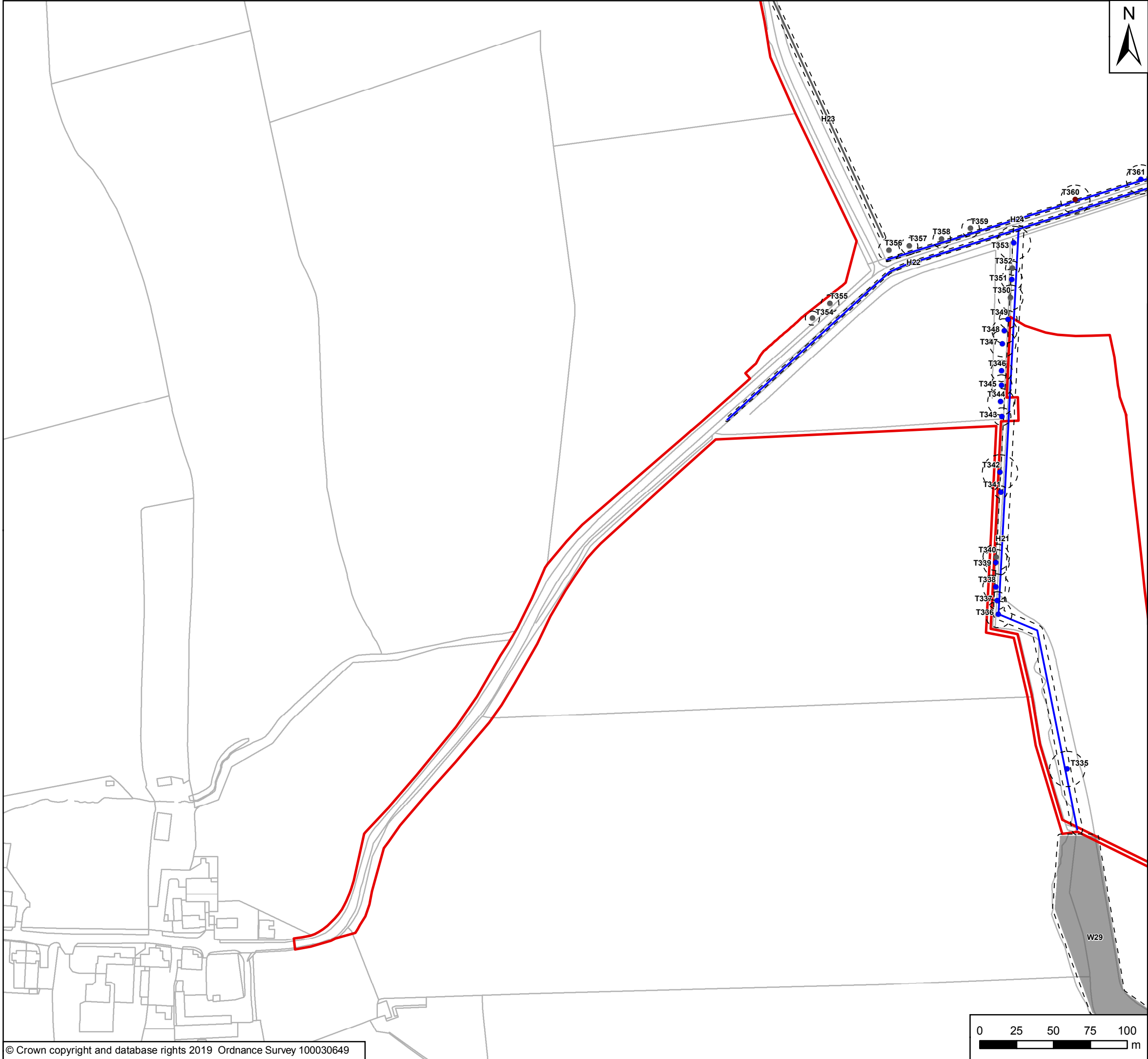
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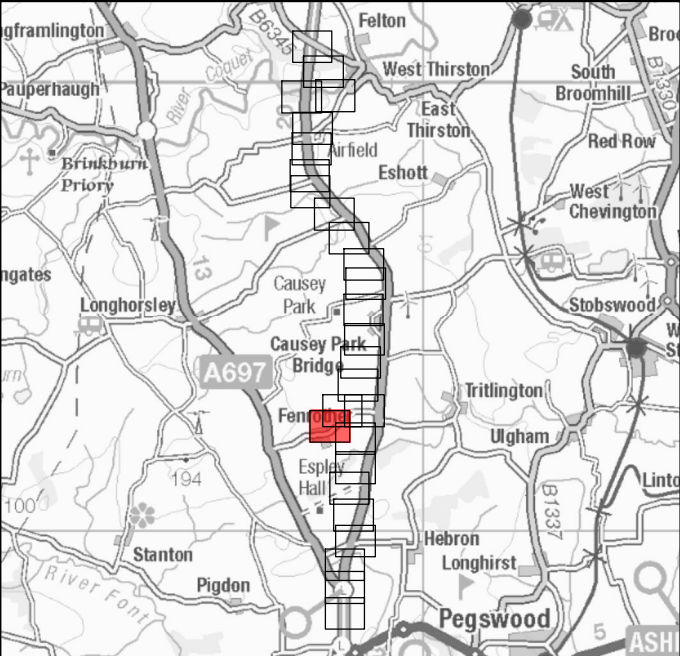
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M2F				P02
Location	Type	Role	Number	





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Rev	Date	Description	By	Chk'd	App'd

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Project Title  
A1 in Northumberland: Morpeth to Felton

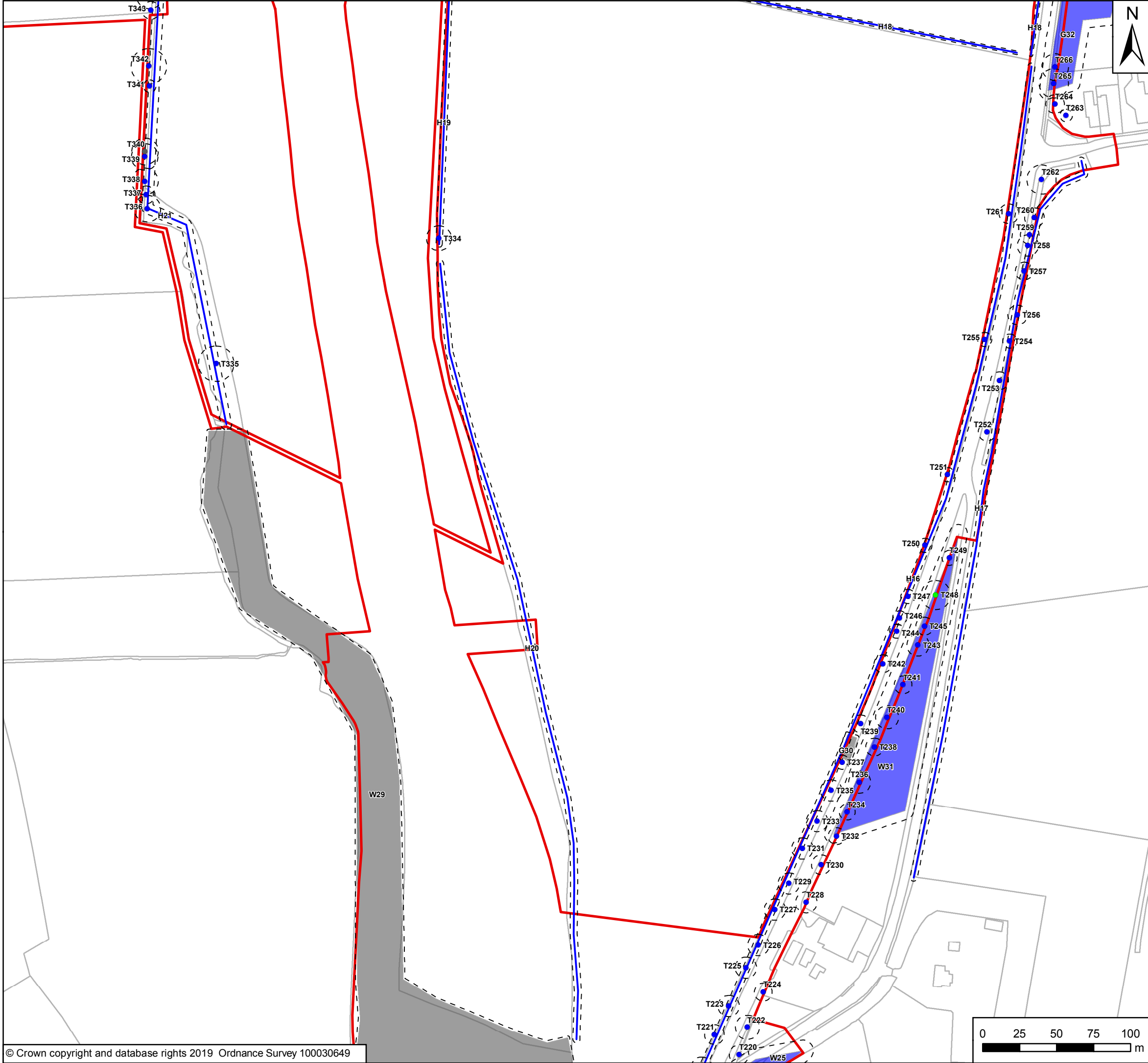
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Drawing Status  
For Information

Suitability  
S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F	Type	Role	Number
Location			P02



Order Limits

Tree Preservation Order/ Conservation Area

Dukes Bank Ancient Woodland

Root Protection Area

Tree Category

A

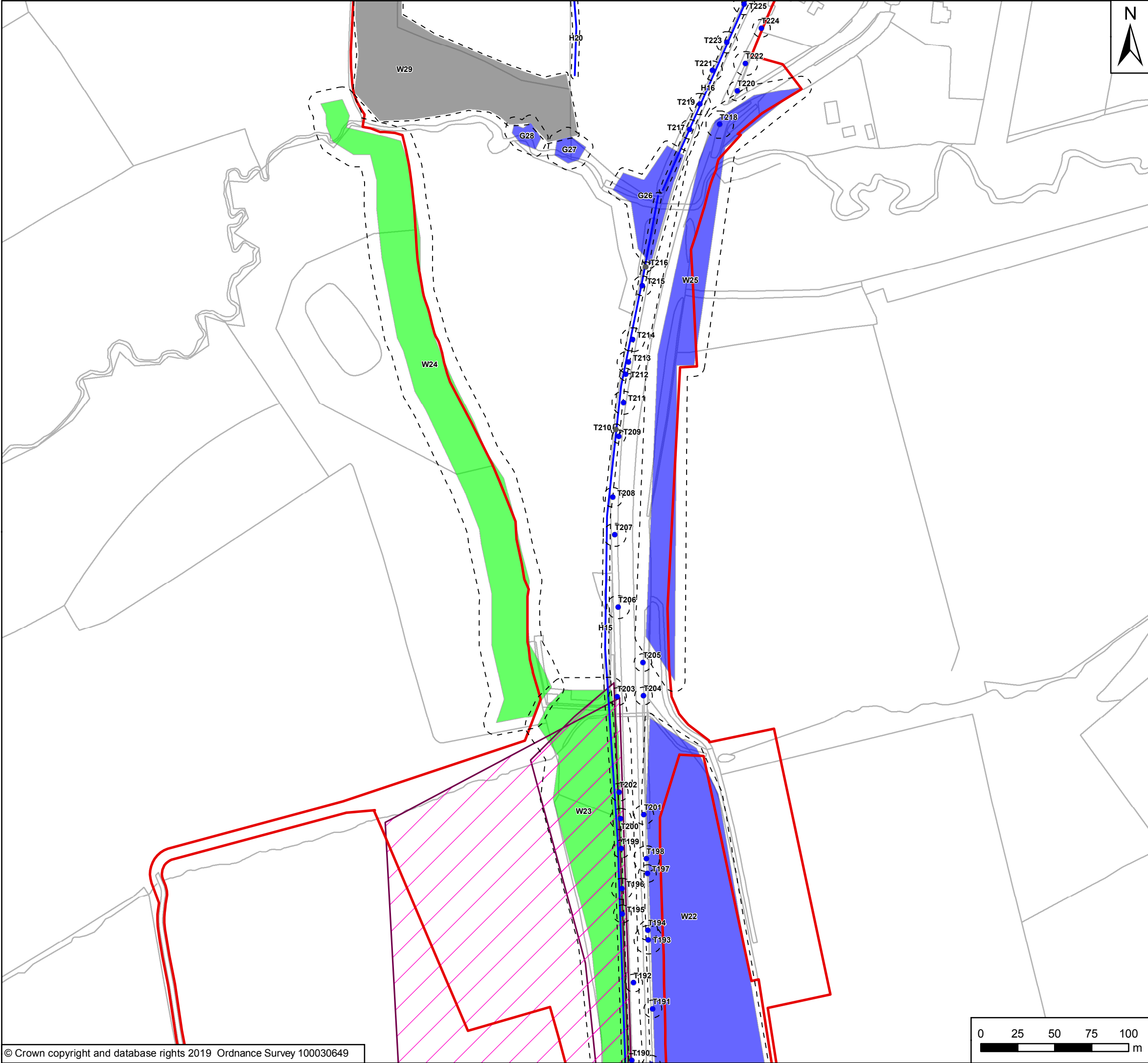
B

C

U

P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
Client					
Project Title A1 in Northumberland: Morpeth to Felton					
Drawing Title Figure B3 Tree Constraints Plan					
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Revision					P02

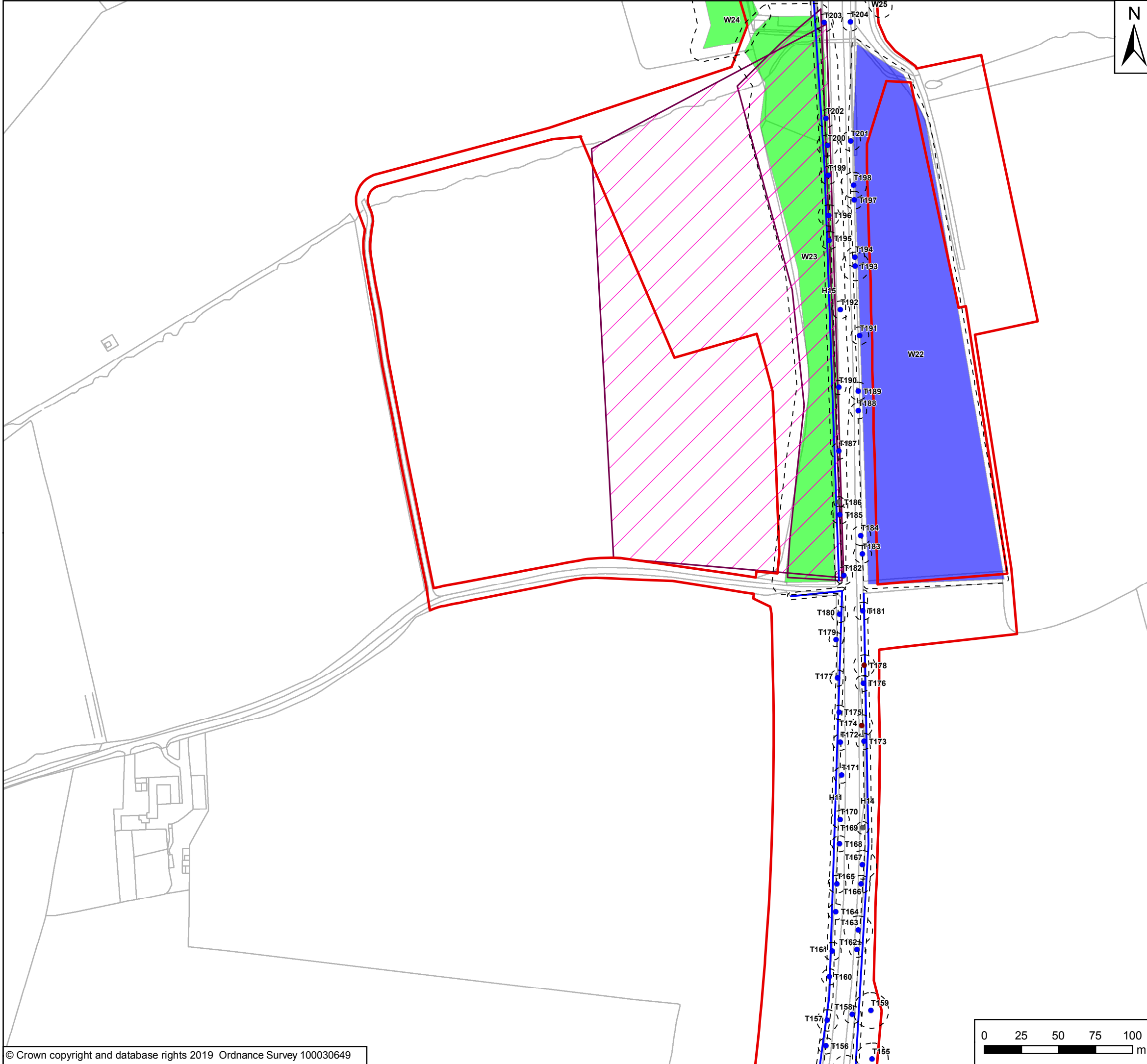




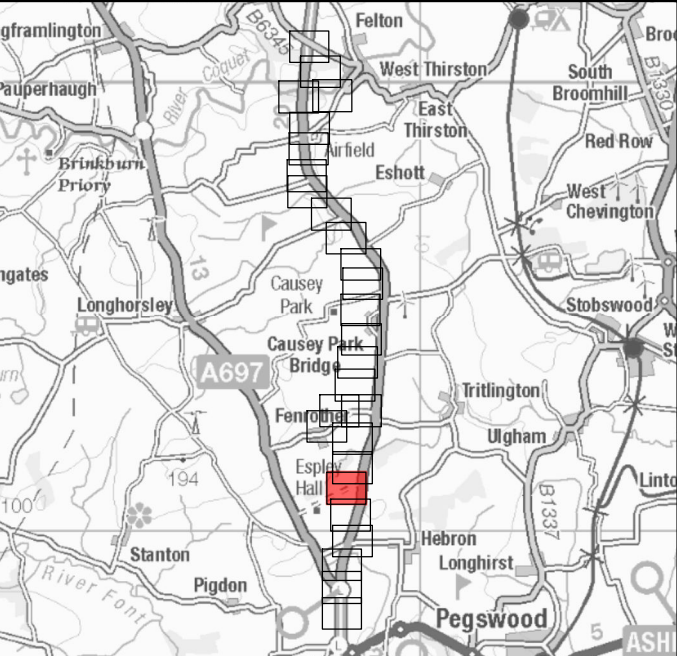
- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
- Tree Category
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
Client					
Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
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Scale	Drawn	Checked	Approved	Authorised	
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For Information				S1	
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HE551459		WSP		70044136	
M2F		Volume		Revision	
Location		6.2		P02	
		Type	Role	Number	



- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
- Tree Category
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

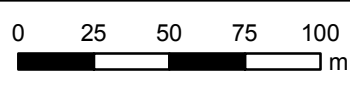
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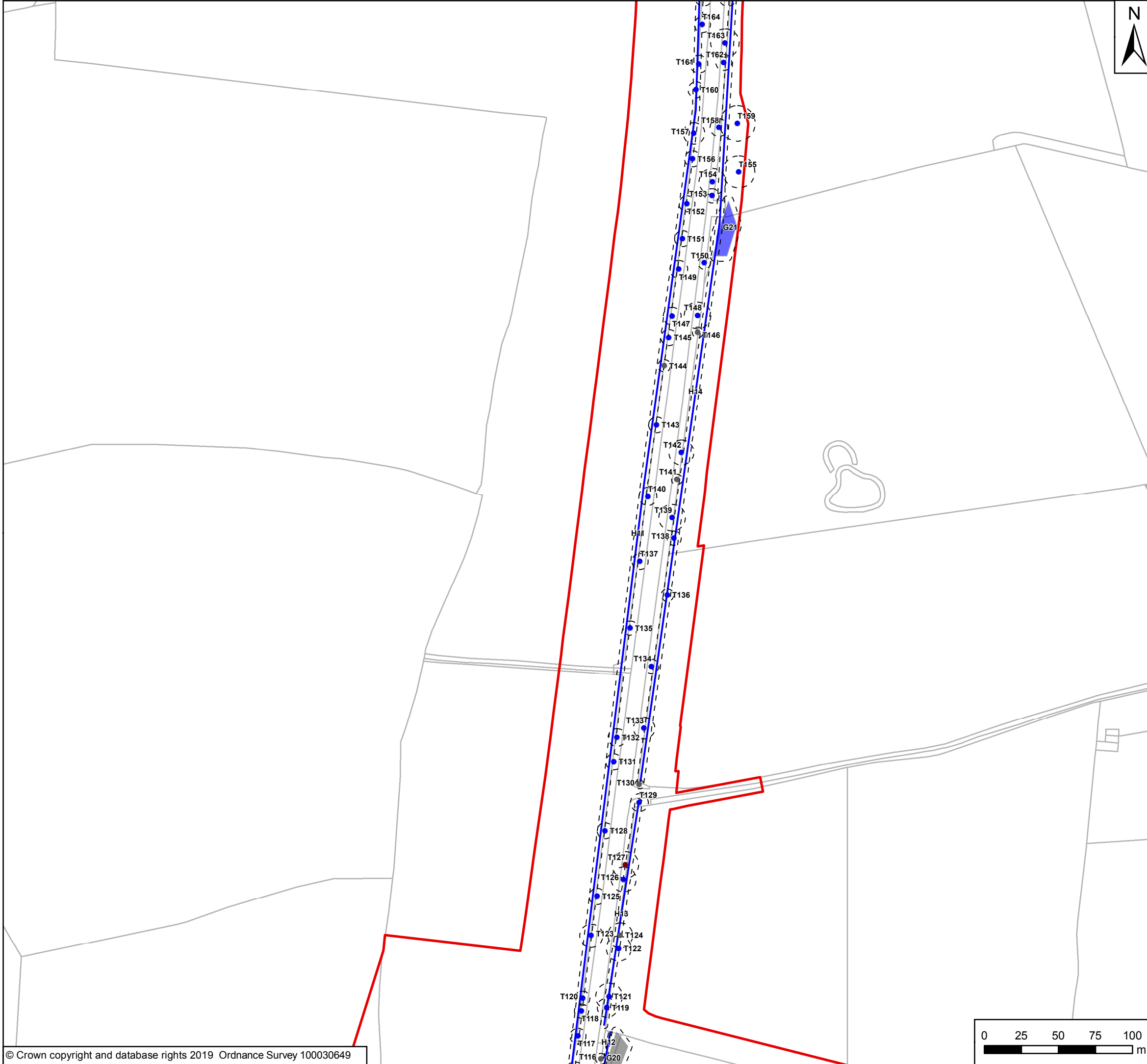
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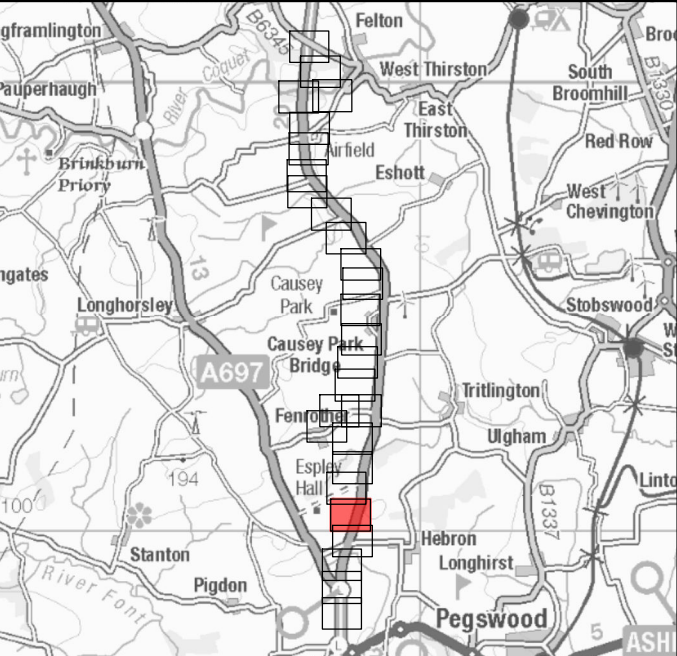
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Drawing Number	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F	Type	Role	Number
Location			P02





- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
- Tree Category
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

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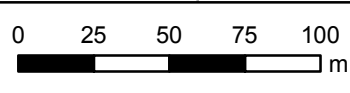
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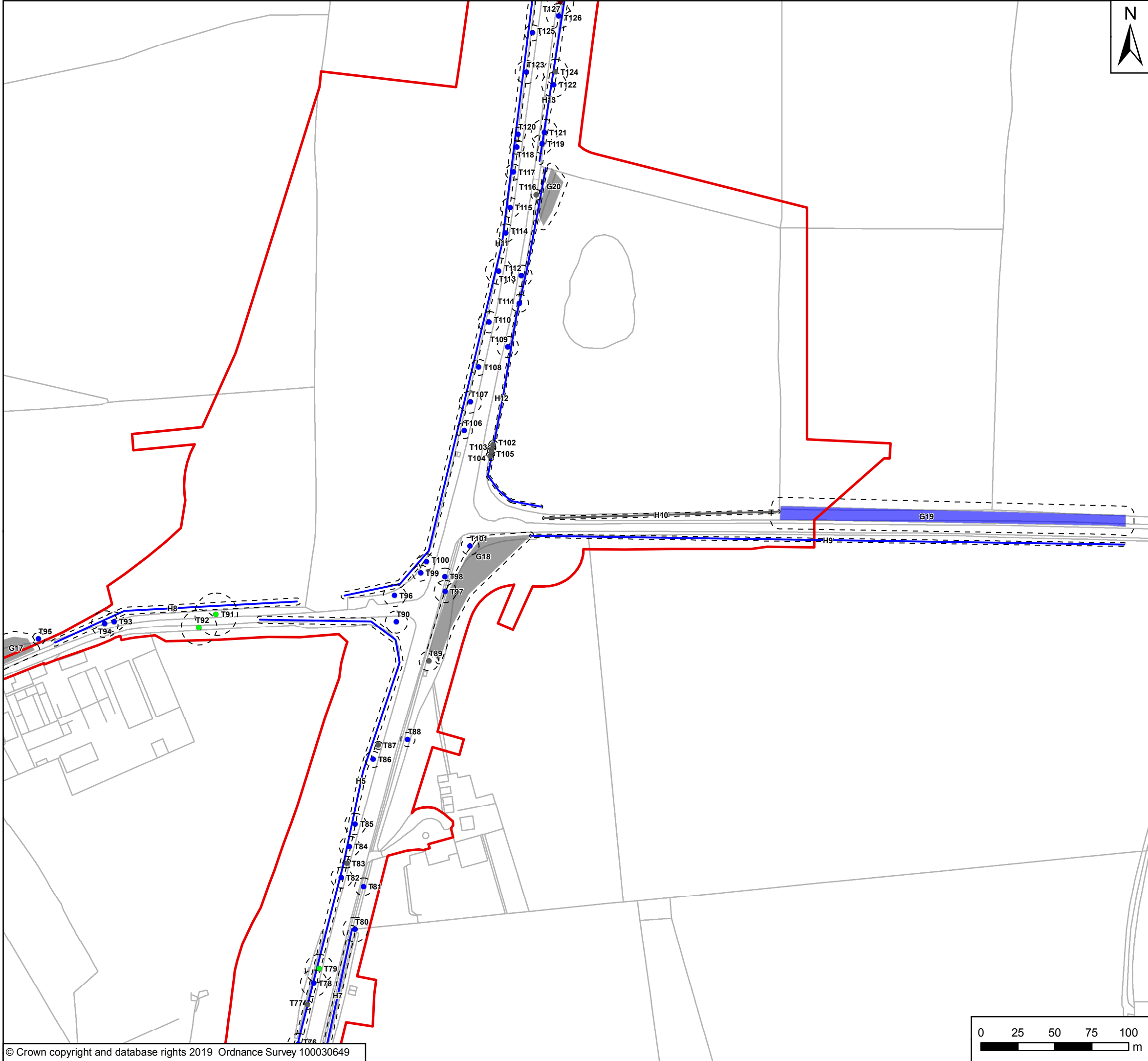
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Drawing Status	Suitability
For Information	S1

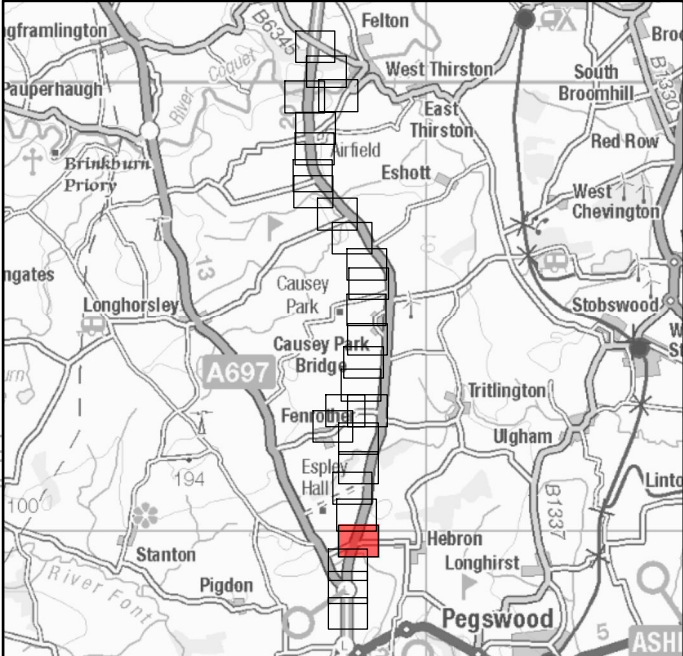
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Location		Number	P02







- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
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P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

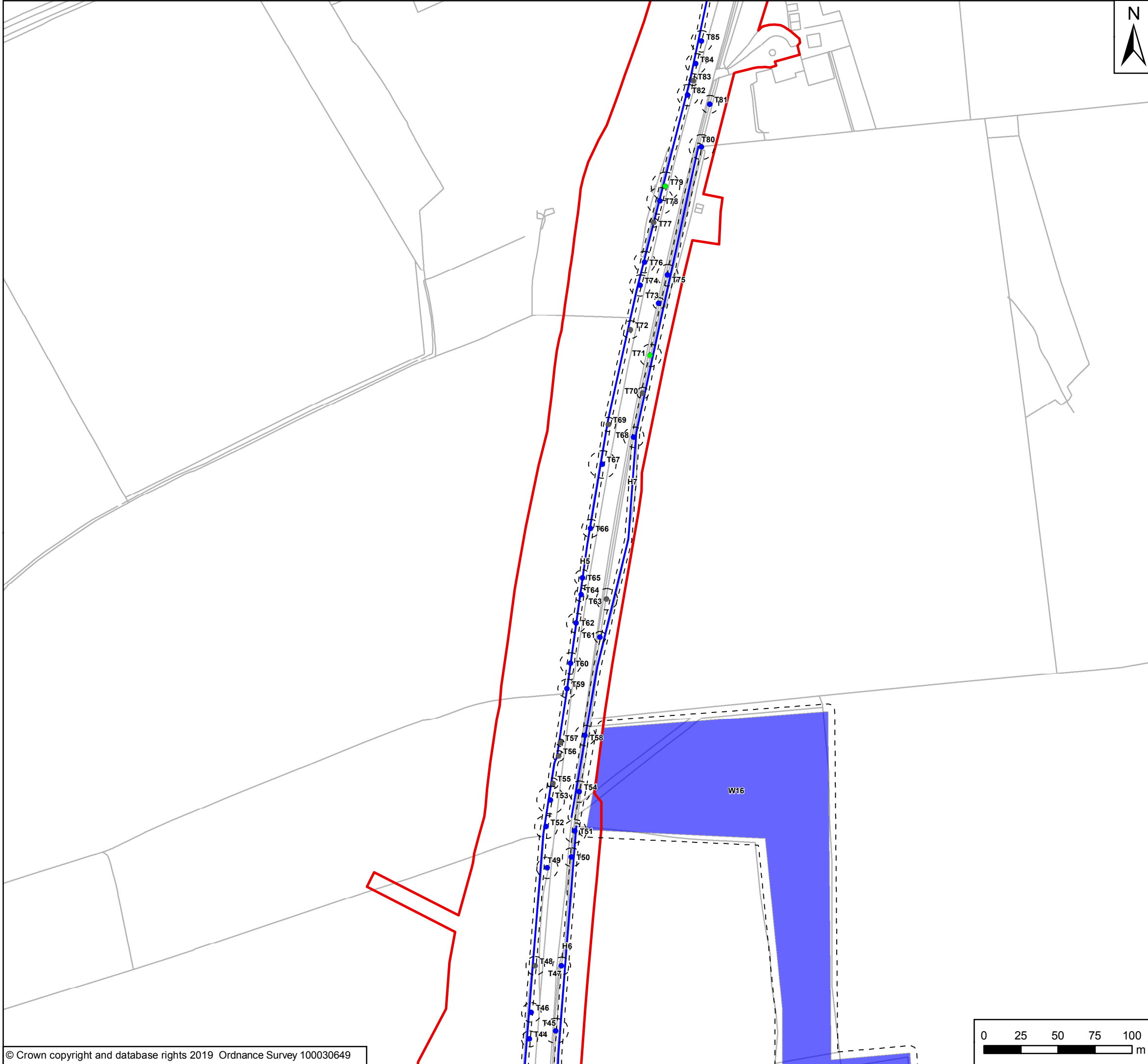
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Drawing Title  
Figure B3 Tree Constraints Plan

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Original Size	Date	Date	Date	Date
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Drawing Status	Suitability
For Information	S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F Location	Type	Role	Number
			P02



N

Order Limits

Tree Preservation Order/ Conservation Area

Dukes Bank Ancient Woodland

Root Protection Area

Tree Category

A

B

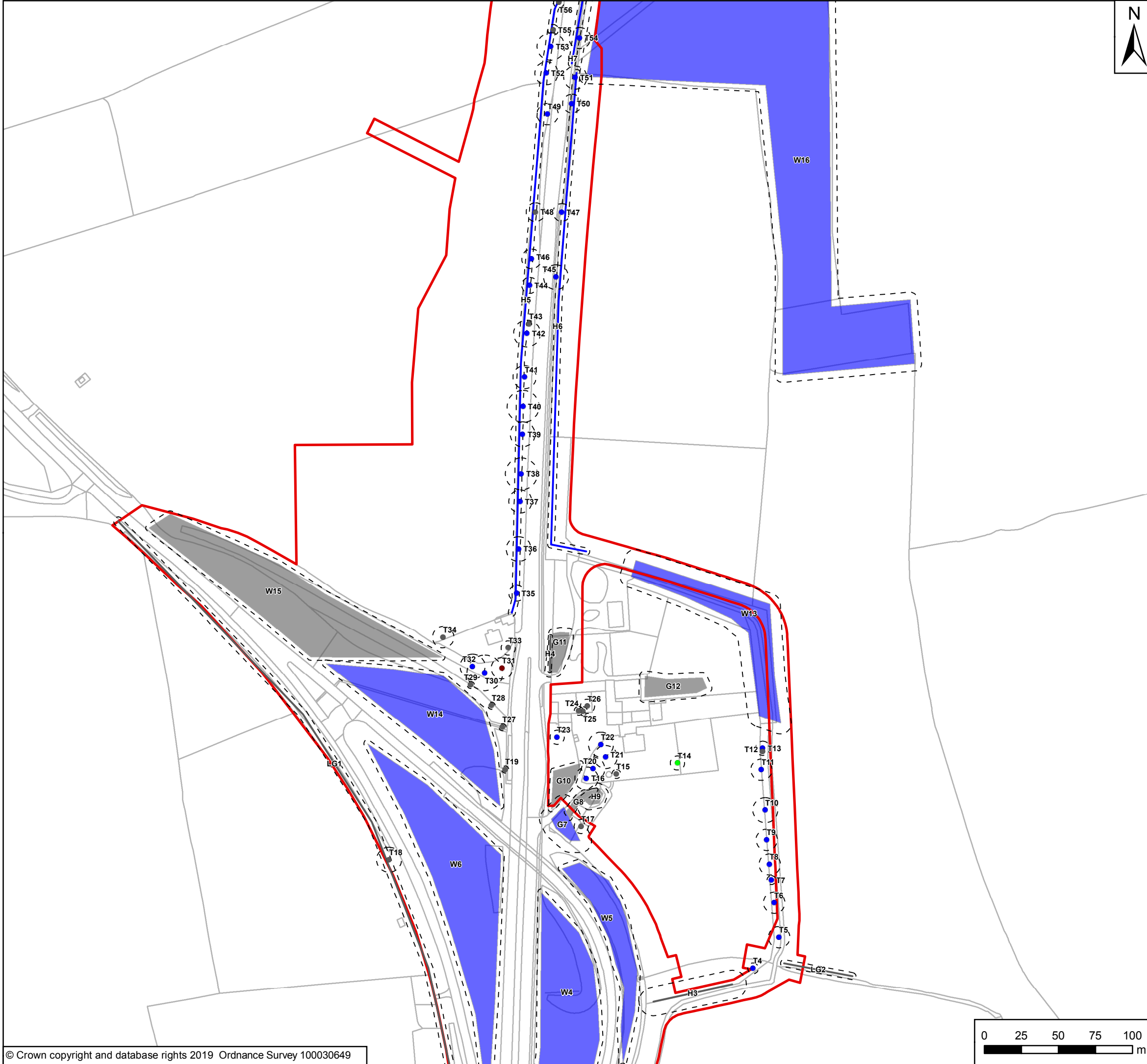
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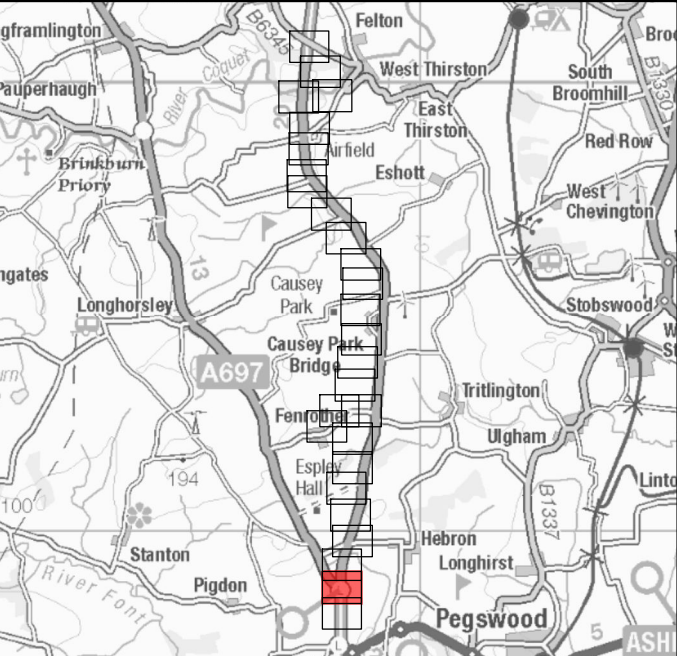
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Drawing Title Figure B3 Tree Constraints Plan					
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For Information				S1	
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HE551459		WSP		6.2	
M2F		Type		Role	
Location				Number	
				Project Ref. No. 70044136	
				Revision P02	

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- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
- Tree Category
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

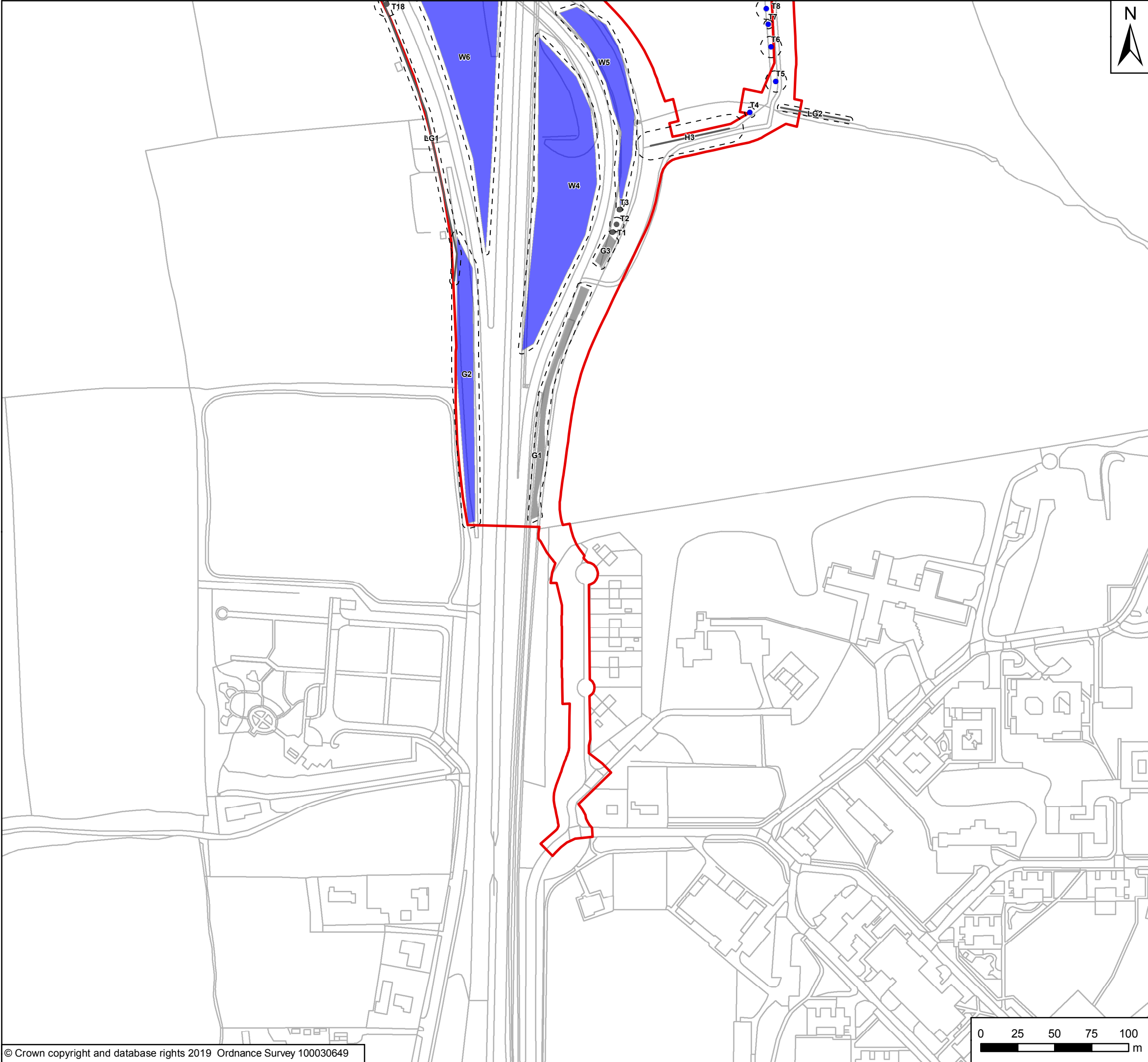
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Drawing Title  
Figure B3 Tree Constraints Plan

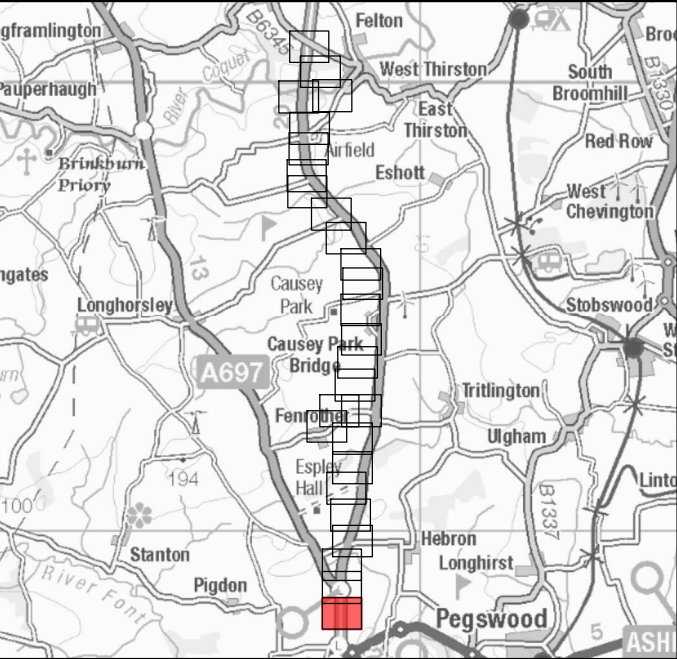
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Drawing Status	Suitability
For Information	S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.2	70044136
M2F Location	Type	Role	Number
			P02



- Key
- Order Limits
  - Tree Preservation Order/ Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Protection Area
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P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

Project Title  
A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B3 Tree Constraints Plan

Scale	Drawn	Checked	Approved	Authorised
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Drawing Status	Suitability
For Information	S1

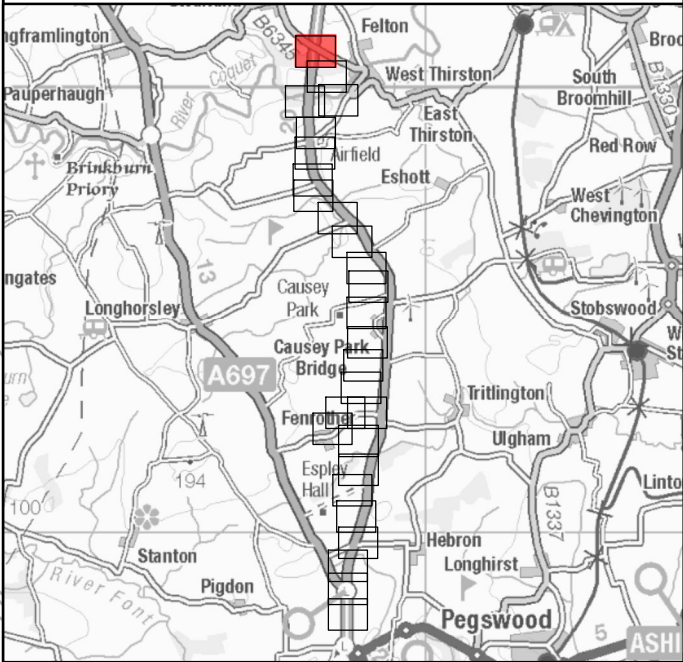
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M2F	Type	Role	Revision
Location		Number	P02







- Key**
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category**
- A
  - B
  - C
  - U



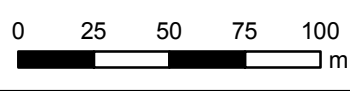
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Rev	Date	Description	By	Chk'd	App'd

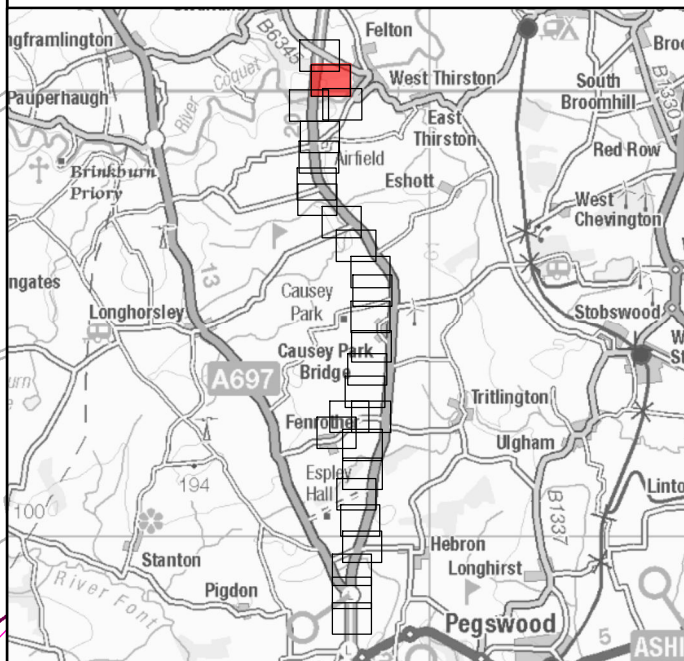
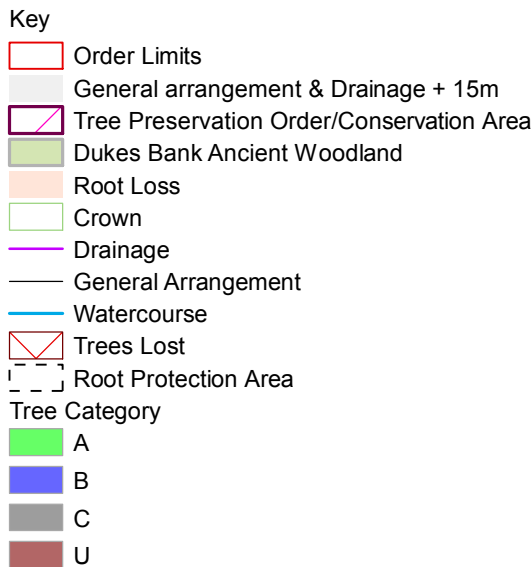
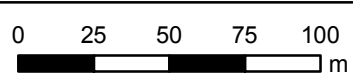
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Project Title  
A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B4a Tree Protection Plan

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Drawing Number Project	HE551459	Originator	WSP	Volume	6.3	Project Ref. No. 70044136			
M2F Location		Type		Role		Number		Revision P02	





P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client



Project Title	A1 in Northumberland: Morpeth to Felton
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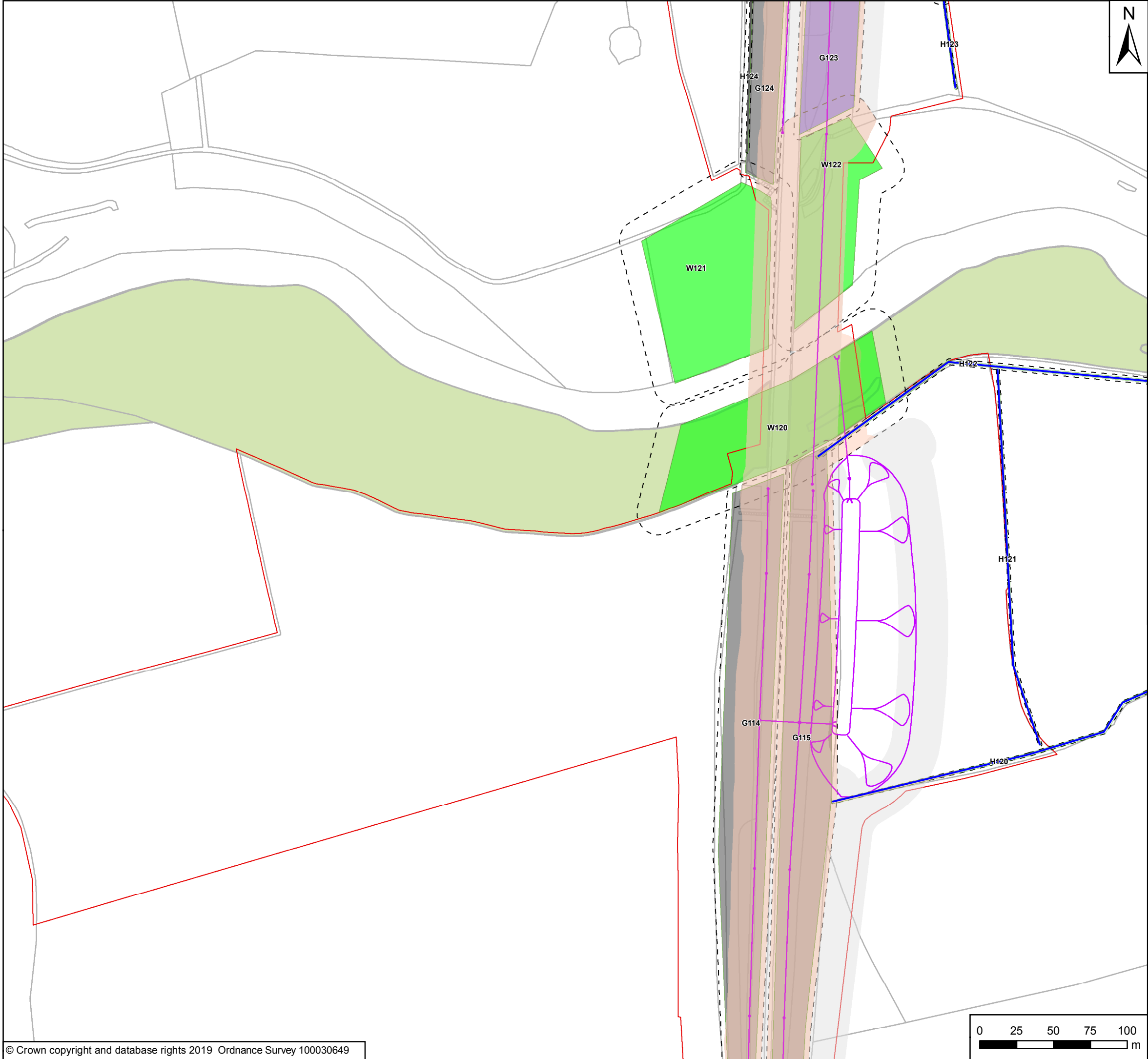
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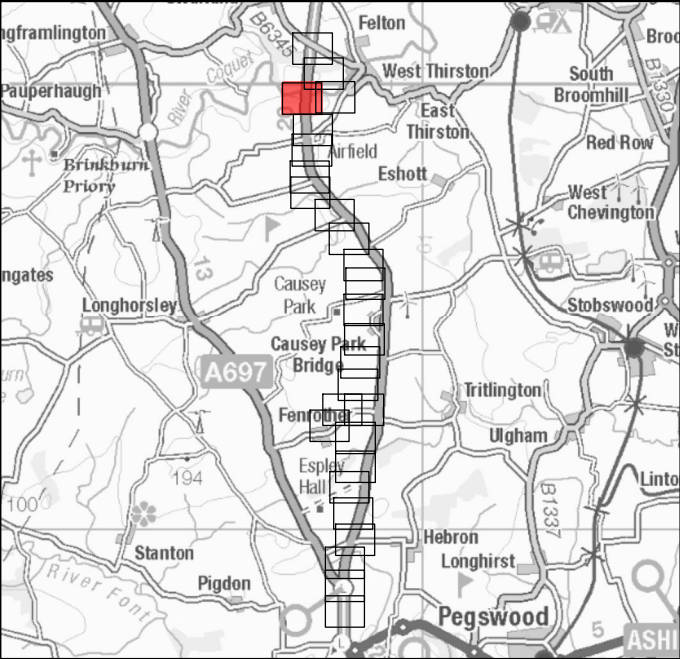
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For Information	S1

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M2F Location				Revision	
		Type	Role	Number	P02





- Key**
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category**
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
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Project Title  
A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B4a Tree Protection Plan

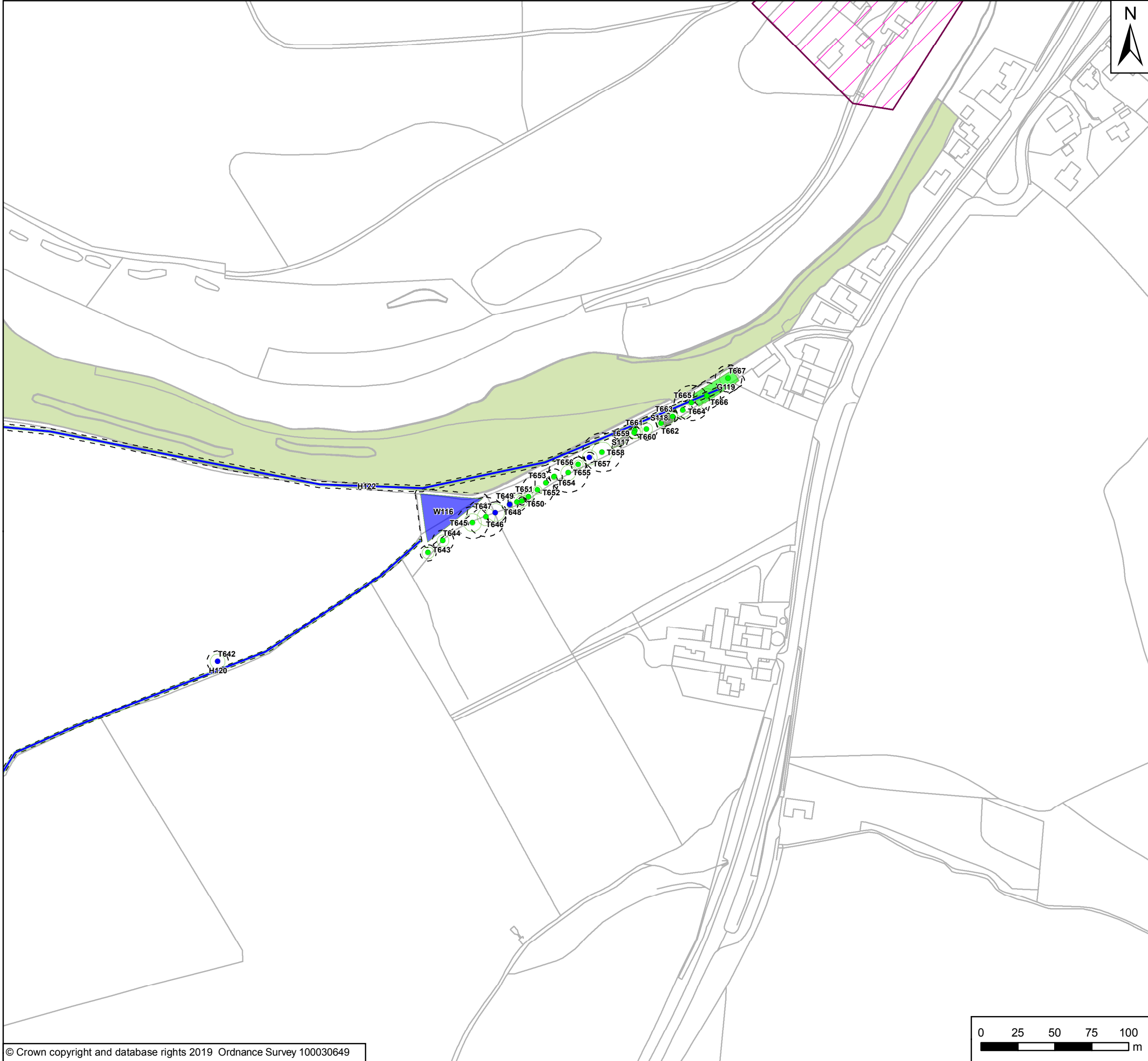
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Drawing Status For Information	Suitability S1
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M2F Location	Type	Role	Number
			Revision P02





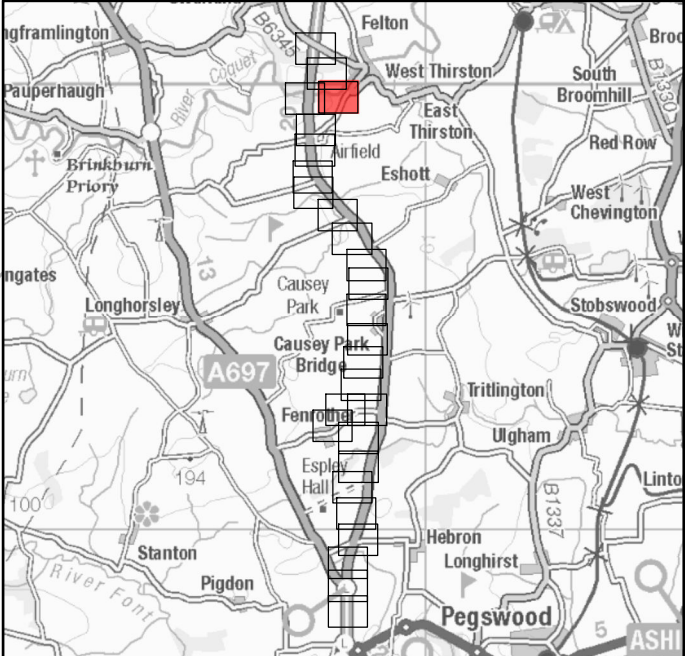


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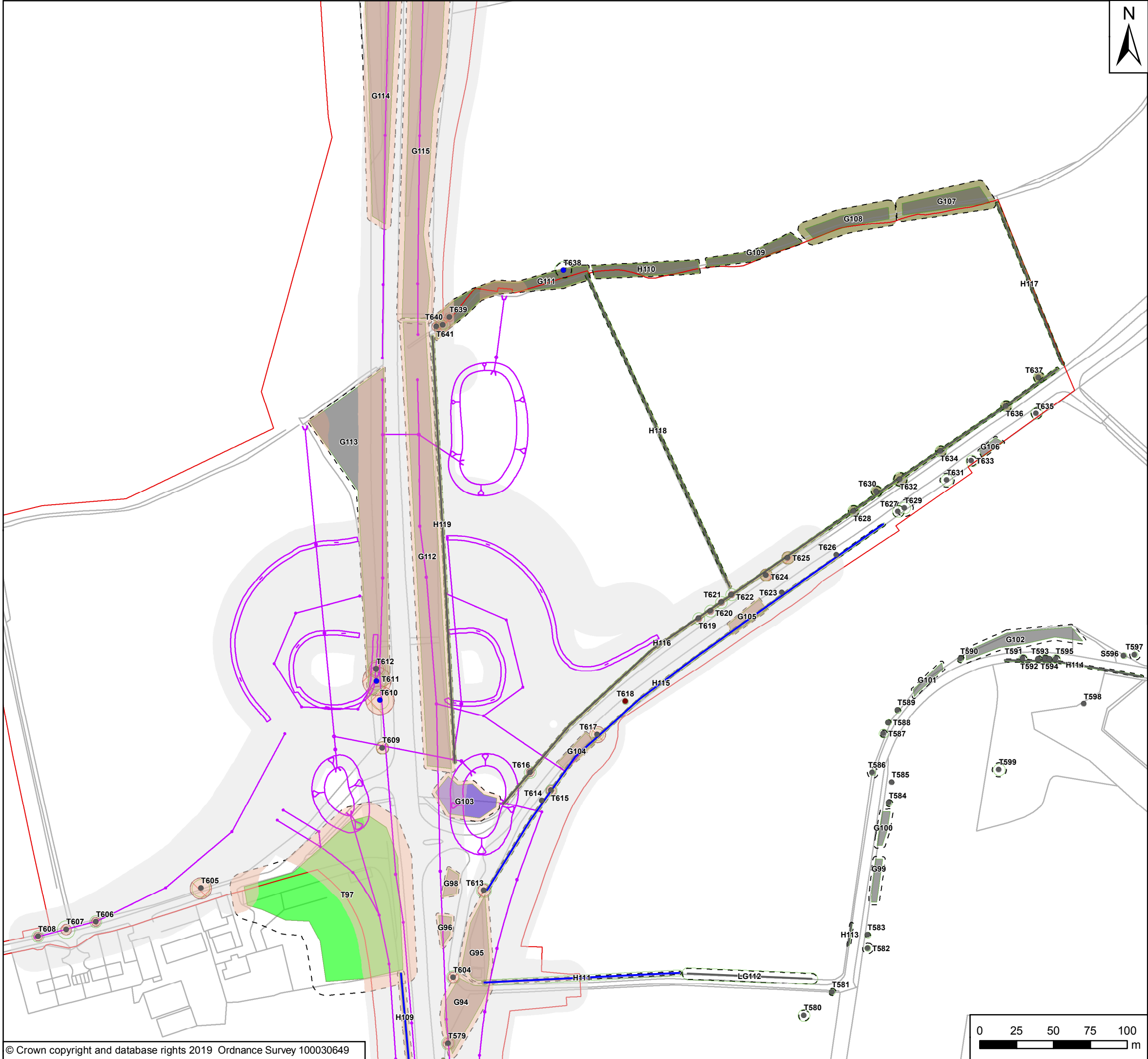
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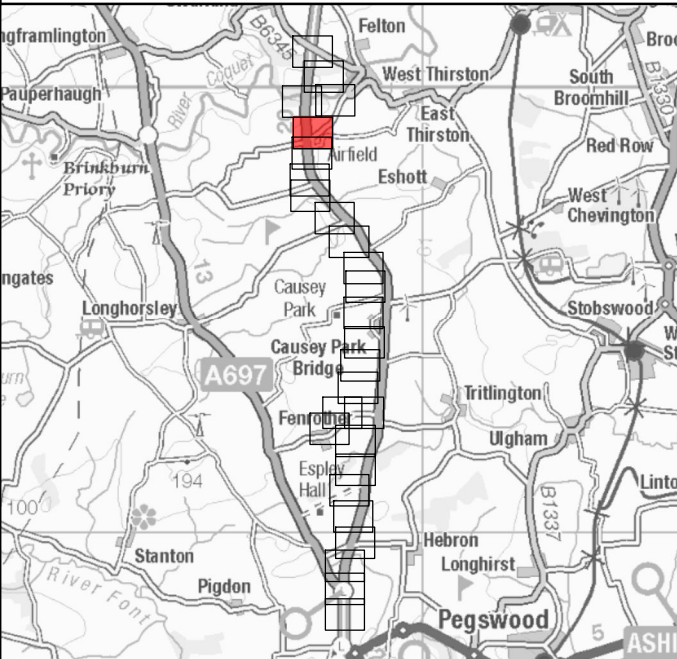
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P02	04/10/19	Second Issue	GH	NM	KS
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Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B4a Tree Protection Plan					
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Drawing Status				Suitability	
For Information				S1	
Drawing Number		Originator		Volume	
Project		WSP		6.3	
HE551459				Project Ref. No.	
				70044136	
				Revision	
				P02	
M2F		Type	Role	Number	
Location					



- Key**
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category**
- A
  - B
  - C
  - U



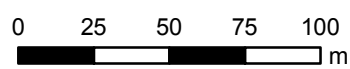
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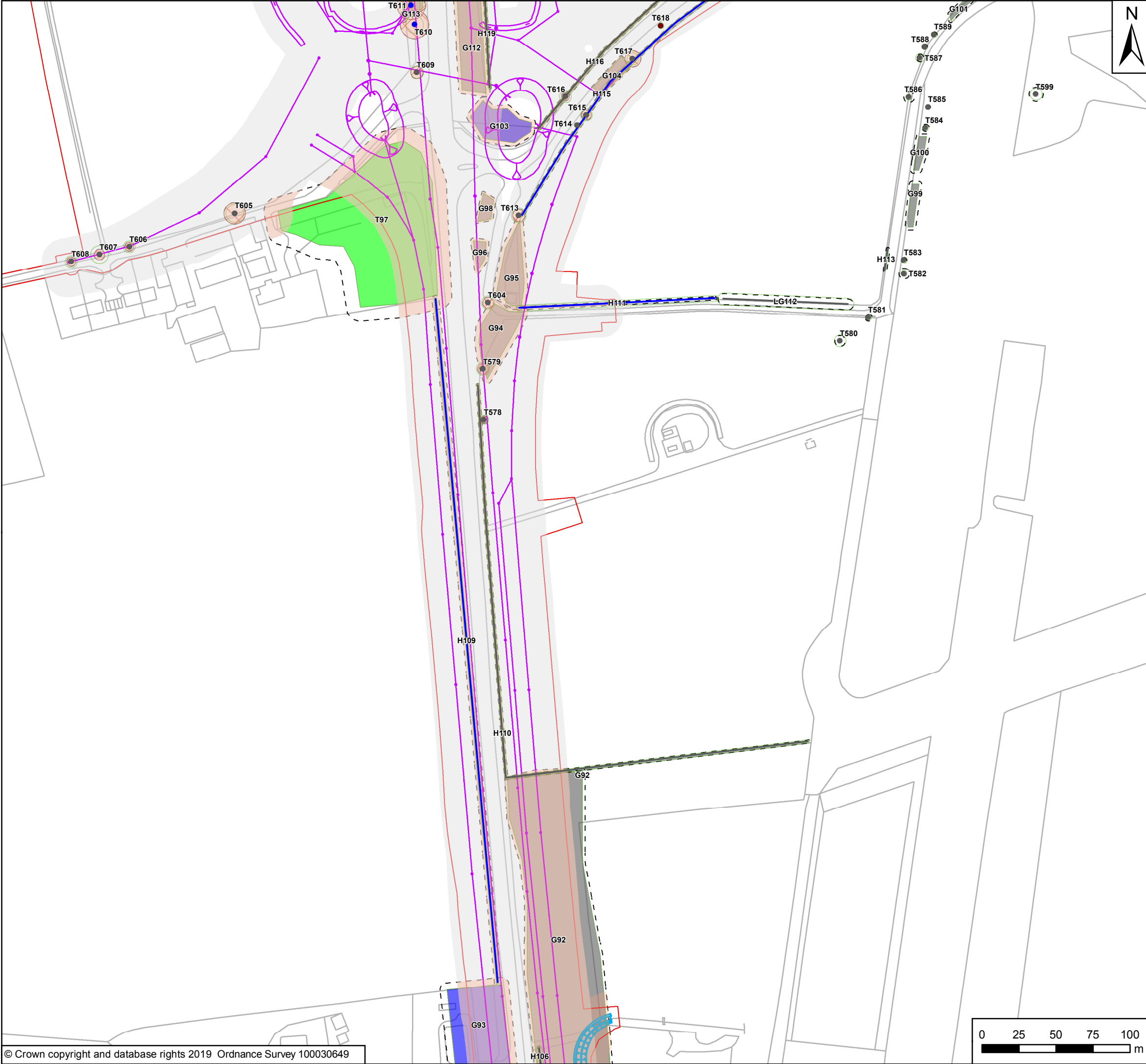
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M2F Location				Revision  P02
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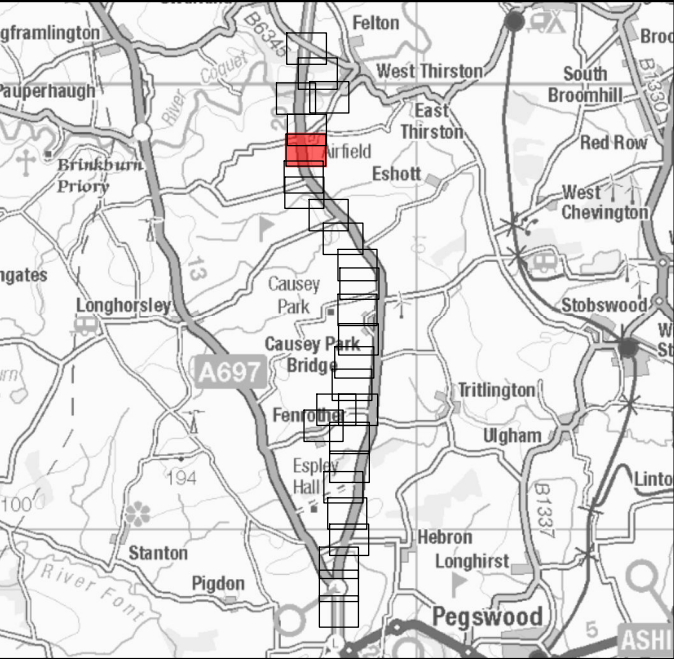


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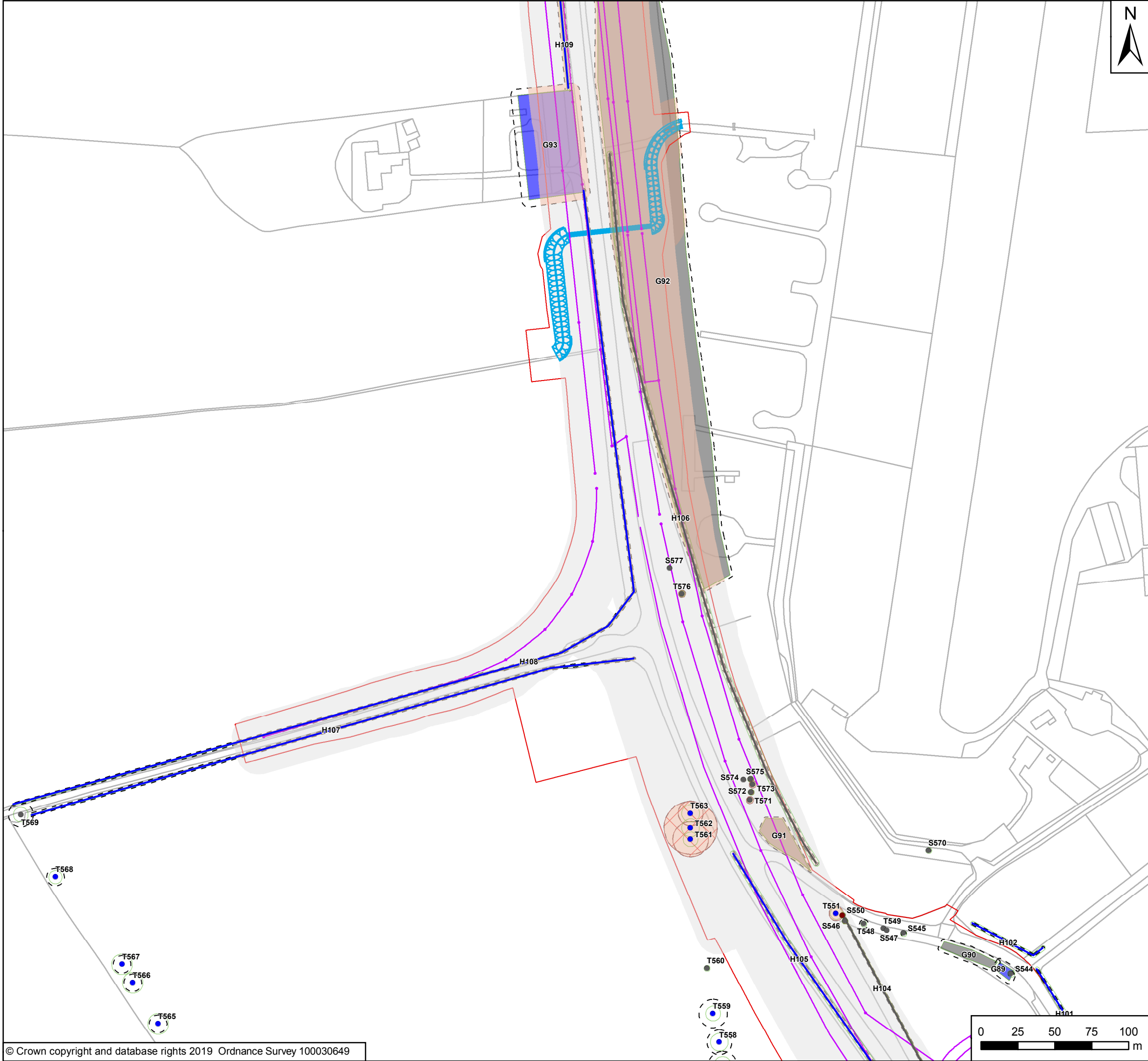
- Order Limits
- General arrangement & Drainage + 15m
- Tree Preservation Order/Conservation Area
- Dukes Bank Ancient Woodland
- Root Loss
- Crown
- Drainage
- General Arrangement
- Watercourse
- Trees Lost
- Root Protection Area

**Tree Category**

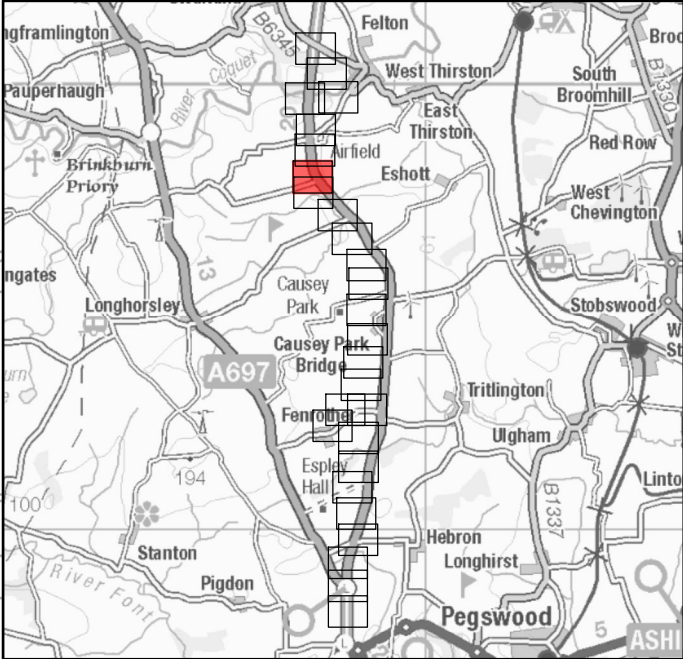
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- C
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Rev	Date	Description	By	Chk'd	App'd
Client					
Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B4a Tree Protection Plan					
Scale	Drawn	Checked	Approved	Authorised	
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For Information				S1	
Drawing Number		Originator		Volume	
Project		WSP		6.3	
HE551459				Project Ref. No.	
				70044136	
				Revision	
				P02	
M2F		Type	Role	Number	
Location					



- Key**
- Order Limits
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  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category**
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P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

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Project Title  
A1 in Northumberland: Morpeth to Felton

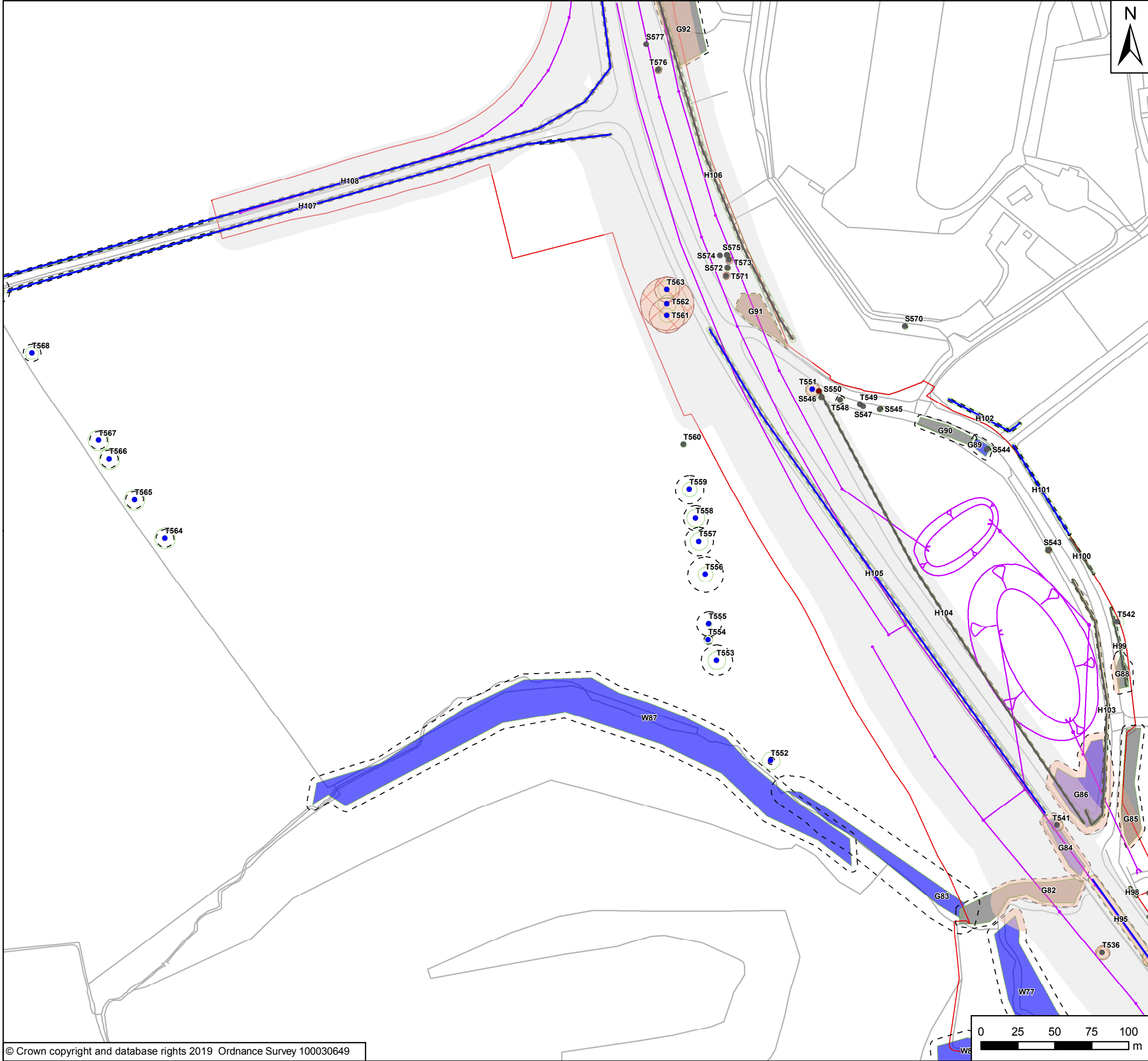
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Drawing Status	Suitability
For Information	S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.3	70044136
M2F Location	Type	Role	Number
			P02





Order Limits

General arrangement & Drainage + 15m

Tree Preservation Order/Conservation Area

Dukes Bank Ancient Woodland

Root Loss

Crown

Drainage

General Arrangement

Watercourse

Trees Lost

Root Protection Area

Tree Category

A

B

C

U

framlington

Pauperhaugh

Brinkburn Priory

ngates

Longhorsley

Causesy Park

Causesy Park Bridge

Fenoull

Esplay Hall

Stanton

Pigdon

Hebron

Longhirst

Pegswood

ASH

felton

West Thirston

East Thirston

Eshott

South Broomhill

Red Row

West Chevington

Stobswood

W St

Tritlington

Ulgham

Linton

P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

Project Title

A1 in Northumberland: Morpeth to Felton

Drawing Title

Figure B4a Tree Protection Plan

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Drawing Status

For Information

Suitability

S1

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HE551459	WSP	6.3	70044136
M2F	Type	Role	Number
Location			P02

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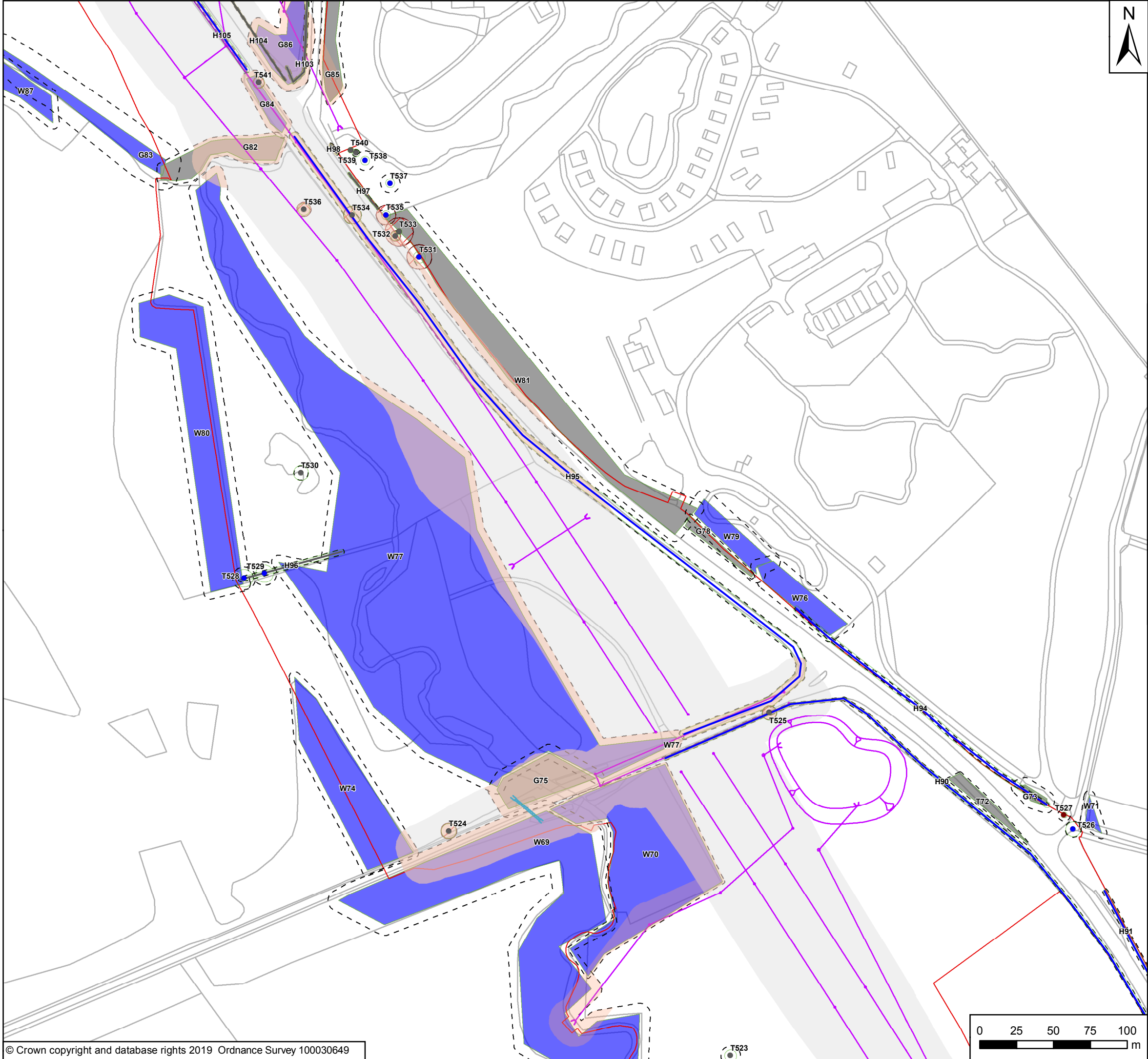
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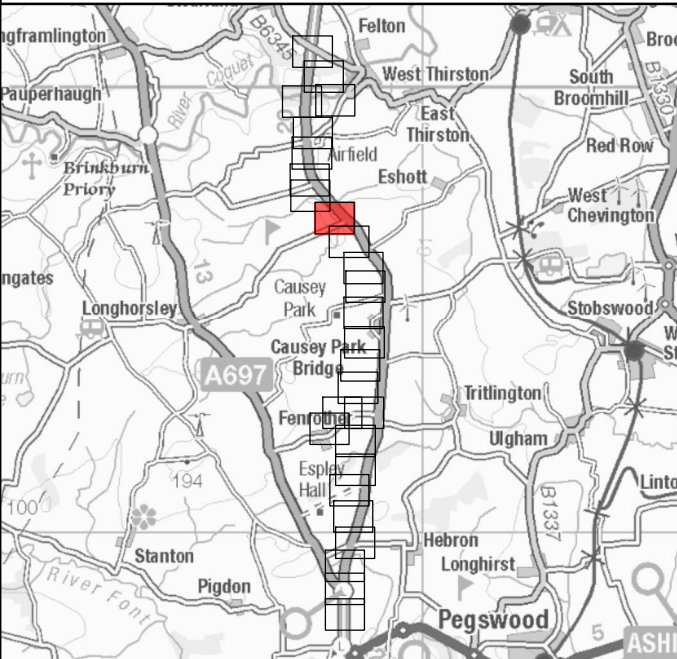
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- Key**
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
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  - B
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Rev	Date	Description	By	Chk'd	App'd
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P01	12/07/19	First Issue	GH	DW	DW

Client

Project Title: A1 in Northumberland: Morpeth to Felton

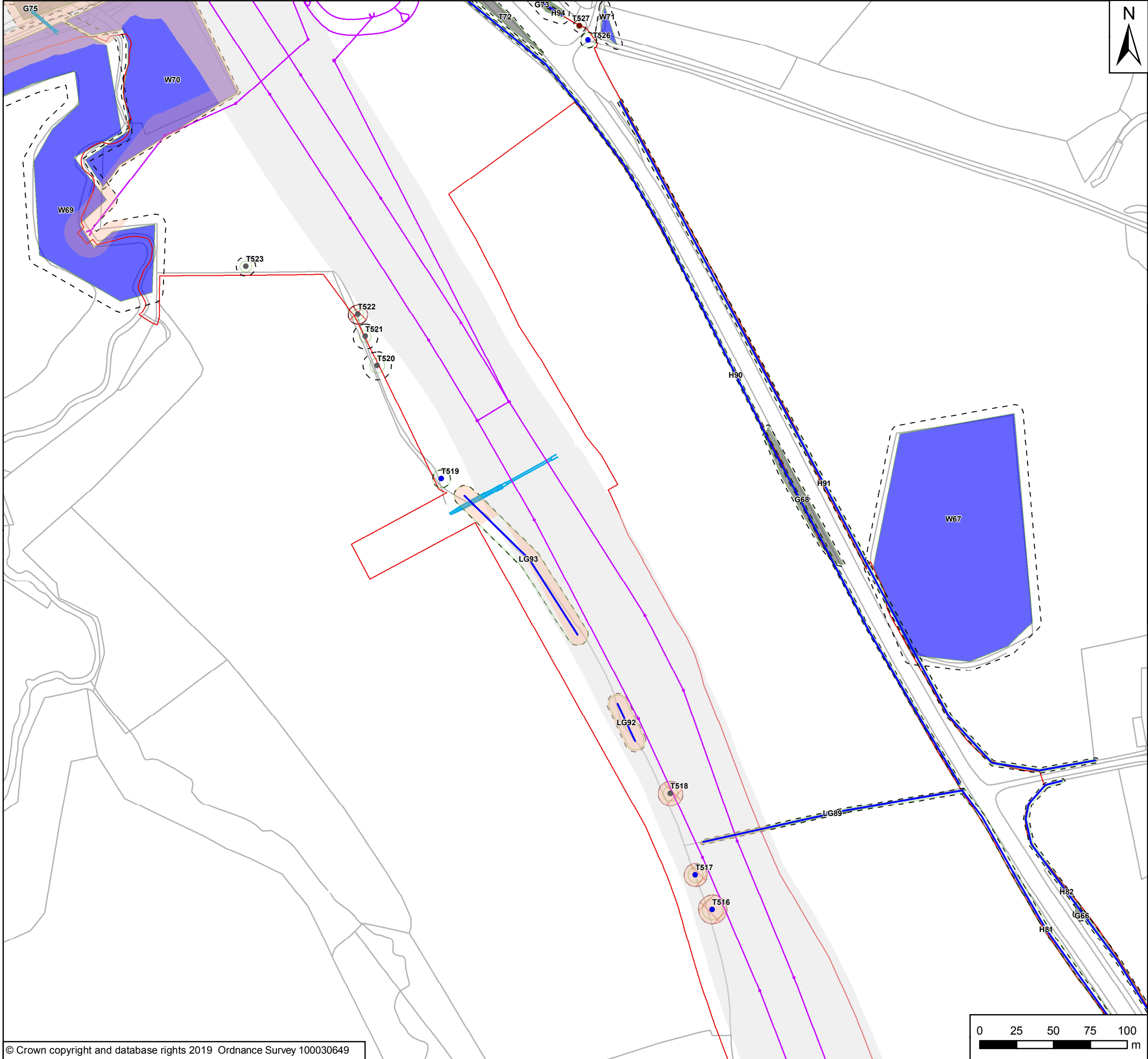
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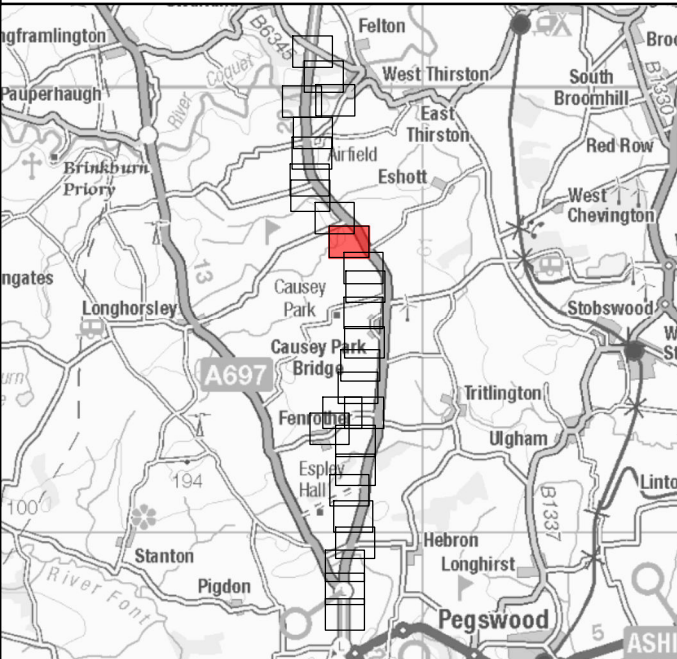
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Project	M2F	Type		Role		Revision	P02
Location				Number			



- Key
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

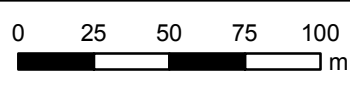
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B4a Tree Protection Plan

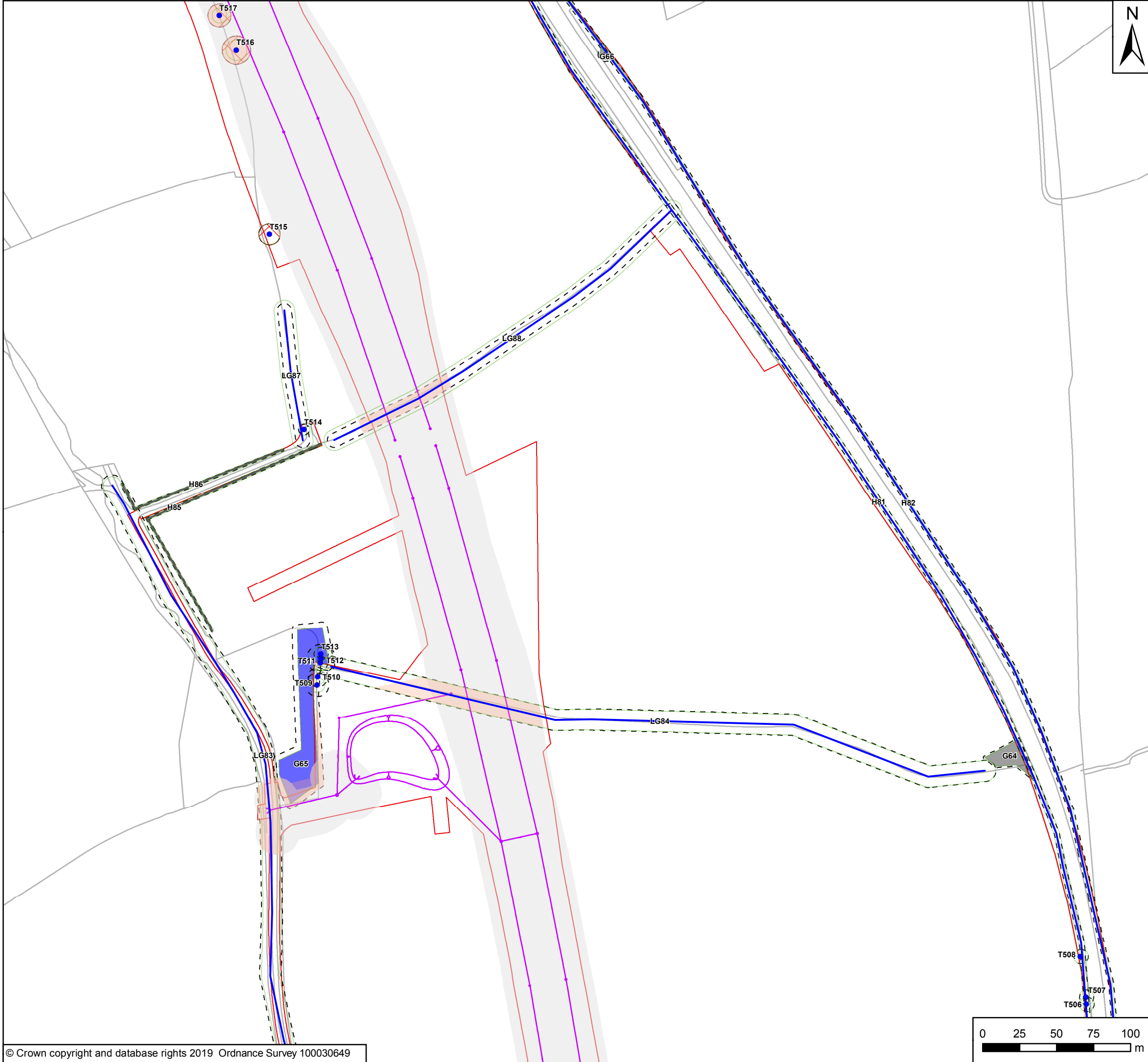
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Drawing Status	Suitability
For Information	S1

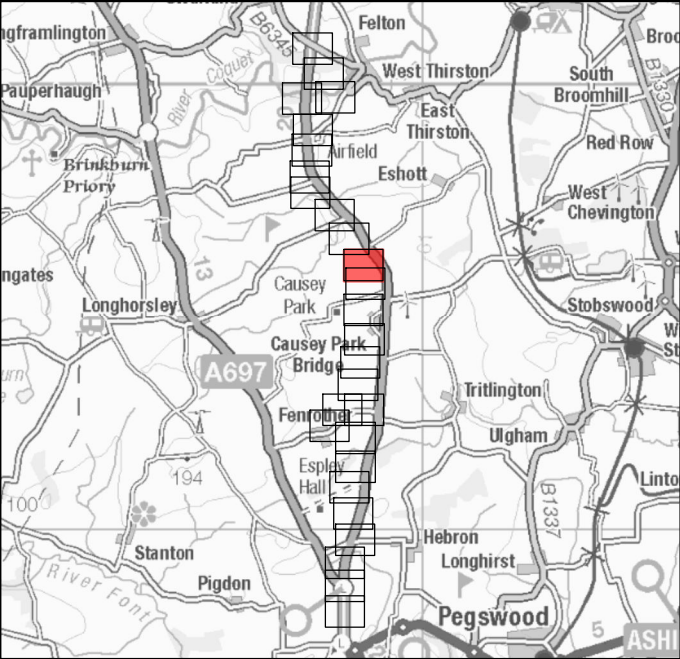
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HE551459	WSP	6.3	70044136
M2F	Type	Role	Number
Location			P02







- Key**
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category**
- A
  - B
  - C
  - U



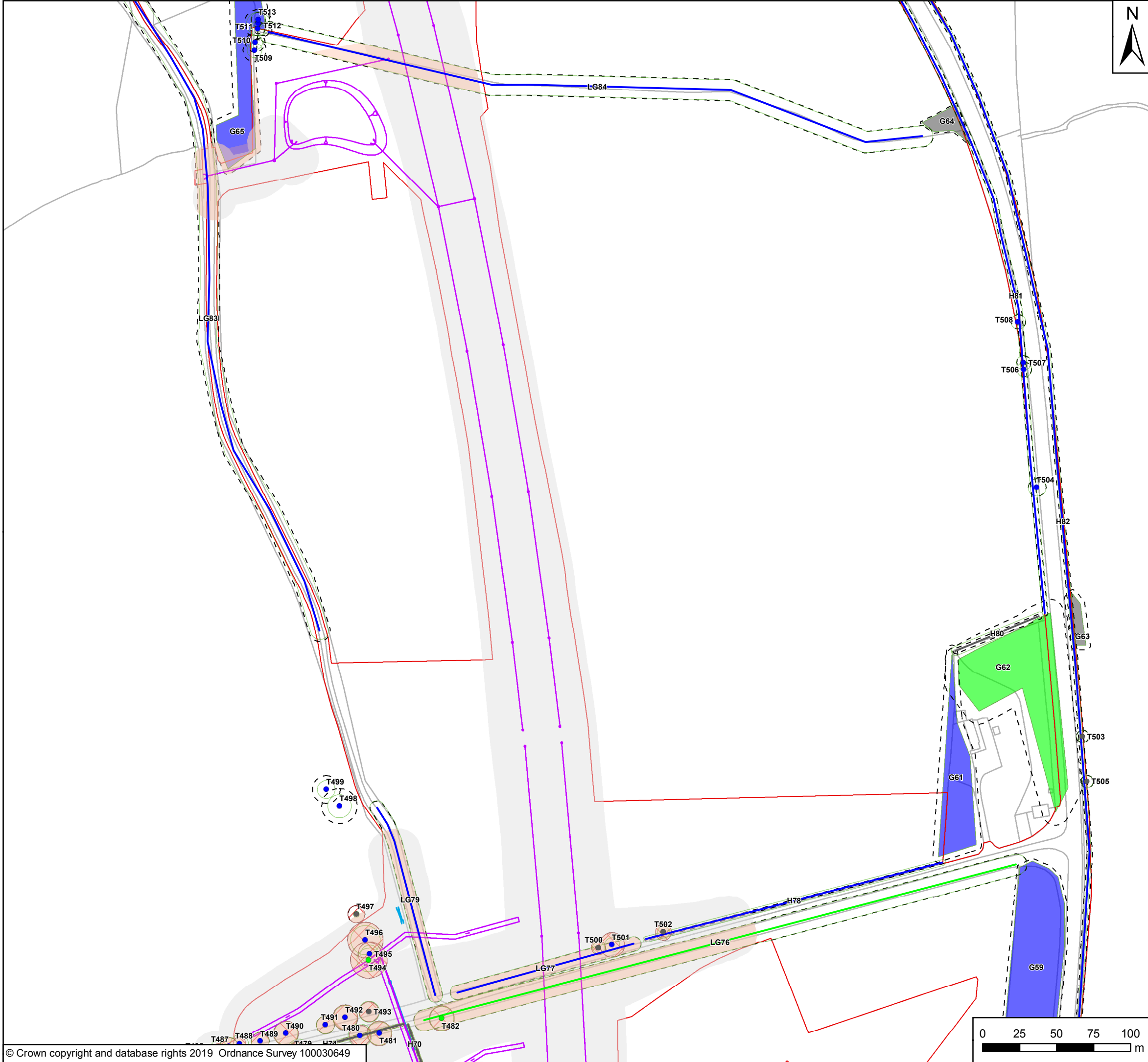
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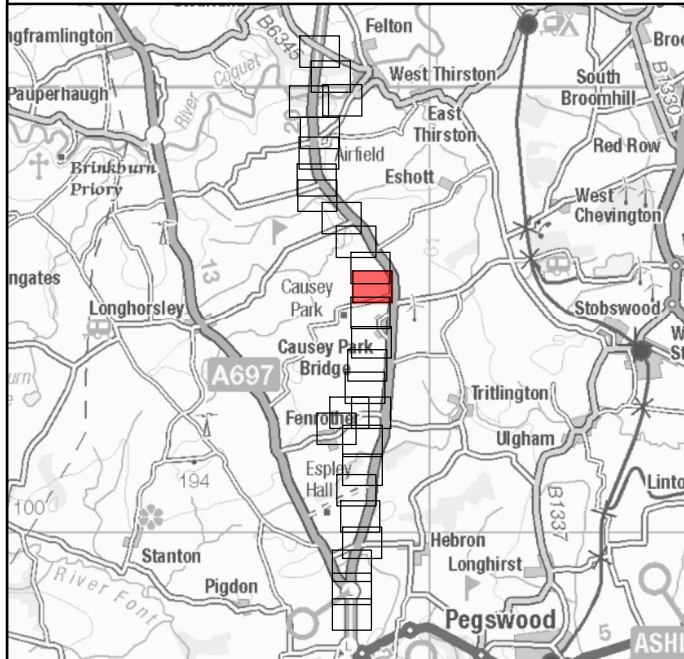
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B4a Tree Protection Plan

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Drawing Number	HE551459	Project	WSP	Originator	WSP	Volume	6.3	Project Ref. No.	70044136
M2F	Location	Type	Role	Number	Revision				
					P02				



- Key**
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
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P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

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Project Title  
A1 in Northumberland: Morpeth to Felton

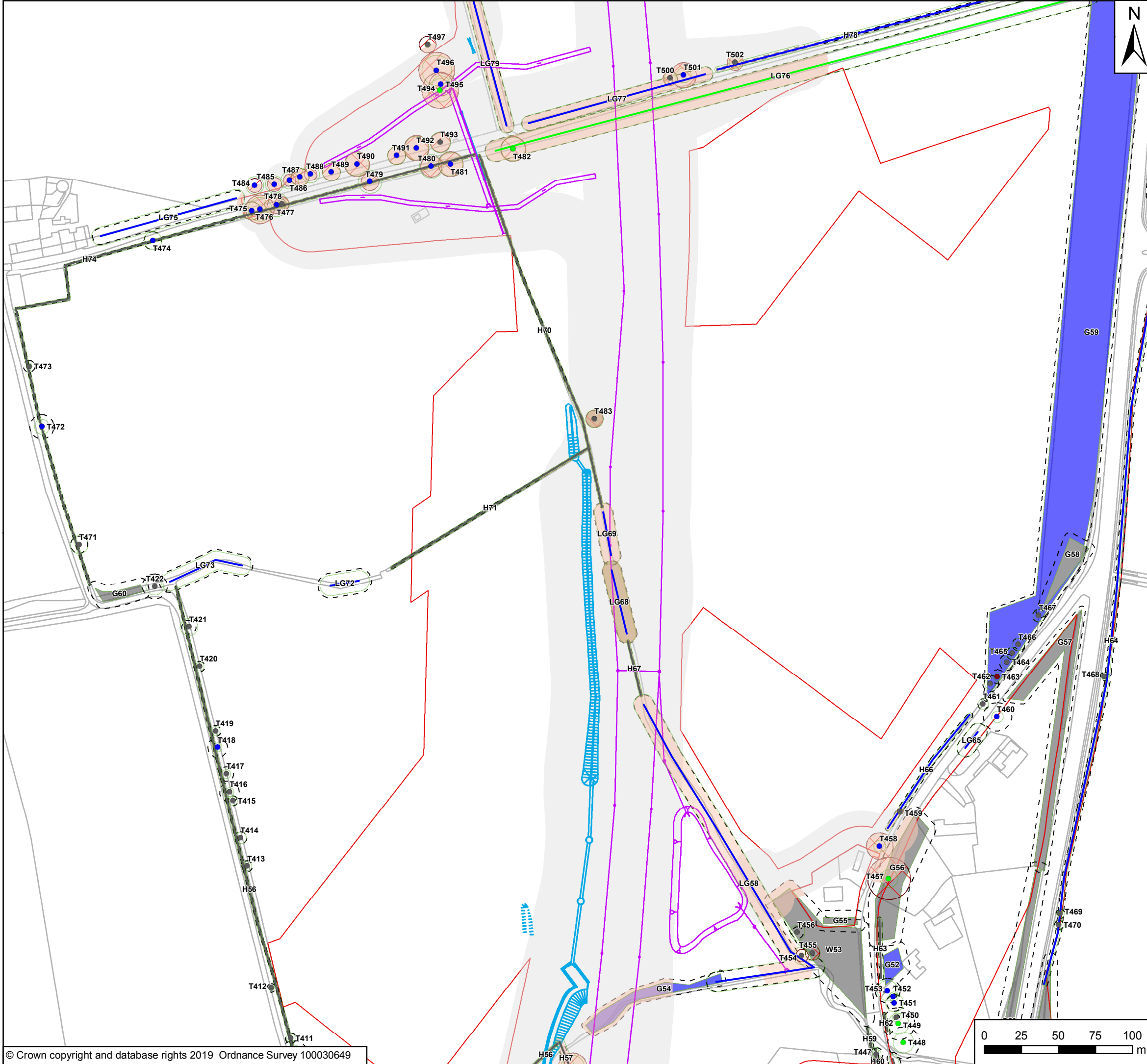
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Figure B4a Tree Protection Plan

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Drawing Status For Information	Suitability S1
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M2F Location	Type	Role	Number
			P02



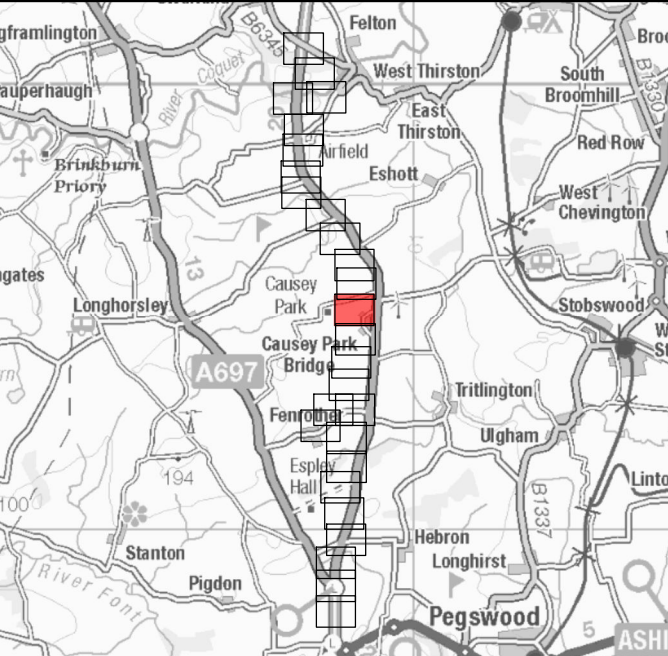



**Key**

- Order Limits
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- Dukes Bank Ancient Woodland
- Root Loss
- Crown
- Drainage
- General Arrangement
- Watercourse
- Trees Lost
- Root Protection Area

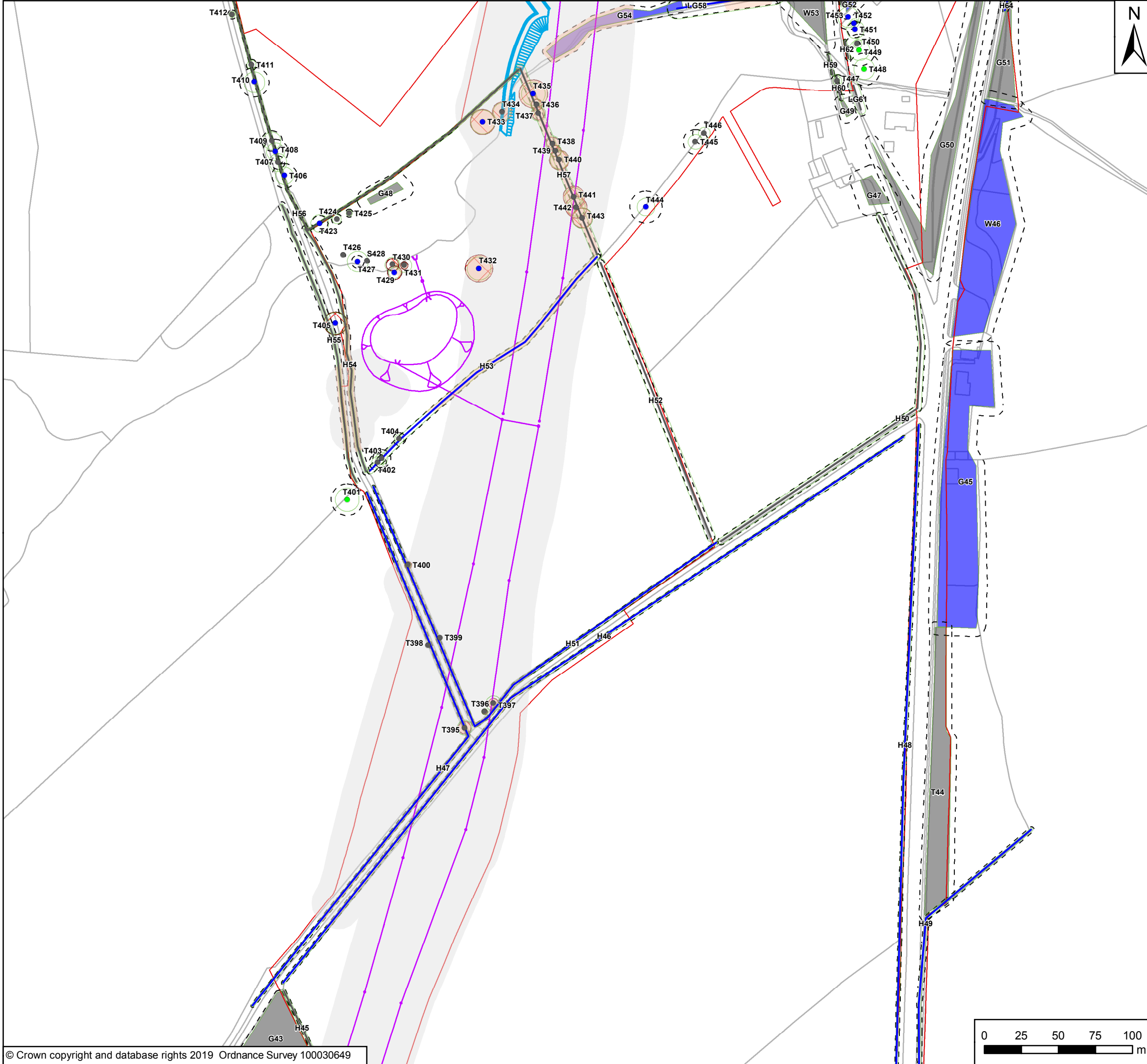
**Tree Category**

- A
- B
- C
- U

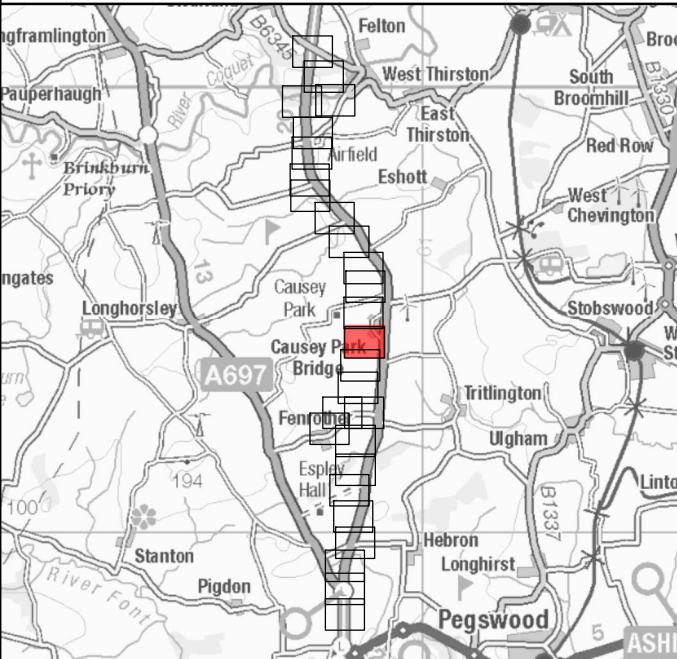


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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
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A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B4a Tree Protection Plan					
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For Information				S1	
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M2F Location		Type	Role	Revision P02	





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  - Watercourse
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  - Root Protection Area
- Tree Category**
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  - C
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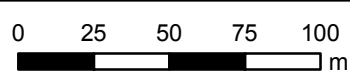
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Rev	Date	Description	By	Chk'd	App'd

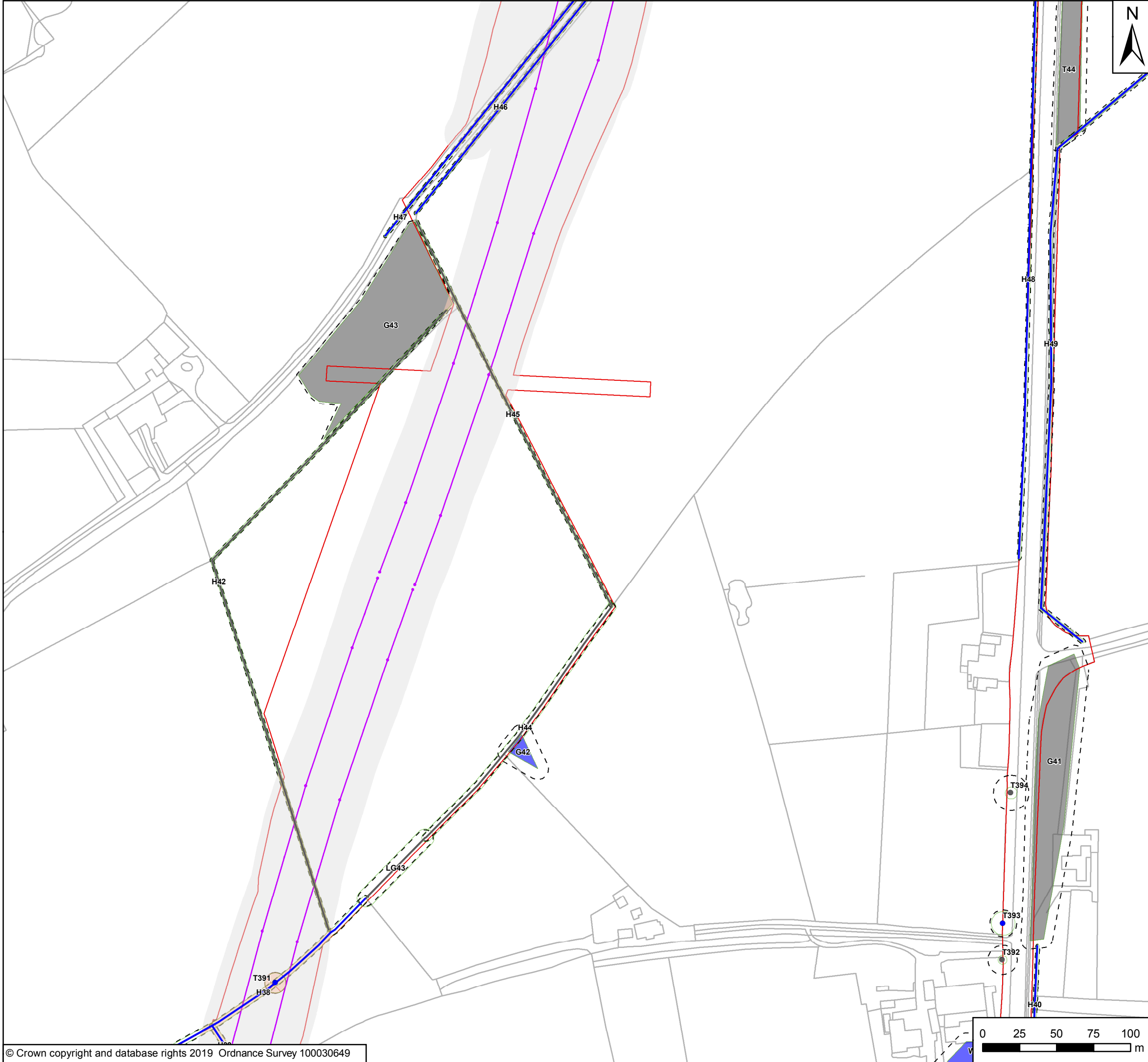
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Project Title  
A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B4a Tree Protection Plan

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Original Size	A3	Date	12/07/19	Date	12/07/19	Date	12/07/19	Date	12/07/19
Drawing Status	For Information								Suitability S1
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M2F	Location	Type	Role	Number	Revision P02				



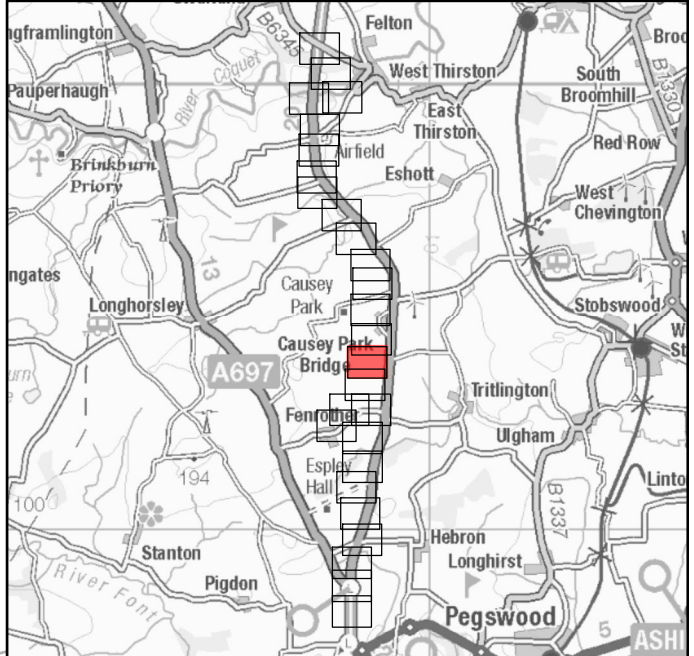


**Key**

- Order Limits
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- Root Loss
- Crown
- Drainage
- General Arrangement
- Watercourse
- Trees Lost
- Root Protection Area

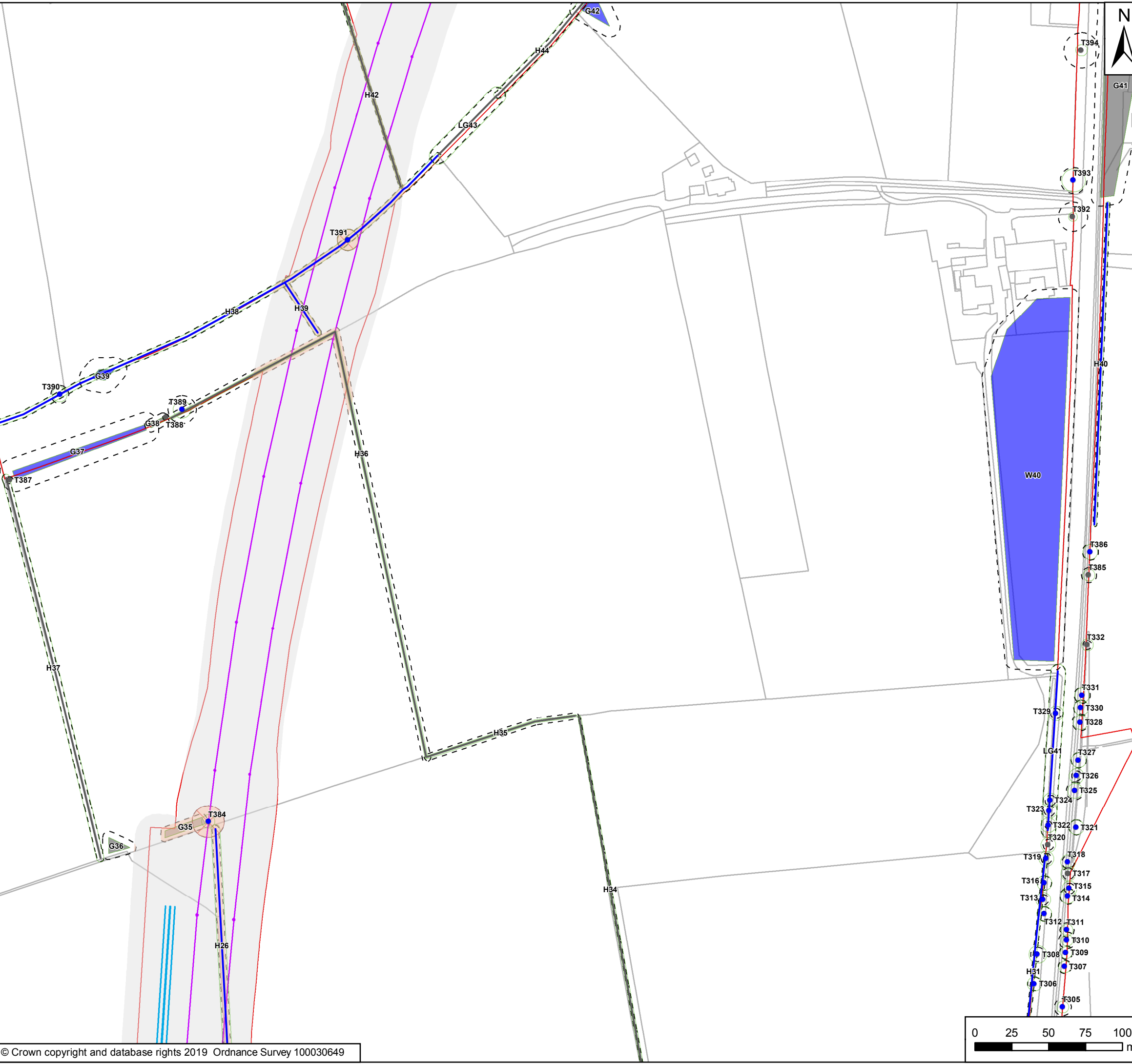
**Tree Category**

- A
- B
- C
- U



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
Client					
Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B4a Tree Protection Plan					
Scale	Drawn	Checked	Approved	Authorised	
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Original Size	Date	Date	Date	Date	
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Drawing Status				Suitability	
For Information				S1	
Drawing Number		Originator		Volume	
Project		WSP		6.3	
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				70044136	
M2F				Revision	
Location		Type	Role	Number	
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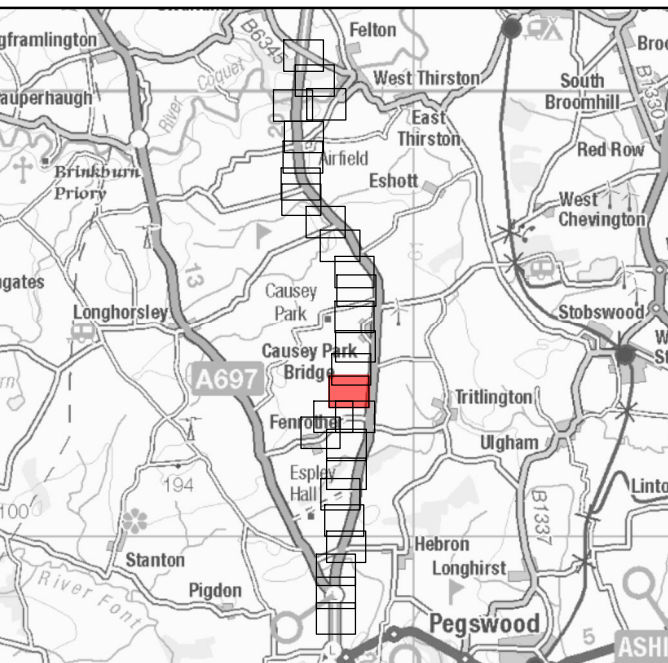


**Key**

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- Crown
- Drainage
- General Arrangement
- Watercourse
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**Tree Category**

- A
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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

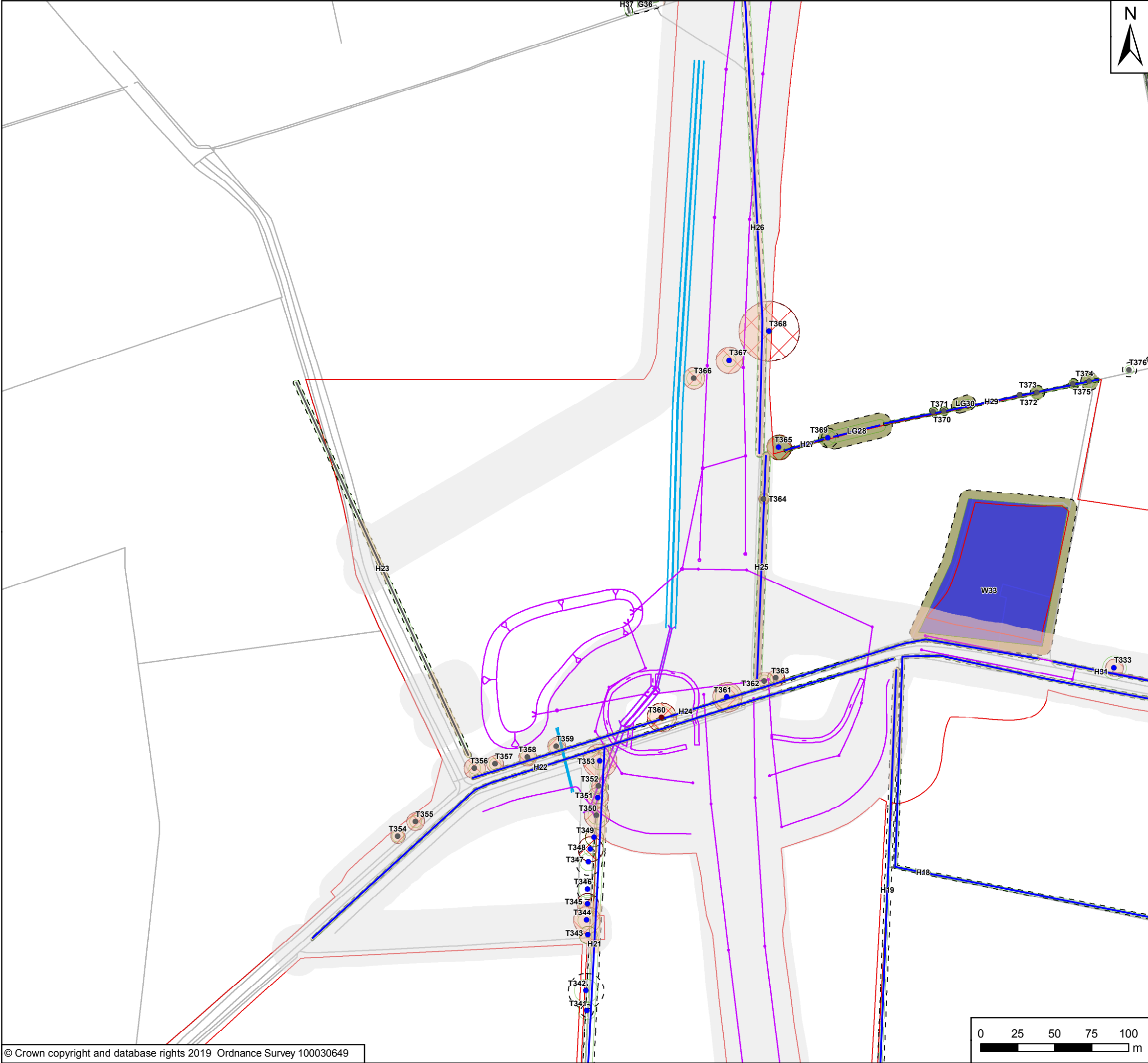
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Project Title: A1 in Northumberland: Morpeth to Felton

Drawing Title: Figure B4a Tree Protection Plan

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Original Size	Date	Date	Date	Date
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Drawing Number	Originator		Volume	Project Ref. No.
HE551459	WSP		6.3	70044136
M2F	Type	Role	Number	Revision
Location				P02



N

Key

Order Limits

General arrangement & Drainage + 15m

Tree Preservation Order/Conservation Area

Dukes Bank Ancient Woodland

Root Loss

Crown

Drainage

General Arrangement

Watercourse

Trees Lost

Root Protection Area

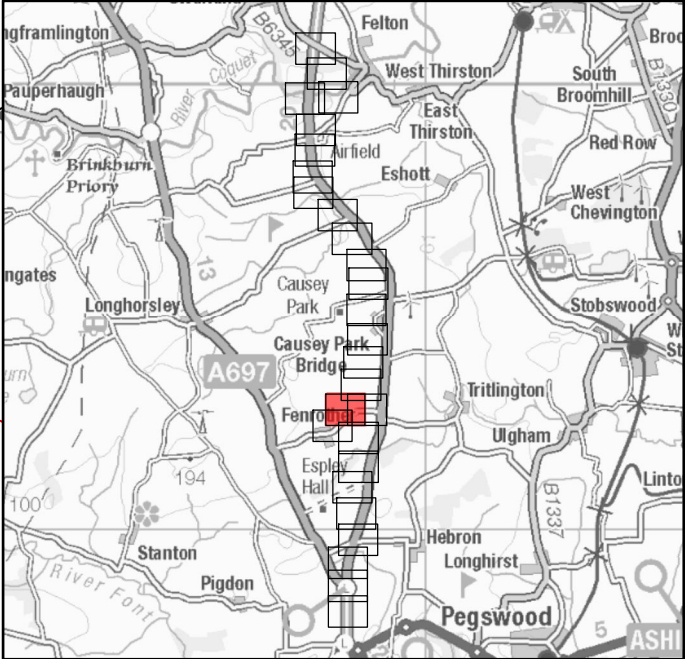
Tree Category


A

B

C
















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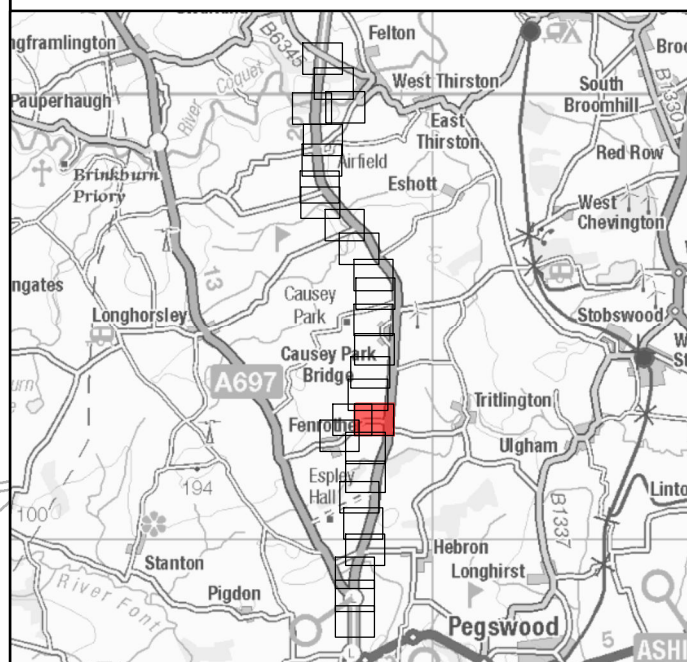


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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
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A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B4a Tree Protection Plan					
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For Information				S1	
Drawing Number		Originator		Project Ref. No.	
Project		Volume		70044136	
HE551459		WSP		6.3	
M2F		Type		Role	
Location		Number		P02	





- Key**
-  Order Limits
  -  General arrangement & Drainage + 15m
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  -  Root Loss
  -  Crown
  -  Drainage
  -  General Arrangement
  -  Watercourse
  -  Trees Lost
  -  Root Protection Area
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-  A
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P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

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Project Title	A1 in Northumberland: Morpeth to Felton
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Drawing Title
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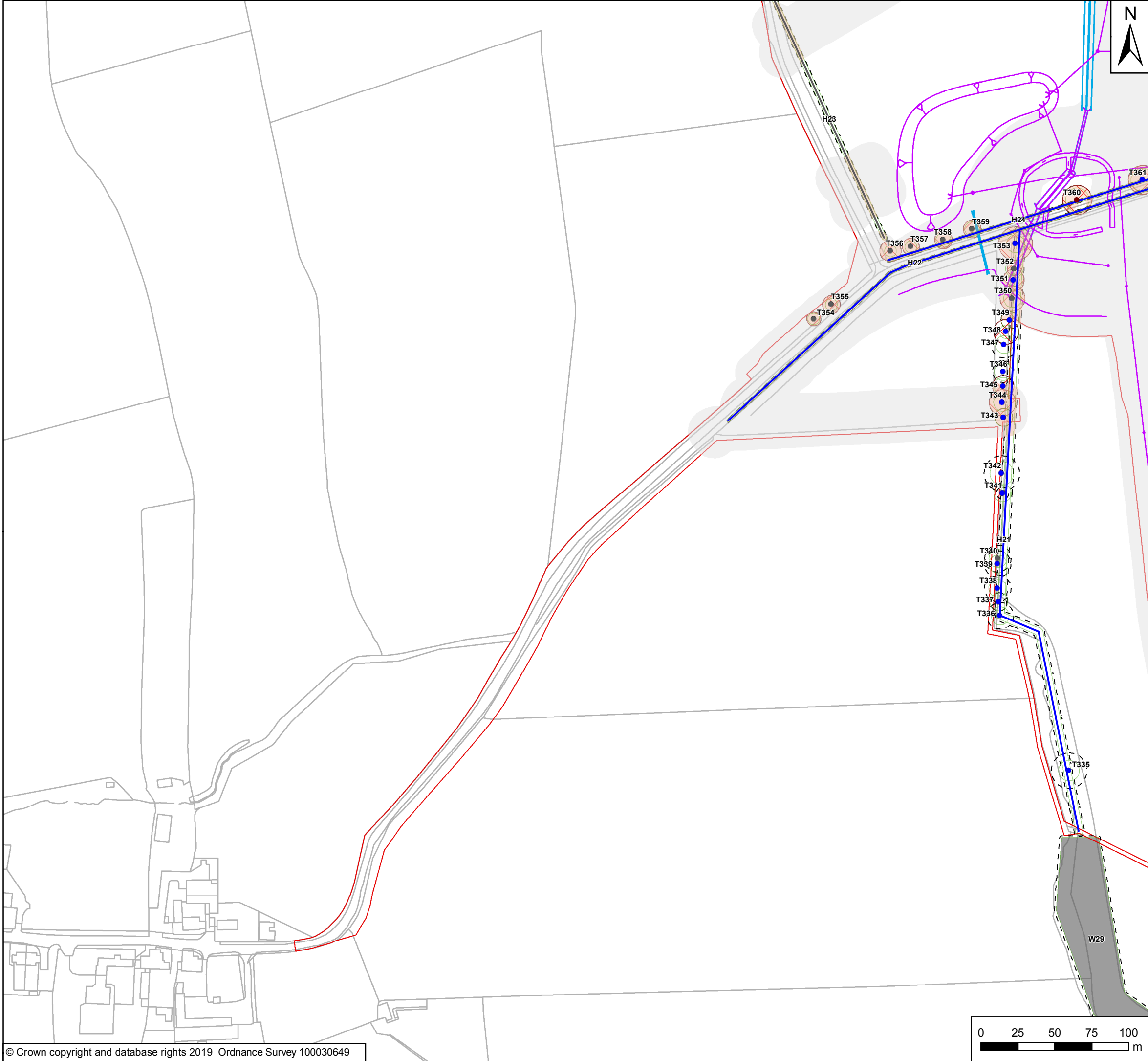
Figure B4a Tree Protection Plan

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Drawing Status	Suitability
For Information	S1

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HE551459		Originator WSP	Volume 6.3		70044136
M2F Location				Revision	
		Type	Role	Number	P02



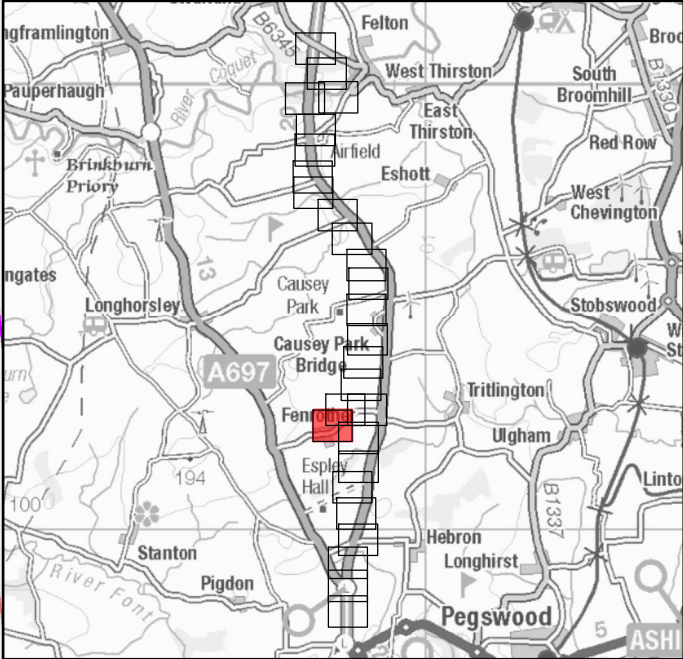


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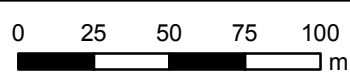
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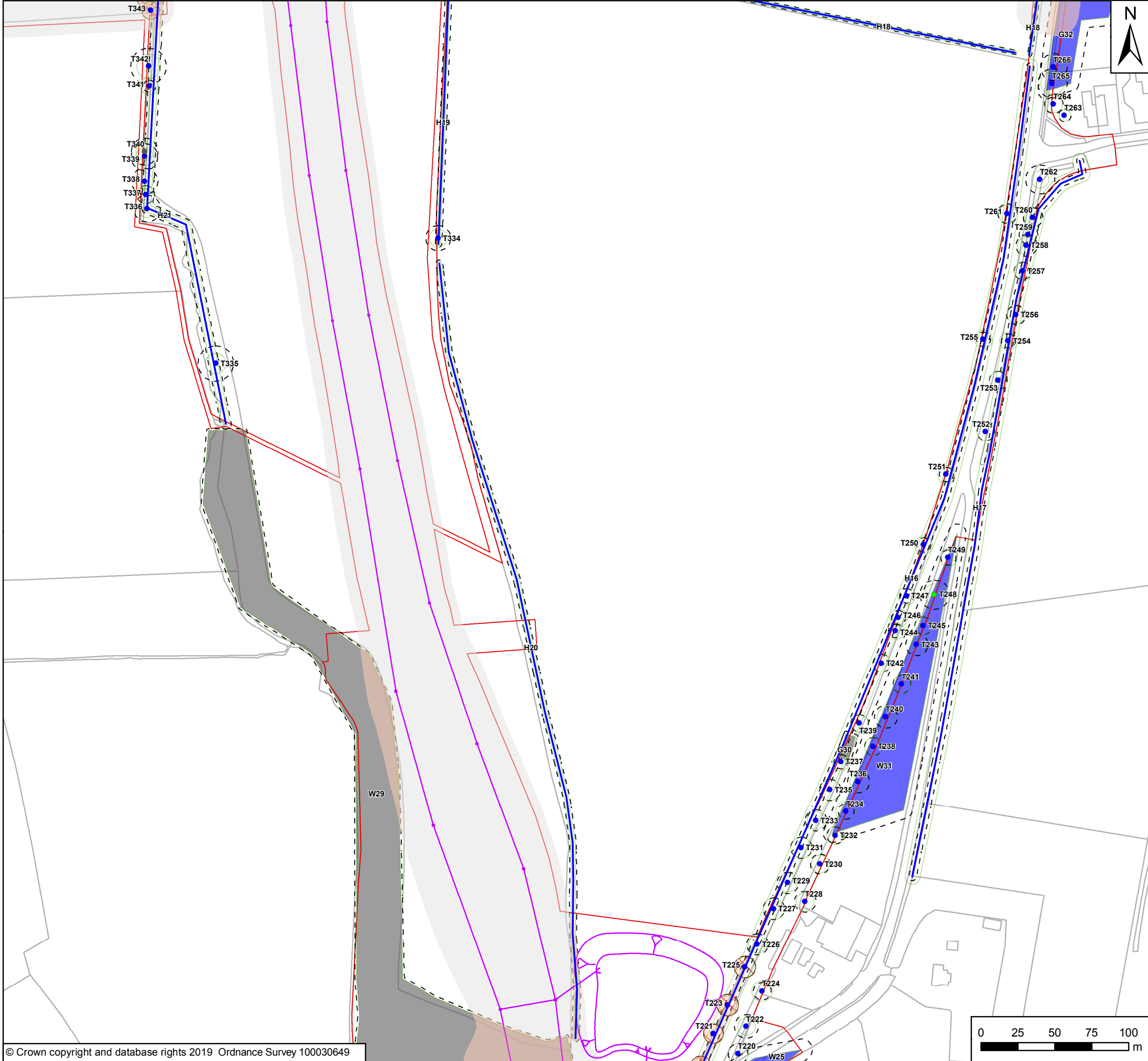
General arrangement & Drainage + 15m

Tree Category

ABCU

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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
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Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B4a Tree Protection Plan					
Scale	Drawn	Checked	Approved	Authorised	
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For Information				S1	
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Project		WSP		6.3	
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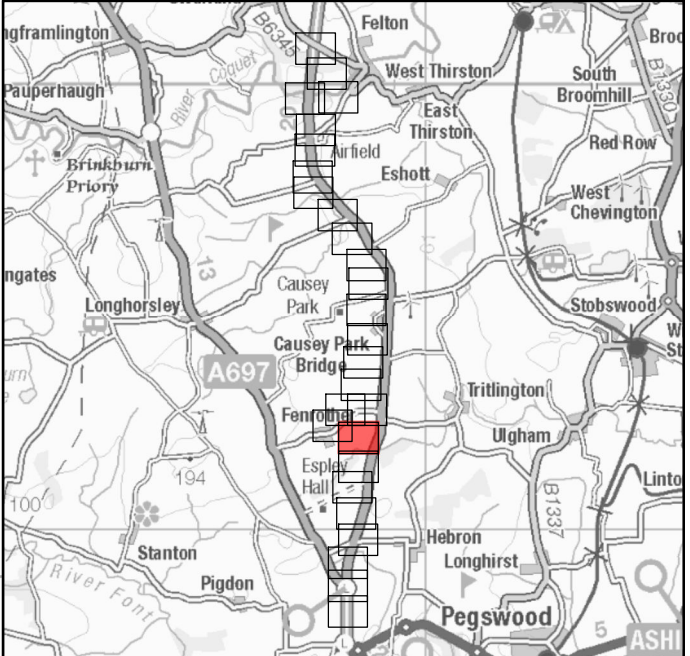


**Key**

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- Root Loss
- Crown
- Drainage
- General Arrangement
- Watercourse
- Trees Lost
- Root Protection Area

**Tree Category**

- A
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- U



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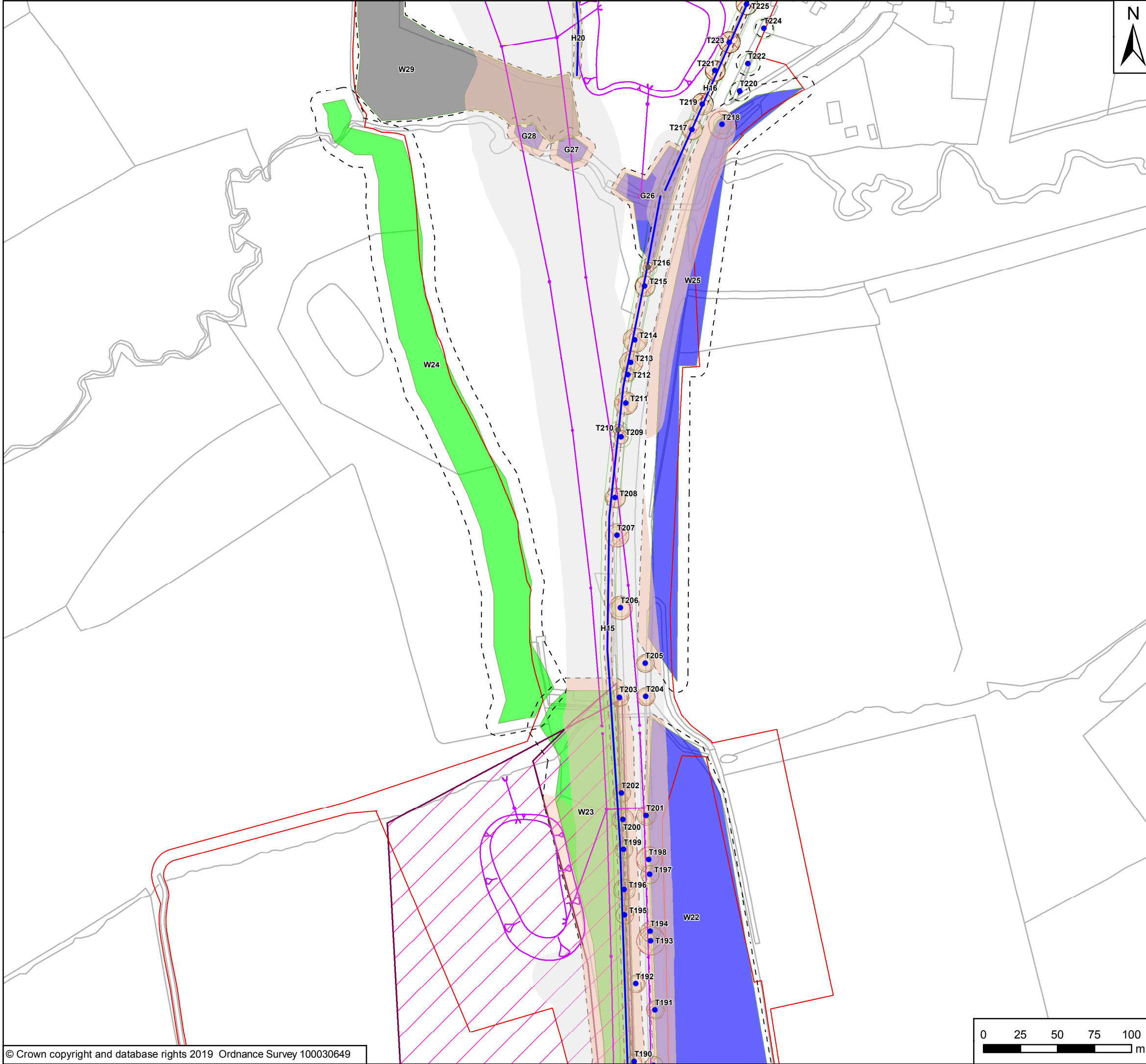
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A1 in Northumberland: Morpeth to Felton

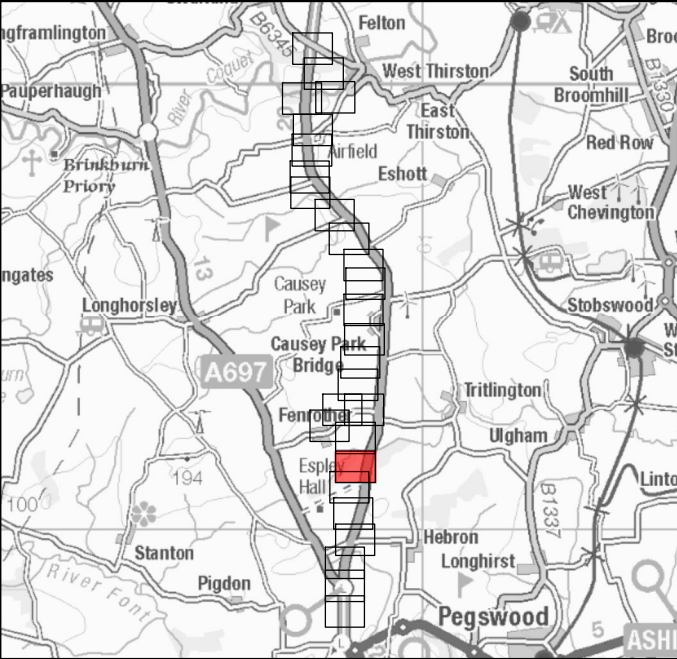
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Figure B4a Tree Protection Plan

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Drawing Status  For Information				Suitability S1
Drawing Number Project HE551459	Originator WSP		Volume 6.3	Project Ref. No. 70044136
M2F Location	Type	Role	Number	Revision P02





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P01	12/07/19	First Issue	GH	DW	DW
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Client

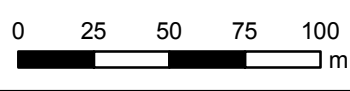
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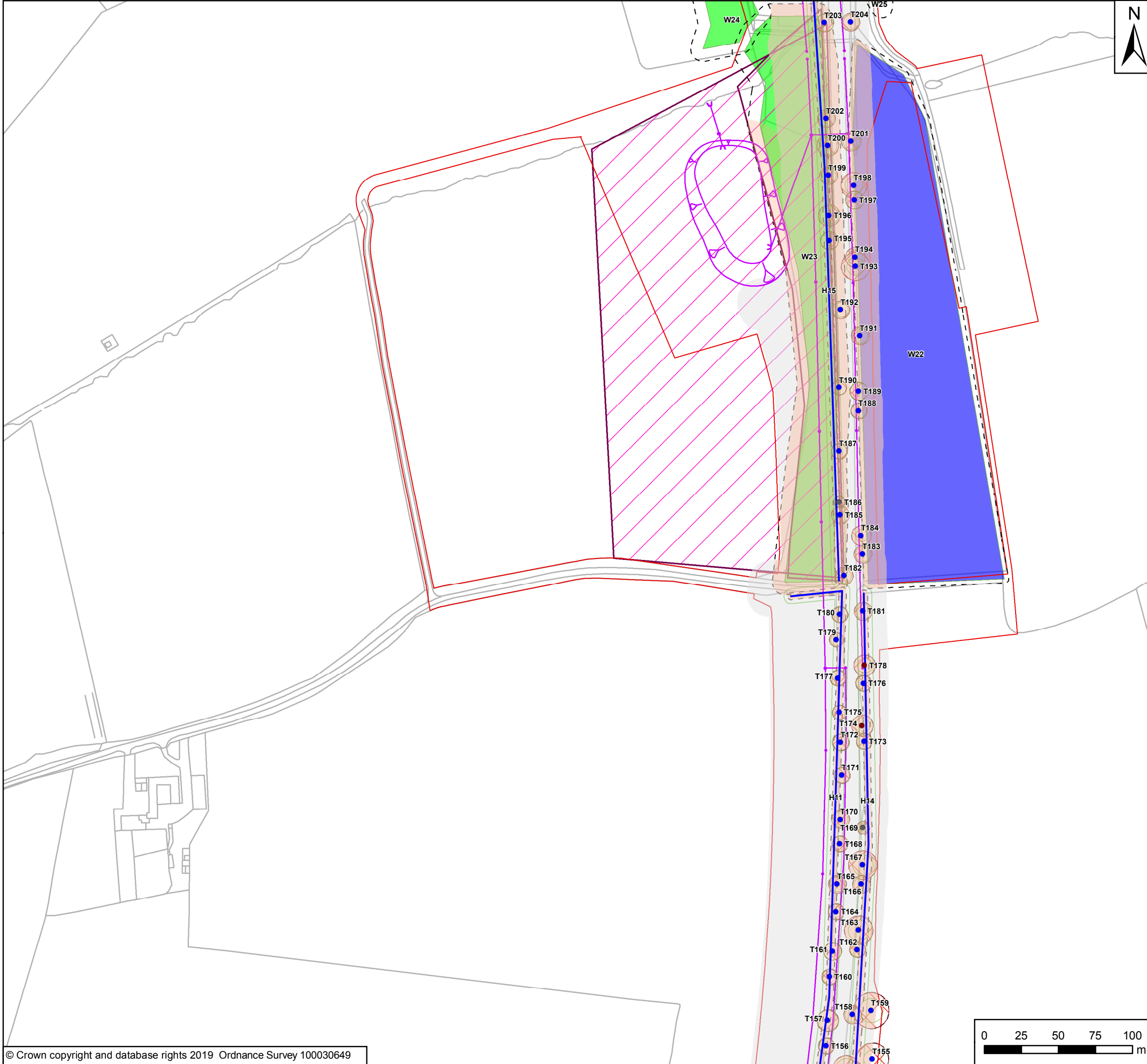
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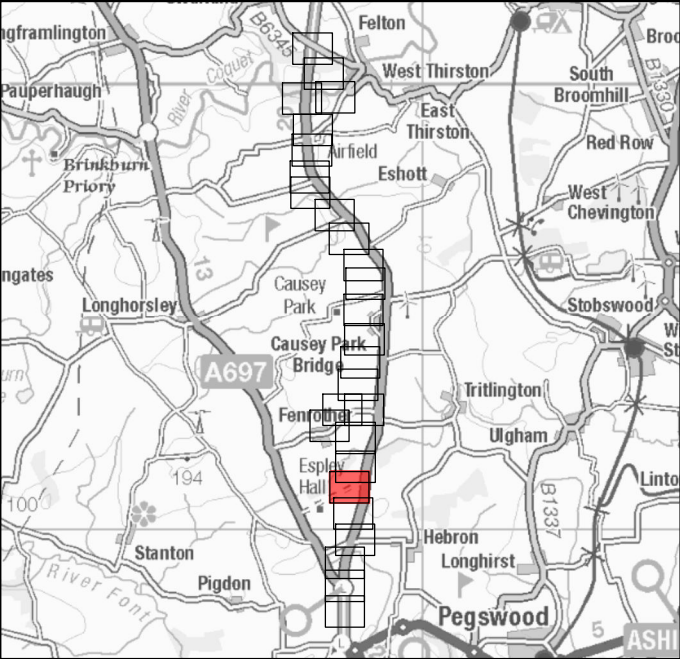
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For Information	S1

Drawing Number	Originator	Volume	Project Ref. No.
HE551459	WSP	6.3	70044136
M2F	Type	Role	Revision
Location		Number	P02





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Rev	Date	Description	By	Chk'd	App'd

Client

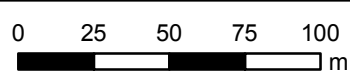
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B4a Tree Protection Plan

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Drawing Status	Suitability
For Information	S1

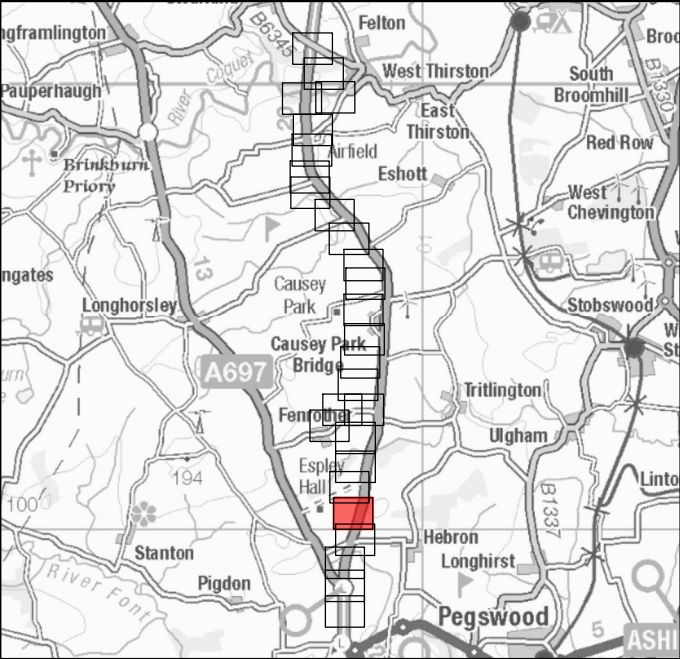
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HE551459	WSP	6.3	70044136
M2F	Type	Role	Revision
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P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

Project Title  
A1 in Northumberland: Morpeth to Felton

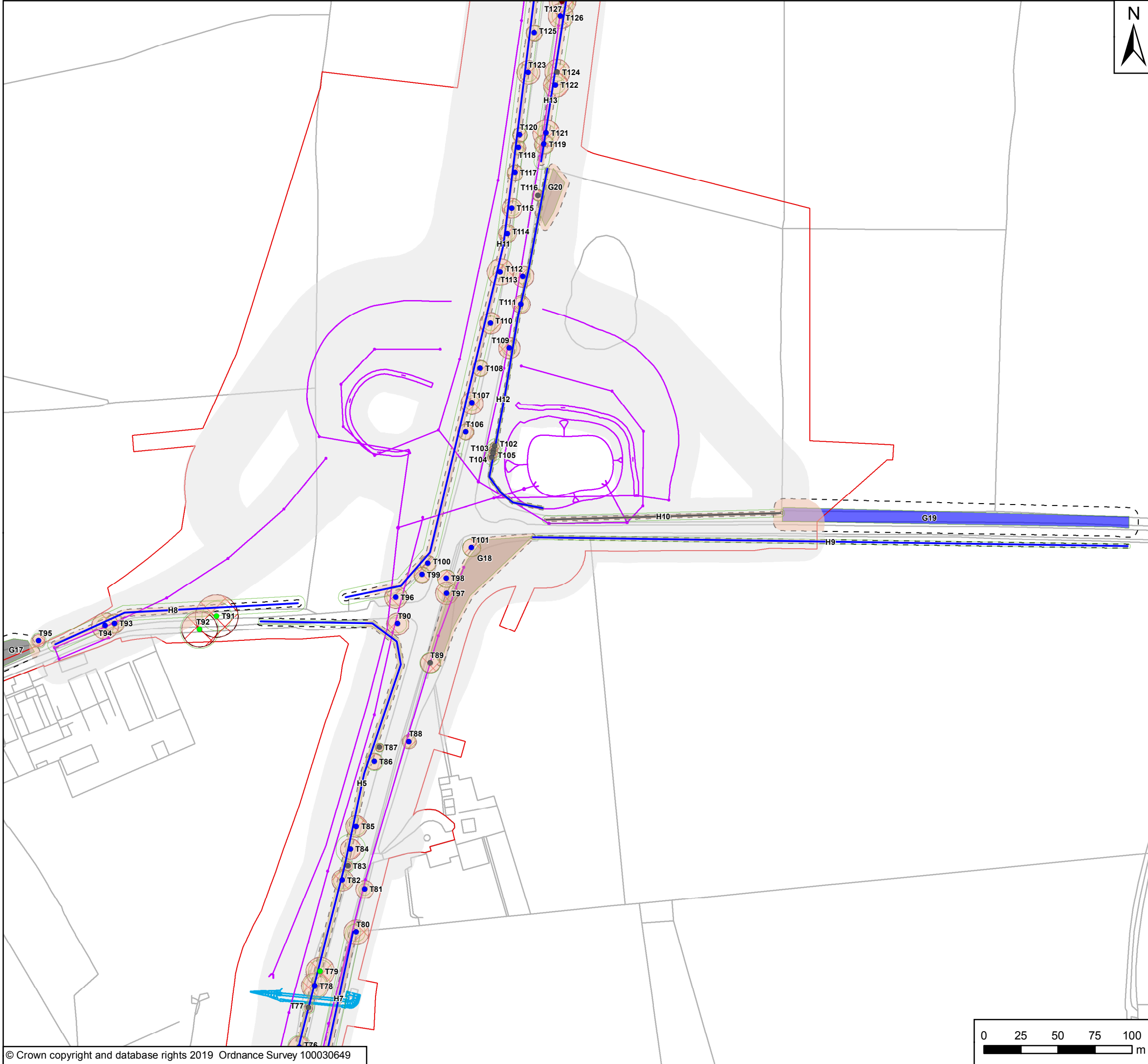
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Figure B4a Tree Protection Plan

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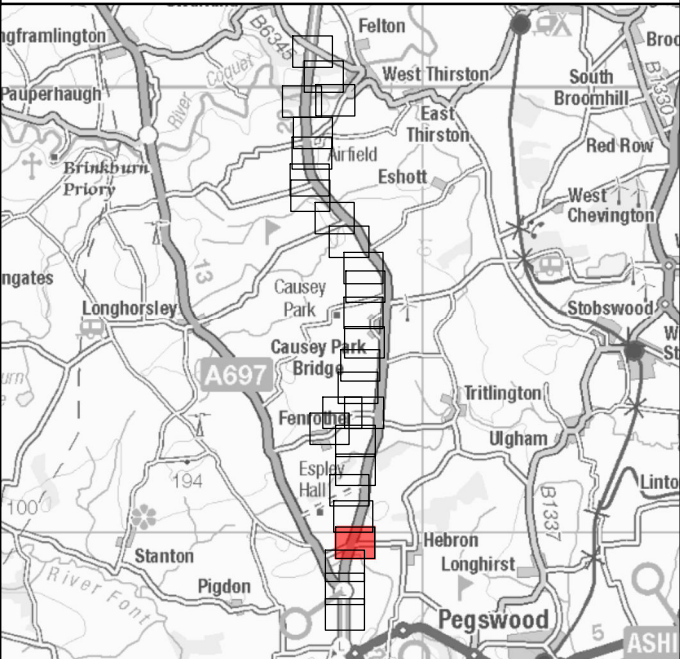
Drawing Status	Suitability
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Drawing Number	Originator	Volume	Project Ref. No.
HE551459	WSP	6.3	70044136
M2F	Type	Role	Revision
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P02	04/10/19	Second Issue	GH	NM	KS
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Rev	Date	Description	By	Chk'd	App'd

Client

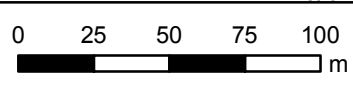
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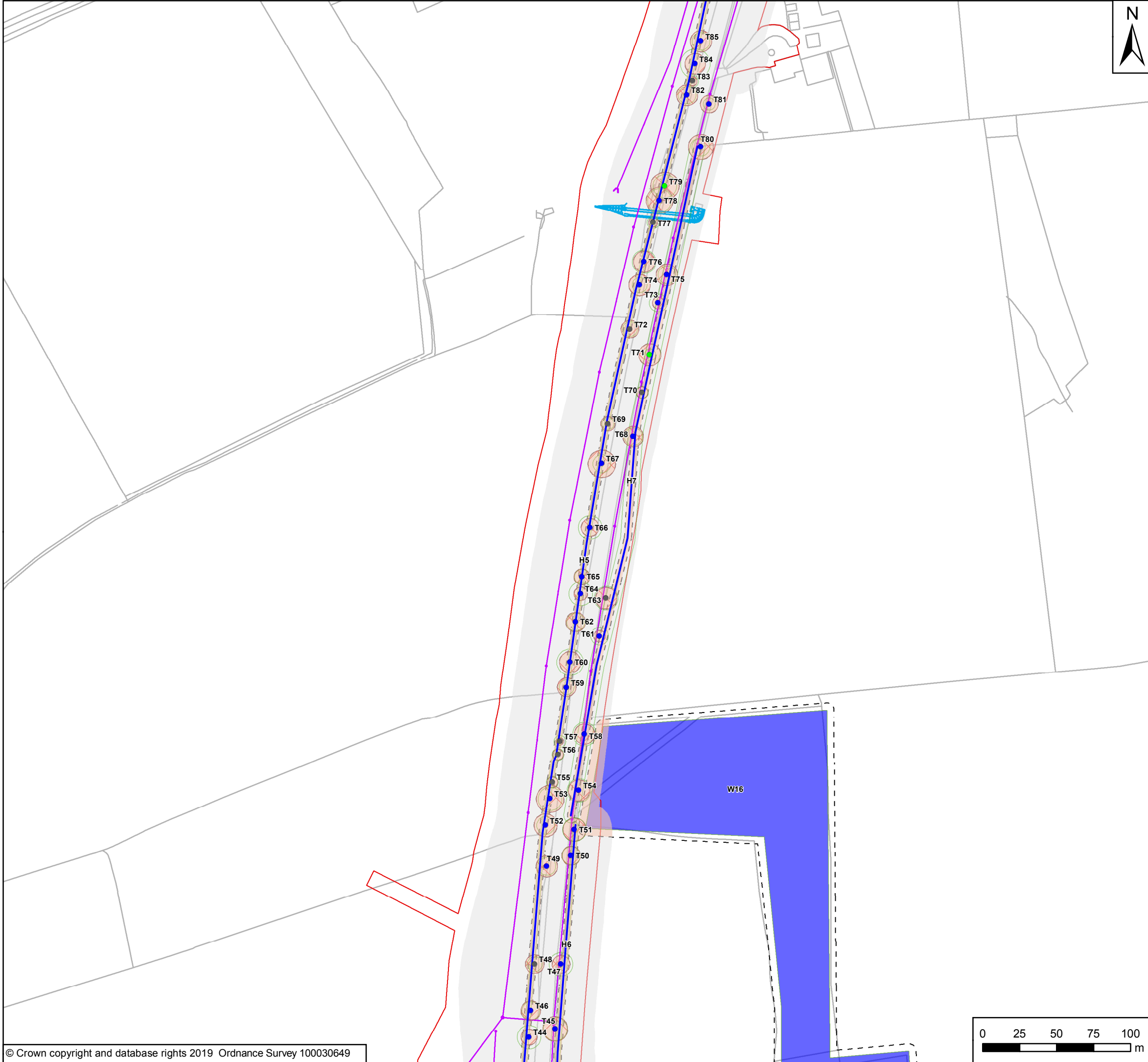
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Figure B4a Tree Protection Plan

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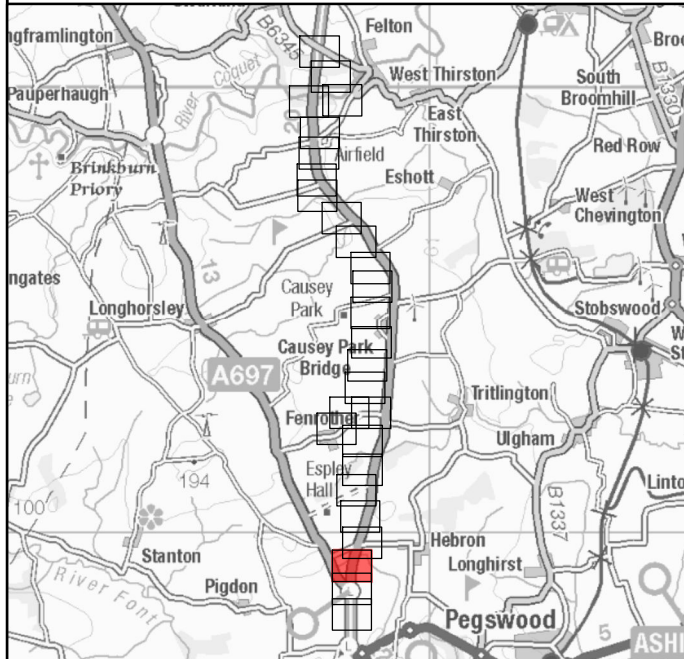
Drawing Status	Suitability
For Information	S1

Drawing Number	Originator	Volume	Project Ref. No.
HE551459	WSP	6.3	70044136
M2F	Type	Role	Number
Location			P02





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  - C
  - U



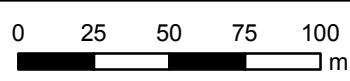
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P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

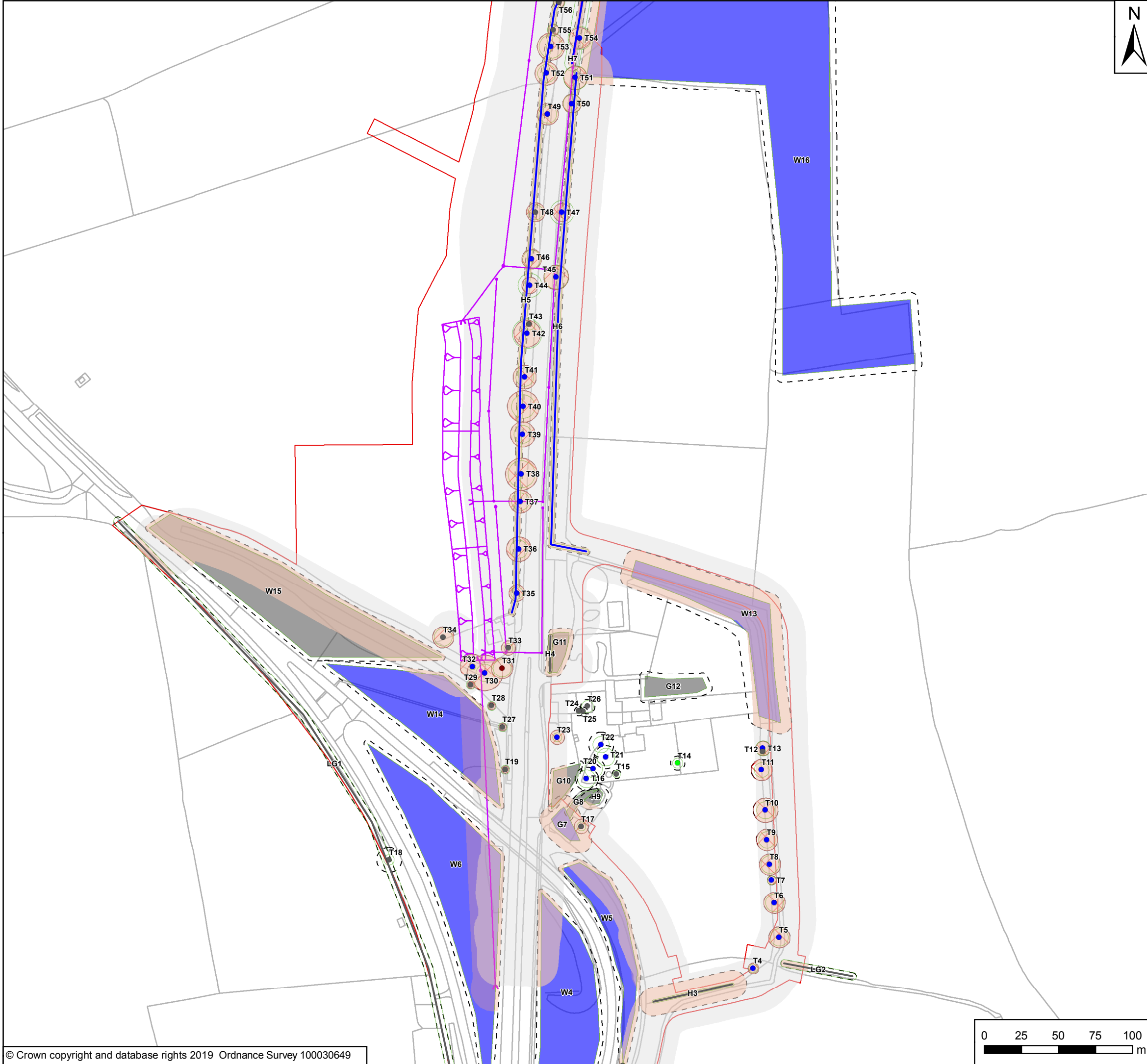
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A1 in Northumberland: Morpeth to Felton

Drawing Title  
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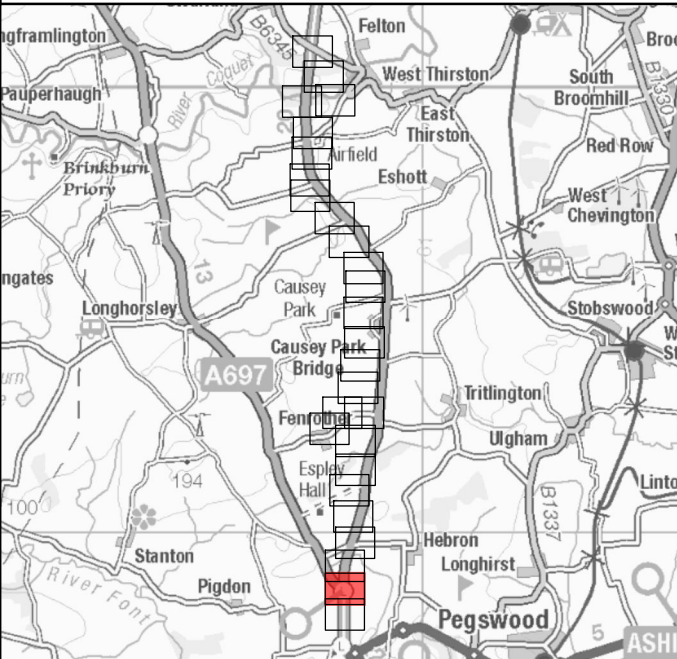
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Drawing Status				Suitability
For Information				S1
Drawing Number		Originator	Volume	Project Ref. No.
HE551459		WSP	6.3	70044136
M2F		Type	Role	Revision
Location			Number	P02







- Key**
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category**
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

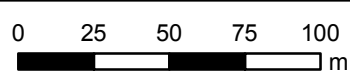
Project Title  
A1 in Northumberland: Morpeth to Felton

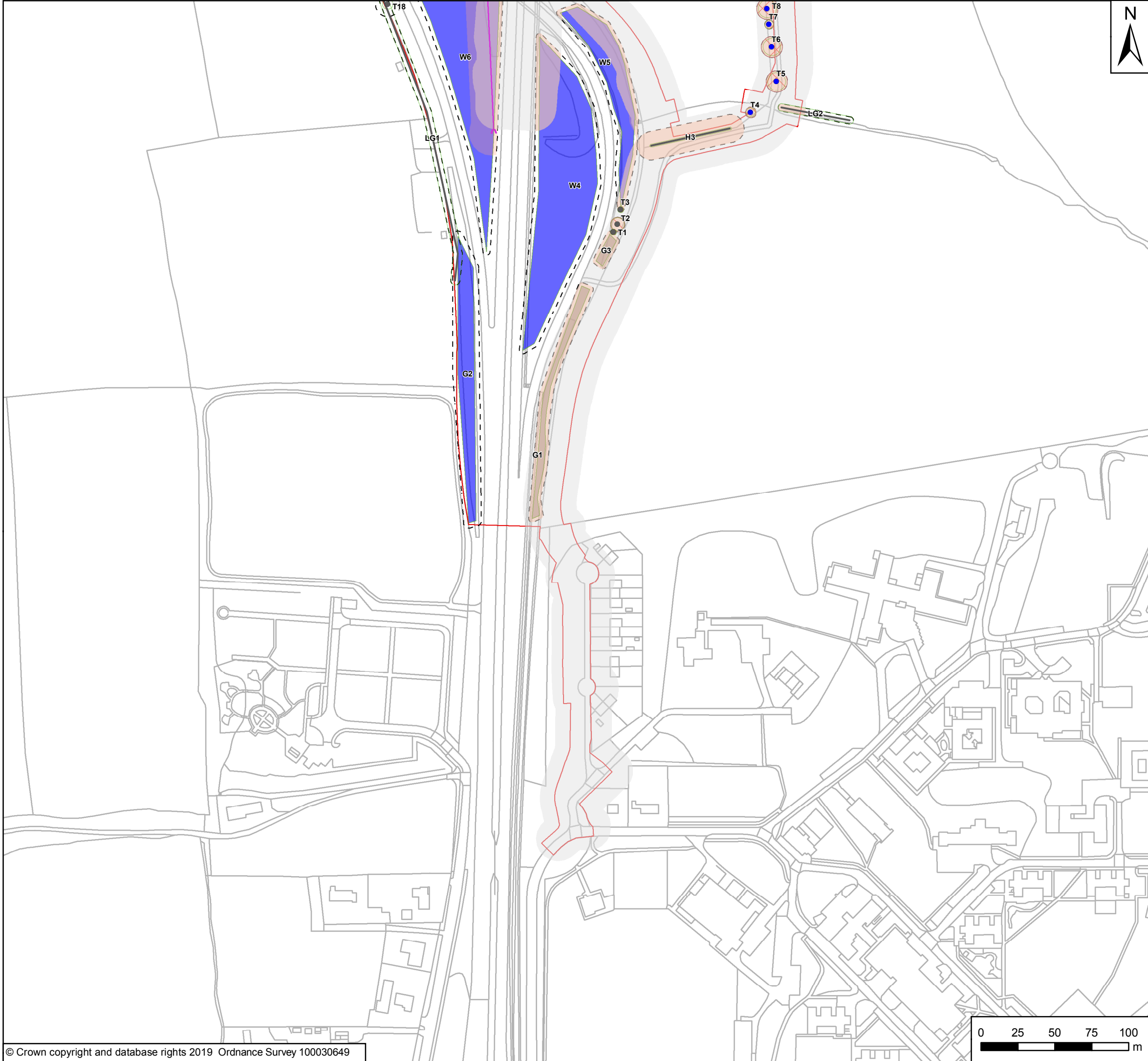
Drawing Title  
Figure B4a Tree Protection Plan

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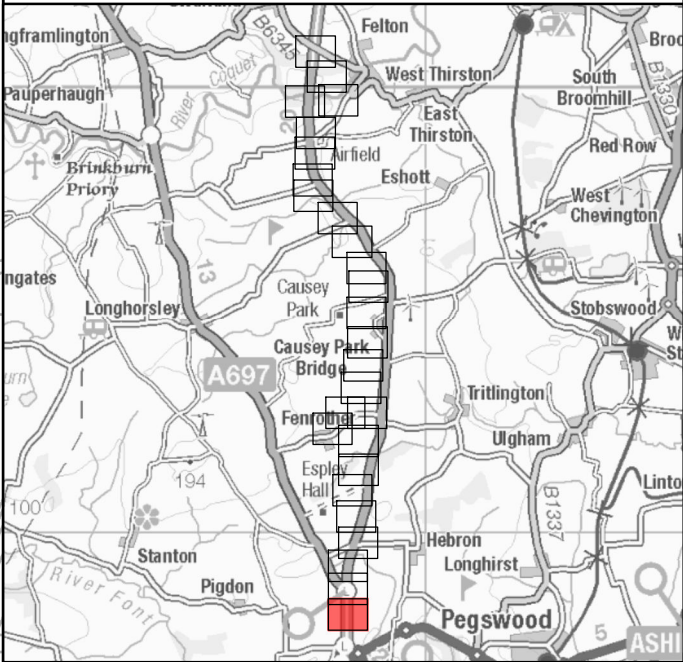
Drawing Status	Suitability
For Information	S1

Drawing Number Project	Originator	Volume	Project Ref. No.
HE551459	WSP	6.3	70044136
M2F Location	Type	Role	Number
			P02





- Key
- Order Limits
  - General arrangement & Drainage + 15m
  - Tree Preservation Order/Conservation Area
  - Dukes Bank Ancient Woodland
  - Root Loss
  - Crown
  - Drainage
  - General Arrangement
  - Watercourse
  - Trees Lost
  - Root Protection Area
- Tree Category
- A
  - B
  - C
  - U



P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd

Client

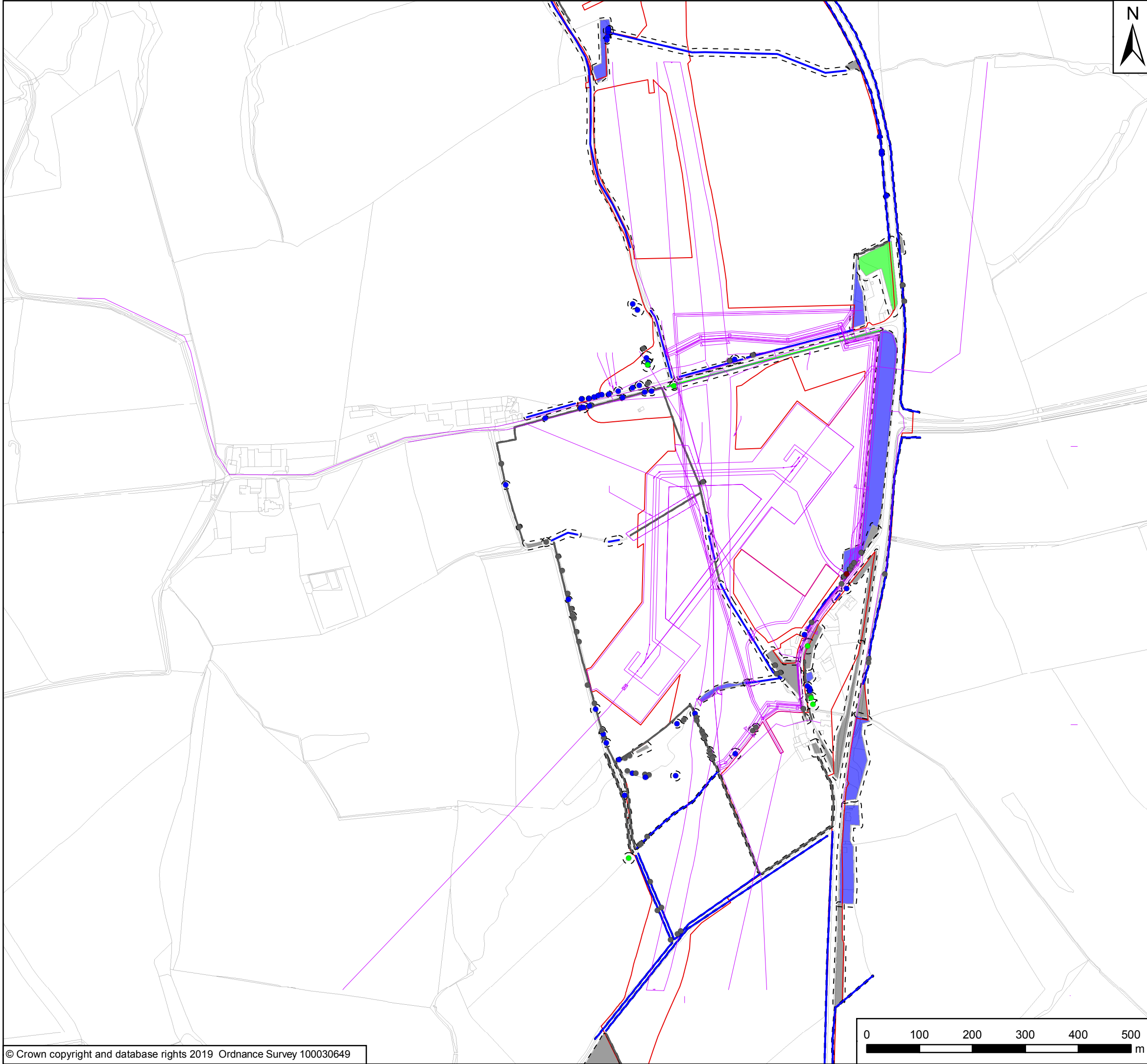
Project Title  
A1 in Northumberland: Morpeth to Felton

Drawing Title  
Figure B4a Tree Protection Plan

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Drawing Status For Information				Suitability S1
Drawing Number Project HE551459		Originator WSP		Volume 6.3
M2F Location		Type	Role	Number
				Project Ref. No. 70044136
				Revision P02







**Key**

- Order Limits
- Causey Park Stats
- Root Protection Area
- Tree Category**
  - A
  - B
  - C
  - U

P02	04/10/19	Second Issue	GH	NM	KS
P01	12/07/19	First Issue	GH	DW	DW
Rev	Date	Description	By	Chk'd	App'd
Client					
Project Title					
A1 in Northumberland: Morpeth to Felton					
Drawing Title					
Figure B4b Tree Protection Plan (Causey Park)					
Scale	Drawn	Checked	Approved	Authorised	
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Drawing Status				Suitability	
For Information				S1	
Drawing Number		Originator	Volume	Project Ref. No.	
HE551459		WSP	6.3	70044136	
M2F		Type	Role	Number	Revision
Location					P02

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# Appendix C

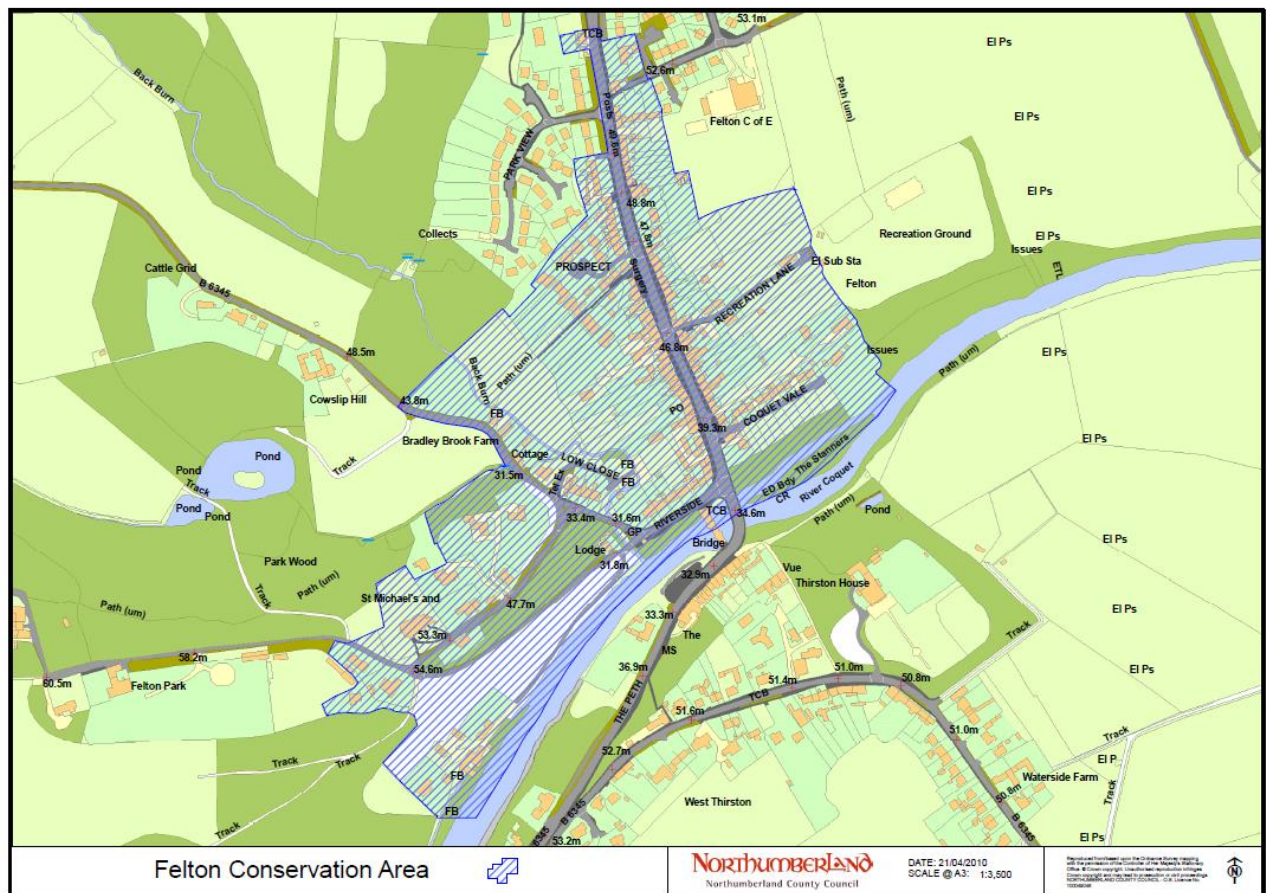
SUPPORTING INFORMATION

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# Appendix C.1

## TREE PRESERVATION ORDERS AND CONSERVATION AREAS

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# Appendix C.2

## PREAPPLICATION ENGAGEMENT

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## AGENDA & MEETING NOTES

PROJECT NUMBER	Project number	MEETING DATE	31 October 2018
PROJECT NAME	A1 in Northumberland: Morpeth to Felton	VENUE	Lancaster House, Hampshire Court, Newcastle upon Tyne NE4 7YH
CLIENT	Highways England (the Applicant)	RECORDED BY	DW
MEETING SUBJECT	Trees and Woodland Consultation		

PRESENT	Dominic Waller(WSP), Stuart Culley (Morgan Sindall), Jim Smith (FC), Sarah Radcliffe(FC), Ian Everard (FC), <u>Robert Cussen</u> (NE).
APOLOGIES	none
DISTRIBUTION	As above plus: Nic Macmillan (WSP), Jack Fenwick (WSP), Fearn Sims(WSP), Kevin Stubbs (WSP), Clare Horner (WSP)
CONFIDENTIALITY	Public

ITEM	SUBJECT	ACTION	DUE
<b>1</b>	<b>Anticipated loss of ancient woodland – location and size – 0.37 ha</b>		
<b>1.1</b>	RC has had ongoing discussion with JF regarding final area to be confirmed by arb report and final design of bridge. Agreement will be sought through Ancient Woodland Strategy, Arb Report and consultation after these are complete. No significant objections were raised so far.	DW/JF	Early 2019
<b>1.2</b>	Discussion on the loss in relation to other woodland works in the area. Felling Licence for Duke's Bank under application. Felling licence application adjacent to mitigation site – how does this affect management of the area overall? Felton park woodland adjacent to mitigation area – thinning only until 2024. No major impacts forecast. See map attached and keep under review.	-	-
<b>2</b>	<b>Anticipated new area of ancient woodland – location and size. 0.9 ha</b>		
<b>2.1</b>	Area of mitigation for Duke's Bank Wood currently satisfactory but further detail through the AWS and Landscape Mitigation Masterplan to be provided.	DW/JF/ FS	Early 2019
<b>2.2</b>	Felling Licence for Duke's Bank under application. Felling licence application adjacent to mitigation site – how does this affect management of the area overall? Felton park woodland adjacent to mitigation area – thinning only until 2024.	DW/JF/ FS	Early 2019

	Consideration needed of woodland salvage and planting adjacent to existing woodland and how both are managed in future		
2.3	BC stated harvesting saplings desirable not necessarily practical. Design to review practicalities and timing of this	DW/JF/ FS	Early 2019
2.4	Seed collection/bank – future resilience based on climate change. Can this be assisted by use of Ecological Site Classification. Review opportunities for ESC and future risk to seed bank in AWS.	JF/DW	Early 2019
2.5	Ravine soil versus hay meadow is translocation of soil appropriate? AWS to indicate donor areas and likely volumes and method of movement.	JF/DW	Early 2019
2.6	SR emphasised desire to avoid planting in tubes and consider fencing as needed. Include note in planting plans	FS/DW	Early 2019
3	<b>Ash-die back issue and findings of survey.</b>		
3.1	Presentation and General discussion on findings between JS and DW. JS to locate plant health contact (Now Ewan Calcott (FC)). Information provided on likely impacts as laid out in the report and the challenge of moving material across site.	JS	Early 2019
3.2	All around the table agreed the impact of moving ash material a short distance from one side of woodland to the other was low, and a pragmatic option, given the benefits arising.	-	-
3.3	DW to determine process and limitations on ash and soil movement under plant health controls.	DW	Early 2019
4	<b>General expected impact based on attached presentation</b>		
4.1	Presentation was given on main design elements of the Scheme and the likely impacts, including those to coronation avenue. All noted with no significant objections so far.		
4.2	All agreed that this should be viewed in relation the wider landscape proposals for mitigation of tree loss outside the River Coquet. DW I will confirm the current landscape proposals	DW/FS	Early 2019
5	<b>The likely requirement for a felling licence for the River Coquet GI works</b>		
5.1	Presently a felling licence is not expected where trees are removed as part of planning consent, as they are exempt. Confirmation shall be sought as part of final consultation/ approval	DW	Early 2019
6	<b>AOB</b>		
7	All would like to see final documents for input prior to planning submission	DW/FS/JF	Early 2019

Meeting materials and follow up.



map54615.pdf



A1 Northumberland -



RE A1

Morpeth to Felton Imj Northumberland - Mc

## AGENDA & MEETING NOTES

PROJECT NUMBER	HE551459-WSP-EGN-M2F-RP-LE-1942	MEETING DATE	28 March 2019
PROJECT NAME	A1 in Northumberland: Morpeth to Felton	VENUE	Woodland Trust (WT), Grantham
CLIENT	Highways England (the Applicant)	RECORDED BY	DW
MEETING SUBJECT	Ancient Woodland		

PRESENT	Jack Taylor (JT) Woodland Trust, Nicole Hillier (NH) Woodland Trust. Dominic Waller (DW) WSP, Andy Bascombe (AB) WSP.
APOLOGIES	None
DISTRIBUTION	As above plus: Jack Fenwick (WSP), Nic Macmillan (WSP), Declan Franklin-Losardo (WSP), Ellie Briggs (WSP), Kevin Stubbs (WSP),
CONFIDENTIALITY	Public

ITEM	SUBJECT	ACTION	DUE
1	<p><b>Introduction</b></p> <p>WSP and WT met to discuss the impacts of the A1 Morpeth to Felton Scheme, primarily on ancient woodland.</p> <p>Introductions were made. DW and AB represent environmental team working on M2F. JT is lead campaigner for WT assisted by NH. NH drafted/submitted the written consultation response attached. The response confirms that <b>the WT object to the Scheme impacts on ancient woodland</b>. This position was confirmed throughout the meeting.</p>		
2	<p><b>Scheme overview</b></p> <p>DW presented the key design components such as West Moor Junction etc. and Coronation Avenue of the Scheme. The arrangement and construction around Duke's Bank Wood (DBW) was discussed in detail.</p>		
3	<p><b>Trees outside woodland</b></p> <p>The WT are primarily focussed on woodlands however as an organisation their involvement has recently moved into non-woodland/street trees. To establish scope, DW highlighted this as many trees within the Scheme are outside woodland. JT confirmed that on principle, the WT's remit is that they would oppose the loss of all ancient and veteran trees, rather than simply all trees. While they would like to see the retention of all healthy mature trees, their remit focuses on impacts to</p>		



ITEM	SUBJECT	ACTION	DUE
	ancient/veteran specimens and areas of ancient woodland and wood pasture. Discussion subsequently centred mainly around DBW and Ancient woodland. Several trees were highlighted as being of veteran status within the Study Area, some of which were to be removed and some retained. JT understood the reason for tree removal although did not explicitly support or object. The WT position is to object to their removal.		
4	<b>Duke's Bank Wood</b>  Construction details for DBW were presented. This Identified the extent of the works, including the haul road. JT queried whether there would be any works adjacent and parallel to the south boundary of DBW (in an east: west direction). It was subsequently confirmed that access would be running north to south within the adjacent field. All working areas would be a minimum of 15 m from DBW except in the area of construction.		
5	<b>Mitigation/Compensation</b>  JT confirmed the WT position is that primary means of mitigation is avoidance and replacement planting can only be considered compensation.  Compensation area was confirmed as being replacement on 12:1 ratio. The compensation area was confirmed to be approximately 9 ha. The ancient woodland strategy would be made available once approved for release by the Applicant.  Translocation/Salvage – DW described the proposed salvage for DBW to remove soil and plant material and place within the compensation area. DW asked what the WT position was on translocation/salvage.  JT confirmed that WT does not support translocation as, by definition, this involves adverse disturbance of ancient woodland. Its benefits are also not clearly known. JT did accept that it is likely to be better than nothing, though this depends on the situation and should be looked at on a case by case basis. The WT position is that in the absence of avoidance, soils should be retained and protected in situ.  JT queried the presence of ash dieback and how this would affect translocation. DW confirmed presented the impacts of ash dieback within DBW and that WSP/the Applicant are in discussion with the Forestry Commission (FC). FC agreed given the potential of translocation/salvage versus a do-nothing scenario, it is likely movement of infected material will be permitted under strict control measures.  With regards to net gain offsetting, the WT position is that net gain cannot be achieved where ancient woodland is subject to loss as it constitutes an irreplaceable habitat. Compensation	DW	April 2019

ITEM	SUBJECT	ACTION	DUE
	areas may compensate to some extent but cannot be seen as acceptable replacement. 'Ancient woodland is irreplaceable'.		
6	<p><b>Construction Management</b></p> <p>JT was asked what the WT felt was suitable mitigation. Acoustic and Dust screens were suggested to prevent dust accumulations on retained trees.</p> <p>Avoidance – avoidance of the removal of AW was identified as mitigation. DW confirmed the alignment of haul route has been designed to stay within Order Limits of the Scheme as far as is possible. The haul road is not extended through the woodland but a number of short sections zig-zag down the piling foundation area on the south bank. Access on the north bank will lie on existing access tracks and is expected to minimally impact on the woodland. The north east side of the river does not contain many mature trees.</p> <p>The WT would like to see details of permanent and temporary construction and landscape details under the bridge. WT prefer to see soil protection in place across the site and the donor area reduced to only those areas of permanent construction. Comments will be passed to the design team.</p> <p>Engineering solutions to retain soil were suggested including use of cell web. A response of feasibility is required from the design team.</p> <p><b>Action: Confirm design details under bridge including any options to retain soil in situ.</b></p> <p><b>Action: Confirm mitigation within arboriculture report and ancient woodland strategy</b></p>	<p>DW</p> <p>DW</p>	<p>April 2019</p> <p>April 2019</p>
7	<p><b>Statement of Common Ground</b></p> <p>WT will not work with the Applicant as their objectives are not compatible. However, JT did cite other schemes where a statement of common ground has been used and might be used on this Scheme.</p> <p>While the WT objects to the Scheme impacts and would like to see them mitigated, they have confirmed they will not be making use of a public campaign action.</p>		
8	<b>Meeting minutes circulated and agreed as of 10<sup>th</sup> April 2019</b>		

# Appendix C.3

## ASH DIEBACK REPORT

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Highways England

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# **A1 IN NORTHUMBERLAND: MORPETH TO FELTON**

Ash Dieback Assessment - River Coquet Bridge  
Crossing







Highways England

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# **A1 IN NORTHUMBERLAND: MORPETH TO FELTON**

Ash Dieback Assessment - River Coquet Bridge Crossing

**TYPE OF DOCUMENT (VERSION) PUBLIC**

**PROJECT NO. 70044136**

**OUR REF. NO. 70044136-354**

**DATE: OCTOBER 2018**

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Highways England

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# **A1 IN NORTHUMBERLAND: MORPETH TO FELTON**

Ash Dieback Assessment - River Coquet Bridge Crossing

WSP

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Birmingham, West Midlands  
B5 4PJ

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WSP.com

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# QUALITY CONTROL

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Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	-			
Date	4 <sup>th</sup> October 2018			
Prepared by	Dominic Waller			
Signature				
Checked by	Neil Davies			
Signature				
Authorised by	Kevin Stubbs			
Signature				
Project number	<b>70044136-354</b>			
Report number	1.0			
File reference	-			

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## **APPENDICES**

### APPENDIX A

## 1. INTRODUCTION

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- 1.1.1. An arboriculture survey has been undertaken for the A1 in Northumberland: Morpeth to Felton (the Scheme) highway scheme by WSP on behalf of Highways England (the Applicant) as part of wider environmental assessment works.
- 1.1.2. During a recent arboriculture inspection (June 2018) WSP inspectors identified extensive crown dieback and death of ash (*Fraxinus excelsior*) trees located at the bridge crossing of the A1 over the River Coquet at Felton. This area is known as Dukes Bank Wood and is designated by Natural England as ancient semi-natural woodland (ASNW). Preliminary investigation suggested the legally controlled fungus, *Hymenoscyphus fraxineus*, causing Ash Dieback (ADB) may be the cause.

### INSTRUCTION

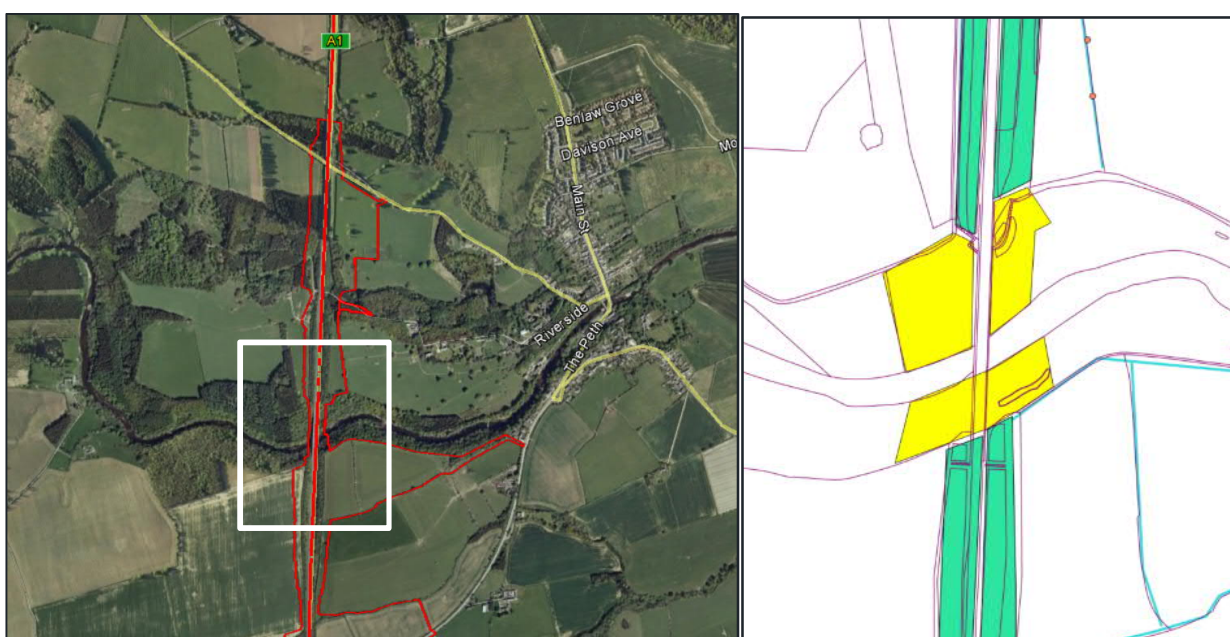
- 1.1.3. This report has been instructed to examine the cause of dieback in more detail, confirm the presence of ADB and evaluate whether construction may exacerbate the impact of disease in the area and consequently how disease controls may constrain the Scheme.
- 1.1.4. It will also look at possible solutions to assist delivery of the scheme while minimising adverse effects of ADB.

### LIMITATIONS

- 1.1.5. Disease and dysfunction of trees may be caused by many factors. Every effort has been made to locate attributable symptoms of ADB within the Study Area around the River Coquet and these are shown and discussed within this report. However, without more formal genetic or microbiological tests, it is not possible to guarantee the presence of a particular pathogen. Legal restrictions on movement prevented the collection of any samples for laboratory testing.
- 1.1.6. This report uses site investigation to gather evidence and draw probable conclusions only. The results are discussed within the report.

## 2. SITE DESCRIPTION

- 2.1.1. The site is located adjacent to the A1 and River Coquet in Northumberland, approximately 1.2 km west south west of Felton and 14 km north of Morpeth.
- 2.1.2. The site is a designated priority habitat deciduous woodland, the south bank is also designated ASNW and a Site of Special Scientific Interest (SSSI)<sup>1</sup>. The SSSI is designated in 2014 as Favourable Condition in 1999, 2009 and 2014. Significantly, ADB was first records in the area in 2013/14.
- 2.1.3. The site comprises a river running east to west with a single-carriageway bridge crossing running north-south as shown in Figure 1. The Bridge is estimated to be around 15-20 m high over the river surface.



**Figure 1: Site Location and Layout (inset)**

- 2.1.4. The south bank is ASNW known as Dukes Bank Wood growing on an escarpment of the River Coquet. The woodland mix is similar on both sides of the bridge and further down the river at this location. It comprises sycamore (*Acer pseudoplatanus*), ash, beech (*Fagus sylvatica*), silver birch (*Betula pendula*) and wild cherry (*Prunus avium*)

---

<sup>1</sup> River Coquet and Coquet Valley Woodlands SSSI - Duke's Bank Wood unit ID 1027994 – retrieved from Natural England [www.magic.gov.uk](http://www.magic.gov.uk) and <https://designatedsites.naturalengland.org.uk/UnitDetail.aspx?UnitId=1027994> on 4<sup>th</sup> October 2018.

- 2.1.5. The north bank comprises two distinct stands east and west of the bridge. The section west of the bridge is comprised of mature ash, sycamore and oak (*Quercus robur*, *Quercus patraea*) over hazel (*Corylus avellana*) coppice and hawthorn (*Crataegus monogyna*) with occasional wych elm (*Ulmus glabra*)
- 2.1.6. To the east of the bridge the site comprises young ash saplings, alder (*Alnus glutinosa*), sycamore and oak.
- 2.1.7. Areas nearer the river on all four areas were more densely populated with alder.
- 2.1.8. Land immediately under the bridge is largely free from vegetation, presumably as a result of construction and maintenance of the bridge. Ash saplings in various states of decline are growing among bramble (*Rubus fruticosus*).



### 3. ASH DIEBACK

---

- 3.1.1. Ash dieback (ADB) *Hymenoscyphus fraxineus* is a fungal disease that infects species of ash trees (*Fraxinus spp.*). It originated from Asia and is endemic across much of Europe affecting up to 90% of trees in some areas. The disease infects the leaves of Ash trees and travels within the plant, blocking the flow of water and nutrients. This causes leaf loss and dieback, in many cases, eventually killing the tree. The fungus has a sexual stage (*H. fraxineus*) and an asexual stage (*Chalara fraxinea*).
- 3.1.2. The UK Forestry Commission provides an up to date resource for general information on Ash Dieback at <https://www.forestry.gov.uk/ashdieback>. A detailed source of information is also available at <https://www.forestry.gov.uk/forestry/INFD-8ZSS7U>. A summary is provided below.

### 3.2. DISEASE HISTORY

- 3.2.1. ADB was first identified within the UK in 2012 believed to be transported by imported plants from Europe. The disease is now largely endemic within the UK with the highest incidence occurring in the east of the country where it is believed spores can be imported by wind from Europe. Review of Forestry Commission records<sup>2</sup> suggest the disease was first identified in 2013/2014 within the Morpeth/Felton area.

### 3.3. DISEASE SPREAD

- 3.3.1. The disease is spread by fungal spores in the wind. A natural dispersal rate of 20-30 km per year is expected i.e. unaffected trees up to 30 km from an infected tree can be infected within a year.
- 3.3.2. The disease spreads longer distances by human transport on infected material such as young plants (nursery stock), branch material, leaf litter or contaminated soil.
- 3.3.3. The wood and timber of Ash is believed to be a low risk vector for dispersal, however inadvertent transportation of leaf litter may occur, for example during tree surgery operations where whole tree removal is common.

### 3.4. DISEASE LIFECYCLE

- 3.4.1. The fungal spores are naturally transported by wind and land on the leaves of ash trees between June and October. The spores will germinate within the leaf cells causing black lesions on the leaf. Infection will spread down the leaf rachis (stem) invading the parent twig or branch. Here the fungus invades the surface tissues of the twig or branch causing bark and wood tissue to become blocked and die. The bark and wood will eventually decay causing a canker.
- 3.4.2. As the disease blocks and kills cells, transport of water and nutrients to the twigs and branches ceases, causing twig and branch death. Dying and infected leaves will fall to the floor and the fungus

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<sup>2</sup> <http://chalaramap.fera.defra.gov.uk/> retrieved September 27<sup>th</sup> 2018

will grow fruiting bodies (mushrooms) from the leaf litter. These fruiting bodies will then create new spores, blown on the wind, for the life cycle to begin again.

### 3.5. PROGNOSIS FOR TREE HEALTH

- 3.5.1. Crown diseases such as ADB are usually slower acting as they effectively starve the tree over time. Reduced leaf area means less ability to photosynthesise sugars for energy. Combined with production of reactive growth that depletes energy resources, over time, the tree develops an energy deficit. A persistent energy deficit means a progressively weaker response to infection and eventually death. For this reason, young trees with small crowns and low energy stores are susceptible to the disease. This is primarily due to the relatively high load of spores and the lower energy reserves within the plant available to resist the disease.
- 3.5.2. Mature and larger trees effectively need a higher volume of spores to be overcome and may only be partially infected within the first few growing seasons. As ADB becomes established trees will enter a progressive cycle of dieback and regeneration, where new growth compensates for lost tissue only itself to become infected. Healthy trees may resist infection for a number of years whereas already weakened trees may die. Some genetic resistance may also be present that slows or resists the disease in certain trees or groups.
- 3.5.3. As trees are weakened by ADB secondary pathogens or dysfunction may arise. For example, Honey fungus (*Armillaria mellea*) will infect weakened trees causing decay and canker of the stem and roots. The tree may become unstable and/or die from the infection.

### 3.6. CONTROL

- 3.6.1. Due to the abundance of Ash trees in the UK, UK Government research is looking intensely at ADB biology and its control. Use of fungicides has proved effective in limiting or controlling the impact of ADB in trials but the practicalities of applying large amounts of pesticide in the field remain questionable.
- 3.6.2. Recommended controls are aimed at preventing or limiting dispersal of the disease and legislation has been in place since 2012 to prevent this.

### 3.7. CURRENT KNOWLEDGE

- 3.7.1. Government scientists have set out the most up-to-date understanding of the disease. Their assessment concluded that:
- the spores are unlikely to survive for more than a few days;
  - spore dispersal on the wind is possible from mainland Europe;
  - trees need a high dose of spores to become infected;
  - spores are produced from infected dead leaves during June to September;
  - there is a low probability of dispersal on clothing or animals and birds;
  - the disease will attack any species of ash;
  - the disease becomes obvious within months rather than years;
  - wood products would not spread the disease if treated properly;
  - once infected, trees cannot be cured; and

- not all trees die of the infection - some are likely to have genetic factors which give them tolerance of, or resistance to, the disease<sup>3</sup>.

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<sup>3</sup> <https://www.forestry.gov.uk/forestry/inf-d-8zss7u> retrieved 27th September 2018

## 4. LEGISLATION

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- 4.1.1. The UK plant health legislation is complex and dynamic as it responds to new pests while also repealing disease controls that are no longer relevant. Primary legislation (Acts) empowers government to pass secondary legislation (Statutory Instruments, Regulations and Orders).
- 4.1.2. Plant health legislation is also influenced and governed by international<sup>4</sup> and European legislation<sup>5</sup> to protect against international spread of pest and disease.
- 4.1.3. The Plant Health Act 1967 empowers government to pass secondary legislation to control “*pests and diseases injurious to agricultural or horticultural crops, or to trees or bushes*”<sup>6</sup>.
- 4.1.4. Under the Act ‘Pests and diseases’ are:
 

*“taken as references to insects, bacteria, fungi and other vegetable or animal organisms, viruses and all other agents causative of any transmissible disease of agricultural or horticultural crops or of trees or bushes, and also as including references to pests in any stage of existence”<sup>7</sup>.*
- 4.1.5. Section 1(2)(a) defines The Forestry Commission as the competent Authority for “...the protection of forest trees and timber from attack by pests (“timber” for this purpose including all forest products)”, whereas section 1(2)(b) identifies the Secretary of State (currently DEFRA) as the Competent Authority for all plants.
- 4.1.6. Section 3 concerns control of spread of Pests and disease. An excerpt is contained within Appendix A of this report. Specifically, this act is primary legislation that permits government to make secondary legislation as and when pests become of concern.
- 4.1.7. The Plant Health (Forestry) (Amendment) Order 2012 was made as an emergency order on 29 October 2012 to grant the Forestry Commission powers as the Competent Authority and bring in legal controls for *Chalara Fraxinea/H. Fraxinea*. This amended the Plant Health (Forestry) Order 2005 to include provisions for this disease. Detailed background information is contained within the explanatory notes of the 2012 order.
- 4.1.8. On 22 November 2012, The Plant Health (England) (Amendment) Order 2012 empowered the Secretary of State to be Competent Authority with regards to *Chalara Fraxinea/H. Fraxinea*. The order ‘amends the Plant Health (England) Order 2005 (S.I. 2005/2530) to include measures to

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<sup>4</sup> International Plant Protection Convention (IPPC) 1997, International Standards for Phytosanitary Measures

<sup>5</sup> European Council Directive 2000/29/EC

<sup>6</sup> Plant Health Act 1967 s1(1) <https://www.legislation.gov.uk/ukpga/1967/8>

<sup>7</sup> Ibid s1(1)a



prevent the introduction and spread of *Chalara fraxinea* T. Kowalski, including its teleomorph *Hymenoscyphus pseudoalbidus*<sup>8</sup>, a cause of ash dieback<sup>9</sup>.

## 4.2. LEGAL CONTROLS

4.2.1. Specifically, The Plant Health (England) (Amendment) Order 2012:

- prohibits the landing in or the spread within England of *Chalara fraxinea* T. Kowalski (article 2(7));
- prohibits the landing in or the movement within England of plants of *Fraxinus* L. intended for planting, which are infected with *Chalara fraxinea* T. Kowalski (article 2(8));
- imposes additional requirements on the landing in or movement within England of plants of *Fraxinus* L. intended for planting (article 2(9) to (12)); and
- imposes additional requirements on the consignment from England to other parts of the European Union of plants of *Fraxinus* L. intended for planting (article 2(13)).<sup>10</sup>

## 4.3. IN PRACTICE

4.3.1. In practice the legal controls are described by the Forestry Commission (as Competent authority):

- prohibits all imports of ash plants, trees and seeds into Great Britain until further notice (because no pest-free areas are established);
- prohibits all movements of plant-passported ash plants, trees and seeds within Great Britain until further notice (because no pest-free areas are in place);
- continues to permit logs, woodchips and firewood, which pose a very low risk of disease transmission especially when they are kiln dried, to be imported from EU countries. In the unlikely event that this material is found to contain infection, action such as destruction will be ordered;
- continues to permit movements within Great Britain of all ash timber, which poses a very low risk of disease transmission;\*
- continues to permit imports of sawn ash timber from certain countries abroad under existing regulations against the forestry pest Emerald Ash Borer (EAB). These require the material to be accompanied by official phytosanitary (plant health) certificates declaring that the material either originated in areas known to be free of EAB, or that the wood is bark-free (which addresses the *Chalara* risk as well) before entering Great Britain. Imported woodchips and bark of ash material have the same certification requirements as for wood, but the alternative to originating in an area of pest freedom is that the material has been processed into pieces of not more than 2.5 cm thickness and width.

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<sup>8</sup> *Hymenoscyphus pseudoalbidus* is now considered to be a synonym (old name) of *H. fraxinea*.

<sup>9</sup> The Plant Health (England) (Amendment) Order 2012 - Explanatory note

<sup>10</sup> *ibid*

\* Although there are no specific measures on logs and firewood in the legislation, the general prohibition on spreading *H. fraxineus* means that movement is prohibited within Great Britain of logs and firewood from woodlands and other sites with confirmed *H. fraxineus* infection and which have been served with a statutory Plant Health Notice.”<sup>11</sup>

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<sup>11</sup> <http://webarchive.nationalarchives.gov.uk/20180705120715/https://www.forestry.gov.uk/forestry/inf-d-8yrdy7> retrieved on 26th September 2018.

## 5. METHODOLOGY

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- 5.1.1. A walkover survey was undertaken on the 17 September 2018 and a follow up visit was undertaken on the 20 September 2018 to assess the Study Area for signs and symptoms of *H. fraxineus*, their frequency and impact.
- 5.1.2. Visual inspection and gathering information on signs and symptoms of the disease was undertaken. The signs and symptoms were assessed according to guidance from the Forestry Commission and FERA. These are<sup>12</sup>:

- Black lesions on leaves and Rachis -



- Dead, black leaves and leaflets -



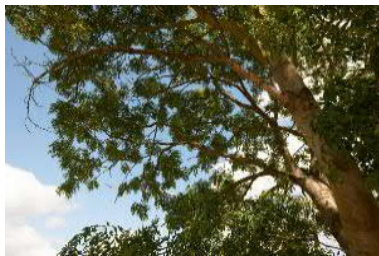
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<sup>12</sup> Images courtesy of the Forestry Commission and FERA at <https://www.forestry.gov.uk/forestry/inf-d-8zlkxsx>

- Branch and stem lesions, often in diamond shape cankers -



- General Crown dieback with 'Pom-Pom' regeneration of crown around dieback -



- 5.1.3. A sign is taken to be a positive identification of a disease such as a fruiting body, whereas a symptom is a visual cue expressed by the host plant such as dead leaves or decay.
- 5.1.4. To assess incidence of disease in the wider area, survey initially progressed along the public right of way (PRoW) on the south side of the river on top of the escarpment from Felton village.
- 5.1.5. Sample plots were laid out in the north west stand to assess ash density using methodology proposed by the Forestry Commission<sup>13</sup>. Due to the steep escarpment of the south bank sample plots were not practical at this location. Due to the very dense young growth and the resulting information on the north-east stand, sample plots were not used.
- 5.1.6. Surrounding areas south, east and west of the site were inspected to look at wider incidence of the disease.
- 5.1.7. As the bridge was largely above crown height, photos were taken to assist with assessing incidence levels.
- 5.1.8. Crowns were assessed based on estimated percentage of live crown to assess susceptibility and impact.

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<sup>13</sup> Matthews, R.W., Mackie, E.D. (2006) *Forest Mensuration, A Handbook for Practitioners*. Forestry Commission. Edinburgh.

5.1.9. Young trees were assessed for approximations of mortality.

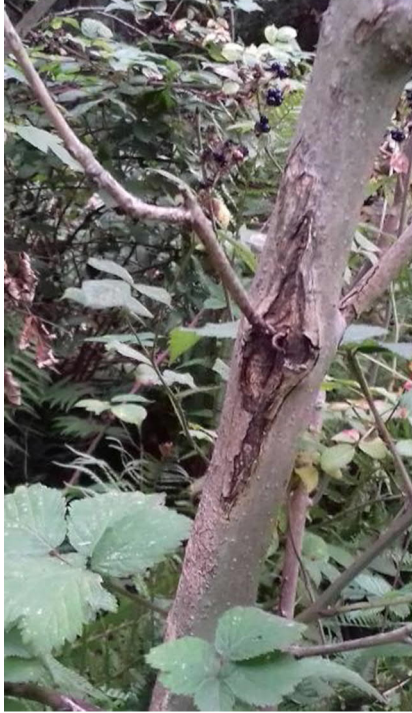
## 5.2. LIMITATIONS

- 5.2.1. All assessment has been undertaken using visual parameters and general estimates. No measurements have been used, therefore all values given are approximate judgements.
- 5.2.2. Differential diagnoses were considered including frost damage, salt spray and *Phytophthora* spp. Other diseases were largely discounted early on due to assessment of symptoms.
- 5.2.3. At the time of survey, Lateral Flow devices were not approved for detection of *C.fraxinea/H.fraxineus*. These devices are still being developed by Nornex Ltd. and are proposed to detect proteins specific to ADB to give a positive confirmation of the disease. Therefore, these devices were not available for use.
- 5.2.4. Due to steep cliff and banks of the south side of the river, assessment was limited to viewing the south edge of the wood and viewing from the bridge.
- 5.2.5. Due to the dense growth on the north east stand, assessment was limited to viewing from above and below the bridge.



## 6. RESULTS

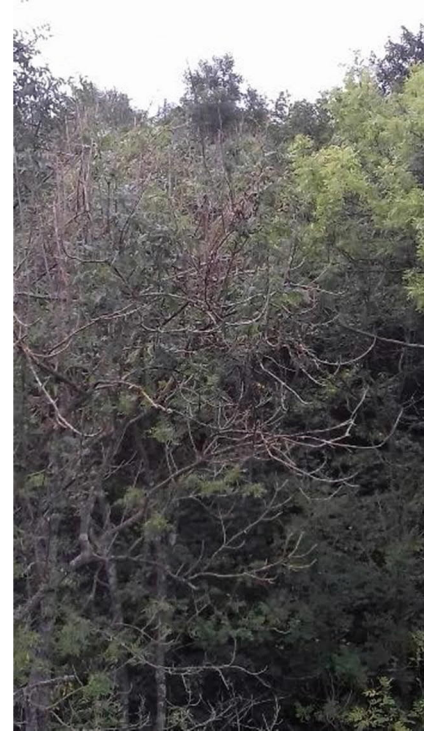
### 6.1. SIGNS AND SYMPTOMS



**Figure 2 Diamond Lesion**



**Figure 4 Probable infected leaves**



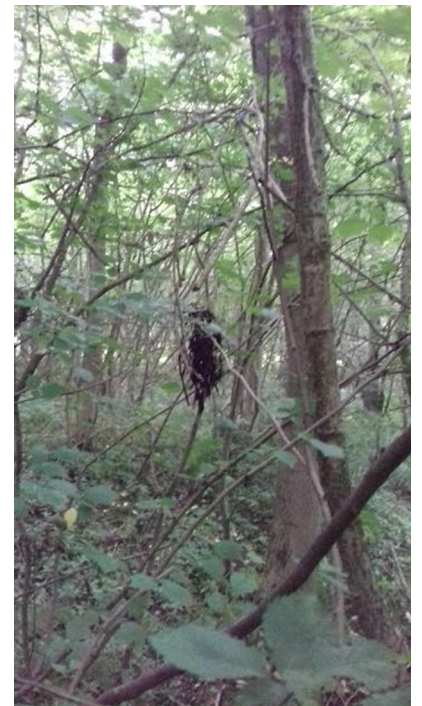
**Figure 6 Repeated dieback**



**Figure 3 Canker around dead twig**

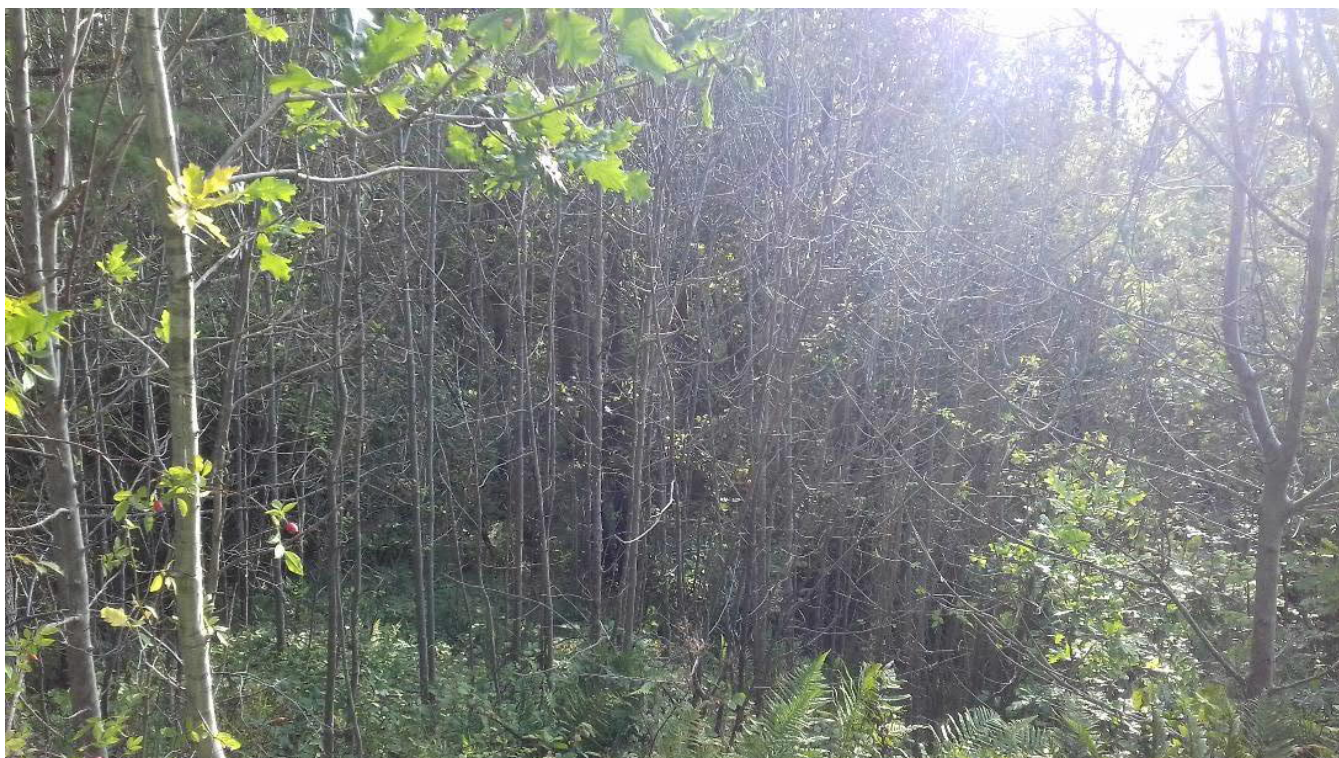


**Figure 5 Dieback**



**Figure 7 Blackened Falling Leaves**





**Figure 8 Dead and Dying Ash Regeneration in North East Stand.**

- 6.1.1. No signs such as fruiting bodies were positively identified during survey but many symptoms were identified within all areas of the site as shown in **Figures 2 to 8**. Images are the author's collected from site.
- 6.1.2. Symptoms were infrequent outside of the study area but present nonetheless. Within the Study Area signs and symptoms were more frequent. In particular, ash seedlings and saplings were dead or dying.

## **6.2. ALTERNATIVE DIAGNOSES**

- 6.2.1. The following alternative diagnoses were considered and discounted:
- Highway salt damage – this was considered however symptoms occurred outside the area of highway where salt spray occurred. Other species were not affected in the same way.
  - Air/traffic pollution – this was discounted for the same reasons as salt damage.
  - *Pytophthora spp.* – No symptoms such as basal canker or decay was identified to suggest *Phytophthora spp.*
  - Wind Exposure – Ash are a hardy species and not subject to exposure damage. No other species were significant expressing symptoms.
  - Frost Damage - Ash are a hardy species and not subject to frost damage. No other species were significantly expressing typical symptoms.
  - Other cankers – Bacterial canker (*Pseudomonas spp.*) and Target Canker (*Nectria spp.*) were not identified and will not cause extensive death of young trees.

- Soil conditions – no soil assessment was undertaken, however consistent dieback over the site was not indicative of soil problems. Again, no other tree species were significantly expressing these symptoms.
- Drought stress – This has a relative short-term effect on the physiology of a tree the symptoms found on site show evidence of persisting for several growing seasons and such has been discounted.

### 6.3. FREQUENCY OF ASH

- 6.3.1. To understand the overall impact to the Study Area, an assessment of the frequency of ash was undertaken. Where a higher density of ash is found it is assumed the impact is greater, both due to the loss of ash trees in the locale but also by providing a more substantial host resource to support greater sporulation and infectious material to other sites.

#### NORTH BANK – EAST

- 6.3.2. Ash were determined to be abundant as young and semi mature trees. It is likely site was cleared in the past 10 or so years as young dense regeneration is coming through. Due to limited access, a visual assessment estimated that 50% or more, by area, of trees within this stand were ash.

#### NORTH BANK – WEST

- 6.3.3. Access with this stand allowed sample plots to be carried out. Total stand area was 0.85 ha. Three plots were laid out by walking from the south-west corner the stand to the north-east corner of the stand and stopping at random to lay the centre of a circular plot of 7 m radius each (154 m<sup>2</sup>). All trees were counted and the stem diameter measured within the plot to get an indication of frequency of Ash. Results are displayed in **Table 1** overleaf. Coppice diameter represent the largest stem.
- 6.3.4. The sample plots demonstrate the ash and sycamore are the dominant species within this stand. The frequency of ash within the sample plots was 12 trees or  $((10000 \text{ m}^2 / (154 \times 3)) \times 12 \text{ trees} =) 260 \text{ trees/ha}$ . Mean stem diameter was 26.7 cm.
- 6.3.5. Where ash regeneration was observed it was typically dead or dying.

#### SOUTH BANK

- 6.3.6. Access to the south bank was limited due to steep terrain preventing access. However, ash frequency was observed to be similar or perhaps slightly less frequent than that on the north bank.

#### OVERALL ASSESSMENT

- 6.3.7. Overall assessment in crown coverage withing Study Area estimates ash crowns occupy 30-50% of the woodland canopy except for the north east stand which may exceed 60% or more.

**Table 1 Sample Plot Results Sorted by Stem Diameter – North West Stand**

Sample Plots									
	1			2			3		
Tree	Species	Diameter	Coppice	Species	Diameter	Coppice	Species	Diameter	Coppice
1	Ash	58		Ash	38		Sycamore	39	
2	Sycamore	38		Oak	35		Sycamore	30	
3	Ash	27		Sycamore	31		Sycamore	27	
4	Ash	24		Ash	25		Ash	22	
5	Ash	19		Hazel	8	Yes	Ash	19	
6	Ash	18		Elm	8	Yes	Ash	17	
7	Hawthorn	15		Hazel	7	Yes	Elm	13	Yes
8	Hawthorn	14		Birch	7		Elm	11	Yes
9	Rowan	14		Hazel	7	Yes	Elm	10	Yes
10	Hazel	11	Yes	Hazel	5	Yes	Sycamore	7	Yes
11	Elm	11		Hazel	5	Yes	Elm	7	
12	Elm	11		Hazel	5	Yes	Hazel	6	Yes
13	Hazel	10	Yes	Hazel	5		Ash	5	Yes
14	Hawthorn	10		Hazel	5		Sycamore	5	Yes
15	Hazel	10	Yes	Hazel	5		Sycamore	5	Yes
16	Hazel	10	Yes	Hazel	5		Hazel	5	Yes
17	Hazel	7	Yes	Hazel	5		Hazel	5	Yes
18				Hazel	5		Hazel	4	Yes
19				Hazel	5		Elm	4	
20				Hazel	5		Hazel	4	
21				Hazel	5		Elm	3	Yes
22				Hazel	5		Elm	3	Yes
23				Hazel	5		Hazel	3	

Sample Plots									
	1			2			3		
24				Hazel	5		Ash	3	Yes
25				Hazel	5		Sycamore	3	Yes
26				Hazel	5		Sycamore	2	Yes
27				Hawthorn	4				



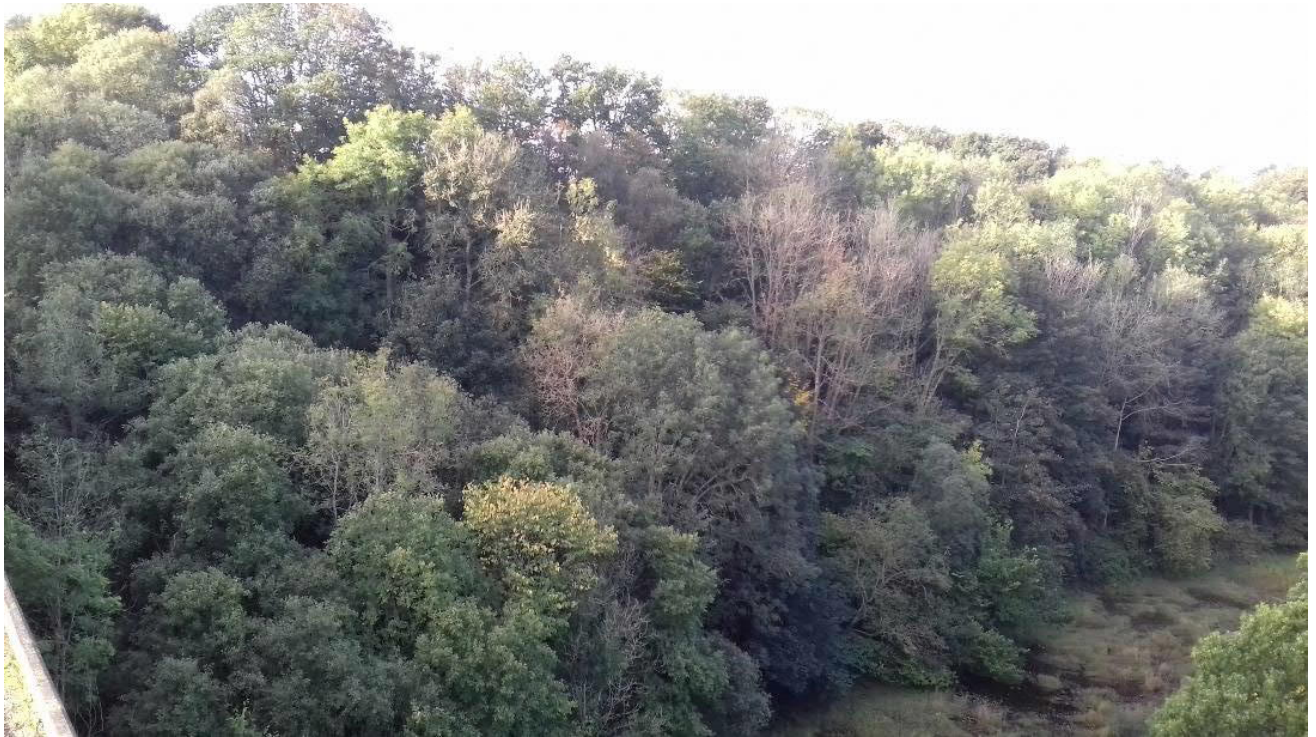
## 6.4. INCIDENCE AND IMPACT

- 6.4.1. Having determined the presence of ADB is highly probable and the cause of dieback in ash trees, the survey observed the incidence of the disease. The crown assessment shown at **Figures 9** and **10** illustrates that most trees are affected by the disease. In particular **Figure 11** and **Figure 12** demonstrate the impact on younger trees where most trees are in some phase of death or decline.
- 6.4.2. Incidence can be assessed percentage of host species trees affected. Impact is assessed visually by crown transparency where a dense healthy crown transparency may be less than 20%. As leaves fall light can be seen through the crown and transparency increases. Where no leaves are present transparency is more than 90%.
- 6.4.3. Based on visual assessment on site, and use of **Figure 9** to **Figure 13**, incidence of disease is estimated to be more than 80% within the ash population and crown transparency commonly exceeded 80% also.

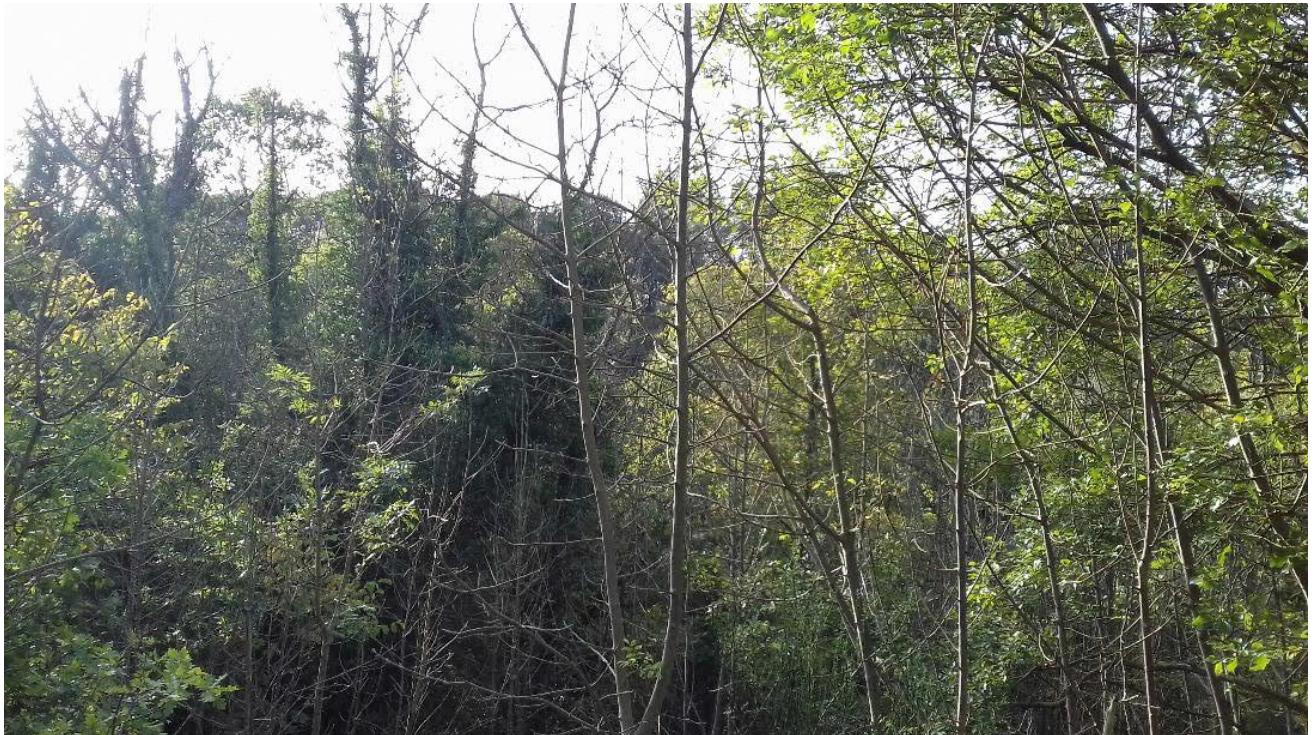


**Figure 9 North West Stand**





**Figure 10 South West Stand**



**Figure 11 North East Stand - Photo at Northern Boundary**





**Figure 12 North East Stand from under Bridge**



**Figure 13 North East Stand from Bridge**





**Figure 14 Foreground North East Stand, Distance South East Stand.**



**Figure 15 South East Stand from bridge**

## 7. DISCUSSION

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- 7.1.1. The information gathered during the survey has determined that *C. fraxinea/H. fraxineus* is highly likely to be the cause of ash dieback and mortality within the Study Area.
- 7.1.2. The impact of the disease within the Study Area on the population of ash is determined to be high. However, as the woodland areas are made up of mixed species the impact to the woodland overall is perhaps moderate and it is likely the woodland canopy will evolve in the absence of ash.
- 7.1.3. The impact of the young trees and regeneration of ash is very high, particularly in the north east stand.
- 7.1.4. Some trees did show signs of not being affected whereas many mature trees were showing signs of recurrent dieback and regeneration. This recurrent growth is perhaps in its third or fourth growing season. On this basis, it is not expected that ash will continue to be a dominant species in the medium to long term and it is likely other species, such as sycamore, will increase in dominance. Where natural selection isolates partially resistance species there is always the possibility that some ash trees will regenerate and carry resistance on. However, this will be over many decades or even centuries.
- 7.1.5. Survey of ash plantations for the wider Scheme Arboricultural Survey outside the Study Area identified significant mortality lending weight to the view the establishment of ash in mitigation planting will be challenging if not impossible until additional controls are found.



## 8. MANAGEMENT

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- 8.1.1. Provisional biosecurity controls are identified below to prevent the spread of the disease in contravention of legislation.
- 8.1.2. Felling is not recommended purely for sanitation purposes, however, where trees become hazardous due to their condition they should be felled, with all material left on site or burnt.
- 8.1.3. Where trees are felled to allow construction, processing should follow prescribed biosecurity measures.
- 8.1.4. The soil throughout the Study Area will be contaminated with material that can potentially aid the spread of the disease and consequently cannot be removed from site nor can plants or arisings be transported from site without approval from the Forestry Commission and/or Defra and its agencies.
- 8.1.5. Where site clearance is undertaken for access or construction it is recommended that any ash trees felled or pruned are chipped on site. Where volumes of chip left on site exceed Environment Agency waste limits or there is a risk of contamination of water, the environment agency should be consulted.
- 8.1.6. Where allowable volumes of chip are exceeded or adversely impact on the local ecology it is possible that burning of ash material may be required. The burn location must remain within the site – use of an ‘air curtain burner’ will incinerate the disease. Checking with the local authority to determine any smoke free zones or other constraints is recommended.
- 8.1.7. Dropping ash material into the river may act as a long distance vector and consequently all material should be felled away from the river and processed as far from the river as possible. Wood chip piles should be located so as not to be spread by construction staff or traffic or to be within the high water / spate limits of the river.
- 8.1.8. Sanitation of footwear and vehicles may be specified by the Forestry commission and should be adhered to.

## 8.2. PROJECT CONSTRAINTS

- 8.2.1. Translocation of soil for ancient woodland mitigation will need Forestry Commission and/or Defra licencing.
- 8.2.2. Within woodland mitigation planting, ash is not currently recommended due to its susceptibility at a young age. Replacement species should be matched to the soil type, topography and light conditions for the site while also providing as many of the ecological attributes such as litter pH,

associated invertebrates, associated with ash as possible. Detailed guidance on alternative species to ash has been published by Natural England<sup>14</sup> and is summarised by the Forestry Commission<sup>15</sup>.

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<sup>14</sup> Mitchell et al. (2014) Assessing and addressing the impacts of ash dieback on UK woodlands and trees of conservation importance (Phase 2)

<sup>15</sup> Broome and Mitchell (2017) *Ecological impacts of ash dieback and mitigation methods* retrieved from [https://www.forestry.gov.uk/pdf/FCRN029.pdf/\\$FILE/FCRN029.pdf](https://www.forestry.gov.uk/pdf/FCRN029.pdf/$FILE/FCRN029.pdf) on 27th September 2018.

## 9. REFERENCES

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### Legal References:

Legislation retrieved from <http://www.legislation.gov.uk/> :

The Plant Health Act 1967

The Plant Health (Forestry) Order 2005(S.I. 2005/2517)

The Plant Health (England) (Amendment) Order 2012

The Plant Health (Forestry) (Amendment) Order 2012 2012 No. 2707

Plant Health (England) Order 2005 (S.I. 2005/2530)

### Internet Resource:

UK Plant Health Risk Register at

<https://secure.fera.defra.gov.uk/phiw/riskRegister/viewPestRisks.cfm?cslref=26345>

<https://www.forestry.gov.uk/ashdieback> and associated pages.

<https://www.observatree.org.uk/portal/ash-dieback/>

### Books and Articles:

B.C. Ministry of Forests. 2001. Generic Forest Health Surveys Guidebook. 2nd ed. For. Prac. Br., Min. For., Victoria, B.C. Forest Practices Code of British Columbia Guidebook.

Broome and Mitchell (2017) Ecological impacts of ash dieback and mitigation methods retrieved from [https://www.forestry.gov.uk/pdf/FCRN029.pdf/\\$FILE/FCRN029.pdf](https://www.forestry.gov.uk/pdf/FCRN029.pdf/$FILE/FCRN029.pdf) on 27th September 2018.

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Mitchell, R.J., Broome, A., Harmer, R., Beaton, J.K., Bellamy, P.E., Brooker, R.W., Ray, D., Ellis, C.J., Hester, A.J., Hodgetts, N.G., Iason, G.R., Littlewood, N.A., Mackinnon, M., Pakeman, R., Pozsgai, G., Ramsey, S., Riach, D., Stockan, J.A., Taylor, A.F.S. & Woodward, S. 2014. Assessing and addressing the impacts of ash dieback on UK woodlands and trees of conservation importance (Phase 2). Natural England Commissioned Reports, Number 151

Haycock, G. (2009) River Coquet and Coquet Valley Woodlands SSSI, Woodland NVC and Common Standards Monitoring. Report by Thomson Ecology, Otley North Yorkshire on behalf of Natural England.

# Appendix A



PLANT HEALTH ACT 1967 S3

### 3 Control of spread of pests in Great Britain.

(1) A competent authority may from time to time make such orders as the authority thinks expedient [F7or called for by any [F4EU] obligation] for preventing the spread of pests in Great Britain [F8or the conveyance of pests by articles exported from Great Britain].

(2) The orders may direct or authorise—

(a) the removal [F9treatment] or destruction of any crop, or any seed, plant or part thereof [F10or any container, wrapping or other article], or any substance, which has on it, or is infected with, a pest, or to or by means of which a pest is in the opinion of the competent authority likely to spread;

(b) the entering on any land [F10or elsewhere] for the purpose of any removal [F9treatment] or destruction authorised by the orders, or any examination or inquiry so authorised, or for any other purpose of the orders.

(3) The orders may prohibit the selling or exposing or offering for sale, or the keeping, of living specimens of a pest, or the distribution in any manner of such specimens.

[F11(4) An order made by a competent authority under this section may provide that a person guilty of an offence against the order be liable on summary conviction to a fine of an amount not exceeding level 5 on the standard scale, F12. . . or not exceeding a lesser amount.

(4A) An order so made for preventing the spread in Great Britain of the Colorado beetle ( *Leptinotarsa decemlineata* ) (Say)) may provide that a person guilty of an offence against the order relating to the keeping of living specimens of the beetle (in any stage of existence), or to the distribution in any manner of such specimens, shall be liable on summary conviction to imprisonment for not more than three months, as well as, or as an alternative to, a fine under subsection (4) above. ]

(5) Proceedings for an offence against an order under this section may, . . . F13be instituted at any time within twelve months from the day on which the alleged offence was committed.



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