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Application Site area for DC/BESS

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FOR PLANNING PURPOSE ONLY

KEY

SITE BOUNDARY

Issue	Date	Purpose of Issue	Drawn	Checked
P06	08.09.25	RLB ADJUSTMENT	SR	SH
P05	04.09.25	COMMENTS AMEDNED	SR	SH
P04	03.09.25	COMMENTS AMEDNED	SR	SH
P03	28.08.25	RLB TEMPLATE AMENDMENT	SR	SH
P02	14.08.25	RLB AMENDED NEAR HITHERMOOR STREAM ROUNDABOUT	SR	CB
P01	30.07.25	FOR INFORMATION	SR	CB

0 1 2 km

NORTH

Client: JUNIPER ENERGY LIMITED

Drawing Title:
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RED LINE BOUNDARY
SITE LOCATION PLAN INSERT MAP OVERVIEW

Drawn:	Date:	Checked:	Date:
SR	30.07.2025	CB	30.07.2025

Service Order Number: -

Job Ref: P1308

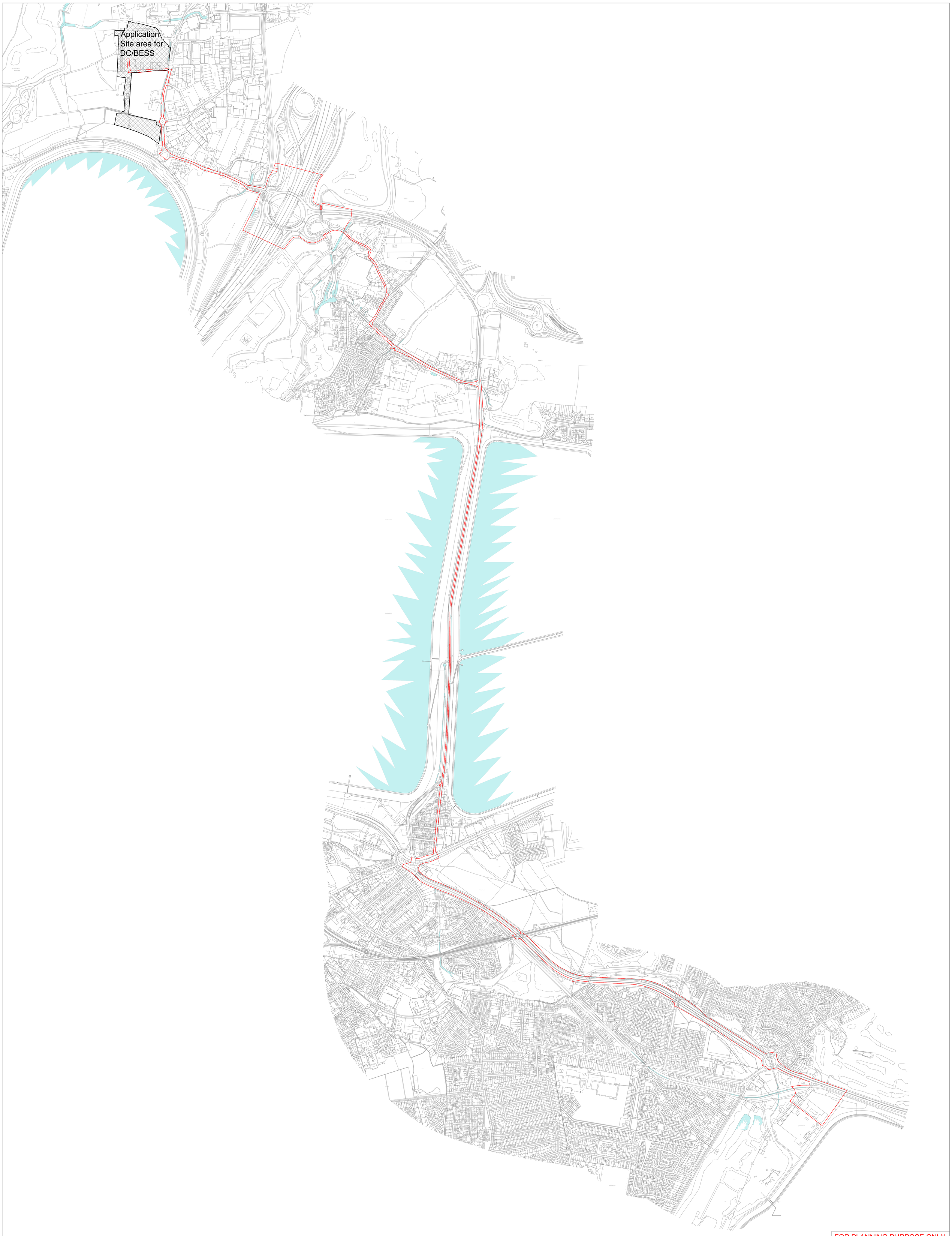
Scale: 1:2500 @ A0

Drawing Number: JSM-RL-EDF-24-0731

Page Number: 2 OF 12

Issue: P06

JSM Group
Sterling House,
Mutton Lane, Potters Bar,
Hertfordshire, EN6 3AR
T: 01992 788 019



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NORTH

Client: JUNIPER ENERGY LIMITED

Drawing Title:
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RED LINE BOUNDARY
SITE LOCATION PLAN

Drawn:	Date:	Checked:	Date:
SR	30.07.2025	CB	30.07.2025

Service Order Number: -

Job Ref: P1308

Scale: 1:2500 @ A0

Drawing Number: JSM-RL-EDF-24-0731

Page Number: 1 OF 12

Issue: P06

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JSM Group
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Insert 1

Application Site area for DC/BESS

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SITE BOUNDARY

Issue	Date	Purpose of Issue	Drawn	Checked
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Service Order Number: -

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Issue: P06

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FOR PLANNING PURPOSE ONLY

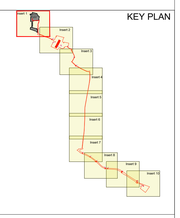
KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

Application Site area for DC/BESS

KEY PLAN



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JSM Group
Sterling House,
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Client:
JUNIPER ENERGY LIMITED

Drawing Title:
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Drawing Number: JSM-RL-EDF-24-0731
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NORTH

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KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

L-1

L-2

L-3

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L-5

L-6

L-7

KEY PLAN

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P01	30.07.25	FOR INFORMATION	SR	CB

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Client:
JUNIPER ENERGY LIMITED

Drawing Title:
PLANNING DRAWING
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Job Ref: P1308
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Drawing Number: JSM-RL-EDF-24-0731
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Issue: P06

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NORTH

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KEY

SITE BOUNDARY

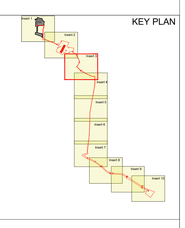
INFRASTRUCTURE FEATURE

L-7

L-8

L-9

KEY PLAN



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P01	30.07.25	FOR INFORMATION	SR	CB

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Hertfordshire, EN6 3AR
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Client:
JUNIPER ENERGY LIMITED

Drawing Title:
PLANNING DRAWING
RED LINE BOUNDARY
SITE LOCATION PLAN INSERT 3

Drawn:	Date:	Checked:	Date:
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Service Order Number:
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Job Ref:	Scale:
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Drawing Number: JSM-RL-EDF-24-0731
Page Number: 5 OF 12
Issue: P06

0 75 150m

NORTH

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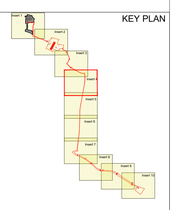
FOR PLANNING PURPOSE ONLY

KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

KEY PLAN



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Client:
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Drawing Title:
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SITE LOCATION PLAN INSERT 4

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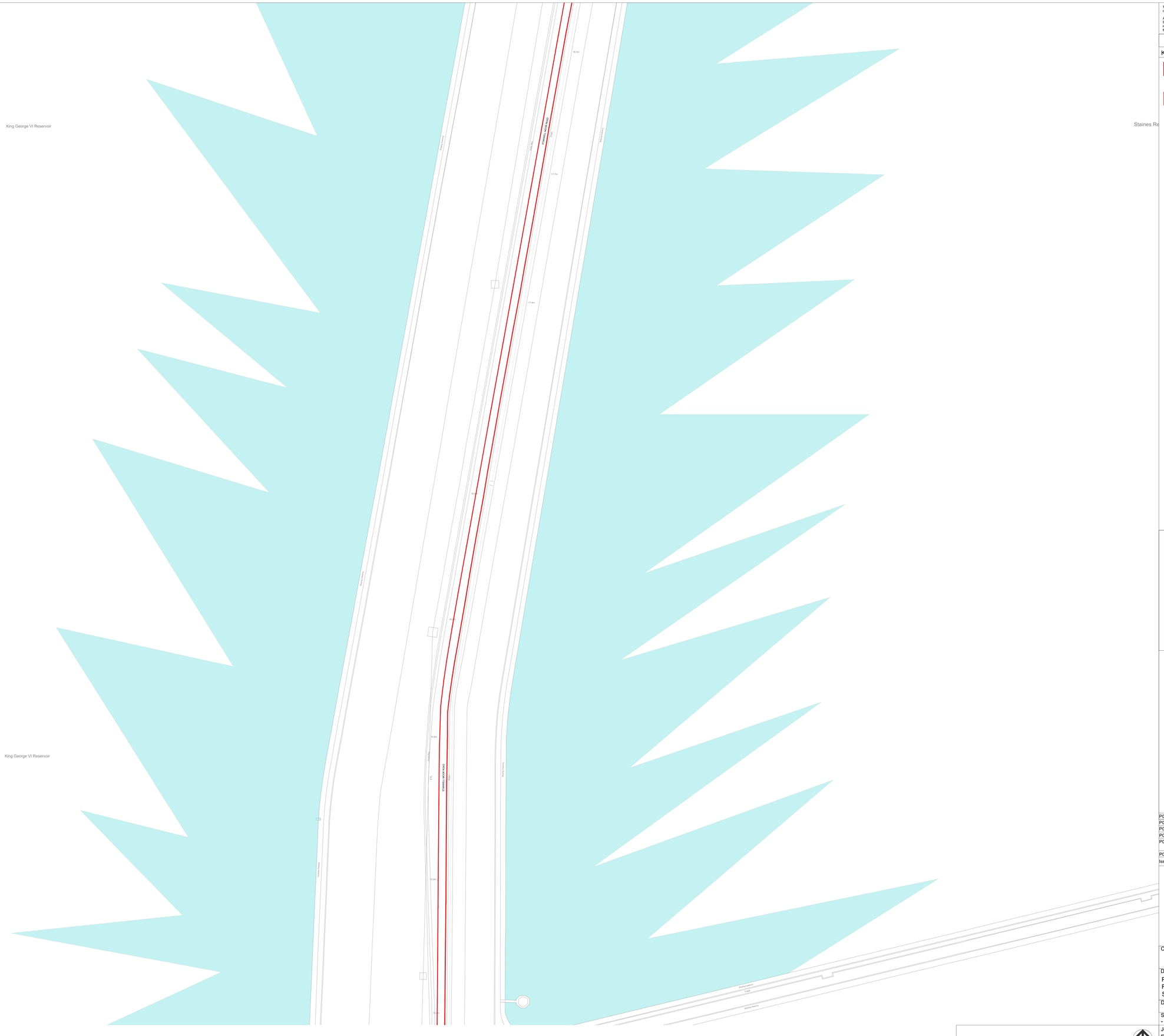

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KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

KEY PLAN

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P01	30.07.25	FOR INFORMATION	SR	CB

JSM Group
Sterling House,
Mutton Lane, Potters Bar,
Hertfordshire, EN6 3AR
T: 01992 788 019

Client:
JUNIPER ENERGY LIMITED

Drawing Title:
PLANNING DRAWING
RED LINE BOUNDARY
SITE LOCATION PLAN INSERT 5

Drawn:	Date:	Checked:	Date:
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Service Order Number:
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NORTH

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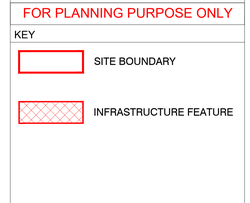
FOR PLANNING PURPOSE ONLY

KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

KEY PLAN



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JSM Group
Sterling House,
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Hertfordshire, EN6 3AR
T: 01992 788 019

Client:
JUNIPER ENERGY LIMITED

Drawing Title:
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SITE LOCATION PLAN INSERT 6

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NORTH

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Drawing Number: JSM-RL-EDF-24-0731
Page Number: 8 OF 12
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KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

L-10

L-11

L-12

KEY PLAN

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Hertfordshire, EN6 3AR
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Client:
JUNIPER ENERGY LIMITED

Drawing Title:
132kV Cable Route Scheme
Feasibility Study
Red Line Drawing

Drawn:	Date:	Checked:	Date:
SR	30.07.2025	CB	30.07.2025

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Drawing Number: JSM-RL-EDF-24-0731
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FOR PLANNING PURPOSE ONLY

KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

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KEY PLAN

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Client:
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Drawing Title:
132kV Cable Route Scheme
Feasibility Study
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Job Ref:
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JSM-RL-EDF-24-0731

Page Number:
10 OF 12

Issue
P06

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Client:
JUNIPER ENERGY LIMITED

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KEY

SITE BOUNDARY

INFRASTRUCTURE FEATURE

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KEY PLAN

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Client:
JUNIPER ENERGY LIMITED

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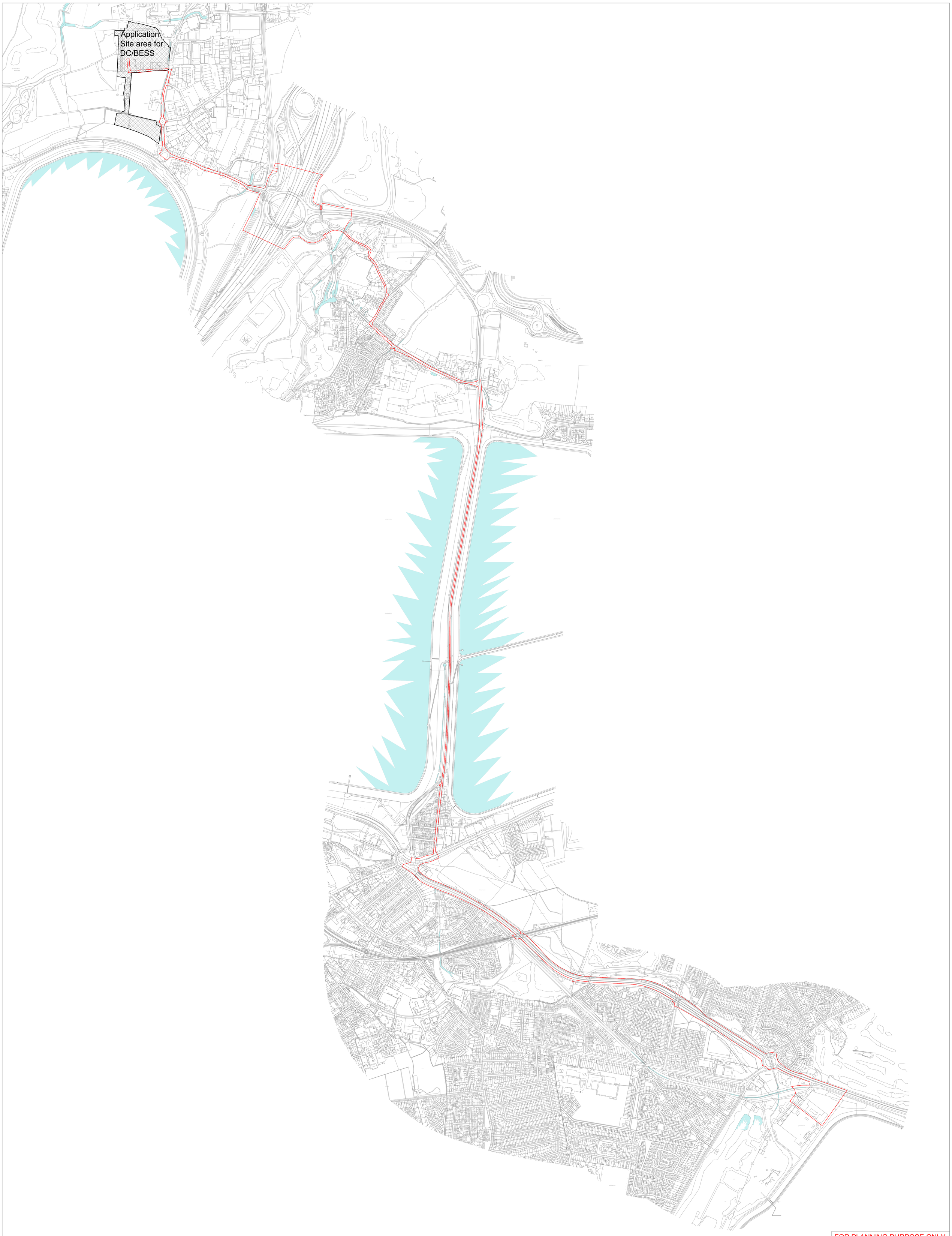

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Client: JUNIPER ENERGY LIMITED

Drawing Title:
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RED LINE BOUNDARY
SITE LOCATION PLAN

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Issue: P06

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Sterling House,
Mutton Lane, Potters Bar,
Hertfordshire, EN6 3AR
T: 01992 788 019

Manor Farm Cables - Laleham Substation Corridor

Arboricultural Baseline Report & Impact Assessment

Juniper Energy Ltd

Prepared by:

SLR Consulting Limited

Mountbatten House, 1 Grosvenor Square,
Southampton SO15 2JU

SLR Project No.: 402.065673.00001

3 September 2025

Revision: 02

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
01	1 September 2025	AG	MMS	RB
02	3 September 2025	RB	MMS	RB

Basis of Report

This document has been prepared by SLR Consulting Limited (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Juniper Energy Limited (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

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Executive Summary

On behalf of Juniper Energy Ltd, SLR Consulting Limited has carried out a Tree Survey in accordance with BS 5837:2012 'Trees in Relation to Design, Demolition and Construction-Recommendations' (BS 5837:2012) on the 22nd May, 18-20th June and 12th-13th August 2025.

The survey records all trees within and adjacent to the site, recording a number of parameters including species, crown spread and Root Protection Area (RPA).

The RPA of any given tree is the area of ground around that tree which should not be disturbed by excavation, compaction, changes in level or other construction/demolition operations. The extent of the RPA is calculated in accordance with BS 5837:2012 and is an important metric for understanding the impact a proposal will have on tree removal and retention and how to protect those trees retained.

The survey recorded:

- Sixty nine individual trees (8 category A, twenty two category B and thirty nine category C).
- Sixty eight tree groups (3 category A, twenty six category B, thirty eight category C and 1 category U).
- Three hedgerows.

A single Area TPO (Spelthorne Borough Council reference 1/7/1964) is located adjacent to the application site, at Horton Road/ Stanwell Moor Road. This is illustrated on the Tree Constraints Plan and Tree Retention and Removal Plan and includes G66. An Area TPO protects trees within a demarked area that were present at the time the TPO was confirmed (trees younger than the date of the TPO are not covered).

No areas along the proposed route are part of a Conservation Area.

No part of site is listed in the Ancient Woodland Inventory

No ancient and/or veteran trees are present within or adjacent to the application site.

No trees are to be removed.

Where works are required within the RPA of trees, appropriate construction methods, such as Hydraulic Directional Drilling (HDD) or hand digging trenches will be used.

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Appendices

Appendix A **Tree Survey Schedule**
Appendix B **Tree Constraints Plans**
Appendix C **Tree Retention and Removals Plan**
Appendix D **Preliminary Arboricultural Method Statement**

Acronyms and Abbreviations

AIA	Arboricultural Impact Assessment
AMS	Arboricultural Method Statement
CEZ	Construction Exclusion Zone
DBH	Diameter at Breast Height
RPA	Root Protection Area
TCP	Tree Constraints Plan
TPO	Tree Preservation Order
TPF	Tree Protection Fencing
TPP	Tree Protection Plan

Glossary of Arboricultural Terms

Ancient tree: An ancient tree is exceptionally valuable attributed with great age/size/cultural heritage/biodiversity value as a result of significant wood decay and the habitat created from the ageing process. All ancient trees are veteran trees with very few trees of any species reaching the ancient life-stage.

Bark: A term usually applied to all the tissues of a woody plant lying outside the vascular cambium.

Buttress zone: The region at the base of a tree where the major lateral roots join the stem, with buttress-like formations on the upper side of their junction.

Canker: A lesion formed by the death of bark and cambium often due to fungal or bacterial infection.

Condition: An indication of the physiological vitality of the tree. Where the term ‘condition’ is used in a report, it should not be taken as an indication of the stability of the tree.

Conservation Area: A designated area that requires notice (currently six weeks) to be given to the local planning authority prior to the commencement of any tree works.

Crown/Canopy: The main foliage bearing section of the tree.

Crown lifting: A term used to describe the removal of limbs and small branches to a specified height above ground level.

Deadwood: Branch or stem wood bearing no live tissues. Retention of deadwood provides valuable habitat for a wide range of species and seldom represents a threat to the health of the tree. Removal of deadwood can result in the ingress of decay to otherwise sound tissues and climbing operations to access deadwood can cause significant damage to a tree. Removal of deadwood is generally recommended only where it represents an unacceptable level of hazard.

Dieback: The death of parts of a woody plant, starting at shoot-tips or root-tips.

Habit: The overall growth characteristics, shape of the tree and branch structure.

Hazard beam: An upwardly curved part of a tree in which strong internal stresses may occur without being reduced by adaptive growth; prone to longitudinal splitting.

Minor deadwood: Dead wood of a diameter less than 25mm and or unlikely to cause significant harm or damage upon impact with a target beneath the tree.

Notable: Notable trees are usually mature trees which may stand out in the local environment because they are large in comparison with other trees around them

Pollarding: is the removal of the tree canopy, back to the stem or primary branches. Pollarding may involve the removal of the entire canopy in one operation or may be phased over several years. The period of safe retention of trees having been pollarded varies with species and individuals. It is usually necessary to re-pollard on a regular basis, annually in the case of some species.

Primary branch: A major branch, generally having a basal diameter greater than 0.25 x stem diameter.

Pruning: The removal or cutting back of twigs or branches, sometimes applied to twigs or small branches only, but often used to describe most activities involving the cutting of trees or shrubs.

Snag/stub: In woody plants, a portion of a cut or broken stem, branch or root which extends beyond any growing-point or dormant bud; a snag usually tends to die back to the nearest growing point.

Stem/s: The main supporting structure/s, from ground level up to the first major division into branches.

Topping: In arboriculture it is the removal of the crown of a tree, or of a major proportion of it.

Veteran tree: A loosely defined term for an old specimen that is of interest biologically, culturally or aesthetically because of its age, size or condition and which has usually lived longer than the typical upper age range for the species concerned.

1.0 Introduction

1.1 Purpose of the report

On behalf of Juniper Energy Ltd, SLR Consulting Limited has undertaken a Tree Survey of the Laleham grid Corridor route. The Tree Survey Report has been produced with reference to 'BS 5837:2012 – Trees in relation to design, demolition and construction – Recommendations' (BSI, 2012).

1.2 Methodology and Scope

The tree survey was conducted in line with the methodology detailed within BS 5837:2012 and included all trees within the proposed development boundary and adjacent off-site trees where there is potential for development within the site to cause direct impact. The data recorded is shown in Appendix A (Tree Survey Schedule) and methodology used is summarised in Tables A-1 (Tree Survey Schedule Key) and A-2 (Cascade Chart of Tree Quality Assessment (Taken from BS 5837:2012)).

The tree survey data and has been used to produce Tree Constraints Plans (TCP) (Appendix B). This depicts the Root Protection Area (RPA) and canopy constraints posed by the arboricultural features within the survey area.

Trees are recorded as the following arboricultural features: individual trees, tree groups, woodlands or hedgerows. In accordance with paragraph 4.4.2.3 of BS 5837:2012, trees that "*form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture)* have been recorded as groups.

The locations of all arboricultural features illustrated on the Tree Constraints Plan (TCP) (Appendix B) are based on a combination of Bluesky's National Tree Map (NTM)[1] data and where required augmented with GPS data collected with aa Garmin GLO 2 Global Positioning System (GPS), with an accuracy of approximately +/- 3 metres, and Bluesky's National Tree Map (NTM) data. The NTM identifies trees over 3 metres in height and estimates canopy extents using proprietary algorithms that process high-resolution aerial photography, surface and terrain data, and colour infrared imagery. While this provides a helpful representation of tree locations and dimensions, all mapped features should be regarded as indicative only and confirmed by a detailed topographical survey where greater positional accuracy is required.

1.2.1 Categorisation of Arboricultural Features

In accordance with BS 5837:2012, all arboricultural features have been categorised as A, B, C or U, categories A to C are also categorised for their quality within the three subcategories of 1 (Arboricultural), 2 (Landscape) and/or 3 (Cultural). A description of each category can be found in Table A-2 (Cascade Chart of Tree Quality Assessment) of Appendix A.

The trees illustrated by the TCP are presented in line with 'Table 2: Identification of tree categories' of BS 5837:2012, reproduced below.

[1] The National Tree Map (NTM) is a comprehensive database of location, height and canopy/crown extents for every single tree 3m and above in height. This has been created using the most up-to-date high resolution national aerial photography, accurate terrain and surface data, and colour infrared imagery.

Table 1-1: Colour Coding of BS 5837:2012 Categories

Category	Colour	RGB Code
U	Dark red	127-000-000
A	Light green	000-255-000
B	Mid blue	000-000-255
C	Grey	091-091-091

1.2.2 Root Protection Areas (RPA)

The RPA provides a notional circular buffer around a tree, based on the stem diameter measured at 1.5m (also known as Diameter at Breast Height (DBH)**)** above ground level in accordance with Annex C of BS 5837:2012.

BS 5837:2012 defines the RPA as representing "*the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority."*

However, this is not necessarily representative of the full extent of a tree's root system e.g., the roots may extend beyond the RPA boundary on one side and remain inside it on the opposite, dependent on ground conditions and/or other pre-existing site conditions. The root network extent is dependent on many factors including species, age, soil conditions, topography and exposure etc.

BS 5837 acknowledges that the following factors will influence the extent of root growth and subsequent RPA:

- past or existing site conditions, e.g. the presence of roads, structures and underground apparatus.
- topography and drainage.
- soil type and structure.
- the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

The RPA illustrated for tree groups and woodland have been calculated based on the maximum stem diameter taken for tree groups, and the maximum stem diameter for trees along the edge of woodland.

In accordance with paragraph 5.2.1 of BS 5837:2012, the TCP illustrates the RPA of category A, B and C trees only. It should be noted that although category U trees are defined as "*Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years*" they may provide conservation, heritage or landscape value, and be desirable to retain where issues concerning their safety can be appropriately managed.

The RPA for trees identified as Veteran have been calculated in accordance with current standing advice (Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK) which states: "*the buffer zone should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5 metres from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter.*"

In accordance with the above standing advice, a 15m RPA has been applied to all ancient woodland.

1.3 Limitations and Assumptions

Limitations to the tree survey include the following key points:

- No soil survey data is included in this report.
- No data for individual trees within surveyed groups was recorded. An exception to this is when a tree was deemed notable within a group.
- Where access was restricted, tree measurement data has been estimated. This has been indicated within the Tree Survey Schedule (Appendix A) with the use of an '#' next to the tree number.

Due to health and safety risks it was not possible to record survey data from a number of locations adjacent to the application boundary, these areas include (but are not limited to): Poyle Interchange, the A3044 Stanwell Moor Road and the A308 Staines Bypass.

- The health and condition of trees can change rapidly and all trees, even healthy ones, are at risk from unpredictable climatic and man-made events. This report is based on the observed health and structural condition of the trees at the time of survey by suitably qualified inspectors. The health, condition and safety of trees should be checked on a basis commensurate with the level of risk and preferably on an annual basis, as recommended in Common Sense Risk Management of Trees (National Tree Safety Group, 2024). The tree survey conducted for this report is not a tree health and safety survey and should not be used as such.
- A search for symptoms of disease, parasites, or fungi that may be affecting trees was undertaken as part of the survey and noted where identified. However, symptoms are not always apparent, therefore it is possible that trees affected by disease / parasites / fungi are present within the survey area but could not be identified by surveyor.
- Where the main trunks of trees have limited access due to dense vegetation, epicormic growth or are ivy (*Hedera helix*) clad, a full inspection of the tree(s) was not possible. As such, the category grading for these trees should be considered provisional. Further inspection may be necessary following the removal of the obstruction.
- Where woodlands or large groups of trees are present, the survey has been limited to those trees within influencing distance of the site boundary that could potentially be affected by the proposed development. This would typically include trees within 15 metres of the site boundary. However, in line with best practice, ancient or veteran trees located beyond this distance have also been considered where there is potential for direct or indirect impacts.
- The identification of veteran trees is limited to the definition within NPPF Annex 2 only. Trees meeting the definition of 'veteran' as defined within the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024 are not recorded.

2.0 General Arboricultural Principles

2.1 General Principles

Trees are dynamic living organisms which provide essential benefits to society and the wider environment. Any proposed development with the potential to impact on trees must take into consideration the value of trees on site, the impact of any proposed activity, and any potential future conflicts on the site. Suitable measures to safeguard retained trees or mitigate the loss of trees (to be removed) will need to be fully considered and may be subject to a condition of planning consent.

Tree branches and roots frequently grow across site boundaries and off-site trees can pose a constraint and should be carefully considered when assessing the developable space within a site.

2.2 Below Ground Constraints

Tree roots and the soil environment in which they grow need to be protected if the tree is to be retained. Trees grow in association with fungi and other soil organisms which are of key importance to tree health. Roots are essential for anchorage, the uptake of water and nutrients, and the storage of energy (carbohydrates) for the future growth and function of the tree.

Roots can be damaged by physical severance or wounding (e.g., following excavation of the soil) which can lead to the development of decay and a decline in vitality and/or instability. Raising the soil level can compact the soil, and create soil unsuitable for root growth. Toxic materials discharged into the soil (such as cement based aggregates, fuel and chemicals) can lead to root death and dysfunction. Soils can be compacted to levels inhospitable to tree growth with even a single pass of machinery, regular pedestrian traffic or the storage of plant and materials. Relieving compaction can be problematic and may require costly remedial works. Changes in drainage/water levels can also have significant long-term impacts for tree health.

The effects of these incursions may take many years to manifest, with a resulting decline in amenity value and potentially the death or failure of the tree. It should be noted that older trees are particularly sensitive to damage and changes in conditions.

The RPA is a notional area considered to be the minimum zone that must be protected to avoid any adverse impacts on retained trees. This area is deemed to be particularly important for tree stability, growth, function and health. However, roots may extend far greater distances, with the distribution of the root system relating directly to the availability of suitable conditions for growth (namely oxygen, water and nutrients). It is accepted that tree roots grow predominantly near the surface, with 80-90% being located in the upper 60cm of soil, however, roots may develop at deeper levels where conditions allow.

The RPA of the existing tree stock is an important material consideration when assessing site constraints and planning development activities. The default position should be that all development, including any associated services will occur outside the RPAs of retained trees. Where this is unavoidable, it may be appropriate to use special measures to install structures, services or surfacing within RPAs which allow the protection of roots and soil structure which are essential for tree growth and keep any incursion to a minimum. Further steps to improve or increase the useable rooting area available to the tree may also be required.

2.3 Soils

On shrinkable clay soil, tree growth can lead to the differential movement of structures as moisture is removed from the soil during the growing season. Soils must be carefully

assessed. Where trees which predate existing structures are to be removed, this can result in heave as the soils are re-wet.

The advice of a suitably qualified engineer should be obtained to inform any potential issue of heave. Specific advice in relation to this issue is beyond the scope of this report.

2.4 Above Ground Constraints

Tree stems and branches can restrict available space on a development site. Damage or wounding (including excessive pruning) can significantly reduce the amenity contribution of the tree and may lead to the development of dysfunction and decay, with significant long-term implications for tree health. The future impact of existing trees should be carefully considered, including individual species characteristics (such as potential future size, fruit fall, shade etc.) and how the tree will interact with any proposed development and future land use. Annual tree growth can lead to direct damage if stems/branches (or roots) come into physical contact with structures and this should also be taken into consideration.

2.5 Trees and Risk in the Context of Development

Tree owners/managers have a legal duty to prevent foreseeable harm. It is generally accepted that this duty can be fulfilled by undertaking proactive inspections of significant trees to identify obvious defects and by taking appropriate remedial action or gaining further advice as appropriate.

Further guidance is available from the National Tree Safety Group (https://ntsgroup.org.uk/)

The tree survey carried out as the basis of this report is primarily for planning purposes, focusing on the quality and benefits of the trees and is not specifically designed to assess the safety of the trees identified. However, when obvious issues have been identified recommendations have been included in the Tree Survey Schedule (Appendix A).

The Construction (Design and Management) Regulations (2015) states that developers and contractors have responsibilities for health and safety as a result of their actions. Should trees be left in an unstable or hazardous condition the Health and Safety Executive (HSE) could seek to prosecute those responsible along with the potential for further civil claims for damages.

2.6 Trees and Wildlife

Full consideration must be given to the presence of species protected under the Wildlife and Countryside Act (1981 - as amended), the Countryside Rights of Way Act (2000) and the Conservation of Habitats and Species Regulations (2017), in particular the presence of bats and nesting birds. It is recommended that wherever possible, significant tree/hedge works take place outside of the typical bird nesting season, typically March to August, but this may vary regionally and advice from a suitably qualified ecologist should be sought. The advice of a suitably qualified ecologist is also recommended in relation to any potential impacts on protected species.

3.0 Planning and Legal Considerations

3.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied. In respect to trees, the NPPF includes the following paragraphs

Paragraph 187 states that '*Planning policies and decisions should contribute to and enhance the natural and local environment by:*

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

Paragraph 193 states: '*When determining planning applications, local planning authorities should apply the following principles:*

c) 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 exceptional reasons and a suitable compensation strategy exists….'

3.2 Town and Country Planning Act

Local Planning Authorities (LPA) in the UK have a statutory duty to consider both the protection and planting of trees when considering planning applications. The potential impact of development on all trees (including those not protected by a Tree Preservation Order or other statutory designation) is therefore a material consideration.

In planning terms lower quality trees can generally be removed to facilitate development where their loss can be mitigated with replacement tree planting or where no replacement planting is necessary. This is likely to apply to C category and U category trees where there are no other constraints in place (e.g., ecological or heritage). Whereas higher quality trees (A and B category) should be retained and protected wherever possible; however, in some cases it may also be feasible to remove trees of this quality where there is no reasonable alternative and where the benefit of the development outweighs the impact of the loss of the tree(s).

Prior to the removal of the trees or groups listed in this report, or any tree surgery works being undertaken, it is essential that the trees are assessed again for legal protected status. These include Tree Preservation Orders, Conservation Areas, Sites of Special Scientific Interest (SSSI), locally or nationally designated sites, designed landscapes and ancient woodland.

Works (either above or below ground) to trees protected by Tree Preservation Order or within a Conservation Area is an offence under the Town and Country Planning Act 1990 (as amended), and in the Town and Country Planning (Tree Preservation) (England) Regulations 2012 and Section 192 of the Planning Act 2008.

3.3 Tree Preservation Orders

The following acts are relevant to Tree Preservation Orders:

- Town and Country Planning Act 1990 (as amended).
- Town and Country Planning (Tree Preservation) (England) Regulations 2012.
- Planning Act 2008.
- Localism Act 2011.

A Tree Preservation Order prohibits the cutting down, topping, lopping, uprooting, wilful damage and wilful destruction of trees without the Local Planning Authority's written consent. If consent is given, it can be subject to conditions which have to be followed. The cutting of roots is also a prohibited activity and requires the Local Planning Authority's consent.

Penalties for committing an offence under Section 210(2) of the Town and Country Planning Act 1990 provides that anyone found guilty of these offences is liable, if convicted in the magistrates' court, to a fine of up to £20,000. In serious cases a person may be committed for trial in the Crown Court and, if convicted, is liable to an unlimited fine. Section 210(3) provides that, in determining the amount of fine, the court shall take into account any financial benefit which has resulted, or is likely to result, from the offence.

There is also a duty requiring landowners to replace a tree removed, uprooted or destroyed in contravention of a Tree Preservation Order.

Anyone found guilty in the magistrates' court of an offence under section 210(4) is liable to a fine of up to Level 4 (currently £2,500).

3.4 Conservation Areas

Trees in a Conservation Area that are not protected by a Tree Preservation Order are protected by the Town and Country Planning Act 1990. These provisions require people to notify the local planning authority, using a 'section 211 notice', 6 weeks before carrying out certain work on such trees, unless an exception applies. The work may go ahead before the end of the 6 week period if the local planning authority gives consent. This notice period gives the authority an opportunity to consider whether to make an Order on the tree.

The authority then has six weeks to respond. Objections to the works will lead to a Tree Preservation Order being placed on tree groups or individual trees.

Anyone who cuts down, uproots, tops, lops, wilfully destroys or wilfully damages a tree in a Conservation Area (if that tree is not already protected by an Order), or causes or permits such work, without giving a Section 211 notice (or otherwise contravenes Section 211 of the Town and Country Planning Act 1990) is guilty of an offence, unless an exception applies. The same penalties as those for contravening a Tree Preservation Order apply.

3.5 Felling Licence

The felling of trees is regulated in England by the Forestry Act 1967 (the Act). Forestry England (FE) is the government regulator that enforces the provisions of the Act.

The felling of growing trees in England is restricted under section 9 of the Act. It requires that felling is either authorised by a felling licence issued by the FE or the felling activity is exempt from the need for a licence.

There are many exceptions to the need for a licence, based on the type of the tree, the location of the tree, the size of the tree, the nature and scope of the felling activity and the person responsible for the felling. These are primarily set out in section 9 of the Act as well as the Forestry (Exceptions from Restriction of Felling) Regulations 1979.

The most relevant exemption is;

'Section 9-Requirement of licence for felling (1) A felling licence granted by the appropriate forestry authority shall be required for the felling of growing trees, except in a case whereby or under the following provisions of this Part of this Act this subsection is expressed not to apply…

(d) is immediately required for the purpose of carrying out development authorised by planning permission granted or deemed to be granted under the Town and Country Planning Act 1990

or the enactments replaced by that Act, or under the Town and Country Planning (Scotland) Act 1997.'

Advice from a suitably qualified arboriculturist should be sought before any felling takes place on site.

The granting of permission to remove trees covered by a Tree Preservation Order by the Local Planning Authority does not remove the need to obtain a felling licence from the Forestry Commission if more than $5m^3$ of timber are to be felled in a calendar quarter and none of the exemptions apply.

4.0 Tree Survey

The site was visited and surveyed by a qualified SLR arboriculturist on the 22nd May, 18-20th June and 12th-13th August 2025.

4.1 Desk Study

The proposed cable route passes through the following local authorities:

- Slough Borough Council
- Hillingdon Council
- Spelthorne Borough Council

4.1.1 Tree Preservation Orders

A check for Tree Preservation Orders (TPOs) was undertaken on 1st September using the interactive mapping tools provided by Slough Borough Council, Hillingdon Council and Spelthorne Borough Council as detailed below.

- Slough Borough Council: The interactive TPO map (https://maps.slough.gov.uk/connect/analyst/mobile/#/) confirmed that no trees along the proposed route are subject to a Tree Preservation Order.
- Hillingdon Council interactive map Protected Trees confirmed that no trees along the proposed route are subject to a Tree Preservation Order.
- Spelthorne Borough Council: The interactive TPO map (https://www.arcgis.com/apps/webappviewer/index.html?id=eae9165cfa3b40d78ce79cef8959c1b2) which confirmed that tree group G66 adjacent to Horton Road/ Stanwell Moor Road are protected by an Area TPO, reference 1/7/1964. An Area TPO protects trees within a demarked area that were present at the time the TPO was confirmed (trees younger than the date of the TPO are not covered).

4.1.2 Conservation Areas

A check for Conservation Areas (CAs) was undertaken on 1st September using the interactive mapping tools provided by the relevant local authorities as detailed below.

- Slough Borough Council: The interactive conservation area map (https://maps.slough.gov.uk/connect/analyst/mobile/#/) confirmed that no areas along the proposed route are part of a Conservation Area.
- Hillingdon Council Policies Map confirmed that no areas along the proposed route are part of a Conservation Area.
- Spelthorne Borough Council: The interactive CA map (https://www.arcgis.com/apps/webappviewer/index.html?id=eae9165cfa3b40d78ce79cef8959c1b2) which confirmed that no areas along the proposed route are part of a Conservation Area.

4.1.3 Ancient Woodland

The Ancient Woodland Inventory was checked on the 1st September for the presence of ancient woodland within or adjacent to the study area. This inventory is located on the Multi-Agency Geographical Information for the Countryside (MAGIC) website (https://magic.defra.gov.uk/MagicMap.html). This is a spatial dataset that describes the

geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

No part of site is listed in the Ancient Woodland Inventory.

4.1.4 Ancient and Veteran Trees

The Ancient Tree Inventory (https://ati.woodlandtrust.org.uk) was checked on 1st September for the presence of verified veteran/ancient trees within the survey area. National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2024) refers to veteran trees as "*irreplaceable habitat*" which due to their "*age, size and condition, is of exceptional biodiversity, cultural or heritage value*".

No trees within the site boundary appeared within this inventory. SLR's qualified arboriculturists did not identify any trees, during survey, which they considered ancient or veteran (as defined within NPPF Annex 2, Dec 2024).

4.2 Field Survey

4.2.1 General Site Observations

The proposed cable corridor is primarily located within the highway network, and, where feasible, within the adjacent soft verges within a predominantly urban setting.

Various individual trees and groups of trees are present along the route, comprising a range of native and non-native species, with a broad mix of age and size classes. These trees are typically located within highway verges, adjacent private land, and areas of informal public open space. Tree cover along the route provides screening to residential properties or transport corridors.

4.2.2 Tree Survey Results

The full findings of the tree survey are presented in the Appendix A (Tree Survey Schedule) and Appendix B (Tree Constraints Plans).

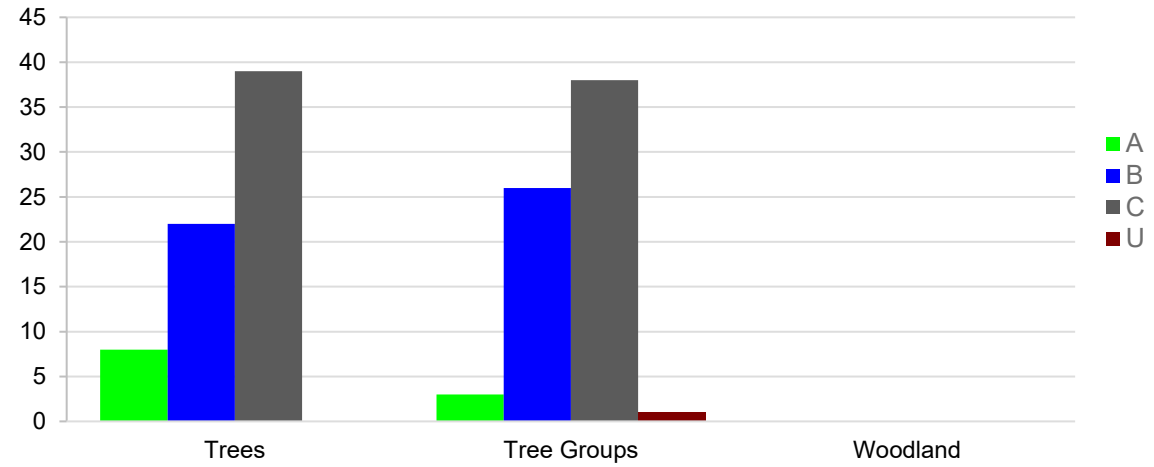
Table 4-1 below provides a summary of the numbers of arboricultural features recorded within each BS 5837 category.

Table 4-1: Arboricultural Features by BS 5837:2012 Category.

Category	Trees	Tree Groups	Woodland	Hedgerows	Total
A	8	3	0	N/A	11
B	22	26	0	N/A	48
C	39	38	0	N/A	77
U	0	1	0	N/A	1
Totals	69	68	0	3	140

Figure 4-1 below provides a graphical summary of the BS 5837:2012 categories for each feature (trees, tree groups, woodland and hedgerows) recorded during the survey.

Figure 4-1: Summary of BS 5837:2012 Categories by Arboricultural Feature



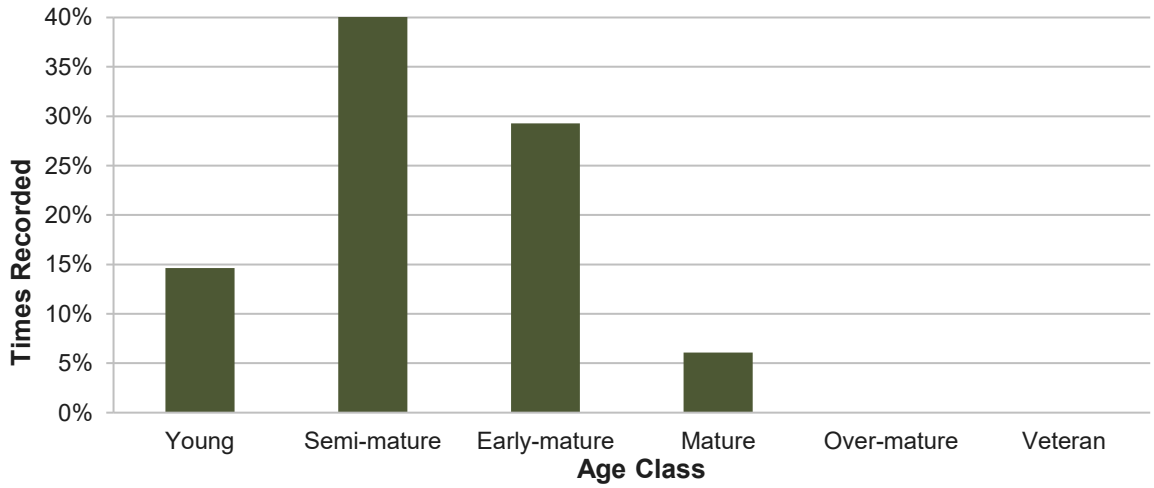
The following general principles should be applied when considering development within the site:

- Category 'A' trees are of high quality and value and should be retained.
- Category 'B' trees are of moderate quality and value and should be considered for retention where possible, although care should be taken to avoid misplaced retention. Any scheme should consider the retention and protection of trees, but also the tree's future growth.
- Category 'C' trees are of low quality and value and should not place a constraint on the proposals.
- From an arboricultural point of view, the Category 'U' trees cannot realistically be considered for retention as a living tree in the context of the current land use due to their low life expectancy of less than 10 years in their current poor condition.

4.2.2.1 Age Class Diversity

The age diversity of features recorded during the survey is illustrated in Figure 4-2 below. It should be noted that this includes for features such as groups and woodland where more than on age class may be present.

Figure 4-2: Summary of BS 5837:2012 Age Classes

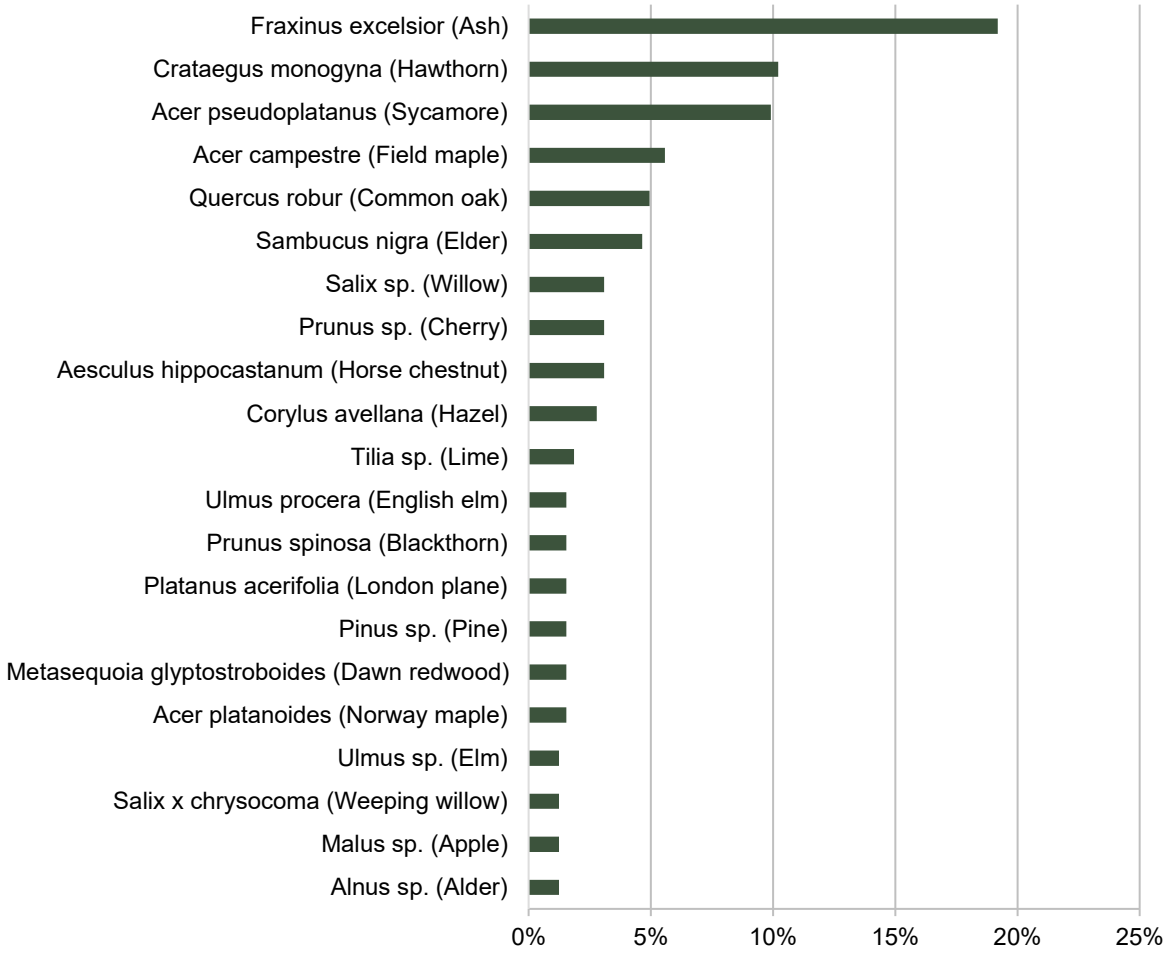


4.2.2.2 Species Diversity

The tree survey recorded fifty seven different species. Figure 4-3 provides a summary of the key species recorded as individual trees, tree groups, woodlands and hedgerows. It should be noted that this does not represent the numbers of each species, but provides a summary of times a species is recorded. The following species were also recorded during the survey but individual species represent less than 1% of the records have not been included in chart below:

- *Acer* sp. (Maple), *Alnus glutinosa* (Common alder), *Betula pendula* (Silver birch), *Carpinus betulus* (Hornbeam), Cedrus deodora (Deodar), *Cedrus* sp. (Cedar), *Chamaecyparis lawsoniana* (Lawson cypress), *Chamaecyparis* sp. (Cypress), *Eucalyptus gunnii* (Cider gum),*Fagus sylvatica* (Beech), *Fagus sylvatica* 'Purpurea' (Copper beech), *Fraxinus ornus* (Manna ash), *Fraxinus* sp. (Ash), *Ilex aquifolium* (Holly), *Juglans regia* (Common walnut), *Laburnum* anagyroides (Laburnum), *Liquidambar styraciflua* (Sweet gum), *Paulownia tomentosa* (Foxglove tree), *Pinus sylvestris* (Scots pine), *Populus nigra* 'Italica' (Lombardy poplar), *Populus* sp. (Poplar), *Populus tremula* (Aspen), *Prunus avium* (Wild cherry), *Prunus laurocerasus* (Cherry laurel), *Quercus* sp. (Oak), *Robinia pseudoacacia* (False acacia), *Salix alba* (White willow), *Salix caprea* (Goat willow), *Salix cinerea* (Grey willow), *Salix fragilis* (Crack willow), *Sorbus aria* (Whitebeam), *Taxus baccata* (Yew), *Tilia cordata* (Small-leaved lime), *Tilia platyphyllos* (Large-leaved lime), *Tilia x europaea* (Common lime), *Ulmus glabra* (Wych elm), *x Cupressocyparis leylandii* (Leyland cypress).

Figure 4-3: Summary of Tree Species Recorded



5.0 Arboricultural Impact Assessment

The Arboricultural Impact Assessment (AIA) sets out the direct and indirect impacts of the proposed development on the trees on or immediately adjacent to the site and provides suitable mitigation measures to allow for the successful retention of all the retained trees or to compensate for trees to be removed, where appropriate.

5.1 Proposed Development

The proposed development comprises the installation of a new 132kV underground and ground mounted electricity cable to connect a proposed data centre and BESS at Manor Farm with the Laleham Substation (planning application reference (P/10076/013). The cable route predominantly follows existing highways and associated verges and consists of up to two 132 kV underground cables, together with associated communications cabling. The construction works will include the excavation of a temporary trench approximately 1.0m wide and a typical depth of 1m with a maximum depth up to 3.0m. to accommodate the cabling infrastructure.

Juniper Energy Ltd have committed to a policy of 'no tree loss' during the design process, as such where there is potential for impacts of trees within and adjacent to the site, the proposed development will be installed using Hydraulic Direction Drilling (HDD) to enable all construction works to remain outside the RPA and canopy extents of trees within and adjacent to the site.

Any HDD will be undertaken at least 1m below ground level, with the entry/exit pits located outside any RPA and canopy extents of adjacent trees thus removing the potential for impacts on trees within or adjacent to the route.

The construction works will also follow the requirements of NJUG Volume 4, *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees* which includes the following:

- *To prevent root damage from percussive boring, trenchless service runs should be installed at least 600mm below ground level.*
- *Boring equipment must not be lubricated with anything other than water when working within the Prohibited Zone—materials such as oil or bentonite are not permitted.*
- *Launch and reception pits for trenchless installations must be positioned outside the RPAs of all retained trees.*

Should it be found that there are constraints which prevent the use of HDD within specific areas, small sections of the cable would be installed in accordance with the following NJUG recommendations for hand-dig methodologies:

- *Trenches will be excavated using hand-dig methodology. The excavation will proceed in small increments, with careful monitoring for roots. Any roots over 25mm in diameter will be retained and accommodated where feasible.*
- *Where significant roots are encountered and installation cannot continue, an alternative route should be considered, if no alternative route is available excavation will transition to air spading to avoid unnecessary root damage.*
- *Exposed roots will be covered with damp hessian to prevent desiccation. Where roots require pruning, this will be undertaken using sharp, clean tools in accordance with BS 3998:2010 (Tree Work – Recommendations).*
- *The trench will be backfilled with the original excavated soil where suitable. If compaction has occurred or soil conditions are poor, an appropriate rooting substrate, such as a mix of topsoil, sharp sand, and organic matter (e.g. well-composted*

woodchip or leaf mould), will be used to maintain soil structure, porosity, and nutrient availability. This will promote root recovery and sustained tree health.

- *All works within the RPA will be supervised by a qualified arboriculturist to ensure compliance with best practice and to make on-site decisions regarding root retention.*

By following these precautions, the impact on retained trees will be minimised, ensuring their long-term health and structural integrity.

Due to health and safety risks it was not possible to record survey data from a number of locations adjacent to the application boundary, these areas include (but are not limited to): Poyle Interchange, the A3044 Stanwell Moor Road and the A308 Staines Bypass. As stated in Section 1.1, the site forms a corridor for the proposed development as flexibility is required to allow for unforeseen construction constraints. Should works be required within the proximity to any unsurveyed trees, the guidance within NJUG Volume 4, Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees would be followed, including seeking advice from a suitably qualified arboriculturalist and liaising with the local authority Tree Officer prior to undertaking any works.

5.1.1 Watercourse Crossings

Watercourses crossed by the cable route will be crossed via a variety of methods as detailed in Table 5-1 below and include (but not limited to) open-cut channel work, on-bridge and trenchless solutions such as horizontal directional drilling (HDD). The determination of the appropriate method in each case will be subject to determination at a later stage.

Table 5-2: Proposed Watercourse Crossings

Crossing Number	Watercourse Name	Crossing Type	Crossing Description
L-1	Wraysbury River	Open Cut	Cable to be installed using open-cut methodology to the south of the existing highway bridge crossing (Horton Road) over the Wraysbury River
L-5	River Colne (Hithermoor Stream)	Open Cut within Highway Bridge	Cable to be installed in the existing culverted crossing (Horton Road) over Hithermoore Stream.
L-6	River Colne	Open Cut within Highway Bridge	Cable to be installed in the existing highway bridge crossing (Horton Road) over the River Colne offshoot.
L-7	River Colne	Trenchless	Cable to be installed under Horton Road under the River Colne,
L-8	Unnamed Main River 01	Open Cut within Highway Bridge or Trenchless	Cable to be installed in the existing culvert crossing (Horton Road) over the River Colne offshoot.
L-9	Unnamed Ditch 02	Open Cut within Highway Bridge or Trenchless	Cable to be installed in the existing culvert crossing (Horton Road) over the unnamed River Colne tributary.
L-10	River Ash	Open Cut within Highway Bridge	Cable to be installed in the existing culvert crossing (London Road interchange) over the River Ash.

Crossing Number	Watercourse Name	Crossing Type	Crossing Description
L-13	Unnamed Drain 01	Open Cut within Highway Bridge	Crossing of the EA watercourse - tributary of the River Ash. Installed within the Staines By-Pass.
L-14	River Ash	Open Cut within Highway Bridge	Crossing of EA Watercourse - River Ash. Installed within the Staines By-Pass.
L-16	River Ash	Open Cut within Highway Bridge or Trenchless,	Crossing of EA Watercourse - River Ash. Installed within the Fordbridge Roundabout.
L-17	Staines Aqueduct	Trenchless	Crossing of Thames Water Aqueduct via a trenchless methodology

5.1.2 M25 Crossing

The proposed cable route is required to cross junction 14 of the M25 between the A3113 (Airport Way) and Horton Road which includes substantial areas of trees. This section will be installed using HDD with entry and exist pits located outside the extents of all adjacent trees to avoid potential arboricultural impacts.

5.2 Tree Protection Fencing

Where construction works are required within the proximity of tree canopies and RPA as illustrated on the Tree Constraints Plan (Appendix A) temporary fencing to meet the requirements of BS 5837 will be installed.

5.3 Trees to be Removed

No trees are to be removed during the construction of the proposed development.

5.4 Trees Works

Due to the context of the proposed development largely being within a highway context, trees works will only be necessary where the proposed development is installed within verges or footpaths. Dependent upon the final route of the cable, there may be a requirement for minor trees works to facilitate construction access. Where required, tree works will be kept to a minimum and follow the recommendations of *BS 3998: 2010 Tree Work – Recommendations* and be carried out by suitably qualified and insured contractors.

6.0 Conclusions

6.1 Baseline Survey

The BS 5837:2012 compliant tree survey conducted on 22nd May, 18-20th June and 12th-13th August 2025, recorded:

- Sixty nine individual trees (8 category A, twenty two category B and thirty nine category C).
- Sixty eight tree groups (3 category A, twenty six category B, thirty eight category C and 1 category U).
- Three hedgerows.

A single Area TPO (Spelthorne Borough Council reference 1/7/1964) is located adjacent to the application site, at Horton Road/ Stanwell Moor Road. This is illustrated on the Tree Constraints Plan and Tree Retention and Removal Plan and includes G66. An Area TPO protects trees within a demarked area that were present at the time the TPO was confirmed (trees younger than the date of the TPO are not covered).No areas along the proposed route are part of a Conservation Area.

No part of site is listed in the Ancient Woodland Inventory

No ancient and/or veteran trees are present within or adjacent to the application site.

6.2 Summary of Arboricultural Impacts

The proposed development will not require the removal of any trees.

Where works are required within the RPA of trees, appropriate construction methods, such as Hydraulic Directional Drilling (HDD) or hand digging trenches will be used.

All trees/groups and hedgerows within the application site are to be retained.

7.0 References

British Standards Institution (BSI). 2010. *BS 3998:2010. Trees Work – Recommendations*. London: British Standards Institution. 3rd ed. London: British Standards Institution.

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National Tree Safety Group. 2024. *Common sense risk management of trees*.

Appendix A Tree Survey Schedule

Manor Farm Cable – Laleham Substation Corridor Route

Tree Survey Report & Arboricultural Impact Assessment

Juniper Energy Ltd

SLR Project No.: 402.065673.00001

September 2025

Table A-1: Tree Survey Schedule

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G1	Populus sp. (Poplar)	6 - 6	800 maximum	As shown on Tree Constraints Plan. Average canopy spread 1m		As shown on Tree Constraints Plan.		N/A	2 - 2	Mature	Pollarded to 4 m with subsequent regrowth Two specimens	20-40	C2	9.6
T2	Aesculus hippocastanum (Horse chestnut)	14	700	5	6#	5	4	1 - W	2 - 3	Mature	Tagged - 0407 Large parts covered occluded wounds on trunks Phyllosticta paviae (Guignardia aesculi) Crown reduced	20-40	B2	8.4
G3	Acer campestre (Field maple) Acer pseudoplatanus (Sycamore)	10 - 13	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	2 - 2.5	Young Early-mature	Mutual suppression In garden - not fully surveyed	40+	C2	3.6
G4	Acer campestre (Field maple) Crataegus monogyna (Hawthorn) Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore)	8 - 18	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 6	Young Semi-mature	Mutual suppression Etiolated Many ivy clad - not fully surveyed	40+	B2	3.6
G5	Salix alba (White willow) Fraxinus excelsior (Ash) Tilia sp. (Lime) Quercus robur (Common oak) Crataegus monogyna (Hawthorn)	8 - 18	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 3.5m				N/A	0 - 4	Young Early-mature	Mutual suppression Good screening value Ash Dieback (Hymenoscyphus fraxineus)	40+	B2	5.4
G6	Salix fragilis (Crack willow) Sambucus nigra (Elder) Fraxinus excelsior (Ash) Fraxinus sp. (Ash)	10 - 18	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	0 - 4	Young Mature	Mutual suppression Associated with dry ditch Grey willow Some ivy clad - not fully surveyed	40+	B2	6
G7	Fraxinus excelsior (Ash) Acer platanoides (Norway maple)	10 - 16	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	2 – 3	Semi-mature Early-mature	Mutual suppression Ash Dieback (Hymenoscyphus fraxineus)	20-40	B2	3.6
G8	Cedrus sp. (Cedar) Pinus sp. (Pine) Prunus sp. (Cherry) Paulownia tomentosa (Foxglove tree)	6 - 13	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 3.5m				N/A	1.5 - 3	Young Early-mature	Snapped branches	40+	B2	6
G9	Aesculus hippocastanum (Horse chestnut) Robinia pseudoacacia (False acacia) Acer campestre (Field maple) Quercus sp. (Oak) Pinus sp. (Pine)	8 - 14	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	1 - 6	Semi-mature Mature	Mutual suppression Screening for caravan park Some ivy clad - not fully surveyed	40+	B2	6
T10	Acer platanoides (Norway maple)	15	330	3#	3	3.5	4	3 - S	3 - 3	Early-mature	Crown lifted	40+	B1	4
T11	Robinia pseudoacacia (False acacia)	17	480	6#	6	5	5	2 - S	2.5 - 5	Early-mature	Occasional dead branches	20-40	B1	5.8

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G12	Fraxinus excelsior (Ash) Ulmus procera (English elm) Populus nigra 'Italica' (Lombardy poplar)	6 - 14	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 2.5m				N/A	0 - 3	Semi-mature Early-mature	Mutual suppression Occasional dead specimen	20-40	B2	5.4
G13	Tilia sp. (Lime) Sambucus nigra (Elder) Salix caprea (Goat willow)	8 - 12	250 maximum	As shown on Tree Constraints Plan. Average canopy spread 2.5m				N/A	1 - 2	Young Semi-mature	Stakes and ties still present	40+	C2	3
G14	Tilia sp. (Lime)	12 - 12	170 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0.5 - 1	Young	No major visible defects	40+	C2	2
G15	Acer pseudoplatanus (Sycamore) Salix sp. (Willow) Fraxinus excelsior (Ash) Acer campestre (Field maple)	6 - 8	350 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 2	Semi-mature	Not accessible - not fully surveyed	40+	B2	4.2
G16	Acer pseudoplatanus (Sycamore) Sambucus nigra (Elder)	4 - 6	150 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	1 - 2	Young Semi-mature	Within neighbouring property Not fully surveyed Not accessible	40+	C2	1.8
G17	Fraxinus excelsior (Ash) Salix sp. (Willow)	6 - 7	350 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	2 - 3	Semi-mature	Not accessible Multi-stemmed Ivy clad stem - not fully surveyed	40+	C2	4.2
G18	Fraxinus excelsior (Ash) Crataegus monogyna (Hawthorn) Acer pseudoplatanus (Sycamore) Acer campestre (Field maple) Quercus robur (Common oak)	5 - 10	400 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 3	Young Semi-mature	Multi-stemmed Not fully surveyed Not accessible Dead specimen(s)	40+	C2	4.8
T19	Fraxinus excelsior (Ash)	8	150	4	5.5	4	5	0.5 - All	2 - 3	Semi-mature	Multi-stemmed Ash Dieback (Hymenoscyphus fraxineus) Dieback - Minor Deadwood less than 150mm diameter Bark wound	<10	C1	4.4
G20	Fraxinus excelsior (Ash) Salix sp. (Willow) Sambucus nigra (Elder)	5 - 12	400 maximum	As shown on Tree Constraints Plan. Average canopy spread m				N/A	0 - 2	Semi-mature	Not fully surveyed Not accessible Tearouts Multi-stemmed	40+	C2	4.8
G21	Fraxinus excelsior (Ash) Salix sp. (Willow) Sambucus nigra (Elder) Acer campestre (Field maple) Quercus robur (Common oak)	5 - 12	400 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	2 - 3	Semi-mature Early-mature	Not fully surveyed Not accessible Multi-stemmed	40+	C2	4.8
G22	Fraxinus excelsior (Ash) Salix sp. (Willow) Sambucus nigra (Elder) Acer campestre (Field maple) Quercus robur (Common oak)	5 - 12	380 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	2 - 3	Semi-mature Early-mature	Not fully surveyed Not accessible Multi-stemmed	40+	B2	4.6

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G23	Quercus robur (Common oak) Acer campestre (Field maple) Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore) Crataegus monogyna (Hawthorn)	6 - 11	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	0 - 4	Young Early-mature	Not fully surveyed Not accessible	40+	B2	5.4
G24	Crataegus monogyna (Hawthorn) Fraxinus excelsior (Ash)	5 - 7	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 2	Semi-mature	Not accessible Not fully surveyed Ash Dieback (Hymenoscyphus fraxineus)	40+	C2	2.4
G25	Quercus robur (Common oak) Acer campestre (Field maple) Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore) Crataegus monogyna (Hawthorn) Pinus sp. (Pine) Corylus avellana (Hazel)	5 - 12	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	0 - 4	Young Early-mature	Not fully surveyed Not accessible	40+	B2	5.4
G26	Crataegus monogyna (Hawthorn) Acer campestre (Field maple) Fraxinus excelsior (Ash) Sambucus nigra (Elder) Acer pseudoplatanus (Sycamore)	5 - 10	250 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 3	Young Semi-mature	Not accessible - not fully surveyed Ivy clad stem - not fully surveyed Multi-stemmed Dead specimen(s)	40+	C2	3
G27	Crataegus monogyna (Hawthorn) Acer campestre (Field maple) Fraxinus excelsior (Ash)	5 - 10	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 3	Young Semi-mature	Not accessible Not fully surveyed Only surveyed front south and east side - no major visible defects	40+	C2	2.4
G28	Fraxinus excelsior (Ash) Salix sp. (Willow) Sambucus nigra (Elder) Acer campestre (Field maple) Quercus robur (Common oak)	6 - 10	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	1 - 3	Semi-mature	Not fully surveyed Not accessible Multi-stemmed	40+	C2	2.4
T29	Fraxinus excelsior (Ash)	10	220, 200, 280, (408)	5	6	6	6	2 - S	3 - 4	Early-mature	Multi-stemmed Tight union	40+	C1	4.9
G30	Ulmus sp. (Elm) Sambucus nigra (Elder) Crataegus monogyna (Hawthorn)	3 - 5	150 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 1	Young Semi-mature	Dead specimen(s)	40+	C2	1.8
T31	Fraxinus excelsior (Ash)	5	100	1.5	1.5	1.5	1.5	0.5 - All	1.5 - 3	Young	Ash Dieback (Hymenoscyphus fraxineus)	<10	C1	1.2
T32	Fraxinus excelsior (Ash)	5	200	2	2	2	2	1.5 - All	1.5 - 3	Semi-mature	Ash Dieback (Hymenoscyphus fraxineus)	<10	C1	2.4
G33	Ulmus sp. (Elm) Sambucus nigra (Elder) Crataegus monogyna (Hawthorn)	4 - 6	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 2	Young Semi-mature	Not fully surveyed Not accessible	40+	C2	2.4

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G34	Salix sp. (Willow) Fraxinus excelsior (Ash) Sambucus nigra (Elder) Crataegus monogyna (Hawthorn)	10 - 15	600 maximum	As shown on Tree Constraints Plan. Average canopy spread 6m				N/A	1 - 4	Young Mature	Not accessible Not fully surveyed Tearouts Dead specimen(s) Multi-stemmed Mutual suppression Ash Dieback (Hymenoscyphus fraxineus) History of whole tree failure	40+	A2	7.2
G35	Crataegus monogyna (Hawthorn) Fraxinus excelsior (Ash) Acer campestre (Field maple)	5 - 7	180 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 2	Semi-mature	Not accessible Not fully surveyed Ash Dieback (Hymenoscyphus fraxineus)	40+	C2	2.2
G36	Sambucus nigra (Elder) Crataegus monogyna (Hawthorn) Acer pseudoplatanus (Sycamore) Salix caprea (Goat willow) Acer campestre (Field maple) Fraxinus excelsior (Ash)	3 - 7	220 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 2	Young Semi-mature	Not fully surveyed Not accessible	40+	C2	2.6
G37	Crataegus monogyna (Hawthorn) Prunus sp. (Cherry)	1 - 6	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 1.5m				N/A	0 - 2	Young Semi-mature	Escaped hedgerow with gaps	20-40	C2	2.4
T38	x Cupressocyparis leylandii (Leyland cypress)	16	800	6	6	6#	6#	2 - N	1.5 - 3	Mature	Ivy clad - not fully surveyed	20-40	B1	9.6
T39	x Cupressocyparis leylandii (Leyland cypress)	15	400#	5	4	4#	5#	2 - N	2 - 3	Mature	Top part of canopy dead	20-40	C1	4.8
G40	Fraxinus excelsior (Ash) Prunus sp. (Cherry) Crataegus monogyna (Hawthorn) Prunus laurocerasus (Cherry laurel)	3 - 14	400 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 4	Semi-mature Early-mature	Ash Dieback (Hymenoscyphus fraxineus) Mutual suppression Some ivy clad - not fully surveyed	20-40	C2	4.8
G41	Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore)	10 - 16	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	1.5 - 4	Semi-mature Early-mature	Ash Dieback (Hymenoscyphus fraxineus) Mutual suppression Some ivy clad - not fully surveyed	40+	B2	5.4
T42	Acer pseudoplatanus (Sycamore)	14	400	7	5#	5	5	3 - E	2.5 - 5	Early-mature	Crown lifted over road Pushing out low retaining wall	40+	B1	4.8
G43	Ulmus procera (English elm) Fagus sylvatica (Beech) Prunus sp. (Cherry) Liquidambar styraciflua (Sweet gum) Taxus baccata (Yew)	2 - 6	250 maximum	As shown on Tree Constraints Plan. Average canopy spread 1m				N/A	0 - 1	Young Semi-mature	Roadside specimens treated as hedge	20-40	C2	3
T44	Fraxinus excelsior (Ash)	16	500	5	6.5	7#	5.5	6 - W	3 - 4	Mature	Ivy clad - not fully surveyed	20-40	B1	6

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G45	Fraxinus excelsior (Ash) Quercus robur (Common oak) Fagus sylvatica 'Purpurea' (Copper beech) Chamaecyparis sp. (Cypress)	6 - 16	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 2.5m				N/A	0 - 4	Semi-mature Early-mature	Lower canopy cut back from pavement Ash Dieback (Hymenoscyphus fraxineus)	20-40	B2	6
T46	Carpinus betulus (Hornbeam)	14	440	4	5	5	3.5	2 - N	1.5 - 2.5	Early-mature	Crown lifted over footpath	40+	B1	5.3
T47	Acer sp. (Maple)	14	500	4	7#	6	4.5	2.5 - S	2 - 3	Mature	Ivy clad - not fully surveyed Unbalanced canopy	20-40	B1	6
T48	Fraxinus excelsior (Ash)	16	330	4.5	5	4.5	5	4 - W	2 - 4	Early-mature	Ash Dieback (Hymenoscyphus fraxineus)	10-20	C1	4
T49	Acer platanoides (Norway maple)	17	600	6.5	7	5.5	5.5	6 - S	2.5 - 6	Mature	Drive and footpath lowered around trunk	40+	B1	7.2
T50	Laburnum anagyroides (Laburnum)	11	250	3.5#	5	5	4.5	3 - W	1.8 - 5	Mature	Occasional dead branch	10-20	C1	3
T51	Fraxinus excelsior (Ash)	14	700	6#	5	6	6	2 - S	2 - 5	Mature	Ash Dieback (Hymenoscyphus fraxineus)	20-40	B1	8.4
T52	Prunus sp. (Cherry)	8	350	3#	3	3	3	2.5 - S	1.5 - 2	Mature	Ivy clad - not fully surveyed Lifted over footpath	10-20	C1	4.2
T53	Fraxinus excelsior (Ash)	18	400, 450, (602)	7#	6	7	7	8 - S	6 - 8	Mature	Ivy clad - not fully surveyed Possible Ash Dieback (Hymenoscyphus fraxineus)	10-20	B1	7.2
G54	Acer campestre (Field maple) Ulmus procera (English elm) Crataegus monogyna (Hawthorn) Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore) Ilex aquifolium (Holly) Aesculus hippocastanum (Horse chestnut) Salix fragilis (Crack willow)	4 - 15	550 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 4	Young Early-mature	Dutch elm disease Mutual suppression Cut back from pavement	20-40	B2	6.6
T55	Crataegus monogyna (Hawthorn)	7	200	2	3	2	2	2 - N	2 - 2	Mature	Leaning Die back	10-20	C1	2.4
T56	Sorbus aria (Whitebeam)	8	210	2	3	3	3	2 - W	1 - 2.5	Early-mature	Epicormic growth at base	20-40	C1	2.5
G57	Chamaecyparis sp. (Cypress) Ulmus procera (English elm) Quercus robur (Common oak) Fraxinus excelsior (Ash) Crataegus monogyna (Hawthorn) Aesculus hippocastanum (Horse chestnut) Sambucus nigra (Elder) Tilia sp. (Lime)	3 - 16	700 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 5	Young Mature	Several dead Large parts covered in brambles	20-40	B2	8.4

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
T58	Fraxinus excelsior (Ash)	17	550	7#	7	7	8	3 - S	3 - 5	Mature	Limbs removed leaving long stubs Dead Ivy, has been cut Ash Dieback (Hymenoscyphus fraxineus)	10-20	C1	6.6
G59	Chamaecyparis sp. (Cypress)	7 - 9	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	2 - 3	Semi-mature	Within neighbouring property Dieback - Major Ivy clad - not fully surveyed stem	<10	C2	5.4
G60	Eucalyptus gunnii (Cider gum) Fraxinus excelsior (Ash) Ulmus procera (English elm) Prunus sp. (Cherry) Salix cinerea (Grey willow)	5 - 16	700 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 5	Semi-mature Early-mature	Ash Dieback (Hymenoscyphus fraxineus) Mutual suppression Associated with dry ditch	20-40	B2	8.4
T61	Fraxinus excelsior (Ash)	11	550#	8	8	8	7	6 - S	5 - 6	Mature	Dieback - Major Ash Dieback (Hymenoscyphus fraxineus) Deadwood greater than 150mm diameter Old pruning wounds	<10	C1	6.6
T62	Prunus avium (Wild cherry)	6	500	6.5	6	7	7	2 - N	2 - 3	Early-mature	Old pruning wounds Soil levels lowered	40+	C1	6
T63	Acer platanoides (Norway maple)	10	520	7	7	6.5	6	3 - E	2 - 3	Early-mature	Crown lifted Deadwood less than 150mm diameter	40+	B1	6.2
G64	Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore) Corylus avellana (Hazel) Robinia pseudoacacia (False acacia) Quercus robur (Common oak)	10 - 12	800 maximum	As shown on Tree Constraints Plan. Average canopy spread 11m				N/A	3 - 5	Semi-mature Mature	Tearouts Ivy clad - not fully surveyed stem Multi-stemmed Not fully surveyed Dense undergrowth	40+	B2	9.6
T65	Acer pseudoplatanus (Sycamore)	9	310	5	2.5	5.5	5.5	3 - W	2 - 3	Semi-mature	Crown lifted Asymmetrical crown	40+	C1	3.7
G66	Fraxinus excelsior (Ash) Populus tremula (Aspen) Acer pseudoplatanus (Sycamore) Corylus avellana (Hazel)	10 - 14	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 7m				N/A	2 - 4	Semi-mature Mature	Tearouts Ivy clad stem - not fully surveyed Multi-stemmed Not fully surveyed Dense undergrowth	40+	A2	6
T67	Acer campestre (Field maple)	3	90	1	2	2	2	1 - All	0 - 0.5	Semi-mature	No obvious visible defects	40+	C1	1.1
T68	Pinus sp. (Pine)	5	110	3	2	2	3	1 - All	0 - 0.5	Semi-mature	No obvious visible defects	40+	C1	1.3
T69	Fraxinus excelsior (Ash)	6	90	3	2	2	2	1 - All	1 - 2	Semi-mature	No obvious visible defects	40+	C1	1.1
T70	Betula pendula (Silver birch)	6	180	2.5	2.5	3	2.5	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	2.2
T71	Alnus glutinosa (Common alder)	5	150	2.5	2.5	2	2.5	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	1.8

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				N	S	E	W							
T72	Metasequoia glyptostroboides (Dawn redwood)	5	180	2.5	2.5	2	2.5	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	2.2
T73	Metasequoia glyptostroboides (Dawn redwood)	6	200	2	2.5	2	2.5	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	2.4
T74	Prunus sp. (Cherry)	5	160	2	2.5	2	2.5	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	1.9
T75	Pinus sylvestris (Scots pine)	4	100	2	2	2	2	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	1.2
T76	Pinus sylvestris (Scots pine)	4	120	3	2	2	2	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	1.4
T77	Pinus sp. (Pine)	4	100	1	2	1	2	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	1.2
T78	Pinus sylvestris (Scots pine)	7	300	4	4	4	5	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	3.6
T79	Fraxinus excelsior (Ash)	4	115	3	2	2	2	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	1.4
T80	Metasequoia glyptostroboides (Dawn redwood)	6	260	4	3	4	3	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	3.1
T81	Metasequoia glyptostroboides (Dawn redwood)	6	310	4	4	4	5	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	3.7
T82	Metasequoia glyptostroboides (Dawn redwood)	6	350	4	5	4	4	1 - All	0.5 - 1	Semi-mature	No obvious visible defects	40+	C1	4.2
G83	Tilia platyphyllos (Large-leaved lime) Tilia cordata (Small-leaved lime)	8 - 10	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 4.5m				N/A	2 - 3	Early-mature	Not fully surveyed Old pruning wounds Dense basal growth	40+	B2	5.4
G84	Chamaecyparis lawsoniana (Lawson cypress) Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore) Aesculus hippocastanum (Horse chestnut)	7 - 9	380 maximum	As shown on Tree Constraints Plan. Average canopy spread 5.5m				N/A	1 - 3	Semi-mature Early-mature	Old pruning wounds Not fully surveyed Ivy clad stem - not fully surveyed Dieback - Minor Dead specimen(s) Some trees within residential garden	40+	C2	4.6
T85	Aesculus hippocastanum (Horse chestnut)	9	680	8	8	9	7	1 - E	3 - 4	Early-mature	Old pruning wounds Deadwood less than 150mm diameter Crossing branches Tight union	40+	B1	8.2
G86	Aesculus hippocastanum (Horse chestnut) Fraxinus excelsior (Ash)	9 - 11	580 maximum	As shown on Tree Constraints Plan. Average canopy spread 5.5m				N/A	2 - 3	Early-mature	Ash Dieback (Hymenoscyphus fraxineus) Ivy clad stem - not fully surveyed Not fully surveyed	40+	C2	7
G87	Fraxinus excelsior (Ash) Crataegus monogyna (Hawthorn)	8 - 10	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	1 - 2	Semi-mature	Not fully surveyed Ivy clad stem - not fully surveyed Ash Dieback (Hymenoscyphus fraxineus)	20-40	C2	3.6

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				N	S	E	W							
T88	Platanus acerifolia (London plane)	12	750	9#	10	10	10	2.5 - S	2 - 4	Mature	Deadwood greater than 150mm diameter Tearouts Old pruning wounds Ivy clad stem - not fully surveyed Not fully surveyed	40+	B1	9
T89	Malus sp. (Apple)	5	500#	3	5	4	3	1 - All	0 - 2	Mature	Ivy clad stem - not fully surveyed Coppiced	40+	C1	6
G90	Fraxinus excelsior (Ash) Crataegus monogyna (Hawthorn) Ulmus glabra (Wych elm) Acer pseudoplatanus (Sycamore) Prunus sp. (Cherry)	8 - 10	400 maximum	As shown on Tree Constraints Plan. Average canopy spread 7.5m				N/A	1 - 2	Semi-mature Early-mature	Not fully surveyed Ivy clad stem Ash Dieback (Hymenoscyphus fraxineus)	40+	B2	4.8
T91	Platanus acerifolia (London plane)	12	930	8#	8.5	8	8.5	2 - N	0.5 - 2	Mature	Crown reduced Old pruning wounds Lapsed pollard	40+	A1	11.2
T92	Platanus acerifolia (London plane)	12	950	8#	9	8	7.5	2 - N	0.5 - 2	Mature	Crown reduced Old pruning wounds Lapsed pollard	40+	A1	11.4
T93	Platanus acerifolia (London plane)	14	1150	11#	11	9	8	2 - S	0.5 - 2	Mature	Crown reduced Old pruning wounds Crown lifted Ivy clad stem - not fully surveyed Lapsed pollard	40+	A1	13.8
T94	Acer pseudoplatanus (Sycamore)	14	980#	11#	8	7.5	9	3 - SE	1 - 2	Mature	Old pruning wounds Ivy clad stem - not fully surveyed	40+	B1	11.8
T95	Acer pseudoplatanus (Sycamore)	12	280	9#	7	7.5	7	3 - S	1 - 2	Mature	Old pruning wounds Ivy clad stem - not fully surveyed Multi-stemmed Vehicle damage to upper crown	40+	B1	8.2
G96	Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore) Crataegus monogyna (Hawthorn) Prunus spinosa (Blackthorn)	4 - 6	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 2	Semi-mature	Not fully surveyed Not accessible Multi-stemmed Ash Dieback (Hymenoscyphus fraxineus)	40+	C2	2.4
G97	Fraxinus excelsior (Ash) Acer pseudoplatanus (Sycamore) Crataegus monogyna (Hawthorn) Prunus spinosa (Blackthorn) Quercus robur (Common oak) Sambucus nigra (Elder) Acer campestre (Field maple)	4 - 6	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 2	Semi-mature	Not fully surveyed Not accessible Multi-stemmed Ash Dieback (Hymenoscyphus fraxineus)	40+	C2	2.4
G98	Acer pseudoplatanus (Sycamore)	10 - 12	250 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	N/A	Semi-mature	Not fully surveyed Not accessible Growing from railway level, RPA not within verge	40+	C2	3

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				N	S	E	W							
G99	Acer pseudoplatanus (Sycamore) Crataegus monogyna (Hawthorn) Acer platanoides (Norway maple)	9 - 11	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 6.5m				N/A	0 - 3	Early-mature Semi-mature	Not accessible Not fully surveyed Growing on steep slope, RPA unlikely to be within verge	40+	B2	6
G100	Ulmus sp. (Elm) Corylus avellana (Hazel)	6 - 7	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	0 - 3	Semi-mature	Deadwood less than 150mm diameter Dieback - Minor Not fully surveyed Not accessible	<10	C2	3.6
T101	Tilia cordata (Small-leaved lime)	13	710	7#	6	5.5	5	2.5 - N	4 - 6	Early-mature	Old pruning wounds Crown lifted Tight union Sap run/ slime flux Recent tree works	40+	B1	8.5
T102	Aesculus hippocastanum (Horse chestnut)	10	600#	6	6	5	6	2 - NE	2 - 3	Early-mature	Not fully surveyed Not accessible	40+	B1	7.2
G103	Crataegus monogyna (Hawthorn) Fraxinus excelsior (Ash)	3 - 4	100 maximum	As shown on Tree Constraints Plan. Average canopy spread 1m				N/A	0 - 1	Young	No obvious visible defects	40+	C2	1.2
G104	Corylus avellana (Hazel) Crataegus monogyna (Hawthorn) Fraxinus excelsior (Ash) Sambucus nigra (Elder)	4 - 6	120 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 3	Semi-mature	Ash Dieback (Hymenoscyphus fraxineus) Multi-stemmed	40+	C2	1.4
T105	Fraxinus excelsior (Ash)	4	100, 100, (141)	2	2	2	1	2 - All	1 - 2	Young	Ash Dieback (Hymenoscyphus fraxineus)	<10	C1	1.7
G106	Fraxinus excelsior (Ash) Crataegus monogyna (Hawthorn) Prunus sp. (Cherry)	6 - 10	280 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 3	Semi-mature	Multi-stemmed Ash Dieback (Hymenoscyphus fraxineus)	40+	C2	3.4
G107	Fraxinus excelsior (Ash) Crataegus monogyna (Hawthorn) Prunus sp. (Cherry) Quercus robur (Common oak) Aesculus hippocastanum (Horse chestnut) Malus sp. (Apple) Acer pseudoplatanus (Sycamore) Salix sp. (Willow)	6 - 10	350 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 3	Semi-mature	Multi-stemmed Ash Dieback (Hymenoscyphus fraxineus) Deadwood less than 150mm diameter Dead specimen(s)	40+	C2	4.2
G108	Salix sp. (Willow) Acer pseudoplatanus (Sycamore) Ilex aquifolium (Holly) Fraxinus excelsior (Ash)	10 - 12	580 maximum	As shown on Tree Constraints Plan. Average canopy spread 6m				N/A	1 - 4	Semi-mature Early-mature	Multi-stemmed Bark wound Dead specimen(s) Ash Dieback (Hymenoscyphus fraxineus) Old pruning wounds Not accessible Not fully surveyed Only surveyed north side due to footpath ending	40+	B2	7

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				N	S	E	W							
G109	Salix sp. (Willow) Acer pseudoplatanus (Sycamore) Fraxinus excelsior (Ash)	4 - 6	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	1 - 1.5	Semi-mature Young	Multi-stemmed Not fully surveyed Not accessible Only surveyed north side due to footpath ending	40+	C2	2.4
G110	Aesculus hippocastanum (Horse chestnut) Acer campestre (Field maple) Crataegus monogyna (Hawthorn) Prunus laurocerasus (Cherry laurel) Fraxinus excelsior (Ash) Quercus robur (Common oak)	5 - 7	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 3	Semi-mature	Not fully surveyed Not accessible Dead specimen(s) Ash Dieback (Hymenoscyphus fraxineus) Surveyed from north side due to footpath ending	40+	C2	2.4
T111	Fraxinus excelsior (Ash)	15	530	9#	5	7	7.5	2 - NE	5 - 7	Early-mature	Ash Dieback (Hymenoscyphus fraxineus) Bark wound Dieback - Minor Deadwood less than 150mm diameter	<10	C1	6.4
G112	Juglans regia (Common walnut) Fraxinus ornus (Manna ash) Crataegus monogyna (Hawthorn) Prunus spinosa (Blackthorn) Acer pseudoplatanus (Sycamore)	5 - 7	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	N/A	Semi-mature	Ash Dieback (Hymenoscyphus fraxineus) Multi-stemmed Ivy clad stem - not fully surveyed Recent vegetation clearance	40+	C2	2.4
G113	Juglans regia (Common walnut) Crataegus monogyna (Hawthorn) Prunus spinosa (Blackthorn) Acer pseudoplatanus (Sycamore) Fraxinus excelsior (Ash) Malus sp. (Apple) Quercus robur (Common oak)	8 - 12	420 maximum	As shown on Tree Constraints Plan. Average canopy spread 4.5m				N/A	0 - 4	Semi-mature Early-mature	Ash Dieback (Hymenoscyphus fraxineus) Multi-stemmed Ivy clad stem - not fully surveyed Recent vegetation clearance	40+	B2	5
G114	Crataegus monogyna (Hawthorn) Prunus spinosa (Blackthorn) Acer pseudoplatanus (Sycamore) Fraxinus excelsior (Ash) Malus sp. (Apple) Quercus robur (Common oak)	8 - 12	480 maximum	As shown on Tree Constraints Plan. Average canopy spread 4.5m				N/A	0 - 4	Semi-mature Early-mature	Ash Dieback (Hymenoscyphus fraxineus) Multi-stemmed Ivy clad stem - not fully surveyed Recent vegetation clearance	40+	B2	5.8
T115	Populus nigra 'Italica' (Lombardy poplar)	18	1150	4#	3.5	4	4.5	2 - SE	4 - 6	Mature	Crown lifted Old pruning wounds Tight union	20-40	B1	13.8
G116	Fraxinus excelsior (Ash) Alnus sp. (Alder)	9 - 11	360 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	1.5 - 4	Early-mature Semi-mature	Ash Dieback (Hymenoscyphus fraxineus) Not fully surveyed Ivy clad stem Recent vegetation clearance	10-20	C2	4.3
G117	Ulmus sp. (Elm)	5 - 6	250 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	2 - 3	Semi-mature	Dead specimen(s) Deadwood greater than 150mm diameter	<10	U	0
T118	Salix x chrysocoma (Weeping willow)	8	960	3.5	2.5	1.5	3	2.5 - NW	1 - 3	Mature	Crown reduced Ivy clad stem - not fully surveyed	40+	B1	11.5

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				N	S	E	W							
T119	Salix x chrysocoma (Weeping willow)	13	1050	6.5	11	10	8#	5 - E	2 - 4	Mature	Cavities Tearouts Deadwood greater than 150mm diameter	40+	A1	12.6
T120	Cedrus deodora (Deodar)	12	420, 280, (505)	4	5.5	2.5	3.5	3 - E	2.5 - 4	Early-mature	Old pruning wounds Crown lifted Twin-stemmed Tight union	40+	B1	6.1
T121	Cedrus deodora (Deodar)	7	430	2	6	4.5	3	2 - W	3 - 4	Early-mature	Old pruning wounds Tearouts Upper crown loss	40+	C1	5.2
H122	Berberis thunbergii (Japanese barberry)	1	80 average	As shown on Tree Constraints Plan. Average hedgerow width 1m				N/A	N/A	Young	Heavily managed/flailed	40+	C2	1
T123	Betula pendula (Silver birch)	11	380	3.5	7	4	6#	3 - W	3 - 4	Early-mature	Not fully surveyed Ivy clad stem Tearouts	20-40	C1	4.6
T124	Platanus acerifolia (London plane)	12	740	8	6.5	6	9.5	3.5 - W	2 - 3	Mature	Hanging branch Old pruning wounds	40+	A1	8.9
T125	Salix x chrysocoma (Weeping willow)	12	1080	4.5	9#	7	10	4 - SE	1.5 - 5	Mature	Hanging branch Old pruning wounds Ivy clad stem Tearouts Cavities Deadwood less than 150mm diameter	40+	A1	13
T126	Salix x chrysocoma (Weeping willow)	9	1000#	2.5	2.5	3	6#	4 - W	2 - 3	Mature	Asymmetrical crown Crown reduced Ivy clad stem - not fully surveyed Significant lean to the west	40+	A1	12
G127	Fraxinus excelsior (Ash) Salix fragilis (Crack willow)	6 - 8	250 maximum	As shown on Tree Constraints Plan. Average canopy spread m				N/A	N/A	Semi-mature	Not fully surveyed Ivy clad stem Not accessible	40+	C2	3
T128	Tilia x europaea (Common lime)	12	700#	7.5	8#	8#	9	2 - All	0.5 - 1	Mature	Ivy clad stem - not fully surveyed Not accessible Deadwood less than 150mm diameter	40+	B1	8.4
G129	Corylus avellana (Hazel) Crataegus monogyna (Hawthorn)	2 - 4	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 2	Semi-mature	Ivy clad stem Partly managed	40+	C2	2.4

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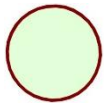
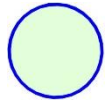
				N	S	E	W							
T130	Fraxinus excelsior (Ash)	14	590	7#	6	8#	7.5	3 - S	1.5 - 4	Early-mature	Deadwood less than 150mm diameter Ash Dieback (Hymenoscyphus fraxineus) Bark wound Old pruning wounds Branch stubs	<10	C1	7.1
T131	Quercus robur (Common oak)	14	750	8#	9	9#	6	2 - SW	1 - 4	Mature	Deadwood less than 150mm diameter Bark wound Old pruning wounds Branch stubs	40+	A1	9
T132	Corylus avellana (Hazel)	7	100	4	4	3	3	0.5 - All	Min Clearance - 0	Semi-mature	Lapsed coppice Not fully surveyed Not accessible Surveyed from roadside	40+	C1	3.6
T133	Corylus avellana (Hazel)	7	100	4	4	3	3	0.5 - All	Min Clearance - 0	Semi-mature	Lapsed coppice Not fully surveyed Not accessible Surveyed from roadside	40+	C1	2.9
T134	Corylus avellana (Hazel)	7	100	5	4	3	5	0.5 - All	Min Clearance - 0	Semi-mature	Lapsed coppice Not fully surveyed Not accessible Surveyed from roadside	40+	C1	3.8
H135	Acer campestre (Field maple)	2	80 average	As shown on Tree Constraints Plan. Average hedgerow width 1.5m				N/A	N/A	Semi-mature	Partially managed/flailed	40+	C2	1
G136	Tilia sp. (Lime)	10 - 12	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 6.5m				N/A	1 - 2	Semi-mature Mature	Not accessible Not fully surveyed	40+	B2	5.4
G137	Acer pseudoplatanus (Sycamore) Fagus sylvatica (Beech) Crataegus monogyna (Hawthorn) Alnus sp. (Alder) Tilia sp. (Lime)	6 - 12	400 maximum	As shown on Tree Constraints Plan. Average canopy spread 6m				N/A	0 - 3	Semi-mature Mature	Not fully surveyed Multi-stemmed Not accessible Crown lifted Overgrown verge restricts access	40+	B2	4.8
G138	Alnus sp. (Alder) Acer pseudoplatanus (Sycamore) Fraxinus excelsior (Ash)	10 - 15	500 maximum#	As shown on Tree Constraints Plan. Average canopy spread 6m#				N/A	4 - 6	Semi-mature Mature	895/132	40+	A2	6
G139	Alnus sp. (Alder) Acer pseudoplatanus (Sycamore) Fraxinus excelsior (Ash)	10 - 15	500 maximum#	As shown on Tree Constraints Plan. Average canopy spread 6m#				N/A	4 - 6	Semi-mature Mature	Within neighbouring property Not fully surveyed Not accessible Ivy clad stem Private property, surveyed from roadside only	40+	B2	6

Table A-2: Tree Survey Schedule Key

Parameters Assessed	Details
Tree ID	'T' denotes Tree, 'G' denotes Tree Group, 'W' denotes Woodland, 'H' denotes Hedgerow. The original tree survey numbering is shown in brackets.
Species	Botanical and common name.
Height	Measured using a clinometer. Measured to the nearest metre.
Stem Diameter	Measured at 1.5 m above ground level. For multi-stem trees each stem diameter is recorded. For trees with 2-5 stems the overall diameter is calculated by squaring each stem diameter, adding these figures together and square rooting the result. For trees with more than 5 stems the mean stem diameter is squared and multiplied by the number of stems. The result is then square rooted to give the overall diameter. The results of the calculations for multi-stemmed trees are shown in brackets on the schedule. Where the tree is inaccessible due to vegetation or obstacles then the stem diameter has been estimated. For groups and woodlands, the stem diameter shown is the maximum recorded.
RPA Radius	The Root Protection Area (RPA) is calculated using the stem diameter. The RPA is an area equivalent to a circle with a radius 12 times the stem diameter for a single stem tree. BS 5837:2012 limits the maximum RPA to 707 square metres (m²), i.e. equivalent to a circle with a radius of 15m or a square with approximately 26m sides. The RPA of veteran/ancient trees is calculated using the standing advice Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK. this states that the RPA for ancient or veteran trees should be an area equivalent to a circle with a radius at least 15 times the stem diameter or 5m beyond the tree canopy, whichever is the greater. All ancient woodland requires an RPA of at least 15m.
Branch Spread	Measured at the four cardinal points to derive an accurate representation of the crown and is recorded on the tree survey plan. Where the tree is inaccessible due to vegetation or obstacles then the branch spreads have been estimated. Measured to the nearest metre using a laser measurer. Direction measured using a compass.
Life Stage	Young: Newly planted tree 0-10 years. Semi-Mature: Tree in the first third of its normal life expectancy for the species (significant potential for future growth in size). Early Mature: Tree in the second third of its normal life expectancy for the species (some potential for future growth in size) Mature: Tree in the final third of its normal life expectancy for the species (having typically reached its approximate ultimate size). Over Mature: Tree beyond the normal life expectancy for the species. Veteran: Tree, which is of interest biologically, aesthetically or culturally because of its condition, size or age.
General Observations	Particularly of structural and / or physiological condition (e.g. the presence of any decay and physical defect) and / or preliminary management recommendations. External features assessed based upon – The Body Language of Trees, Research for Amenity Trees No 4. (Mattheck and Breloer, 1994).

Parameters Assessed	Details
Category Grading	Recorded on the tree survey plans and schedule. See Table A-3 for Cascade Chart for Tree Quality Assessment. British Standard (BS) 5837 (2012), “Trees in relation to design, demolition and construction – Recommendations”. Occasionally trees are given more than one category grading, where trees would otherwise be categorised as U, but have identifiable conservation, heritage or landscape value, even though only for the short term, they may be upgraded, although they might be suitable for retention only where issues concerning their safety can be appropriately managed. A – Trees of high quality with an estimated remaining life expectancy of at least 40 years. (Shown as green on the tree survey plans). B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. (Shown as blue on the tree survey plans). C – Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150 mm. (Shown as grey on the tree survey plans). U – Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. (Shown as red on the tree survey plans). 1 – Mainly arboriculture qualities. 2 – Mainly landscape qualities. 3 – Mainly cultural values, including conservation
Notes	Trees can be grouped if they form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or woodland pasture). The category grading for a group of trees does not necessarily imply that the individual trees within that group are the same grading. The group is viewed as a whole and individual trees within it may have a lower grading.
#	Estimated dimensions
*	Indicates estimated position of tree (not indicated on topographical survey).
**	RPA limited to the maximum diameter of 15m in accordance with BS 5837:2012

Table A-3: Cascade Chart of Tree Quality Assessment (Taken from BS 5837:2012)

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan #
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.*			
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees 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	Trees with no material conservation or other cultural value