



Hallam Land Management

North West Bicester

Appendix 8d - Arboricultural Assessment

December 2021

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1.0 INTRODUCTION

- 1.1 This report has been prepared by FPCR Environment and Design Limited on behalf of Hallam Land Management to present the findings of an Arboricultural Assessment and survey of trees located at North West Bicester (hereafter referred to as the site), OS Grid Ref SP 571 249.
- 1.2 The survey was carried out on 24th February 2021.

Scope of Assessment

- 1.3 The tree survey and assessment of existing trees has been carried out in accordance with guidance contained within British Standard 5837:2012 '*Trees in Relation to Design, Demolition and Construction - Recommendations*' (hereafter referred to as BS5837). The guidelines set out a structured assessment methodology to assist in determining which trees would be deemed either as being suitable or unsuitable for retention.
- 1.4 The guidance also provides recommendations for considering the relationship between existing trees and how those trees may integrate into designs for development; demolition operations and future construction processes so that a harmonious and sustainable relationship between any retained trees and built structures can be achieved.
- 1.5 The purpose of the report is therefore to firstly, present the results of an assessment of the existing trees' arboricultural value, based on their current condition and quality and to secondly, provide an assessment of impact arising from the proposed development of the site.
- 1.6 This report has been produced to accompany an outline planning application for a mixed used development and has included an assessment of any impact to the tree cover. The survey has therefore focused on any trees present within or bordering the site that may potentially be affected by the future proposals or will pose a constraint to any proposed development.

Site description

- 1.7 Situated to the Northwest of the town of the Bicester, the site comprises 177.13ha of arable land bisected by Bicester Road. To the east of Bicester Road, the site abuts the A4095 on its southern boundary, the B4100 on its eastern boundary and Bainton Road on its northern boundary. To the west of Bicester Road, the site extends between Bicester Road to the east and an adjacent railway line to the west.

2.0 PLANNING POLICY

National Planning Policy Framework July 2021

- 2.1 National Planning Policy is defined by the National Planning Policy Framework (NPPF). This sets out the Government's most current and up to date planning policies for England and how these should be applied. The current NPPF is dated July 2021.

- 2.2 Paragraph 10 of the NPPF states that there is a presumption in favour of sustainable development and states that for decision making, the LPA should be ‘*c) approving development proposals that accord with an up-to-date development plan without delay*’. In the absence of a development plan or the development plan is out of date, the acting LPA should grant planning consent so far as the development proposals do not breach the policies and guidance outlined in the NPPF.
- 2.3 In relation to arboriculture, the NPPF also states that:
- *131 ‘Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.*
 - *180(b) ‘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’;*
and provides specific guidance that:
 - *180(d) ‘development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity’.*
- 2.4 Examples of what is deemed to be ‘*wholly exceptional*’ are included within Footnote 63 and provides the examples of ‘*infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat*’.

Local Planning Policy

- 2.5 Local planning decisions regarding all future developments are assessed against a framework to ensure that the district or county in question is developed in a well-informed and coherently systematic manner, this may include decisions to ensure that the right number and types of houses are built and incorporating the correct type of shopping and recreation facilities, whilst protecting the local ecological resources, landscape context and intrinsic heritage value of an area.
- 2.6 Within the context of Adopted Cherwell Local Plan 2011-2031, there are several policies relating to trees. The following lists the most relevant.
- *Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment*
Protection and enhancement of biodiversity and the natural environment will be achieved by the following:

The protection of trees will be encouraged, with an aim to increase the number of trees in the District.

- *Policy ESD 13: Local Landscape Protection and Enhancement*

Opportunities will be sought to secure the enhancement of the character and appearance of the landscape, particularly in urban fringe locations, through the restoration, management or enhancement of existing landscapes, features or habitats and where appropriate the creation of new ones, including the planting of woodlands, trees and hedgerows.

- *Policy ESD 15: The Character of the Built and Historic Environment*

Successful design is founded upon an understanding and respect for an area's unique built, natural and cultural context. New development will be expected to complement and enhance the character of its context through sensitive siting, layout and high quality design. All new development will be required to meet high design standards. Where development is in the vicinity of any of the District's distinctive natural or historic assets, delivering high quality design that complements the asset will be essential.

New development proposals should:

Contribute positively to an area's character and identity by creating or reinforcing local distinctiveness and respecting local topography and landscape features, including skylines, valley floors, significant trees, historic boundaries, landmarks, features or views, in particular within designated landscapes, within the Cherwell Valley and within conservation areas and their setting

Statutory Considerations

- 2.7 Local authorities have a Duty under the Town and Country Planning Act to create Tree Preservation Orders (TPO) in order to protect and preserve specific trees and woodlands that bring significant amenity benefit to a particular site or location. Under a TPO it is a criminal offence to cut down, top, lop, uproot or willfully destroy a tree protected by that Order, or to cause or permit such actions, if carried out without the prior written consent of the acting LPA. Anyone found guilty of such an offence is liable and in serious cases, may result in prosecution and incur an unlimited fine.
- 2.8 No direct consultation with the Local Planning Authority has taken place, however, it is understood having used the online search facility on the Cherwell District Council website, that there is an individual Tree Preservation Order, namely TPO 005/2002 (Tree in field north east of Lords Farm, Lords Lane), which applies to a single tree present within the assessment site. The tree (T141) has been identified on the Tree Survey Plan and further details are given in Chapter 3. Before any tree works are undertaken confirmation of the online information should be sought from the Local Authority.
- 2.9 Information provided on Tree Preservation Orders and Conservation Areas is accurate to the date of this assessment and cannot be assumed to remain unchanged. The last check was carried out on 16th August 2021.

Non-Statutory Considerations

- 2.10 To compile existing baseline information on relevant arboricultural considerations information was requested from both statutory and non-statutory nature conservation organisations. The Multi Agency Geographic Information for the Countryside (MAGIC)¹ website highlighted tree cover within the site as or included within the following:
- The Priority Habitat Inventory, Deciduous Woodland
 - The National Forestry Inventory
- 2.11 The Priority Habitat Inventory 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.²
- 2.12 The deciduous woodland inventory is a rolling programme designed to provide accurate information about the size, distribution, composition and condition of forests and woodlands.³
- 2.13 Priority habitat designation and inclusion within the National Forestry Inventory does not provide any statutory protection.

3.0 SURVEY METHODOLOGY

- 3.1 The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of BS5837. The survey has been undertaken by a suitably qualified and experienced arboriculturist and has recorded information relating to all those trees within the site and those adjacent to the site which may be of influence to any proposals. Trees were assessed for their arboricultural quality and benefits within the context of the proposed development in a transparent, understandable and systematic way.
- 3.2 Trees have been assessed as groups, hedgerows or woodland where it has been determined appropriate.
- The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally including biodiversity or habitat potential for example parkland or wood pasture.
 - For the purposes of this assessment, a hedgerow is described as any boundary line of trees or shrubs less than 5m wide at the base and are managed under a regular pruning regime.
 - For the purposes of this assessment woodland is described as a habitat where ‘trees are the dominant plant form. The individual tree canopies generally overlap and interlink, often forming a more or less continuous canopy’⁴. Woodlands however, are not just formed of trees and generally include a great variety of other plants. These will include ‘mosses, ferns and lichens, as well as small flowering herbs, grasses and shrubs’⁵.

¹ <http://magic.defra.gov.uk/>

² Contains public sector information licensed under the Open Government Licence v3.0.

³ <https://www.forestresearch.gov.uk/tools-and-resources/national-forest-inventory/>

⁴ http://www.countrysideinfo.co.uk/woodland_manage/whatis.html

⁵ http://www.countrysideinfo.co.uk/woodland_manage/whatis.html

- 3.3 An assessment of individual trees within groups, hedgerows or woodland has been made where a clear need to differentiate between them, for example, in order to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

BS5837 Categories

- 3.4 Trees have been divided into one of four categories based on Table 1 of BS5837, '*Cascade chart for tree quality assessment*'. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).
- 3.5 Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds. Categories A, B and C are applied to trees that should be of material considerations in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.
- 3.6 **Category (U) – (Red):** Trees which are unsuitable for retention and are 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 within this category are:
- Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.
 - Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.
 - Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.
 - Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.
- 3.7 **Category (A) – (Green):** Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years with potential to make a lasting contribution. Such trees may comprise:
- Sub category (i) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
 - Sub category (ii) trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.
 - Sub category (iii) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.
- 3.8 **Category (B) – (Blue):** Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years with potential to make a significant contribution. Such trees may comprise:

- Sub category (i) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
- Sub category (ii) 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.
- Sub category (iii) trees with material conservation or other cultural value.

3.9 **Category (C) – (Grey):** Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

- Sub category (i) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
- Sub category (ii) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary / transient screening benefits.
- Sub category (iii) trees with no material conservation or other cultural value.

Tree Constraints and Root Protection Areas

- 3.10 Below ground constraints to future development are represented by tree roots and the soil environment in which they grow which needs to be protected if the tree is to be retained. Tree rooting systems are essential for the uptake of water and nutrients, serving the storage of carbohydrates for the future growth and function of the tree, and form structural anchorage and support for the stem and crown. The perceived rooting area of the tree; referred to as the root protection area (RPA) needs to be protected if the tree is to be retained.
- 3.11 The RPA is a notional area considered to be the minimum zone that must be protected to avoid any adverse impacts on retained trees. The RPA has been calculated in accordance with Annex C, D and Section 4.6 of BS5837:2012 and requires suitable protection in order for the tree to be successfully incorporated into any future scheme. As such, the RPA of existing trees is an important material consideration when considering site constraints and planning development activities.
- 3.12 Whilst it is generally accepted that a trees roots may extend far greater distances than the notional RPA, with the distribution of the root system relating directly to the availability of suitable conditions for growth (namely oxygen, water and nutrients), with roots predominantly located in the upper 1,000 mm of the soil horizon; the RPA offers an accepted protective buffer from development.
- 3.13 Above ground constraints such as the current crown spread of the trees and an illustration of the shade pattern (where appropriate) have been considered and identified within the Tree Survey Plan and Tree Retention Plan indicates their potential area of shading influence.

Considerations and Limitations of the Tree Survey

- 3.14 The survey was completed from ground level only and from within the boundary of the site. Aerial tree inspections or an assessment of the internal condition of the stem/s or branches were not undertaken at this stage as this level of survey is beyond the scope of the initial assessment.
- 3.15 The statements made in this report regarding the assessed trees does not take into account the effects of extreme / adverse weather conditions, changes in land use prior to the site's development, unforeseen accidents or anti-social behaviours, such as vandalism, which occur since the date of the survey. As such, the assessment of tree condition given within applies to the date of survey and cannot be assumed to remain unchanged.
- 3.16 It will be necessary to review all comments and observations made within this report, in accordance with sound arboricultural practice, within two years of the date of survey (unless explicitly stated elsewhere within this report). Further review may also be necessary where site conditions change or works to trees are carried out which have not been specified in detail within this report.
- 3.17 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The tree survey conducted, in accordance with BS5837, does not assess hedgerows against the Hedgerow Regulations 1997 or specifically from an ecological perspective, and is outside the scope of this assessment.
- 3.18 It may be necessary during detailed design to undertake further assessment and accurate positioning of woody species within tree groups and hedgerows to assist structural calculations for foundation design of structures in accordance with current building regulations. The exact position of individual trees or species included as part of a tree group should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths in accordance with NHBC Chapter 4.2 Building near Trees.

4.0 RESULTS

- 4.1 A total of 151 individual trees, 64 groups of trees and 29 hedgerows were surveyed as part of the Arboricultural Assessment. Trees were surveyed as individual trees and groups of trees where examples are clearly present as per the description. Refer to the Tree Survey Plan and Appendix A – Tree Schedule for full details of the trees included in this assessment.

Tree Schedule

- 4.2 Appendix A presents details of all individual trees, groups and hedgerows found during the assessment including heights, diameters at breast height, crown spread (given as a radial measurement from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention and the root protection area.
- 4.3 General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

Tree Survey Plan

- 4.4 The individual positions of trees, groups and hedgerows have been shown on the Tree Survey Plan. The positions of trees are based on a topographical / land survey, as far as possible, supplied by the client. Where topographical information has not identified the position of trees these have been plotted using a global positioning system and aerial photography to provide approximate locations. The crown spread, root protection area and shade pattern (where appropriate) are also indicated on this plan.

Results Summary

- 4.5 The table below summarises the trees assessed.

Table 1: Summary of Trees by Retention Category

	Individual Trees	Total	Groups of Trees	Total
Category U - Unsuitable	T23, T26, T55, T64, T72, T91, T112, T118, T119, T120, T131, T134, T140	13		0
Category A (High Quality / Value)	T1, T53, T54, T70, T115	5		0
Category B (Moderate Quality / Value)	T3, T16, T33, T34, T35, T36, T37, T38, T40, T41, T42, T43, T44, T45, T47, T48, T52, T56, T58, T62, T63, T65, T66, T67, T68, T69, T71, T73, T74, T75, T76, T79, T81, T82, T83, T84, T85, T88, T89, T90, T96, T105, T106, T107, T108, T109, T110, T111, T132, T135, T136, T137, T138, T139, T141, T146	56	G1, G2, G6, G11, G13, G15, G18, G21, G22, G23, G25, G27, G28, G29, G31, G32, G34, G35, G36, G45, G50, G55, G60, H2, H4, H7, H11, H14, H16, H18, H19, H27	32
Category C (Low Quality / Value)	T2, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T17, T18, T19, T20, T21, T22, T24, T25, T27, T28, T29, T30, T31, T32, T39, T46, T49, T50, T51, T57, T59, T60, T61, T77, T78, T80, T86, T87, T92, T93, T94, T95, T97, T98, T99, T100, T101, T102, T103, T104, T113, T114, T116, T117, T121, T122, T123, T124, T125, T126, T127, T128, T129, T130, T133, T142, T143, T144, T145, T147, T148, T149, T150, T151	77	G3, G4, G5, G7, G8, G9, G10, G12, G14, G16, G17, G19, G20, G24, G26, G30, G33, G37, G38, G39, G40, G41, G42, G43, G44, G46, G47, G48, G49, G51, G52, G53, G54, G56, G57, G58, G59, G61, G62, G63, G64, H1, H3, H5, H6, H8, H9, H10, H12, H13, H15, H17, H20, H21, H22, H23, H24, H25, H26, H28, H29	61

- 4.6 Tree cover on the site is considered typical of an arable setting, with maintained hedgerows, containing individual trees denouncing field boundaries. The tree cover recorded was generally of early mature to mature proportions and considered of moderate or low quality, from an arboricultural perspective.
- 4.7 Ash *Fraxinus excelsior* is the most abundant species recorded on the site, but as a result of recent tree planting across the site, within and adjacent to hedgerows, the species diversity had been improved, with several specimens of field maple *Acer campestre*, horse chestnut *Aesculus hippocastanum*, Norway Maple *Acer platanoides* and common lime *Tilia x europaea* being recorded.
- 4.8 Only five trees recorded on the site were considered of high quality, all are English oak *Quercus robur* of mature proportions. These trees were considered particularly good examples of species and by virtue of the long-lived nature of oak trees, all had a life expectancy greater than 40 years.
- 4.9 The most abundant tree cover stood around Hawkwell Farm (not within the application boundary) and along a watercourse within the southern portion of the site. Ash was again the dominant species, but this area also contained mature pollarded crack willow *Salix fragilis* and mixed species buffer groups along the A4095.
- 4.10 Larger pockets of tree cover were recorded across the site, these included G11, G13, G45 and G50. All four of these groups appear to have been planted to create pockets of woodland, but due to their immature proportions, absence of other plants and development of canopy layers and structure, these were considered tree groups as opposed to woodland, from an arboricultural perspective and of only moderate quality.
- 4.11 Of the 151 individual trees recorded only thirteen were considered unsuitable for retention being 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. Despite their Category U designation these trees can have existing or potential conservation value which should be preserved, provided their retention would not present an unacceptable risk to people or property.

Ancient and Veteran Trees

- 4.12 Veteran trees and Ancient Woodland are important components of the landscape, their importance can be for a number of reasons including that of their ecological, social, cultural and historic value. The National Planning Policy Framework (NPPF) 2021, which defines the terms ancient or veteran tree as:
- 'A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.'*⁶
- 4.13 Various published methodologies are currently available which, due to the complexity and subjectivity of the process of defining and assessing these trees, often have conflicting definitions. This assessment, and the criteria used for defining ancient/veteran trees and the identification of attributable ancient/veteran features, has been based on a range of currently published guidance and resources.

⁶ Ministry of Housing, Communities and Local Government. (2019). *National Planning Policy Framework*. London: Ministry of Housing, Communities and Local Government.

- 4.14 None of the assessed trees were considered as ancient or veteran trees in accordance with these accepted methodologies and guidance.

Ancient Woodland

- 4.15 Ancient woodland in England is defined as an area that has been continuously wooded since at least 1600 AD. 'Continuously wooded' does not require there to have been a continuous cover of trees and shrubs across the entire area. Habitats such as glades, deer lawns, rides, ponds and streams, as well as gaps created by natural occurrences, and forestry may all occur within woodland.
- 4.16 The Multi Agency Geographic Information for the Countryside (MAGIC)⁷ website identified no Ancient Woodland within the site.

Statutory Constraints

- 4.17 The Cherwell District Council website identified a single individual T141, a mature ash tree within the south of the site, close to a mast, as afforded protection by a Tree Preservation Order, (TPO 005/2002 Tree in field north east of Lords Farm, Lords Lane). This tree is protected by law from felling or uprooting, pruning including 'topping/lopping' and willful damage or destruction.
- 4.18 Prior to any tree surgery and / or felling of protected trees it will be necessary to apply to the relevant local planning authority to gain consent for the works. The granting of full planning permission would override the protection afforded by the Tree Preservation Order to those trees shown as removed within an approved reserve matters planning application.

5.0 ARBORICULTURAL IMPACT ASSESSMENT

- 5.1 The following paragraphs present a summary of the tree survey and discussion of particular trees and groups recorded in the context of any proposed development in the form of an Arboricultural Impact Assessment in accordance with section 5.4 of BS5837. Any final tree retentions will need to be reconciled with the advice contained within this report.
- 5.2 The AIA has been based upon the Composite Land Use Plan (HLM066-001-Rev1) and seeks to outline the relationship between the proposals and the existing trees and hedgerows.

Outline Development Proposals

- 5.3 The Composite Land Use Plan shows the proposals for an outline mixed use development illustrating the indicative position of residential development, employment use and proposed supporting facilities, which include a burial ground, primary school, secondary school, allotments and community farm and solar panels.
- 5.4 An overlay of the Composite Land Use Plan has been incorporated in the Tree Retention Plan, which shows the outline layout in relation to the existing tree cover allowing for an assessment of any potential conflicts.

⁷ <http://magic.defra.gov.uk/>

- 5.5 At this illustrative stage the position of the proposed built element and internal road layout have been shown to be constraint led and designed around the natural features of the site. Much of the existing tree cover has been shown as retained within proposed green space which will include sport, recreation and play areas. This existing tree cover would provide separation between housing parcels and maturity to the landscape, providing a natural green and leafy urban environment in which people would want to work and reside.
- 5.6 Although illustrative at this stage, the primary street through the development, is shown to require the removal of sections of hedgerow and tree groups. The removal of these sections of hedgerows and tree groups would be unavoidable to facilitate the change in land use and provide necessary links between existing field parcels.
- 5.7 Further vehicular and pedestrian links between existing field parcels will be required and at the detailed design stage, the position of these links should be informed by the existing tree cover to minimise tree loss and avoid positioning roads and footpaths within the root protection areas of retained trees.
- 5.8 Individual trees and hedgerows have at this outline stage been shown as retained within landscape buffers between development parcels to avoid retaining trees centrally within development parcels. The final layout of the scheme should assess the distance of proposed development and any alterations in ground levels which may be necessary, to determine if these trees and hedgerows can be retained.
- 5.9 It would be advised that an Arboricultural Assessment be submitted with a future reserve matters applications to assess any additional arboricultural impacts which may be necessary to implement a reserve matters layout.
- 5.10 Where trees are considered unsuitable for retention (Category U) and are shown to be positioned centrally within development parcels, these have been shown as removed at this stage. The estimated remaining life expectancy of these trees is considered less than 10 years and so the trees would be considered inappropriate for retention centrally within a development parcel and should not pose a constraint to development.
- 5.11 The number of trees and length of hedgerow, which would be removed would be determined at the detailed design stage. A future landscaping scheme should provide suitable mitigation for the loss of trees and hedgerows and should aim to both increase tree cover on the site and enhance existing arboricultural features through new tree and hedgerow planting in accordance with Cherwell Local Plan 2011-2031 Policy ESD10 and ESD 13.

Protected Trees

- 5.12 The single tree afforded protection by the Cherwell District Council Tree Preservation Order, TPO 005/2002 is shown at this outline stage to be positioned within green space which will house attenuation basins and not be impacted upon by the development of the site. At the reserve matters stage, it will be important to consider this protected tree and the design of the attenuation basins in order to avoid any excavation within its RPA.

Vehicular Access and Pedestrian Links

- 5.13 The proposed new bypass through the site was granted conditional approval by Cherwell District Council 21st August 2019, as part of the application for “*Construction of new road from Middleton Stoney Road roundabout to join Lord's Lane, east of Purslane Drive, to include the construction of a new crossing under the existing railway line north of the existing Avonbury Business Park, a bus only link east of the railway line, a new road around Hawkwell Farm to join Bucknell Road, retention of part of Old Howes Lane and Lord's Lane to provide access to and from existing residential areas and Bucknell Road to the south and associated infrastructure.*”, (Planning reference 14/01968/F). The proposed tree removal necessary to implement this new bypass have been identified within the Tree Retention Plan but this impact is not discussed within this Arboricultural Assessment.
- 5.14 The main vehicular access to the site will be achieved through primary streets linking to the new bypass. Although illustrative at this stage the position of these access points, have shown to require the removal of sections of tree groups and a single individual tree.
- 5.15 The easternmost access which is shown to link with the A4095 opposite Germander Way will, in its current position, require the removal a section of G36 and individual tree T88. While the removal of a section of G36, a buffer planting group along the length of the boundary, would be unavoidable to facilitate an access to the A4095, at the detailed design stage modifications to the junction design and position may allow for the retention of T88, a moderate quality elm *Ulmus sp.* However, should the retention of this tree not be considered feasible, due to necessary highway modifications and the visibility splay requirements of a new junction, its removal could be mitigated for through new tree planting of higher quality around the proposed new access.
- 5.16 Secondary street which will include a vehicular access linking the development to Bucknell Road, have not been shown at this outline stage but during the detailed design should consider the position of existing tree cover to minimise tree loss and avoid positioning roads and footpaths within the root protection areas of retained trees.
- 5.17 Tertiary streets linking to employment and residential parcels west of Bucknell Road should similarly be positioned to minimise tree loss and avoid positioning roads and footpaths within the root protection areas of retained trees.
- 5.18 Pedestrian links and footpaths, which will include a proposed leisure pedestrian cycle route and an off-road proposed commuter pedestrian route along Bucknell / Bicester Road, are likely to require gap be created within existing hedgerows for the creation of access point but should not require the removal of any individual trees. Where existing grass verges will not accommodate the creation of these pedestrian route's consideration should be given to positioning these pathways within the development to avoid the removal of any large length of hedgerows.

Discussion

- 5.19 In conclusion for arboriculture, the proposals are considered to meet the aims and objectives of both local and national policy, through careful consideration of the design and retention of a high proportion of the existing tree cover, including all protected trees. The retention of, coupled with targeted future management and enhancement of the existing and future tree cover will meet many of the individual aspirations set out in the various policies.

Retained Tree Management

- 5.20 The layout of the development is currently reserved for subsequent approval. In the course of a reserved matters application pursuant to layout, a review of the relationship between the layout and the retained trees should be undertaken by a qualified arboriculturist to assess the existing tree cover and prepare a schedule of tree works.
- 5.21 All retained trees should be subjected to sound arboricultural management as recommended within section 8.8.3 of BS5837 *Post Development Management of Existing Trees*, where there is a potential for public access in order to satisfy the landowner's duty of care. Additionally, inspections annually and following major storms should be carried out by an experienced arboriculturist or arborist to identify any potential public safety risks and to agree remedial works as required.
- 5.22 All tree works undertaken should comply with British Standard 3998:2010 and should therefore be carried out by skilled tree surgeons. It would be recommended that quotations for such work be obtained from Arboricultural Association Approved Contractors as this is the recognised authority for certification of tree work contractors.
- 5.23 All vegetation and, particularly, woody vegetation proposed for clearance should be removed outside of the bird-breeding season (March - September inclusive) as all birds are protected under the Wildlife and Countryside Act, 1981 (as amended) whilst on the nest. Where this is not possible, vegetation should be checked for the presence of nesting birds prior to removal by an experienced ecologist.

New Tree Planting

- 5.24 New tree planting would be provided as part of the development proposals and although not shown at this illustrative stage would provide extensive new tree planting within the site which will include the creation of green space, a riparian corridor and green loop. This green infrastructure which is likely to include a large amount of structured buffer tree planting, significantly increasing tree cover on the site and mitigating for any tree loss required to facilitate the development.
- 5.25 The purpose and function of this new tree planting should be understood from the start of any design stages so that key objectives from a landscape perspective can be achieved. Tree and shrub planting can be used to contribute to achieve a net gain in biodiversity value. To maximise biodiversity value (and contribution to net gain) native species or varieties should be specified.
- 5.26 Careful consideration should however be given to the following: ultimate height and canopy spread, form, habit, density of crown, potential shading effect, colour, water demand, soil type and maintenance requirements of any new tree planting. To reduce the risk of trees being removed in the future on the grounds of nuisance
- 5.27 Tree planting should be avoided where they may obstruct overhead power lines or cables and any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.

6.0 TREE PROTECTION MEASURES

- 6.1 Retained trees will be adequately protected during works ensuring that the calculated root protection area for all retained trees can be appropriately protected through the erection of the requisite tree protection barriers. Measures to protect trees should follow the guidance in BS5837 and will be applied where necessary for the purpose of protecting trees within the site whilst allowing sufficient access for the implementation of the proposed layout. These have been broadly summarised below.

General Information and Recommendations

- 6.2 All trees retained on site will be protected by suitable barriers around the calculated RPA, crown spread of the tree or other defined constraints of this assessment as detailed by section 6 and 7 of BS5837.
- 6.3 Barriers will be erected prior to commencement of any construction work and before demolition including erection of any temporary structures. Once installed, the area protected by fencing or other barriers will be regarded as a construction exclusion zone. Fencing and barriers will not be removed or altered without prior consultation with the Project Arboriculturist.
- 6.4 Any trees that are not to be retained as part of the proposals should be felled prior to the erection of protective barriers. Particular attention needs to be given by site contractors to minimise damage or disturbance to retained specimens.
- 6.5 Confirmation that tree protective fencing or other barriers have been set out correctly should be gained prior to the commencement of site activity.

Tree Protection Barriers

- 6.6 Tree protection fencing should be fit for the purpose of excluding any type of construction activity and suitable for the degree and proximity of works to retained trees. Barriers must be maintained to ensure that they remain rigid and complete for the duration of construction activities on site.
- 6.7 In most situations, fencing should comprise typical construction fencing panels attached to scaffold poles driven vertically into the ground. For particular areas where construction activity is anticipated to be of a more intense nature, supporting struts, acting as a brace should be added and fixed into position through the application of metal pins driven into the ground to offer additional resistance against impacts.
- 6.8 Where site circumstances and the risk to retained trees do not necessitate the default level of protection an alternative will be specified appropriate to the level / nature of anticipated construction activity. The recommended methods of fencing specifications for this site have been illustrated in Appendix B.
- 6.9 It may be appropriate on some sites to use temporary site offices, hoardings and lower level barrier protection as components of the tree protection barriers. Details of the specific protection barriers for the site can be provided should the application be approved, as part of a site specific Arboricultural Method Statement for a Reserved Matters application and in accordance with the guidance contained within BS5837.

Protection outside the exclusion zone

- 6.10 Once the areas around trees have been protected by the barriers, any works on the remaining site area may be commenced providing activities do not impinge on protected areas.
- 6.11 All weather notices should be attached to the protective fencing to indicate that construction activities are not permitted within the fenced area. The area within the protective barriers will then remain a construction exclusion zone throughout the duration of the construction phase of the proposed development. Protection fencing signs can be provided upon request.
- 6.12 Wide or tall loads etc should not come into contact with retained trees. Banksman should supervise transit of vehicles where they are in close proximity to retained trees.
- 6.13 Oil, bitumen, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10m of a tree stem. No concrete should be mixed within 10m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree.
- 6.14 No fires will be lit where flames are anticipated to extend to within 5m of tree foliage, branches or trunk, taking into consideration wind direction and size of fire.
- 6.15 Notice boards, telephone cables or other services should not be attached to any part of a retained tree.
- 6.16 Any trees which need to be felled adjacent to or are present within a continuous canopy of retained trees, must be removed with due care (it may be necessary to remove such trees in sections).

Protection for Aerial Parts of Retained Trees

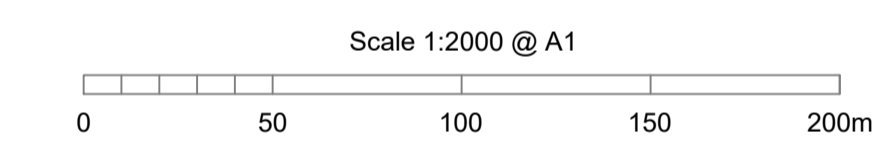
- 6.17 Where it is deemed necessary to operate wide or tall plant within close proximity to trees it is best advised that appropriate, but limited tree surgery, be carried out beforehand to remove any obstructive branches as any such equipment would have potential to cause damage to parts of the crown material, i.e. low branches and limbs, of retained trees within the protective barriers. This is termed as 'access facilitation pruning' within BS5837. Any such pruning should be undertaken in accordance with a specification prepared by an arboriculturist.
- 6.18 A pre-commencement site meeting with contractors who are responsible for operating machinery is advised to firstly highlight the potential for damage occurring to tree crowns and to ensure that extra care is applied when manoeuvring machinery during such operations within close proximity to retained trees to avoid any contact.
- 6.19 In the event of having caused any branch or limb damage to retained trees it is strongly recommended that suitable tree surgery be carried out, in accordance with British Standard 3998:2010 and in agreement with the Local Planning Authority prior to correcting the damage, upon completion of development.

7.0 CONCLUSION

- 7.1 Tree cover on the site is considered typical of an arable setting, with maintained hedgerows, containing individual trees denouncing field boundaries. The tree cover recorded was generally of early mature to mature proportions and considered of moderate or low quality, from an arboricultural perspective.
- 7.2 None of the assessed trees were considered as ancient or veteran trees in accordance with accepted methodologies and guidance and only a single tree (T141) was identified as being afforded protection by a Tree Preservation Order (TPO 005/2002 Tree in field north east of Lords Farm, Lords Lane).
- 7.3 At this outline stage, the built element has been designed around the existing tree cover. Proposed areas of green space have been shown to incorporate existing trees between development parcels and would allow for the retention of much of the existing tree cover, including the single individual tree afforded protection by a TPO.
- 7.4 Tree and hedgerow removal would be necessary to provide vehicular and pedestrian access to the site and links between existing field parcels. This tree removal would be considered unavoidable to allow for development but should be informed by this arboricultural assessment and look to avoid tree removal where possible.
- 7.5 To mitigate for any tree removal, a suitable amount of new tree planting should be provided which should increase tree cover on the site and would also provide an opportunity enhance existing arboricultural features, which include immature woodland groups, mature hedge lines and riparian habitat, through future management and new tree planting.
- 7.6 In conclusion, the outline proposals are considered to meet the aims and objectives of both local and national policy, showing most trees as being retained and providing an opportunity to secure new tree planting and future management which will both increase and enhance tree cover on the site.
- 7.7 The future detailed site layout should be informed by this arboricultural assessment, and additional arboricultural impact assessments should be submitted with all subsequent reserve matters applications, to assess the detailed layouts and determine any additional arboricultural impacts.



- KEY**
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 - Category A - Trees / Groups of High Quality (BS 5837:2012)
 - Category B - Trees / Groups of Moderate Quality (BS 5837:2012)
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 - Indicative Shade Pattern (in accordance with BS5837:2012 where appropriate)



NOTES

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A	16.08.21	TPO Info Added	EC
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drawing title
**TREE SURVEY PLAN
SOUTH**

scale
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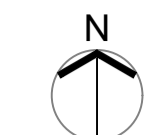
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








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August 2021

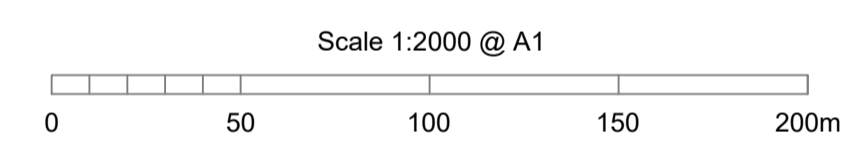
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9643-T-01

rev
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- KEY**
-  Category U - Trees / Groups Unsuitable for Retention (BS 5837:2012)
 -  Category A - Trees / Groups of High Quality (BS 5837:2012)
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 -  Hedgerow Hatching (Colour Indicates BS5837:2012 Category)
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NOTES

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**NW Bicester
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drawing title
**TREE SURVEY PLAN
NORTH**

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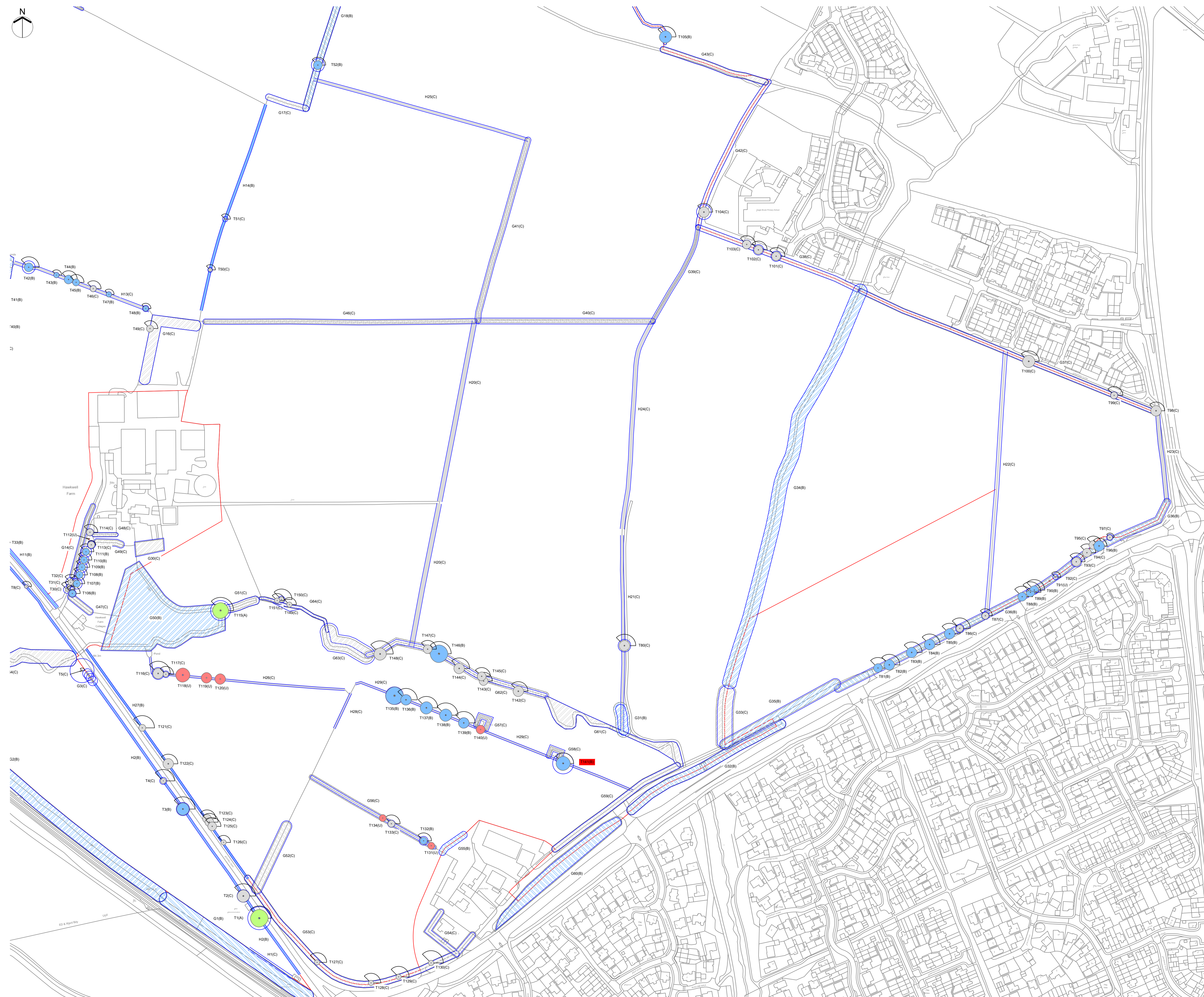
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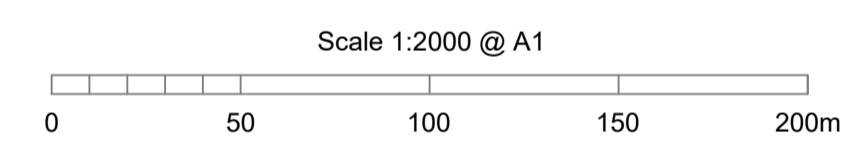
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9643-T-02

rev
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- KEY**
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 - Category A - Trees / Groups of High Quality (BS 5837:2012)
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 - T1 (A)
G1 (A)
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 - Indicative Shade Pattern (in accordance with BS5837:2012 where appropriate)



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drawing title
**TREE SURVEY PLAN
EAST**

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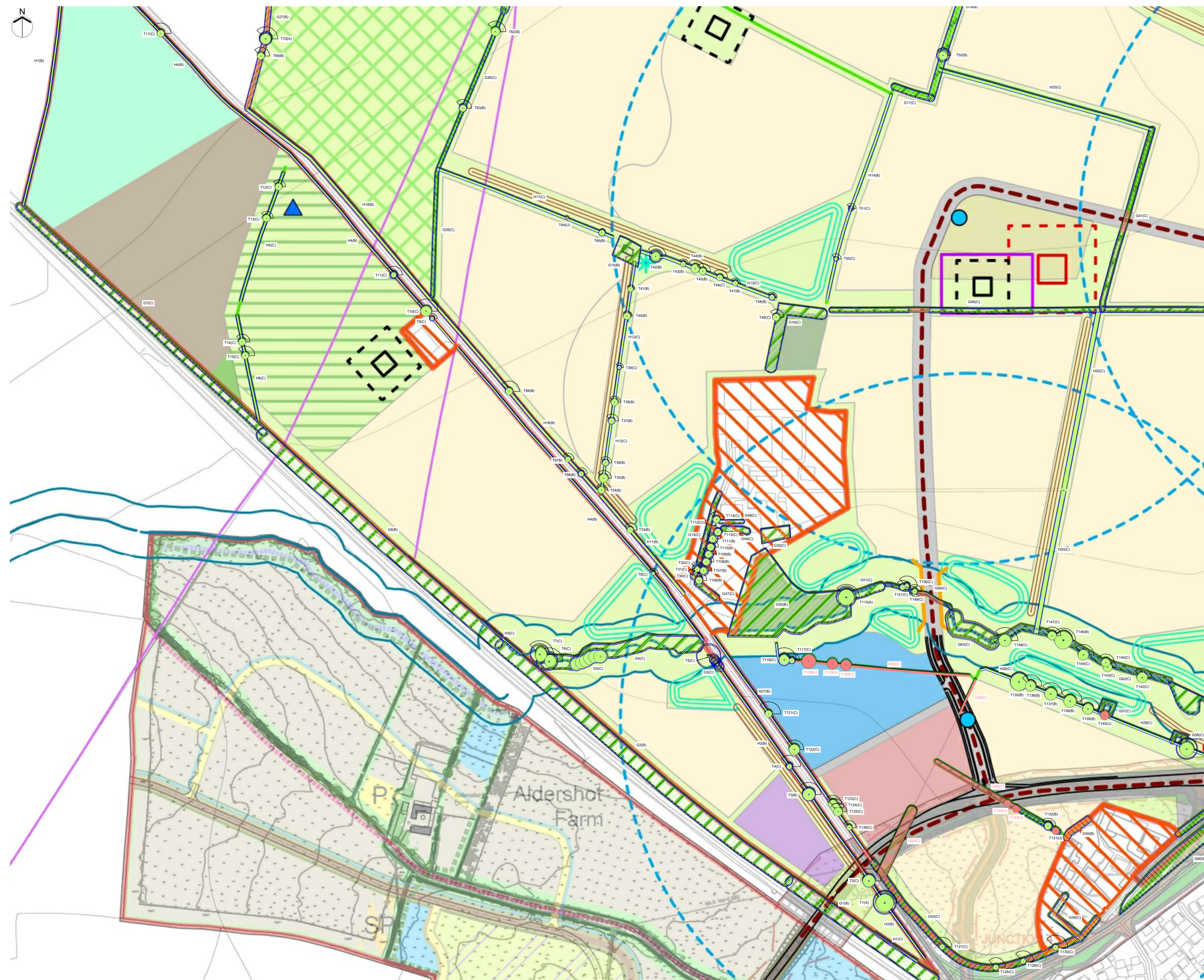
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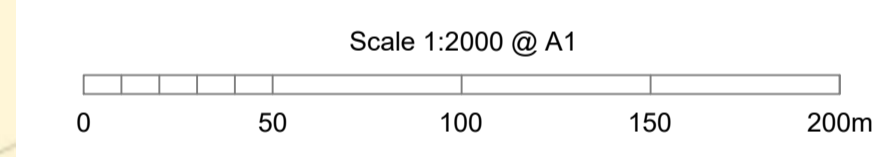
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9643-T-03

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- KEY**
- Tree Group to be Retained
 - Tree/Group proposed to be removed subject to relevant permissions
 - Category U - Unsuitable for retention on arboricultural grounds
 - Hedgerow Proposed to be Retained
 - Hedgerow proposed to be removed subject to relevant permissions
 - Root Protection Area (Shown for retained trees only)
 - T1 (A)
G1 (A) Individual / Group Number and BS Category
 - T1 (A)
G1 (A) Individual / Group Number to be Removed and BS 5837:2012 Category
 - Individual Tree Afforded Protection by a Tree Preservation Order (TPO)
 - Indicative Shade Pattern (where appropriate)



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**NW Bicester
Bicester**

drawing title
**TREE RETENTION PLAN
SOUTH**

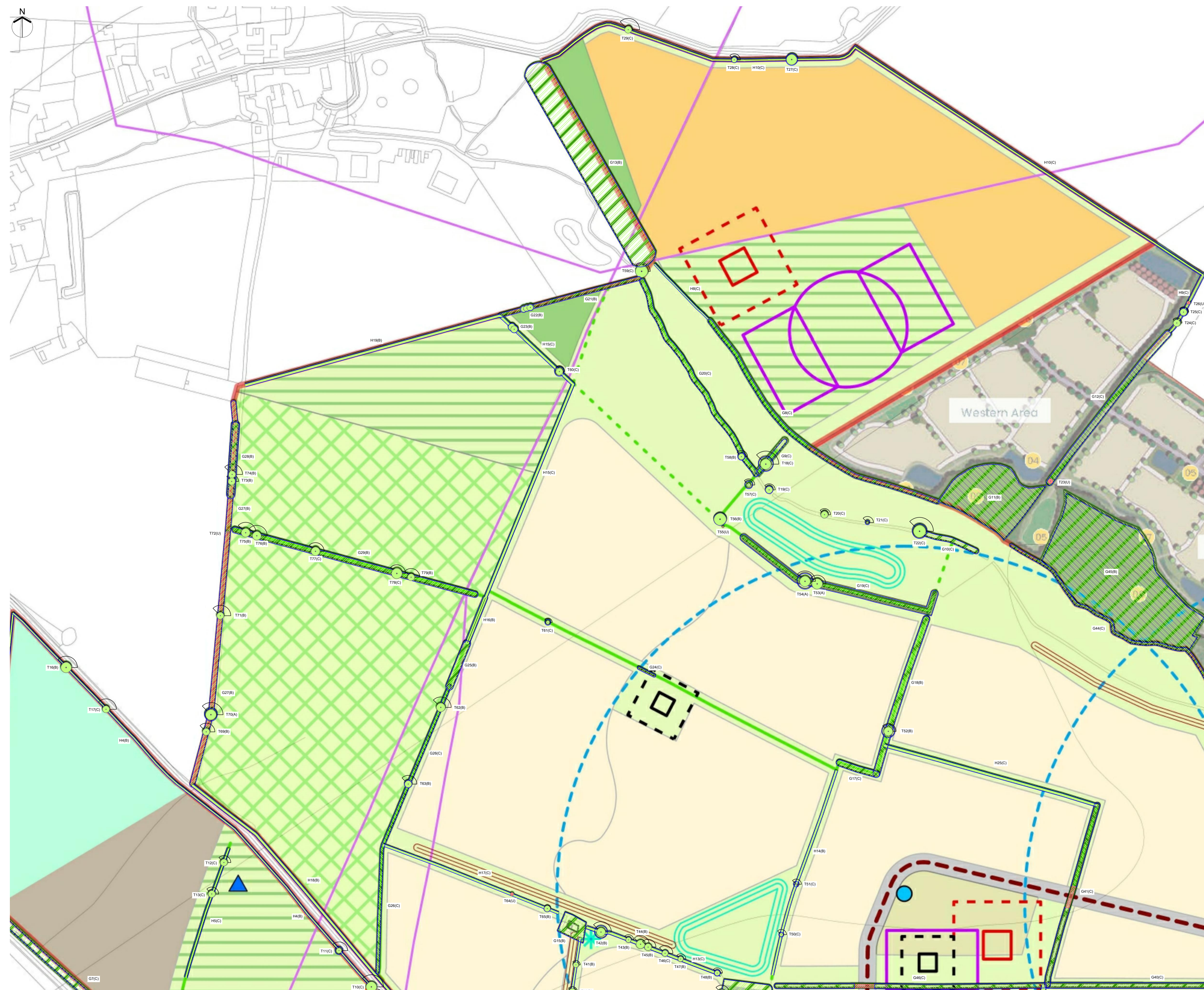
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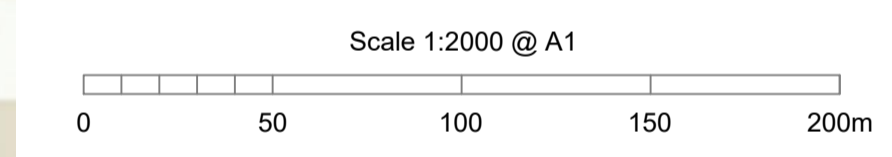
date
September 2021

drawing number
9643-T-04

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- KEY**
- Tree Group to be Retained
 - Tree/Group proposed to be removed subject to relevant permissions
 - Category U - Unsuitable for retention on arboricultural grounds
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G1 (A) Individual / Group Number to be Removed and BS 5837:2012 Category
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**TREE RETENTION PLAN
NORTH**

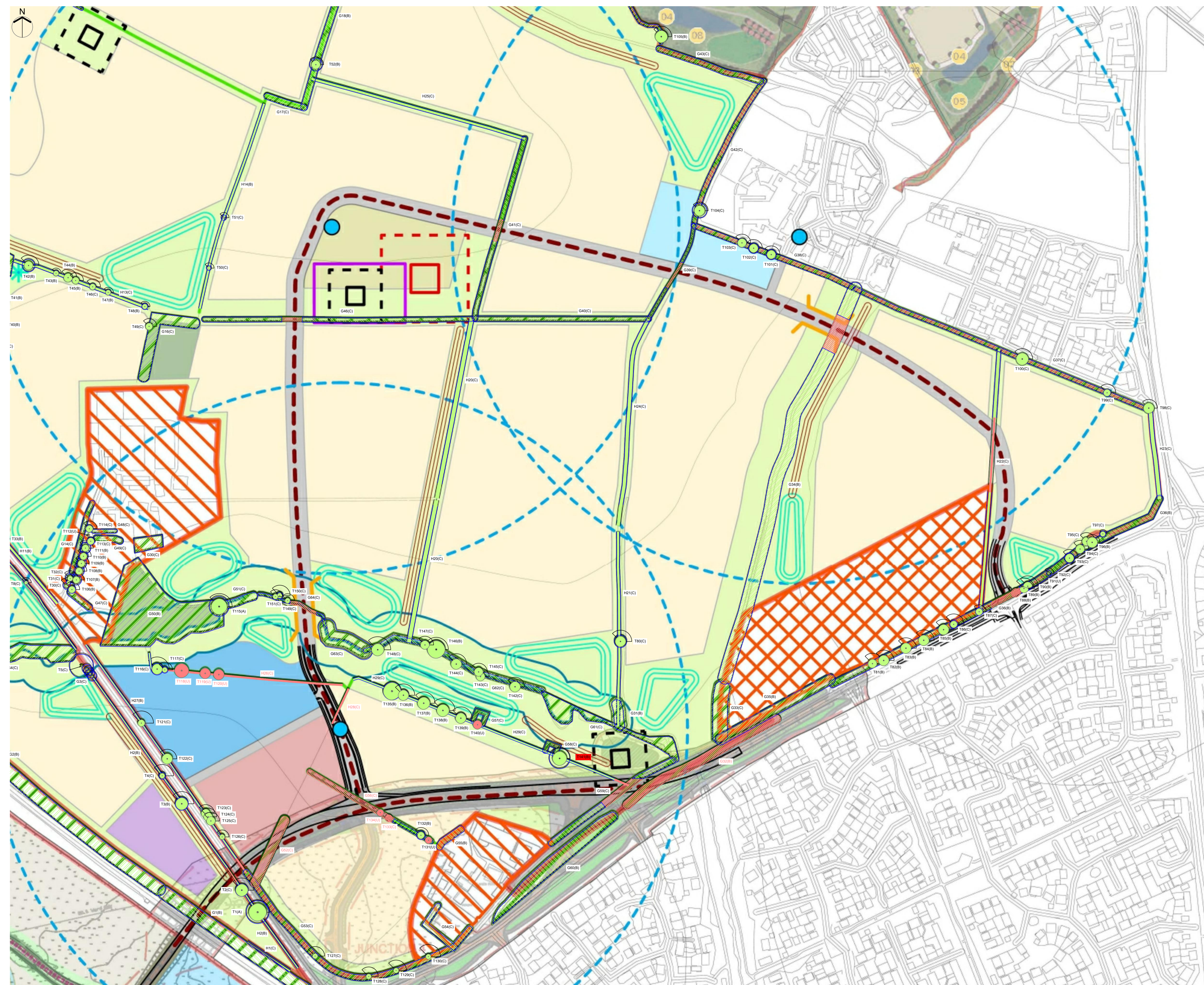
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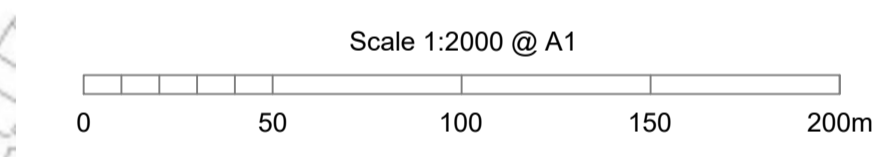
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9643-T-05

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 - Tree/Group proposed to be removed subject to relevant permissions
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NOTES

All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with project Arboriculturalist. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule.

Drawing has been produced in colour and is based on digital information in .dwg format, aerial images and/or GPS location where appropriate. A monochrome copy should not be relied upon. The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths.

Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the project Arboriculturalist should works commence 12 months after the date of this survey.

SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

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Appendix A - Tree Schedule

Measurements	Age Classes	Quality Assessment of BS Category	ULE (relates to BS Category)
Height - Measured using a digital laser clinometer (m)	YNG: Establishing, typically with good vigour and fast growth rates and strong apical dominance; c. less than 1/3 life expectancy	Category U - Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	<10 years
Stem Dia. - Diameter measured (mm) in accordance with Annex C of the BS5837	SM: Semi-mature trees less than 1/3 life expectancy	Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years.	40+ years
Crown Radius - Measured using a digital laser clinometer radially from the main stem (m)	EM: Established, typically vigorous and increasing in apical height and lateral spread; 1/3 - 2/3 life expectancy. Offers landscape significance	Category B - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	20-40 years
Abbreviations est - Estimated stem diameter avg - Average stem diameter for multiple stems upto - Maximum stem diameter of a group	M: Fully established over 2/3 life expectancy, generally good vigour and achieving full height potential with crown still spreading	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 150mm.	10-20 years
	OM: Fully mature, at the extremes of expected life expectancy, vigour decreasing, declining or moribund	Sub-categories: (i) - Mainly arboricultural value (ii) - Mainly landscape value (iii) - Mainly cultural or conservation value	
	V: biological, cultural or aesthetic value comprising niche saproxylic habitat. Individuals of large proportions (stem girth) in comparison to trees of the same species/surviving beyond the typical age range for their species.	The BS category particular consideration has been given to the following: <ul style="list-style-type: none"> • The presence of any structural defects in each tree/group and its future life expectancy • The size and form of each tree/group and its suitability within the context of a proposed development • The location of each tree relative to existing site features e.g. its screening value or landscape features • Age class and life expectancy 	

Structural Condition	Physiological Condition
Good - No significant structural defects	Good - No significant health problems
Fair - Structural defects that can be remediated	Fair - Symptoms of ill-health that can be remediated
Poor - Significant defects beyond remediation, present a risk of failure in the foreseeable future	Poor - Significant ill-health. Unlikely the tree will recover in the long term
Dead - Dead tree with structural integrity of tree severely compromised	Advanced Decline / Dead - Advanced state of decline and unlikely to recover or Dead

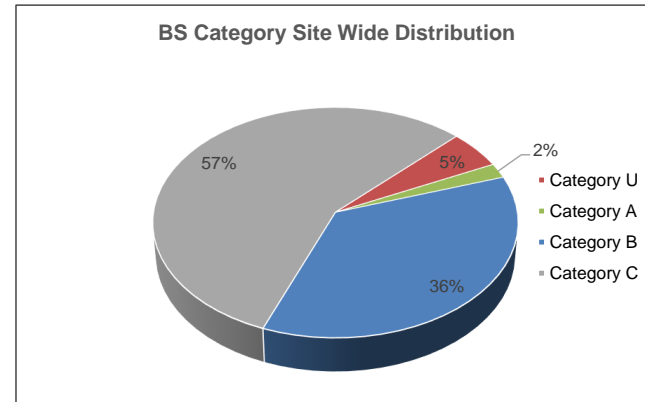
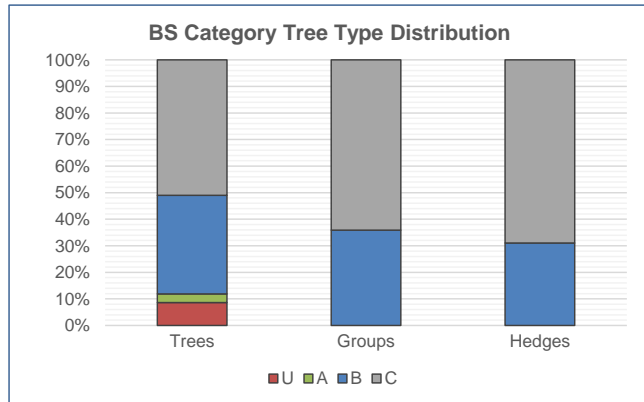
Root Protection Area (RPA)
<ul style="list-style-type: none"> • The RPA Radius column provides the extent of an equivalent circle from the centre of the stem (m). • The RPA is calculated using the formulae described in paragraph 4.6.1 of British Standard 5837: 2012 and is indicative of the rooting area required for a tree to be successfully retained. Tree roots extend beyond the calculated RPA in many cases and where possible a greater distance should be protected. • Where veteran trees have been identified the RPA has been calculated in accordance with Natural England guidance i.e. 15x the stem diameter, uncapped.

Appendix Summary

	Individual Trees	Totals	Tree Groups and Hedgerows	Totals
Category U	T23, T26, T55, T64, T72, T91, T112, T118, T119, T120, T131, T134, T140	13		0
Category A	T1, T53, T54, T70, T115	5		0
Category B	T3, T16, T33, T34, T35, T36, T37, T38, T40, T41, T42, T43, T44, T45, T47, T48, T52, T56, T58, T62, T63, T65, T66, T67, T68, T69, T71, T73, T74, T75, T76, T79, T81, T82, T83, T84, T85, T88, T89, T90, T96, T105, T106, T107, T108, T109, T110, T111, T132, T135, T136, T137, T138, T139, T141, T146	56	G1, G2, G6, G11, G13, G15, G18, G21, G22, G23, G25, G27, G28, G29, G31, G32, G34, G35, G36, G45, G50, G55, G60, H2, H4, H7, H11, H14, H16, H18, H19, H27	32
Category C	T2, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T17, T18, T19, T20, T21, T22, T24, T25, T27, T28, T29, T30, T31, T32, T39, T46, T49, T50, T51, T57, T59, T60, T61, T77, T78, T80, T86, T87, T92, T93, T94, T95, T97, T98, T99, T100, T101, T102, T103, T104, T113, T114, T116, T117, T121, T122, T123, T124, T125, T126, T127, T128, T129, T130, T133, T142, T143, T144, T145, T147, T148, T149, T150, T151	77	G3, G4, G5, G7, G8, G9, G10, G12, G14, G16, G17, G19, G20, G24, G26, G30, G33, G37, G38, G39, G40, G41, G42, G43, G44, G46, G47, G48, G49, G51, G52, G53, G54, G56, G57, G58, G59, G61, G62, G63, G64, H1, H3, H5, H6, H8, H9, H10, H12, H13, H15, H17, H20, H21, H22, H23, H24, H25, H26, H28, H29	61
	Total	151	Total	93

BS Category Tree Type Distribution displays the proportion of trees assessed in each type to enable a better understanding of the category distribution.

BS Category Site Wide Distribution shows the proportion of trees assessed in each category across the whole site which allows an interpretation of the site's overall quality.



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
INDIVIDUAL TREES										
T1	English Oak <i>Quercus robur</i>	14	est 1100	10	M	F	Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Crossing and rubbing branches Dense ivy cover on main stem Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Ivy prevented full inspection	547	13.2	A (i)
T2	Ash <i>Fraxinus excelsior</i>	14	est 600	7	M	F	Base obscured Branch stubs evident Broken branches evident Characteristic for species Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Very dense and established ivy cover prevented full inspection Growing within H2	163	7.2	C (i)
T3	Sycamore <i>Acer pseudoplatanus</i>	14	est 630	7	M	F	Base obscured Characteristic for species Minor dead wood evident in the crown (<75mm) Dense ivy prevented full inspection Ivy from ground level to crown break Situating within H2	180	7.6	B (i)
T4	Ash <i>Fraxinus excelsior</i>	13	est 340	3	M	P / F	Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm) Situating within H2 Storm damage to northern side of crown Limited future potential	52	4.1	C (i)
T5	Crack Willow <i>Salix fragilis</i>	3	est 1150	1	OM	P / F	Bark wounds noted Basal cavity observed Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Dense ivy cover on main stem Dense undergrowth at the base Heartwood exposed Pollarded at 4m	598	13.8	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T6	Ash Fraxinus excelsior	16	490 680	N - 8 S - 7 E - 7 W - 3	M	F	Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm) Western side of crown has been heavily pruned back to gain clearance from HV cables Dense ivy from base to canopy	318	10.1	C (i)
T7	Ash Fraxinus excelsior	16	900	N - 8 S - 4 E - 7 W - 3	M	F	Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Western side of crown has been heavily pruned back to gain clearance from HV cables Dense ivy from base to canopy Basal cavity at base of stem that requires further inspection	366	10.8	C (i)
T8	English Oak Quercus robur	6	est 180	2	SM	F	Hedgerow specimen Flail damage to crown Broken branches Characteristic for species	15	2.2	C (i)
T9	Field Maple Acer campestre	6	est 100 150 150 80	2	EM	P / F	Outgrown hedgerow specimen Flail damage to crown and stem Bark wounds Slight dieback of crown	28	3.0	C (i)
T10	Ash Fraxinus excelsior	14	est 440	6	M	P / F	Branch socket cavities observed Branch stubs evident Broken branches evident Dieback of the crown observed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Dense ivy from 2m above ground level to crown break Extensive epicormic growth within crown	88	5.3	C (i)
T11	Field Maple Acer campestre	10	est 380	3	M	P	Broken branches evident Crossing and rubbing branches Limited future potential Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Hedgerow specimen Crown expensively dying back Split runs from crown break to base	65	4.6	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T12	Field Maple Acer campestre	8	est 240	4	M	F	Situated within hedgerow Light ivy cover Broken branches Crossing branches	26	2.9	C (i)
T13	Field Maple Acer campestre	8	est 300	4	M	P / F	Close cultivation of the soil Situated within hedgerow Light ivy cover Broken branches Crossing branches	41	3.6	C (i)
T14	Ash Fraxinus excelsior	9	est 300	4	M	P	Close cultivation of the soil Established basal sucker growing from stump Dieback of crown Situated within hedgerow Light ivy cover Broken branches Crossing branches	41	3.6	C (i)
T15	Ash Fraxinus excelsior	11	280	4	M	P	Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Close cultivation of the soil Crossing and rubbing branches Dieback of the crown observed Established ivy cover	35	3.4	C (i)
T16	Grey Poplar Populus x canescens	13	est 450	6	EM	F	Basal suckers present Base obscured Branch stubs evident Broken branches evident Characteristic for species Dense undergrowth at the base Light ivy cover	92	5.4	B (i)
T17	Ash Fraxinus excelsior	12	est 200 200	4	EM	P / F	Branch socket cavities observed Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm) Two established basal suckers emanating from stump	36	3.4	C (i)
T18	Ash Fraxinus excelsior	15	est 500 500	6	M	P	Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Compacted ground at the base Dense ivy cover on main stem Dense undergrowth at the base Storm damage present	226	8.5	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T19	Hawthorn Crataegus monogyna	7	est 7x 140	4	M	F	Characteristic for species Crossing and rubbing branches Dense ivy cover on main stem Adjacent to watercourse	62	4.4	C (i)
T20	Field Maple Acer campestre	7	est 7x 120	4	M	F	Characteristic for species Crossing and rubbing branches Dense ivy cover on main stem Adjacent to watercourse	46	3.8	C (i)
T21	Hawthorn Crataegus monogyna	7	est 7x 80	1	M	F	Characteristic for species Crossing and rubbing branches Dense ivy cover on main stem Adjacent to watercourse	20	2.5	C (i)
T22	Ash Fraxinus excelsior	16	est 700	7	M	F	Base obscured Broken branches evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Situating adjacent to watercourse Dense ivy from ground level to canopy prevented a full inspection Typical features	222	8.4	C (i)
T23	Field Maple Acer campestre	6	est 250	2	OM	P	Specimen in extensive decline Hollow base and multiple cavities throughout main stem Leaving heavily to the west	N/A	N/A	U
T24	Ash Fraxinus excelsior	7	est 180 140 70	4	EM	P	Broken branches evident Dense undergrowth at the base Dieback of the crown observed Limited future potential Minor dead wood evident in the crown (<75mm) Sparse / thinning crown	26	2.9	C (i)
T25	Ash Fraxinus excelsior	6	est 400	4	EM	P	Broken branches evident Dense undergrowth at the base Dieback of the crown observed Limited future potential Minor dead wood evident in the crown (<75mm) Sparse / thinning crown Post apical leader at 3m Extensive epicormic growth from wound	72	4.8	C (i)
T26	Field Maple Acer campestre	6	est 200	2	M	D	Dead standing tree within hedgerow	N/A	N/A	U

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T27	Ash Fraxinus excelsior	14	est 560	6	M	P	Bark wounds noted Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Chlorotic leaves evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Dense ivy prevented full inspection Basal cavity noted stem appears to be hollow - further investigation required	142	6.7	C (i)
T28	Ash Fraxinus excelsior	7	est 280	3	SM	F	Growing within hedgerow No major defects Typical features and form	35	3.4	C (i)
T29	Ash Fraxinus excelsior	13	est 320	4	SM	F	Broken branches evident Close cultivation of the soil Minor dead wood evident in the crown (<75mm) Growing within hedgerow No major defects Typical features and form	46	3.8	C (i)
T30	Lawson Cypress Chamaecyparis lawsoniana	9	265 230	2	M	F	Multi leaded form End tree within linear group along access driveway	56	4.2	C (i)
T31	Lawson Cypress Chamaecyparis lawsoniana	6	140 140 110	2	M	F	Multi stemmed from base within linear group along access driveway	23	2.7	C (i)
T32	Lawson Cypress Chamaecyparis lawsoniana	9	Over ivy 410 160 130	3	M	F	Dense ivy cover on main stem Multi stemmed from base within linear group along access driveway	95	5.5	C (i)
T33	Ash Fraxinus excelsior	8	280	3.5	EM	G	Characteristic for species Light ivy cover Likely planted	35	3.4	B (i)
T34	Horse Chestnut Aesculus hippocastanum	7	210 190	4	EM	G	Characteristic for species Light ivy cover Likely planted specimen	36	3.4	B (i)
T35	Norway Maple Acer platanoides	9	370	5	EM	G	Characteristic for species Light ivy cover Situated within hedgerow likely planted	62	4.4	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T36	Horse Chestnut Aesculus hippocastanum	7	320	3.5	EM	G	Characteristic for species Light ivy cover Situated within hedgerow likely planted	46	3.8	B (i)
T37	Field Maple Acer campestre	8	320	3.5	EM	G	Characteristic for species Light ivy cover Situated within hedgerow likely planted	46	3.8	B (i)
T38	Horse Chestnut Aesculus hippocastanum	7	320	4	EM	G	Characteristic for species Light ivy cover Situated within hedgerow likely planted	46	3.8	B (i)
T39	Norway Maple Acer platanoides	5	220	2	EM	F	Light ivy cover Situated within hedgerow likely planted waterlogged ground at base	22	2.6	C (i)
T40	Field Maple Acer campestre	6	320	4	EM	G	Characteristic for species Light ivy cover Situated within hedgerow likely planted	46	3.8	B (i)
T41	Norway Maple Acer platanoides	5	240	3	EM	G	Characteristic for species Situated within hedgerow likely planted waterlogged ground at base	26	2.9	B (i)
T42	Ash Fraxinus excelsior	12	6x 250	5	M	G	Multi stemmed from base Outgrown hedgerow tree	170	7.3	B (i)
T43	Norway Maple Acer platanoides	6	260	3	EM	G	Characteristic for species Situated within hedgerow likely planted	31	3.1	B (i)
T44	Field Maple Acer campestre	10	350	5	EM	G	Characteristic for species Flail damage evident Light ivy cover Situated within hedgerow likely planted	55	4.2	B (i)
T45	Field Maple Acer campestre	9	300	4	EM	G	Characteristic for species Situated within hedgerow likely planted	41	3.6	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T46	Ash <i>Fraxinus excelsior</i>	9	300	3.5	EM	P	Basal suckers present Dieback of the crown observed Situated within hedgerow likely planted	41	3.6	C (i)
T47	Horse Chestnut <i>Aesculus hippocastanum</i>	6	260	3	EM	G	Characteristic for species Situated within hedgerow likely planted	31	3.1	B (i)
T48	Horse Chestnut <i>Aesculus hippocastanum</i>	6	300	3	EM	G	Characteristic for species Situated within hedgerow likely planted	41	3.6	B (i)
T49	Ash <i>Fraxinus excelsior</i>	9	320	4	M	F	Situated alongside ditch possible lapsed coppice unable to access base	46	3.8	C (i)
T50	Crab Apple <i>Malus sylvestris</i>	6	230	2	EM	F	Characteristic for species Outgrown hedgerow tree	24	2.8	C (i)
T51	Crab Apple <i>Malus sylvestris</i>	6	Over ivy 260	1	EM	F	Characteristic for species Dense ivy cover on main stem Outgrown hedgerow tree	31	3.1	C (i)
T52	English Oak <i>Quercus robur</i>	9	540 300	5	M	F	Situated within boundary group twin stemmed from 1m basal cavity noted does not appear to extend up stem dense ivy cover obscures stems	173	7.4	B (i)
T53	English Oak <i>Quercus robur</i>	10	420	6	EM	G	Characteristic for species Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm)	80	5.0	A (i)
T54	English Oak <i>Quercus robur</i>	12	760	6	M	F	Characteristic for species Dense ivy cover on main stem Dieback of the crown observed Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Owl box attached to stem closed at time of assessment	261	9.1	A (i)
T55	Crack Willow <i>Salix fragilis</i>	7	350	1	EM	P	Main stem has failed at 2m crown has formed from failed stem	N/A	N/A	U

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T56	Ash Fraxinus excelsior	12	600	7	M	F	Main stem leans slightly to North large basal suckers dense ivy over on an stem which extends into lower crown broken branches noted	163	7.2	B (i)
T57	Crab Apple Malus sylvestris	7	310 200	2	M	F	Situated on bank of wet ditch secondary leader develops from base but is largely dead	62	4.4	C (i)
T58	Ash Fraxinus excelsior	7	250 150	3.5	EM	F	Situated within tree group along watercourse p unable to access base twin stemmed from base	38	3.5	B (i)
T59	Crack Willow Salix fragilis	10	est 500	7	M	P	Situated beyond boundary unable to access appears to have partially failed dense ivy cover on main stem obscures main stem and base	113	6.0	C (i)
T60	Field Maple Acer campestre	6	300	4	M	F	Basal cavity observed Outgrown hedgerow tree twin stemmed from 1.5m with included union	41	3.6	C (i)
T61	Field Maple Acer campestre	5	6x 100	2	EM	F	Situated on fence line within field parcel multi stemmed from 1m	27	2.9	C (i)
T62	English Oak Quercus robur	12	400 300	5	M	G	Situated within tree group twin stemmed from base unable to access base light ivy cover on main stem	113	6.0	B (i)
T63	Field Maple Acer campestre	10	7x 200	4	M	F	Situated within tree group likely lapsed coppice light ivy cover on main stems	127	6.3	B (i)
T64	Ash Fraxinus excelsior	4	400	2	M	P	Main stem is hollow from base up to 2m limited residual wood remaining limited live crown	N/A	N/A	U
T65	Norway Maple Acer platanoides	9	320	3.5	EM	G	Characteristic for species Situated within hedgerow likely planted	46	3.8	B (i)
T66	Norway Maple Acer platanoides	7	200	3	EM	G	Characteristic for species Light ivy cover Likely planted	18	2.4	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T67	Norway Maple Acer platanoides	7	200	3	EM	G	Characteristic for species Light ivy cover Likely planted	18	2.4	B (i)
T68	English Oak Quercus robur	12	550	4	M	F	Characteristic for species Light ivy cover Major dead wood evident in the crown (>75mm) Situated within hedgerow	137	6.6	B (i)
T69	Field Maple Acer campestre	10	6x 150	4	M	F	Situated within boundary group possible lapsed coppice	61	4.4	B (i)
T70	English Oak Quercus robur	14	est 700	6	M	G	Characteristic for species Light ivy cover Major dead wood evident in the crown (>75mm) Situated within boundary group unable to access base	222	8.4	A (i)
T71	Ash Fraxinus excelsior	12	400	4	EM	G	Characteristic for species Minor dead wood evident in the crown (<75mm) Situated within boundary group	72	4.8	B (i)
T72	Ash Fraxinus excelsior	8	800	1	OM	P	Hollow stem with little residual wood remaining only on one side very limited crown possible habitat value but not veteran	N/A	N/A	U
T73	Ash Fraxinus excelsior	12	est 800	4	OM	F	Main stem appears hollow but unable to access due to undergrowth dense ivy cover obscures main stem possible lapsed pollard situated within boundary group	290	9.6	B (iii)
T74	Ash Fraxinus excelsior	12	Over ivy 500	4	M	F	Situated within boundary group dense ivy cover obscures main stem high crown over site	113	6.0	B (i)
T75	Ash Fraxinus excelsior	12	7x 200	5	M	F	Minor dead wood evident in the crown (<75mm) Situated within tree group likely a lapsed coppice crossing and rubbing stems	127	6.3	B (i)
T76	Ash Fraxinus excelsior	12	7x 150	5	M	F	Minor dead wood evident in the crown (<75mm) Woodpecker holes observed Situated within tree group likely a lapsed coppice crossing and rubbing stems	71	4.8	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T77	Ash Fraxinus excelsior	10	6x 150	5	M	P / F	Dieback of the crown observed Minor dead wood evident in the crown (<75mm) Sparse / thinning crown Woodpecker holes observed Situating within tree group likely a lapsed coppice	61	4.4	C (i)
T78	Crack Willow Salix fragilis	10	400 400 200	6	M	P	Situating within field boundary group multi stemmed from 1.5m bark wound on main stem at base up to 1m with exposed heartwood and decay evident ivy cover obscures main stem and crown break	163	7.2	C (i)
T79	Field Maple Acer campestre	10	7x 150	4	M	F	Situating within tree group likely a lapsed coppice unable to access base	71	4.8	B (i)
T80	Ash Fraxinus excelsior	13	est 600	6	M	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Established ivy cover Flail damage evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	163	7.2	C (i)
T81	Norway Maple Acer platanoides	12	est 300	5	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Established ivy cover Flail damage evident Minor dead wood evident in the crown (<75mm) Multi leaded form	41	3.6	B (i)
T82	Norway Maple Acer platanoides	12	est 450	6	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Established ivy cover Flail damage evident Minor dead wood evident in the crown (<75mm) Multi leaded form	92	5.4	B (i)
T83	Norway Maple Acer platanoides	12	est 450	6	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Established ivy cover Flail damage evident Minor dead wood evident in the crown (<75mm) Multi leaded form	92	5.4	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T84	Norway Maple Acer platanoides	12	est 400	6	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Established ivy cover Flail damage evident Minor dead wood evident in the crown (<75mm) Multi leadered form	72	4.8	B (i)
T85	Norway Maple Acer platanoides	12	est 450	6	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Established ivy cover Flail damage evident Minor dead wood evident in the crown (<75mm) Multi leadered form	92	5.4	B (i)
T86	Norway Maple Acer platanoides	12	est 400	4	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Established ivy cover Flail damage evident Minor dead wood evident in the crown (<75mm) Multi leadered form	72	4.8	C (i)
T87	Field Maple Acer campestre	8	est 300 200	4	M	P	Branch stubs evident Broken branches evident Dense ivy cover on main stem Flail damage evident Minor dead wood evident in the crown (<75mm) Multi leadered form	59	4.3	C (i)
T88	English Elm Ulmus procera	12	est 400	5	M	F	Dense ivy cover on main stem Flail damage evident Minor dead wood evident in the crown (<75mm)	72	4.8	B (i)
T89	English Elm Ulmus procera	12	est 400	N - 1 S - 5 E - 5 W - 5	M	F	Dense ivy cover on main stem Flail damage evident Minor dead wood evident in the crown (<75mm)	72	4.8	B (i)
T90	English Elm Ulmus procera	12	est 400	N - 5 S - 1 E - 5 W - 5	M	F	Dense ivy cover on main stem Flail damage evident Minor dead wood evident in the crown (<75mm)	72	4.8	B (i)
T91	English Elm Ulmus procera	6	est 300	1	M	P	Dense ivy cover on main stem Dieback of the crown observed Flail damage evident Minor dead wood evident in the crown (<75mm)	N/A	N/A	U

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T92	Hawthorn <i>Crataegus monogyna</i>	6	est 250	1	M	P	Dense ivy cover on main stem Dieback of the crown observed Flail damage evident Minor dead wood evident in the crown (<75mm)	28	3.0	C (i)
T93	Horse Chestnut <i>Aesculus hippocastanum</i>	10	est 500	5	EM	F	Dense ivy cover on main stem Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm)	113	6.0	C (i)
T94	Horse Chestnut <i>Aesculus hippocastanum</i>	10	est 200 200	5	EM	F	Dense ivy cover on main stem Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm)	36	3.4	C (i)
T95	Horse Chestnut <i>Aesculus hippocastanum</i>	10	est 200 200 200	5	EM	F	Dense ivy cover on main stem Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm)	54	4.2	C (i)
T96	Field Maple <i>Acer campestre</i>	9	est 300 180 200 180	6	EM	F	Crossing and rubbing branches Epicormic growth evident within the crown Established ivy cover Low crown form Minor dead wood evident in the crown (<75mm) Multi leaded form	88	5.3	B (i)
T97	Norway Maple <i>Acer platanoides</i>	5	est 300	3	EM	F	Crossing and rubbing branches Epicormic growth evident within the crown Established ivy cover Low crown form Minor dead wood evident in the crown (<75mm) Multi leaded form	41	3.6	C (i)
T98	Ash <i>Fraxinus excelsior</i>	10	est 350	6	EM	P	Basal suckers present Crossing and rubbing branches Low crown form Situated offsite	55	4.2	C (i)
T99	Ash <i>Fraxinus excelsior</i>	10	est 200 200 200	4	EM	P	Basal suckers present Crossing and rubbing branches Low crown form Situated offsite	54	4.2	C (i)
T100	Ash <i>Fraxinus excelsior</i>	12	est 250 250 250 250	7	EM	F	Basal suckers present Crossing and rubbing branches Low crown form Minor dead wood evident in the crown (<75mm) Multi leaded form	113	6.0	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T101	Ash Fraxinus excelsior	10	est 300 300 250	5	M	F	Basal suckers present Crossing and rubbing branches Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form Old laid forms	110	5.9	C (i)
T102	Ash Fraxinus excelsior	10	est 500	5	M	F	Basal suckers present Crossing and rubbing branches Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form Old laid forms	113	6.0	C (i)
T103	Field Maple Acer campestre	10	est 300 300	5	M	F	Basal suckers present Crossing and rubbing branches Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form Old laid forms	81	5.1	C (i)
T104	Ash Fraxinus excelsior	10	est 8x 250	6	M	F	Basal suckers present Crossing and rubbing branches Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form	226	8.5	C (i)
T105	English Oak Quercus robur	12	est 550	7	M	F	Barbed Wire attached to stem/s Branch stubs evident Broken branches evident Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	137	6.6	B (i)
T106	Common Lime Tilia x europaea	9	230 290	4	EM	F	Basal cavity observed Branch socket cavities observed Branch stubs evident Minor dead wood evident in the crown (<75mm)	62	4.4	B (i)
T107	Common Lime Tilia x europaea	9	380 340	4	EM	F	Basal cavity observed Branch socket cavities observed Branch stubs evident Minor dead wood evident in the crown (<75mm)	118	6.1	B (i)
T108	Common Lime Tilia x europaea	9	380 340	4	EM	F	Basal cavity observed Branch socket cavities observed Branch stubs evident Minor dead wood evident in the crown (<75mm)	118	6.1	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T109	Common Lime <i>Tilia x europaea</i>	9	380 340	4	EM	F	Basal cavity observed Branch socket cavities observed Branch stubs evident Minor dead wood evident in the crown (<75mm)	118	6.1	B (i)
T110	Common Lime <i>Tilia x europaea</i>	9	460	4	EM	F	Basal cavity observed Branch socket cavities observed Branch stubs evident Minor dead wood evident in the crown (<75mm)	96	5.5	B (i)
T111	Common Lime <i>Tilia x europaea</i>	9	260 460	4	EM	F	Basal cavity observed Branch socket cavities observed Branch stubs evident Minor dead wood evident in the crown (<75mm)	126	6.3	B (i)
T112	Apple <i>Malus domestica</i>	5	180	1	SM	P	Bark wounds noted Basal cavity observed Tree in decline	N/A	N/A	U
T113	Apple <i>Malus domestica</i>	8	180 220 250	4	SM	P	Bark wounds noted Branch stubs evident Characteristic for species Included bark union Minor dead wood evident in the crown (<75mm) Pruning wounds noted	65	4.5	C (i)
T114	Apple <i>Malus domestica</i>	9	350	4	SM	F	Branch stubs evident Characteristic for species Minor dead wood evident in the crown (<75mm) Pruning wounds noted	55	4.2	C (i)
T115	English Oak <i>Quercus robur</i>	15	est 950	9	M	F	Broken branches evident Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm)	408	11.4	A (i)
T116	Ash <i>Fraxinus excelsior</i>	14	570	6	M	F	Branch stubs evident Broken branches evident Characteristic for species Dense ivy cover on main stem Dense undergrowth at the base	147	6.8	C (i)
T117	Ash <i>Fraxinus excelsior</i>	9	320	3	M	F	Branch stubs evident Characteristic for species	46	3.8	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T118	Ash Fraxinus excelsior	14	est 700	8	OM	P	Bark wounds noted Branch stubs evident Broken branches evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Specimen in extensive decline Stem failed at 5m with visible hollowing	N/A	N/A	U
T119	Ash Fraxinus excelsior	14	520	6	M	P	Branch stubs evident Broken branches evident Characteristic for species Minor dead wood evident in the crown (<75mm) Poached ground at the base Woodpecker holes observed Inonotus hispidus Shaggy bracket	N/A	N/A	U
T120	Ash Fraxinus excelsior	12	640	6	M	P	Branch socket cavities observed Branch stubs evident Characteristic for species Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Hollow stem	N/A	N/A	U
T121	Ash Fraxinus excelsior	8	est 290	4	EM	F	Base obscured Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base	38	3.5	C (i)
T122	Sycamore Acer pseudoplatanus	11	est 400	6	EM	F	Base obscured Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base No major defects were noted	72	4.8	C (i)
T123	Sycamore Acer pseudoplatanus	10	est 300	5	EM	F	Base obscured Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base No major defects were noted	41	3.6	C (i)
T124	Sycamore Acer pseudoplatanus	10	est 250	5	EM	F	Base obscured Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base No major defects were noted	28	3.0	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T125	Ash Fraxinus excelsior	10	est 250	5	EM	F	Base obscured Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base No major defects were noted	28	3.0	C (i)
T126	Ash Fraxinus excelsior	8	est 220	3	EM	F	Base obscured Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base No major defects were noted	22	2.6	C (i)
T127	Hybrid Black Poplar Populus x canadensis	11	180	3	EM	F	Typical form within boundary group	15	2.2	C (i)
T128	Hybrid Black Poplar Populus x canadensis	11	180	3	EM	F	Typical form within boundary group	15	2.2	C (i)
T129	Hybrid Black Poplar Populus x canadensis	12	180	3	EM	F	Typical form within boundary group	15	2.2	C (i)
T130	Hybrid Black Poplar Populus x canadensis	14	230	3	EM	F	Typical form within boundary group	24	2.8	C (i)
T131	Ash Fraxinus excelsior	9	310	4	EM	D	Basal cavity observed Branch stubs evident Delaminating bark on main stem Inonotus hispidus Shaggy bracket	N/A	N/A	U
T132	Crab Apple Malus sylvestris	6	420	4	M	F	Branch stubs evident Broken branches evident Characteristic for species Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	80	5.0	B (i)
T133	Field Maple Acer campestre	10	350	4	EM	P	Basal cavity observed Branch socket cavities observed Branch stubs evident Delaminating bark on main stem Inonotus hispidus Shaggy bracket	55	4.2	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T134	Ash Fraxinus excelsior	9	310	4	EM	D	Basal cavity observed Branch stubs evident Delaminating bark on main stem Inonotus hispidus Shaggy bracket	N/A	N/A	U
T135	Ash Fraxinus excelsior	16	est 850	10	M	F	Branch stubs evident Broken branches evident Characteristic for species Minor dead wood evident in the crown (<75mm) Pruning wounds noted	327	10.2	B (i)
T136	Ash Fraxinus excelsior	13	est 500	6	M	F	Branch stubs evident Broken branches evident Characteristic for species Minor dead wood evident in the crown (<75mm) Pruning wounds noted	113	6.0	B (i)
T137	Ash Fraxinus excelsior	13	est 500	7	M	F	Branch stubs evident Broken branches evident Characteristic for species Minor dead wood evident in the crown (<75mm) Pruning wounds noted	113	6.0	B (i)
T138	Ash Fraxinus excelsior	14	est 500	7	M	F	Branch stubs evident Broken branches evident Characteristic for species Minor dead wood evident in the crown (<75mm) Pruning wounds noted	113	6.0	B (i)
T139	Ash Fraxinus excelsior	13	est 500	6	M	F	Branch stubs evident Broken branches evident Characteristic for species Minor dead wood evident in the crown (<75mm) Pruning wounds noted	113	6.0	B (i)
T140	Ash Fraxinus excelsior	12	est 650	4	M	P	Basal cavity observed Basal suckers present Branch stubs evident Broken branches evident Heartwood exposed Major dead wood evident in the crown (>75mm) Inonotus hispidus Shaggy bracket	N/A	N/A	U

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T141	Ash Fraxinus excelsior	17	est 1000	8	M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Dense ivy cover on main stem Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Pruning wounds noted	452	12.0	B (i)
T142	Ash Fraxinus excelsior	11	est 350 250	6	EM	P	Basal suckers present Branch socket cavities observed Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm) Twin stemmed from base	84	5.2	C (ii)
T143	Ash Fraxinus excelsior	10	est 340	5	EM	P	Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm)	52	4.1	C (ii)
T144	Ash Fraxinus excelsior	12	est 370	6	EM	P	Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm)	62	4.4	C (ii)
T145	Ash Fraxinus excelsior	10	est 340	5	EM	P	Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm)	52	4.1	C (ii)
T146	Ash Fraxinus excelsior	14	est 820	10	EM	P	Branch stubs evident Broken branches evident Light ivy cover Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	304	9.8	B (i)
T147	Ash Fraxinus excelsior	10	est 340	5	EM	P	Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm)	52	4.1	C (ii)
T148	Ash Fraxinus excelsior	15	est 400	7	EM	P	Base obscured Branch stubs evident Broken branches evident Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm)	72	4.8	C (ii)
T149	Ash Fraxinus excelsior	8	210	3	SM	F	Minor dead wood evident in the crown (<75mm) No major defects were noted	20	2.5	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T150	Ash Fraxinus excelsior	12	330	3	SM	F	Minor dead wood evident in the crown (<75mm) No major defects were noted	49	4.0	C (i)
T151	Ash Fraxinus excelsior	8	6x 90	3	SM	F	Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted	22	2.6	C (i)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
GROUPS OF TREES										
G1	Ash Fraxinus excelsior Elder Sambucus nigra Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus	14	avg 300	4	EM / M	F	Bark wounds noted Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Dense ivy cover on main stem Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Multi leadered form Unable to gain access Railway embankment group HV cables to east	41	3.6	B (ii)
G2	Ash Fraxinus excelsior Elder Sambucus nigra Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus	14	avg 300	4	EM / M	F	Bark wounds noted Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Dense ivy cover on main stem Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Multi leadered form Unable to gain access Railway embankment group HV cables to east Sections of this group have undergone management to ensure clearance from track	41	3.6	B (ii)
G3	Crack Willow Salix fragilis	4	avg 450	1	M	F	Group of four pollarded willows located adjacent to ditch Copious epicormic growth Dense ivy	92	5.4	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G4	Ash Fraxinus excelsior Blackthorn Prunus spinosa Crack Willow Salix fragilis Elder Sambucus nigra Hawthorn Crataegus monogyna Hazel Corylus avellana	14	avg 310	4	EM / M / OM	F	Bark wounds noted Basal cavity observed Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Crossing and rubbing branches Linear group of trees located alongside small watercourse Unable to gain access HV cables run through group	43	3.7	C (ii)
G5	Ash Fraxinus excelsior	18	avg 600	8	M	F	Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Group of approximately 5 ash trees located within G4 Unable to carry out full inspection due to ivy and restricted access	163	7.2	C (ii)
G6	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Hazel	14	avg 310	4	EM / M	F	Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm) Multi leadered form Multi stemmed from base Situated offsite Unable to gain access Railway embankment group which screens the railway located to the west Larger ash and sycamore specimens with understory of hazel hawthorn and elder	43	3.7	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G7	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Sycamore Acer pseudoplatanus Dogwood Cornus sanguinea	12	avg 280	5	SM / EM / M	F	Bark wounds noted Basal suckers present Base obscured Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Railway embankment group Provides screening of railway Mainly blackthorn and hawthorn with occasional larger ash and sycamore	35	3.4	C (ii)
G8	Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	12	avg 180	3	M	F	Outgrown hedgerow Gaps present Mainly hawthorn with occasional larger field maples Dense ivy cover Dead trees within group Thicket growth at base	15	2.2	C (ii)
G9	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna	10	avg 200	4	M	F	Bark wounds noted Basal cavity observed Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Compacted ground at the base Crossing and rubbing branches	18	2.4	C (ii)
G10	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna	7	avg 6x 100	3	M	F	Self set sporadic group of trees along watercourse Dense ivy and undergrowth	27	2.9	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G11	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	17	avg 350	5	EM / M	F	Bark wounds noted Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Crossing and rubbing branches Dead trees noted Dense ivy cover on main stem Dense undergrowth at the base Dieback of the crown observed Epicormic growth evident within the crown Failed trees Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	55	4.2	B (ii)
G12	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra English Oak Quercus robur Field Maple Acer campestre	13	avg 290	4	Yng / SM / EM / M	F	Bark wounds noted Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Crossing and rubbing branches Dead trees noted Interlocking crowns Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Outgrown hedgerow Flail damage Occasional gaps	38	3.5	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G13	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Wild Cherry Prunus avium Alder Alnus glutinosa Hazel Corylus avellana	14	avg 310	4	Yng / SM / EM	F	Basal suckers present Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Crossing and rubbing branches Dead trees noted Dense undergrowth at the base Epicormic growth evident within the crown Interlocking crowns Group of moderate landscaping value which screens the site from the east Planted and self set specimens found within group HV cables run adjacent to the southern edge of group Consists mainly of ash field maple and alder	43	3.7	B (ii)
G14	Wild Cherry Prunus avium Apple Malus domestica Pear Pyrus communis	5	upto 260	2	M	P / F	Pruning wounds noted Linear group of 18 trees along driveway even spacing of 5m but with several gaps likely where trees have failed cushion fungus	31	3.1	C (ii)
G15	Ash Fraxinus excelsior Crack Willow Salix fragilis Field Maple Acer campestre Wild Cherry Prunus avium Aspen Populus tremula English Elm Ulmus procera	13	upto 350	4	EM	F	Planted group within corner of field wet ditch through group habitat piles noted along with burrowing activity single dead elm within group unable to fully assess due to fence	55	4.2	B (ii)
G16	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna English Elm Ulmus procera	4	upto 120	1.5	SM	P	Dead trees noted Dense undergrowth at the base Sporadic self-seeded group of trees	7	1.4	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G17	Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Crab Apple Malus sylvestris	7	upto 300	3.5	M	F	Unmaintained boundary tree group limited screening value due to gaps dead elms noted	41	3.6	C (ii)
G18	Ash Fraxinus excelsior Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna English Elm Ulmus procera Hazel Corylus avellana	8	upto 300 100 100	3.5	M	P / F	Linear group along boundary contains several coppice stool many of which have decayed with limited regrowth group is now unmanaged gaps noted but provides some screening value dead elm noted	50	4.0	B (ii)
G19	Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna	5	upto 250 250	2	M / OM	P / F	Outgrown hedge line large gaps between trees does not provide any use as stock proofing broken branches and bark wounds noted on several trees failed trees noted	57	4.2	C (ii)
G20	Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna	4	est 150	2	SM / EM	F	Sporadic self-seeded group of trees Along watercourse dense undergrowth throughout restricts access	10	1.8	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G21	Blackthorn Prunus spinosa Field Maple Acer campestre Goat Willow Salix caprea Hawthorn Crataegus monogyna	7	upto 200	2	EM	F	Un-maintained hedgerow Situated along boundary provides moderate screening section has been reduced to provide clearance to overhead lines	18	2.4	B (ii)
G22	Field Maple Acer campestre	9	est 200 200	4	M	F	Small group of trees on site boundary likely bundle planted but unable to fully determine due to close spacing interlocking crowns	36	3.4	B (ii)
G23	Field Maple Acer campestre	8	upto 200 200 200	4	M	F	Small group of trees on site boundary likely outgrown hedgerow trees multi stemmed from base interlocking crowns	54	4.2	B (ii)
G24	Elder Sambucus nigra Field Maple Acer campestre	3	upto 150	1	EM	F	Very sporadic tree group along fence line no screening value	10	1.8	C (ii)
G25	Ash Fraxinus excelsior Elder Sambucus nigra Field Maple Acer campestre Hazel Corylus avellana	10	upto 300 200	4	EM	F	Outgrown tree group within hedgerow overhead lines run adjacent to South with some past pruning possible lapsed coppice failed elder noted	59	4.3	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G26	Ash Fraxinus excelsior Field Maple Acer campestre English Elm Ulmus procera	4	upto 150	2	EM	P / F	Dead trees noted Failed trees Un-maintained hedgerow Predominately elm with limited screening value	10	1.8	C (ii)
G27	Ash Fraxinus excelsior Blackthorn Prunus spinosa Field Maple Acer campestre Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Hazel Corylus avellana	10	upto 250	3	EM	F	Unmaintained boundary tree group flailed along field edge group provides moderate screening group contains several coppice stools	28	3.0	B (ii)
G28	Ash Fraxinus excelsior	12	upto 400	4	EM	G	Flail damage evident Minor dead wood evident in the crown (<75mm) Group of ash trees within boundary group larger proportions dense ivy cover obscures main stems	72	4.8	B (ii)
G29	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna	10	upto 200 200	3	EM	F	Unmaintained field boundary group flailed along field edge provides moderate screening value group contains several coppice stools section has been reduced in height to provide clearance to overhead lines	36	3.4	B (ii)
G30	Hawthorn Crataegus monogyna Apple Malus domestica English Elm Ulmus procera	6	avg 250	2	EM / M	P	Branch stubs evident Broken branches evident Crossing and rubbing branches Interlocking crowns Low crown form	28	3.0	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G31	Hawthorn Crataegus monogyna Norway Maple Acer platanoides Wild Cherry Prunus avium Aspen Populus tremula	14	upto 470	8	EM	F	Branch stubs evident Crossing and rubbing branches Epicormic growth evident within the crown Flail damage evident Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm)	100	5.6	B (ii)
G32	Ash Fraxinus excelsior Blackthorn Prunus spinosa Crack Willow Salix fragilis Hawthorn Crataegus monogyna Hybrid Black Poplar Populus x canadensis Silver Birch Betula pendula Sycamore Acer pseudoplatanus Alder Alnus glutinosa Hornbeam Carpinus betulus	18	avg 450	5	SM / EM	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Epicormic growth evident within the crown Established ivy cover Etiolated form Failed trees Interlocking crowns Minor dead wood evident in the crown (<75mm) Roadside boundary group	92	5.4	B (ii)
G33	Ash Fraxinus excelsior Crack Willow Salix fragilis Hawthorn Crataegus monogyna Aspen Populus tremula	18	avg 500 500	10	M	P / F	Branch stubs evident Broken branches evident Crossing and rubbing branches Epicormic growth evident within the crown Established ivy cover Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form	226	8.5	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G34	Ash Fraxinus excelsior Crack Willow Salix fragilis Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Norway Maple Acer platanoides Wild Cherry Prunus avium Aspen Populus tremula	16	avg 600	8	EM / M	F	Basal suckers present Branch stubs evident Broken branches evident Crossing and rubbing branches Dead trees noted Dense undergrowth at the base Epicormic growth evident within the crown Flail damage evident Failed trees Interlocking crowns Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Multi leaded form Multi stemmed from base Single stem forms Tree group along watercourse	163	7.2	B (ii)
G35	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna English Elm Ulmus procera spindle Dogwood Cornus sanguinea	16	avg 300 300 300	5	M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Dense undergrowth at the base Epicormic growth evident within the crown Established ivy cover Etiolated form Flail damage evident Failed trees Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm)	122	6.2	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G36	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Norway Maple Acer platanoides English Elm Ulmus procera Hazel Corylus avellana Dogwood Cornus sanguinea	10	avg 200 200 200	3	EM / M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Dead trees noted Epicormic growth evident within the crown Established ivy cover Flail damage evident Interlocking crowns Low crown form Old laid forms Outgrown hedgerow	54	4.2	B (ii)
G37	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna English Elm Ulmus procera Dogwood Cornus sanguinea	8	avg 6x 80	3	M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Dead trees noted Established ivy cover Flail damage evident Failed trees Maintained hedgerow Outgrown in places	17	2.4	C (ii)
G38	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna English Elm Ulmus procera	10	avg 150 150 150	3	M	F	Branch stubs evident Broken branches evident Close cultivation of the soil Crossing and rubbing branches Dead trees noted Dieback of the crown observed Established ivy cover Flail damage evident Failed trees Minor dead wood evident in the crown (<75mm)	31	3.1	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G39	Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Crab Apple Malus sylvestris	4	avg 6x 80	1	M	P	Bark wounds noted Crossing and rubbing branches Dead trees noted Dieback of the crown observed Flail damage evident Failed trees Gaps present in hedgerow Minor dead wood evident in the crown (<75mm) Outgrown hedgerow	17	2.4	C (ii)
G40	Ash Fraxinus excelsior Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	6	avg 200 200	2	EM / M	F	Branch stubs evident Crossing and rubbing branches Dieback of the crown observed Epicormic growth evident within the crown Established ivy cover Flail damage evident Outgrown hedgerow	36	3.4	C (ii)
G41	Ash Fraxinus excelsior Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	8	avg 200 200	2	EM / M	F	Branch stubs evident Crossing and rubbing branches Dieback of the crown observed Epicormic growth evident within the crown Established ivy cover Flail damage evident Outgrown hedgerow	36	3.4	C (ii)
G42	Ash Fraxinus excelsior Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna English Elm Ulmus procera	10	avg 6x 100	3	EM / M	P / F	Branch stubs evident Broken branches evident Crossing and rubbing branches Dead trees noted Dense undergrowth at the base Flail damage evident Failed trees Interlocking crowns Low crown form Outgrown hedgerow	27	2.9	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G43	Beech Fagus sylvatica Elder Sambucus nigra Hawthorn Crataegus monogyna English Elm Ulmus procera	7	avg 300	3	EM / M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Flail damage evident Interlocking crowns Low crown form Outgrown hedgerow	41	3.6	C (ii)
G44	Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna	6	avg 6x 60	2	EM / M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Flail damage evident Interlocking crowns Low crown form Outgrown hedgerow	10	1.8	C (ii)
G45	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna English Elm Ulmus procera Scots Pine Pinus sylvestris	15	est 500	8	EM / M	F	Base obscured Crossing and rubbing branches Dead trees noted Interlocking crowns Low crown form Situated offsite Unable to gain access	113	6.0	B (ii)
G46	Ash Fraxinus excelsior Hawthorn Crataegus monogyna English Elm Ulmus procera	8	avg 150 150 150	2	EM / M	F	Crossing and rubbing branches Flail damage evident Low crown form Outgrown hedgerow	31	3.1	C (ii)
G47	Lawson Cypress Chamaecyparis lawsoniana	9	upto 330	3	EM	F	Branch stubs evident Established ivy cover Interlocking crowns	49	4.0	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G48	Wild Cherry Prunus avium Apple Malus domestica Holly Ilex aquifolium Lawson Cypress Chamaecyparis lawsoniana Leyland Cypress Cupressocyparis leylandii Norway Spruce Picea abies Yew Taxus baccata	8	upto 200	2	EM	F	Base obscured Branch stubs evident Broken branches evident Characteristic for species Group within garden	18	2.4	C (ii)
G49	Apple Malus domestica	7	upto 340	3	EM	F	Branch socket cavities observed Branch stubs evident Broken branches evident Pruning wounds noted Typical crown form	52	4.1	C (ii)
G50	Ash Fraxinus excelsior Crack Willow Salix fragilis Elder Sambucus nigra Hybrid Black Poplar Populus x canadensis Aspen Populus tremula Hazel Corylus avellana	19	upto 650	7	EM	F	Barbed Wire attached to stem/s Bark wounds noted Branch socket cavities observed Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base Failed trees Waterlogged ground	191	7.8	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G51	Ash Fraxinus excelsior Hawthorn Crataegus monogyna	10	upto 360	5	EM	F	Barbed Wire attached to stem/s Bark wounds noted Branch socket cavities observed Branch stubs evident Broken branches evident Dense ivy cover on main stem Dense undergrowth at the base Failed trees Waterlogged ground	59	4.3	C (ii)
G52	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna	10	upto 520	5	EM	P	Basal cavity observed Basal suckers present Branch socket cavities observed Branch stubs evident Broken branches evident Browsing damage noted on main stem Flail damage evident Failed trees Minor dead wood evident in the crown (<75mm) Poached ground at the base Inonotus hispidus Shaggy bracket	122	6.2	C (i)
G53	English Oak Quercus robur Field Maple Acer campestre Hawthorn Crataegus monogyna Hybrid Black Poplar Populus x canadensis	6	upto 120	4	EM	F	Flail damage evident Interlocking crowns Outgrown hedgerow	7	1.4	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G54	Hawthorn Crataegus monogyna Silver Birch Betula pendula Apple Malus domestica Lawson Cypress Chamaecyparis lawsoniana Norway Spruce Picea abies Scots Pine Pinus sylvestris	10	est 250	4	SM / EM	F	Garden planting	28	3.0	C (ii)
G55	Horse Chestnut Aesculus hippocastanum Apple Malus domestica	9	upto 330	4	EM	F	Crossing and rubbing branches Interlocking crowns No major defects were noted	49	4.0	B (ii)
G56	Field Maple Acer campestre Hawthorn Crataegus monogyna Crab Apple Malus sylvestris	6	avg 150	3	EM / M	F	Flail damage evident Gaps present in hedgerow Un-maintained hedgerow	10	1.8	C (ii)
G57	Elder Sambucus nigra Hawthorn Crataegus monogyna Hazel Corylus avellana	5	6x 50	3	SM / EM	F	Dense undergrowth at the base Multi stemmed from base	7	1.5	C (ii)
G58	Elder Sambucus nigra Hawthorn Crataegus monogyna Hazel Corylus avellana	5	6x 50	3	SM / EM	F	Dense undergrowth at the base Multi stemmed from base Group around mast	7	1.5	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G59	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna	12	upto 280	4	EM	F	Branch stubs evident Characteristic for species Crossing and rubbing branches Interlocking crowns Minor dead wood evident in the crown (<75mm) No major defects were noted Dense boundary group	35	3.4	C (ii)
G60	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna Silver Birch Betula pendula Sycamore Acer pseudoplatanus	12	upto 250	4	EM	F	Branch stubs evident Characteristic for species Crossing and rubbing branches Interlocking crowns Minor dead wood evident in the crown (<75mm) No major defects were noted Buffer planting adjacent to main road	28	3.0	B (ii)
G61	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna	12	upto 350	4	EM / M	F	Boundary trees adjacent to watercourse	55	4.2	C (ii)
G62	Ash Fraxinus excelsior Hawthorn Crataegus monogyna	7	upto 200	4	EM / M	F	Boundary trees adjacent to watercourse	18	2.4	C (ii)
G63	Crack Willow Salix fragilis	15	upto 850	8	M	P	Branch stubs evident Broken branches evident Characteristic for species Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Polarded group of willow	327	10.2	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G64	Hawthorn Crataegus monogyna	4	est 80 80 50	2	SM	F	Gaps present in hedgerow Un-maintained hedgerow	7	1.5	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
HEDGEROWS										
H1	Elder Sambucus nigra Hawthorn Crataegus monogyna Wych Elm Ulmus glabra	2	avg 6x 60	0.5	M	F	Unmaintained hedgerow Gaps present Dense ivy and undergrowth	10	1.8	C (ii)
H2	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus	2	est 90	0.5	M	F / G	Well maintained dense hedgerow	4	1.1	B (ii)
H3	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Hazel Corylus avellana	2	avg 6x 60	0.5	M	F	Unmaintained hedgerow that runs adajcent to railway embankment	10	1.8	C (ii)
H4	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Hazel Corylus avellana	2	est 90	0.5	M	F / G	Well maintained dense hedgerow	4	1.1	B (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H5	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna	2.5	avg 6x 60	0.5	M	F	Maintained hedgerow	10	1.8	C (ii)
H6	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna	2.5	avg 6x 60	0.5	M	F	Maintained hedgerow	10	1.8	C (ii)
H7	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Wych Elm Ulmus glabra	2	avg 120	0.5	M	F / G	Close cultivation of the soil Well maintained dense boundary hedgerow Light ivy cover and brambles in places	7	1.4	B (ii)
H8	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	2	est 80	0.5	M	F	Unmaintained hedgerow. Dense undergrowth and ivy	3	1.0	C (ii)
H9	Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna	4	avg 6x 70	0.5	M	F	Outgrown hedgerow which forms boundary between site and new development to the south	13	2.1	C (ii)

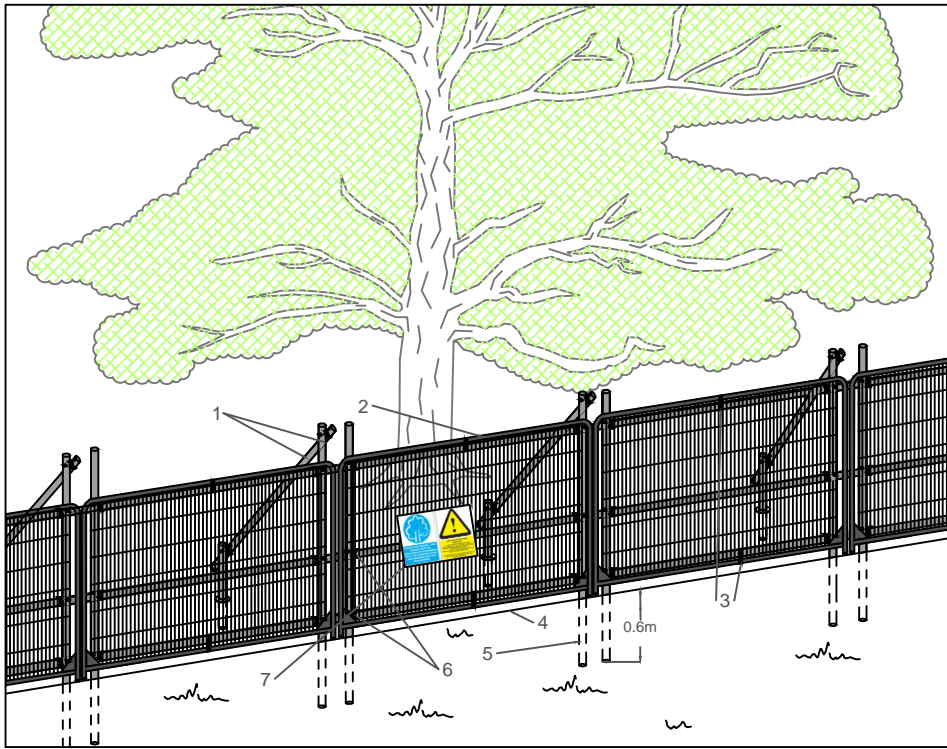
Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H10	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	2	avg 6x 60	0.5	M	F	Maintained boundary hedgerow	10	1.8	C (ii)
H11	Blackthorn Prunus spinosa Field Maple Acer campestre Hawthorn Crataegus monogyna	2	upto 150	1	M	G	Flail damage evident Maintained hedgerow	10	1.8	B (ii)
H12	Blackthorn Prunus spinosa Elder Sambucus nigra English Elm Ulmus procera Hazel Corylus avellana Dogwood Cornus sanguinea	2.5	upto 100	1	EM	P / F	Gaps present in hedgerow Maintained hedgerow	5	1.2	C (ii)
H13	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna English Elm Ulmus procera	3	upto 150	1	M	F	Maintained hedgerow Outgrown hedgerow	10	1.8	C (ii)
H14	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna	2	upto 120	1	M	G	Flail damage evident Maintained hedgerow	7	1.4	B (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H15	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna English Elm Ulmus procera	3	upto 150	1	M	F	Gaps present in hedgerow Maintained hedgerow Outgrown hedgerow Occasional coppice stools	10	1.8	C (ii)
H16	Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	2	upto 150	0.5	M	F	Flail damage evident Maintained hedgerow Double hedgerow	10	1.8	B (ii)
H17	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hazel Corylus avellana	2	upto 120	1	EM	F	Maintained hedgerow	7	1.4	C (ii)
H18	Blackthorn Prunus spinosa Field Maple Acer campestre Hawthorn Crataegus monogyna	2	upto 150	1	M	G	Flail damage evident Maintained hedgerow	10	1.8	B (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H19	Blackthorn Prunus spinosa Field Maple Acer campestre Hawthorn Crataegus monogyna	2	upto 150	1	M	G	Flail damage evident Maintained hedgerow	10	1.8	B (ii)
H20	Elder Sambucus nigra English Elm Ulmus procera Hazel Corylus avellana	7	avg 20x 50	2	M	F	Coppiced form Crossing and rubbing branches Interlocking crowns Low crown form Maintained hedgerow Multi stemmed from base	23	2.7	C (ii)
H21	Blackthorn Prunus spinosa Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	2	avg 6x 60	1	M	F	Crossing and rubbing branches Flail damage evident Maintained hedgerow	10	1.8	C (ii)
H22	Ash Fraxinus excelsior Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna	2	avg 6x 80	1	M	F	Crossing and rubbing branches Established ivy cover Flail damage evident Maintained hedgerow	17	2.4	C (ii)
H23	Ash Fraxinus excelsior Hawthorn Crataegus monogyna English Elm Ulmus procera Dogwood Cornus sanguinea	3	avg 6x 80	2	M	F	Crossing and rubbing branches Flail damage evident Maintained hedgerow Old laid forms Outgrown in places	17	2.4	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H24	Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna English Elm Ulmus procera	4	avg 6x 80	1.5	M	F	Crossing and rubbing branches Flail damage evident Outgrown hedgerow	17	2.4	C (ii)
H25	Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna	2	avg 6x 60	1	M	F	Crossing and rubbing branches Flail damage evident Maintained hedgerow	10	1.8	C (ii)
H26	Hawthorn Crataegus monogyna	2.5	avg 90	1	M	G	Maintained hedgerow	4	1.1	C (ii)
H27	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna	2	avg 50 50 50	1	M	G	Maintained hedgerow	3	1.0	B (ii)
H28	Hawthorn Crataegus monogyna	3	avg 90	1	M	G	Maintained hedgerow	4	1.1	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H29	Hawthorn Crataegus monogyna	3	avg 90	1	M	G	Maintained hedgerow	4	1.1	C (ii)



Standard specification for protective barrier

1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to scaffold frame with wire ties
4. Ground level
5. Uprights driven into the ground until secure (min depth of 0.6m)
6. Standard scaffold clamps
7. Construction Exclusion Zone signs



Above ground stabilising systems

1. Stabiliser strut with base plate secured with ground pins
2. Feet blocks secured with ground pins
3. Construction Exclusion Zone signs

NOTES

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APPENDIX B PROTECTIVE FENCING SPECIFICATIONS

CAD file: S:\Arb resources\Basic Templates\Tree Protection\Appendix B - Protective Fencing A4.dwg