

The West Midlands Rail Freight Interchange Order 201X  
Technical Appendix 12.7 - Arboricultural Assessment  
Regulation 5(2)(a)  
FPCR - June 2018



**West Midlands**  
Interchange

**Four Ashes Ltd**



Four Ashes Limited

**West Midlands Interchange**

**Land south of the A5 and west of Junction 12 of the M6**

**Arboricultural Assessment**

**APPENDIX 12.7**

June 2018

**FPCR Environment and Design Ltd**

Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Company No. 07128076. [T] 01509 672772 [F] 01509 674565 [E] [mail@fpcr.co.uk](mailto:mail@fpcr.co.uk) [W] [www.fpcr.co.uk](http://www.fpcr.co.uk)

This report is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of FPCR Environment and Design Ltd. Ordnance Survey material is used with permission of The Controller of HMSO, Crown copyright 100018896.

Rev	Issue Status	Prepared / Date	Approved/Date
-	Draft	HCK / 19.09.16	HCK / 23.06.17
	Final Draft	HCK / 10.12.17	HCK / 14.12.17
	Final Draft 2	HCK / 10.03.18	HCK / 29.03.18
	Final	HCK / 04.06.18	TCB / 04.06.18

**CONTENTS**

1.0 INTRODUCTION ..... 3

2.0 METHODOLOGY FOR TREE SURVEY INCLUDING VETERAN TREE ASSESSMENT ... 6

3.0 RESULTS..... 13

4.0 VETERAN TREES..... 25

5.0 ARBORICULTURAL IMPACT ASSESSMENT (AIA) ..... 26

6.0 TREE PROTECTION MEASURES ..... 36

7.0 CONCLUSION ..... 38

**TABLES**

- Table 1: Estimated girth size categories for Veteran Trees (from Rural Development Service 2006 Environmental Stewardship-Farm Environment Plan Guidance 009)
- Table 2: Summary of Trees by Retention Category
- Table 3: Summary table of the eleven True Veteran Trees
- Table 4: Summary of Impact on Tree Stock

**FIGURES**

- Figure 1: Assessment Boundary Plan (7121-A-01)
- Figure 2: Tree Survey Plan (7121-A-02.1, 02.2 and 02.3)
- Figure 3: Tree Retention Plan (7121-A-03.1, 03.2 and 03.3)

**APPENDICES**

- Appendix A: Tree Schedule
- Appendix B: Protective Fencing Specifications

## 1.0 INTRODUCTION

- 1.1 This report has been prepared by FPCR Environment and Design Limited on behalf of Four Ashes Limited to present the findings of an Arboricultural Assessment and survey of trees located on an area of land south of the A5 and west of Junction 12 of the M6 in Staffordshire (hereafter referred to as 'the Site'). The Site was centered on Ordnance Survey Grid Ref SJ 919 095a and is shown in Figure 1.
- 1.2 The surveys were carried out throughout August 2016 in several visits and the weather at the time of the assessments was dry and mostly warm, clear and with good amounts of sunshine. Further surveys to record tree cover within the updated red line, to include possible offsite highway works were carried out in March 2018.
- 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. 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.
- 1.4 Trees have been considered following an iterative process into one of four categories (U, A, B & C) as outlined in BS5837. The purpose of the categorisation method is primarily to identify the arboricultural quality and value of the existing tree stock following which informed decisions can be made concerning which trees should be retained in the event of development occurring. The categories also provide an indication of a trees importance in relation to the Study Area and the local landscape as well as their arboricultural merit all of which assist in the decision-making process.
- 1.5 The purpose of the report is therefore to present the results of an assessment of the existing trees' arboricultural value, based on their current condition and quality and to provide an assessment of impact arising from proposals to develop the site. The survey has 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 the proposed development.

### Description of the Development

- 1.6 This report has been produced to accompany a planning application for a proposed development that consists of the following:
- An intermodal freight terminal with connections to the West Coast Main Line, capable of accommodating up to 10 trains per day and trains of up to 775m long and including container storage, HGV parking, rail control building and staff facilities;
  - Up to 743,200 square metres of rail served warehousing and ancillary service buildings;
  - New road infrastructure and works to the existing road infrastructure;

- Demolition of existing structures and structural earthworks to create development plots and landscape zones; and
- Strategic landscaping and open space, including alterations to public rights of way and the creation of new ecological enhancement areas and publicly accessible open areas.

### **Description of Application Area and an Overview of Tree Cover**

- 1.7 The Site is located at Four Ashes, north of Wolverhampton and south of the small settlement of Penkridge, Staffordshire and is approximately 743,200 sq m of existing agricultural, grass and scrubland, adjacent to the West Coast Mainline and west of Junction 12 of the M6.
- 1.8 The western extent of the Site meets with the A449 Stafford Road which runs in a north to south orientation extending from Station Drive in the south as far as the A5 to the north at the Gailey roundabout. The northern boundary is defined by the A5 Watling Street where it extends as far as Junction 12 of the M6 motorway. The southern boundary is defined by Straight Mile and a section of the Staffordshire and Worcester canal which runs between Calf Heath and Four Ashes. The eastern extent stretches as far as the M6 motorway, Stable Lane and Woodlands Lane.
- 1.9 Within the Site is an active quarry in the eastern portion and Calf Heath Reservoir which sits on its eastern boundary. The reservoir is one of two such features to either side of the junction with the M6 motorway serving as balancing ponds from the original construction of the road. The reservoir and quarry are bounded on the eastern side by mature mostly broadleaved woodland and some younger plantation woodland comprising both conifer and deciduous species.
- 1.10 Bisecting the Site in an east west orientation is Vicarage Road which joins with Straight Mile where it turns into Station Road leading down to the junction with the A449. To the south of Vicarage Road and Straight Mile are a number of large fields used for grazing horses and arable crops. Heath House Farm is located off Vicarage Road, towards the eastern end.
- 1.11 The Staffordshire and Worcester Canal passes through the Site from the southern extent as far north as the A5 on the northern boundary and beyond. The canal has public access along the tow path and is lined with many trees most of which are alder *Alnus glutinosa* and English oak *Quercus robur*.
- 1.12 Within the centre of the Site is Calf Heath Wood, a predominantly coniferous plantation but for a number of mature English oak around the boundaries. The south-western portion comprises silver birch.
- 1.13 An active mainline railway passes through the Site in the western portion, orientated north-south and edged with sporadic tree cover on the embankments comprising predominantly of common ash *Fraxinus excelsior*.
- 1.14 Although outside of the Site a large chemical works and a mixed use industrial estate complex is situated in the south-western portion of the area. Access to the chemical works is gained from the A449.
- 1.15 There are a number of smaller woodland blocks within the Site as well as other associated water courses such as minor field ditches and drains and a small number of field ponds. The assessment Site also meets with the boundaries of several existing private residential properties in places distributed throughout the area.

- 1.16 The Site contains a number of Public Rights of Way (PROW).
- 1.17 The main land use is generally arable and horse grazing land with individual field compartments mostly being bounded by the network of well established, maintained native species hedgerows.
- 1.18 The amount of tree cover across the assessment Site would not be considered as extensive but was of a good covering and representative of a rural landscape with trees forming integral features of open countryside with distinctive characteristics depending on their growing environment, position and function. By far the highest concentrations of more significant tree cover were the frequently occurring mature English oak associated with the field boundaries and the well treed edges to the canal. Calf Heath Wood, and the several other woodland parcels were also notable as being important features of the tree cover within the local landscape. Further incidental individual trees and mixed species groupings of trees were also regularly found associated with the farms, existing residential boundaries abutting the Site, field ponds and other minor water courses / ditches, railway embankments and road sides.
- 1.19 The notable arboricultural features were the numerous mature, large and sometimes free-standing English oak, situated around the boundaries of and open grown within the field compartments, several of which were of veteran status and were a strong characteristic element of the local area. These trees were found to be in varying conditions as would be typically expected of those in such a growing environment having seen little in the way of any targeted management.
- 1.20 Also present within the assessment Site was a confirmed native black poplar *Populus nigra* subsp. *'betulifolia'*. Further details are given within the Results section of this report.
- 1.21 Examples of other species present were common ash *Fraxinus excelsior*, white willow *Salix alba*, Norway maple *Acer platanoides*, hornbeam *Carpinus betulus*, crab apple *Malus sylvestris*, mountain ash *Sorbus aucuparia*, hybrid black poplar *Populus x canadensis*, wild cherry *Prunus avium*, turkey oak *Quercus cerris*, holly *Ilex aquifolium*, sweet chestnut *Castanea sativa*, common walnut *Juglans regia*, Lombardy poplar *Populus nigra* var. *Italica*, Lawson cypress *Chamaecyparis lawsoniana*, Leyland cypress *Cupressocyparis leylandii*, blackthorn *Prunus spinosa*, hazel *Corylus avellana*, crack willow *Salix fragilis*, elder *Sambucus nigra*, goat willow *Salix caprea*, aspen *Populus tremula*, whitebeam *Sorbus aria*, field maple *Acer campestre*, elm *Ulmus* spp, hawthorn *Crataegus monogyna*, damson *Prunus insititia*, robinia *Robinia pseudoacacia*, balsam poplar *Populus trichocarpa*, Norway spruce *Picea abies*, scots pine *Pinus sylvestris*, Austrian pine *Pinus nigra* ssp *Nigra*, sitka spruce *Picea sitchensis*, grey poplar *Populus x canescens*, common lime *Tilia x europaea*, sycamore *Acer pseudoplatanus*, beech *Fagus sylvatica*, horse chestnut *Aesculus hippocastanum* and silver birch *Betula pendula*.

### **Statutory Constraints**

- 1.22 It is understood following consultation with the Local Planning Authority, South Staffordshire District Council (SSDC), that there are no tree preservation orders that would apply to any trees present on, or in close proximity to the assessment Site and therefore no statutory constraints would apply to the development in respect of trees in this regard at the time of writing although part of the Site is within a Conservation Area, and therefore statutory constraints apply to the development in respect of trees. Further details of the Conservation Area and which trees would be within the designation are given in the Results section of this report.

- 1.23 It must be understood that should any specific tree protection be required, this would need to be separately considered where needs arise prior to the commencement of construction activity following approval of the application. This should be in the form of an Arboricultural Method Statement produced in accordance with guidance in BS5837 and is beyond the scope of this Arboricultural Assessment.

## **2.0 METHODOLOGY FOR TREE SURVEY INCLUDING VETERAN TREE ASSESSMENT**

- 2.1 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 arboriculturalist 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.
- 2.2 Trees have been assessed as groups or woodlands 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. An assessment of individual trees within groups or woodlands 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.
- 2.3 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). 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.
- 2.4 **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.



- 2.5 **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.
- 2.6 **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.
- 2.7 **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.

### **Veteran Trees**

- 2.8 Veteran trees 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. Veteran Trees are a material consideration within the planning process and their importance is specifically recognised within the National Planning Policy Framework 2012. Should any veteran trees be identified during the initial level 2 BS5837 assessment further survey work of those trees and their communities will be required sufficient to meet planning application needs. From an ecological perspective, veteran trees provide a rare and specialist niche habitat and therefore preservation of this habitat is considered highly important.

- 2.9 Veteran trees and many of their associated specialised species are becoming increasingly rare within the landscape and therefore some veteran tree landscapes and their associated species are now protected, both nationally and Europe wide through the Natura 2000 Directive.

#### **Methodology for the Assessment of Veteran Trees**

- 2.10 The methodologies and assessment criteria used to determine whether or not any trees within the Site were of veteran status are as follows. The defining criteria for the definition of a veteran tree is one that has all or most of the following characteristics listed below based on the following references:
- *The estimated girth size categories used to determine a veteran tree by species has been according to 'Estimated girth size categories for Veteran Trees (from Rural Development Service 2006 Environmental Stewardship-Farm Environment Plan Guidance 009). See Table 1 below.*
  - *Smith & Bunce (2004) and amended according to English Nature's Development of a Veteran Tree Site Assessment Protocol (Castle & Mileto 2005);*
  - *Read 2000 (Veteran Trees – a guide to good management, Veteran Tree Initiative and English Nature (now Natural England);*
  - *Ancient Tree Hunt (Owen and Alderman 2008);*
  - *Ancient and Other Veteran Trees: Further Guidance on Management (editor David Lonsdale 2013 and Reed)*
- 2.11 The veteran tree assessment undertaken at the Site has been carried out using an adaptation of English Nature's Specialist Survey Method (SSM). The adapted system was originally designed by Treework Environmental Practice for English Nature (now Natural England) for collecting data on the associated features and habitat attributes of veteran trees. Crucially this survey method is designed to be adaptable by having a range of levels and detail of survey information.
- 2.12 The survey for veteran trees at the Site has therefore been at SSM Level 2, which is designed for the recording of essential veteran tree information but does not include the recording and interpreting of veteran tree habitats or signs of associated/dependant organisms yet will, where present, make reference to potential habitat to support such specialist associations and indicate where further specialist survey work would be required. Such data should only be recorded and interpreted by a suitably qualified Ecologist or Entomologist.
- 2.13 The Level 2 assessment collects a minimum level of information which would allow determination of veteran status but future management recommendations will need to be determined following a more detailed assessment and would take into consideration some of the more recent research work and guidance for the management of veteran trees contained within *Ancient and Other Veteran Trees: Further Guidance on Management* (Lonsdale and Reed, 2013).
- 2.14 The term 'veteran' refers to those trees that display habitat features associated with ancient trees. This term can include both ancient trees and trees that display these features prior to the ancient stage. It is also used to describe the habitat features themselves (as in 'veteran features').
- 2.15 Table 1, below, shows the estimated girth size categories that have been used to determine a Veteran tree by species.

**Table 1: Estimated girth size categories for Veteran Trees (from Rural Development Service 2006 Environmental Stewardship-Farm Environment Plan Guidance 009)**

Tree Girth (minimum)	Diameter at Breast Height (dbh) – (minimum)	Species
190 cm	60cm	Birch species and Hawthorn
240cm	75cm	Field Maple, Rowan, Grey and Goat Willow, Hornbeam, Cherry and Alder
310cm	100cm	Oak species, Ash, Scots Pine, Yew and Elm species
470cm	150cm	Lime species, Sycamore. Horse Chestnut, Poplar species, other Pine species, Beech, Sweet Chestnut and White and Crack Willows

### List of Veteran Tree Characteristics

#### How to recognise an ancient and or veteran tree:

- 2.16 According to the above listed guidance's in paragraph 2.10, the defining criteria for a veteran tree is one which shows the required amount and quality of physical attributes, characteristics and features pertaining to veteran trees as listed below.
- biological, aesthetic or cultural interest, because of its great age (NB “the biological interest is largely derived from the development of a diverse range of habitats associated with dead and decaying wood” – source *Ancient and other veteran trees: further guidance on management* (editor David Lonsdale 2013),
  - a growth stage that is described as ancient or post-mature,
  - a chronological age that is old relative to others of the same species,
  - a girth that is very large for the species, allowing for the local growing conditions (NB for the size-based attributes these would depend on the tree species concerned, together with soil and climate but the following criteria apply generally to oak; trees with a diameter at breast height of more than 1.0 m (girth 3.2 m) are potentially interesting and trees with a diameter of more than 1.5 m (girth 4.7 m) are valuable with respect to conservation.
  - extensive decay or hollowing in exposed parts of the central wood;
  - a crown structure that, for the species concerned, is characteristic of the latter stages of life;
  - a crown that has undergone retrenchment, i.e. it has become smaller (owing to dieback and breakage) since maturity.

2.17 Other key attributes of Veteran trees (i.e. the more of these a tree has, the stronger the indication that it is a veteran)

- Major trunk cavities or progressive hollowing
- Naturally forming water pools
- Decay holes
- Physical damage to trunk
- Bark loss
- Large quantity of dead wood in the canopy
- Sap runs
- Crevices in the bark, under branches or on the root plate sheltered from direct rainfall
- Fungal fruiting bodies (e.g. from heart-rotting species)
- High number of interdependent wildlife species
- Epiphytic plants (if these are abundant or include rare species)
- An old look
- High aesthetic interest.

2.18 Other attributes which can additionally apply are:

- A pollard form or other form indicating previous management
- Cultural/historic value
- A prominent position in the landscape

2.19 Having a large stem diameter for the species alone does not qualify a tree as being veteran. In order for it to qualify as a veteran tree, mature trees are assessed as to whether they possess either three or more of the characteristic features listed above or significant signs of one or more of the additional associated attributes.

### **Tree Schedule**

2.20 Appendix A presents details of any individual trees, groups, hedgerows and woodlands 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.

2.21 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.

## Hedgerows

- 2.22 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. Hedgerows and substantial internal or boundary hedges (including evergreen screens) have been recorded including lateral spread, height and stem diameter(s). Where trees are present within a hedgerow that are significantly different in character from the remainder, these have been identified and recorded separately.
- 2.23 A tree survey 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.

## Other Considerations

- 2.24 It may be necessary during detailed design to undertake further assessment and accurate positioning of woody species within hedgerows and tree groups to assist structural calculations for foundation design of structures in accordance with current building regulations. Knowledge of soil type was not known at the time of this tree assessment. If a current soil survey of the Site has taken place then it must be read in conjunction with the results of the tree survey.
- 2.25 The exact position of individual trees or species included as part of a tree group, hedgerow or woodland 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.

## Conditions of Tree Survey

- 2.26 The survey was completed from ground level only and from within the boundary of the Site. Aerial tree inspections or 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. Evaluation of tree condition given within this assessment applies to the date of survey and cannot be assumed to remain unchanged. It may be necessary to review these within 12 months, in accordance with sound arboricultural practice.

## Site Plans

- 2.27 Figure 1 (drawing no. 7121-A-01) identifies the Site area considered as the application boundary.
- 2.28 The individual positions of trees and groups have been shown on the Tree Survey Plan, Figure 2 (drawing no's 7121-A-0.21, 02.2 and 02.3). 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 and hedgerows, their relation to any existing surrounding features has been plotted using a global positioning system and aerial photography to provide approximate locations. The crown spreads and root protection areas have been shown on the plan. Shade patterns have not been included but can be provided upon request.

- 2.29 As part of the Arboricultural Impact Assessment, a Tree Retention Plan, Figure 3 (drawing no. 7121-A-03.1, 03.2 and 03.3) has been prepared to show the proposed layout in relation to the existing tree cover allowing an assessment of any potential conflicts. The plan also identifies which trees would be required to be removed or retained as part of the proposed development.

### **Tree Constraints and Root Protection Areas**

- 2.30 Below ground constraints to future development are represented by the area surrounding the tree containing sufficient rooting volume for the specimen to have the best chance of survival in the long term which is identified as the root protection area (RPA). The RPA has been calculated in accordance with section 4.6 of BS5837 and requires suitable protection in order for the tree to be successfully incorporated into any future scheme. Where applicable the shape of the Root Protection Area has been modified to take into account the presence of any nearby obstacles (existing or past) which may have restricted root growth and the likely root distribution i.e. the presence of hard standing, structures and underground apparatus.
- 2.31 Where groups of trees have been assessed, the Root Protection Area has been shown based on the maximum sized tree in any one group and so may exceed the Root Protection Area required for some of the individual specimens within the group. Further detailed inspection of the individual trees forming a group may be required where development impacts upon the group.
- 2.32 Above ground constraints such as the current and potential 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.

### 3.0 RESULTS

- 3.1 A total of three hundred and twenty-eight individual trees, one hundred and eighty-three groups of trees, one hundred and eight hedgerows and eight woodlands were surveyed as part of the Arboricultural Assessment.
- 3.2 Trees were surveyed as individual trees and groups of trees where examples are clearly present as per the description. Refer to the following:
- Figure 2 – Tree Survey Plan (three drawings: 7121-A-02.1, 02.2 and 02.3)
  - Appendix A – Tree Schedule for full details of the trees included in this assessment.
- 3.3 Table 2 below summarises the trees assessed.
- 3.4 To present the results of the survey, the recorded tree cover has been separated into broad areas relative to the position where it occurs in the Site under sub-headed sections following Table 2. The sections have been described travelling from west to east across the application area. The paragraphs provide an overview on the tree cover for each of the broad areas and has described some of the significant arboricultural features present either owing to their physical condition and / or arboricultural and aesthetic value and for their landscape contribution, although for full details of the trees, hedges and woodlands present, refer to the Tree Schedule in Appendix A.
- 3.5 Hedgerows have been described in a more general sense from an arboricultural perspective in paragraph 3.82 and 3.83. For further details on the hedgerows within the application area cross reference should be made to the Ecological Appraisal and Ecology Chapter within the Environmental Statement for findings of assessments against the Hedgerow Regulations and for nature conservation value. Such assessments are beyond the scope of the BS 5837 (2012) tree survey.

#### Results Summary

- 3.6 The amount of tree cover across the Site would be considered as moderate yet was distributed throughout the application area and representative of a rural landscape where farming predominates. By far the dominant species was English oak, which were associated with the extensive network of field boundary hedgerows, as either free standing examples and / or as parts of woodlands. Individual examples were mature and of sizable proportions, many exhibiting open forms as they had grown uninterrupted for many decades thus by virtue of these physical attributes were visually prominent where they occurred and existed as integral features and character forming components of the local landscape.
- 3.7 Importantly, several of the English oak specimens, a total of eleven, were found to be of veteran status as ‘true veteran trees’ as they possessed features pertaining to veteran trees. A further twenty-five specimens, all of which were also English oak, possessed stem diameters in excess of 1000mm, which in accordance with published research, would for their respective species be “interesting” and considered as ‘future’ or ‘transitional’ veteran trees.
- 3.8 Alongside the oak there was a broad range of other species types including evergreen varieties as well as broadleaved recorded both as individual specimens and groups. The varied species range across the Site complemented the rural environment and was typical of open countryside.

- 3.9 Riparian species were found associated with watercourses and water bodies which included alder and willow types.
- 3.10 Where groups of trees were present, these mostly consisted of more than one species and in some cases, had been designated as “groups” to describe naturally occurring and planted collections of trees such as linear belts, outgrown hedgerows and / or clusters of trees. The valued contribution of groups of trees make to the landscape would be of greater significance for their collective presence rather than for the value of the individual trees within them.
- 3.11 As expected with trees in this kind of agricultural semi-rural environment, individual examples regularly showed evidence of storm damaged branch material, dead wood and occasional branch failures where targeted tree management is often absent and therefore in certain circumstances may require application of appropriate remedial tree surgery to manage any risks of failure to acceptable levels in view of the potential for the public to be in close proximity to retained trees.
- 3.12 The nature and type of landscape has meant for the majority of trees little or no formal arboricultural management has been applied except in cases where farming operations or highway maintenance has necessitated the implementation of certain tree work to control the extent of growth to allow machinery and other vehicles easier access to cultivate fields, ensure safety of livestock, clear the brook course, maintain hedgerows, highway clearance pruning or for remediating damage from adverse weather conditions in some places. There was also some evidence of rudimentary branch removals for similar reasons which had resulted in unsympathetic application of tree management. For the most part however trees were found to have developed unobstructed and adapted naturally within their environment.
- 3.13 Across the Site, there were seventy individual category A trees (high quality and value), a high proportion of which were English oak and including the veteran trees, regarded as such for their good physical quality and considerable remaining life expectancy. Their potential to contribute to the Site in the future would be considered as high by virtue of the species and the ability to survive for many years. There were also seventeen groups of category A trees, which included six of the eight woodlands.
- 3.14 There were also one hundred and thirty-eight individual category B trees and one hundred groups of category B trees (moderate quality and value) which reflects the importance these trees have in terms of visual contribution to the local area also alongside the category A trees.
- 3.15 Combined, both category A and B trees far outnumbered the total number of category C trees (low quality and value) which demonstrates the overall high quality, condition and physical contribution to the local landscape of trees across the Site when compared to the presence of lower grade material.
- 3.16 Alongside the several category A specimens, trees of category B status carry equal importance in terms of their suitability for retention as that of category A specimens, but trees assigned a category B status are downgraded for reasons relating to their slightly impaired physical condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage) which can be corrected through the application of management.
- 3.17 There was one confirmed native black poplar present, which has been discussed separately further on in the report.



- 3.18 Throughout the assessment area was an extensive network of native species, well-established field boundary hedgerows, both of managed and unmanaged forms.

**Table 2: Summary of Trees by Retention Category**

	Individual Trees	Total	Groups of Trees	Total
<b>Category U - Unsuitable</b>	T21, T32, T35, T40, T114, T117, T131, T139, T147, T180, T181, T295, T300	13	G15, G96, G124, G158	4
<b>Category A (High Quality / Value)</b>	T11, T45, T68, T79, T85, T86, T87, T94, T95, T96, T98, T103, T112, T115, T116, T119, T129, T130, T153, T159, T163, T166, T167, T168, T169, T170, T171, T178, T186, T188, T189, T198, T201, T203, T204, T205, T207, T212, T215, T216, T217, T218, T222, T223, T224, T225, T262, T263, T266, T269, T271, T272, T273, T275, T276, T277, T279, T280, T281, T282, T283, T284, T286, T287, T288, T289, T290, T292, T294, T296, T309, T317, T318, T325	74	G99, G105, G132, G135, G138, G139, G141, G142, G143, G144, G145, G153, G157, G177, W1, W3, W5, W6, W7, W8	20
<b>Category B (Moderate Quality / Value)</b>	T2, T3, T4, T5, T6, T8, T9, T10, T12, T13, T14, T15, T16, T17, T18, T23, T24, T26, T27, T29, T30, T33, T34, T38, T39, T41, T44, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T69, T70, T72, T73, T74, T76, T77, T78, T80, T81, T82, T88, T89, T90, T93, T99, T100, T110, T111, T118, T120, T124, T125, T132, T133, T134, T137, T138, T141, T142, T143, T144, T151, T152, T154, T155, T164, T165, T173, T174, T175, T176, T182, T183, T185, T187, T190, T192, T193, T194, T196, T208, T210, T211, T213, T219, T220, T221, T227, T232, T233, T234, T236, T237, T238, T239, T240, T241, T244, T245, T246, T247, T248, T250, T252, T253, T254, T255, T256, T258, T260, T261, T264, T265, T267, T268, T270, T278, T293, T301, T302, T305, T306, T307, T308, T312, T313, T314, T315, T316, T320, T321, T324, T326, T328	153	G1, G5, G6, G7, G8, G10, G11, G13, G16, G17, G18, G20, G21, G22, G23, G24, G26, G27, G28, G29, G30, G31, G32, G33, G34, G35, G36, G37, G39, G40, G41, G42, G43, G44, G45, G46, G49, G50, G51, G52, G54, G55, G56, G58, G59, G60, G65, G66, G68, G73, G75, G78, G79, G80, G81, G82, G84, G85, G86, G88, G92, G94, G95, G97, G98, G100, G103, G104, G107, G108, G110, G112, G117, G119, G122, G123, G126, G129, G130, G140, G147, G149, G160, G163, G164, G165, G167, G168, G169, G170, G171, G172, G173, G175, G176, G178, G179, G180, G181, G183, H7, H8, H9, H10, H11, H12, H23, H24, H25, H27, H59, H60, H61, H63, H64, H65, H66, H75, H76, H79, H99, H100, H102, H103, H106, H108, W2, W4	127

	Individual Trees	Total	Groups of Trees	Total
<b>Category C (Low Quality / Value)</b>	T1, T7, T19, T20, T22, T25, T28, T31, T36, T37, T42, T43, T71, T75, T83, T84, T91, T92, T97, T101, T102, T104, T105, T106, T107, T108, T109, T113, T121, T122, T123, T126, T127, T128, T135, T136, T140, T145, T146, T148, T149, T150, T156, T157, T158, T160, T161, T162, T172, T177, T179, T184, T191, T195, T197, T199, T200, T202, T206, T209, T214, T226, T228, T229, T230, T231, T235, T242, T243, T249, T251, T257, T259, T274, T285, T291, T297, T298, T299, T303, T304, T310, T311, T319, T322, T323, T327	85	G2, G3, G4, G9, G12, G14, G19, G25, G38, G47, G48, G53, G57, G61, G62, G63, G64, G67, G69, G70, G71, G72, G74, G76, G77, G83, G87, G89, G90, G91, G93, G101, G102, G106, G109, G111, G113, G114, G115, G116, G118, G120, G121, G125, G127, G128, G131, G133, G134, G136, G137, G146, G148, G150, G151, G152, G154, G155, G156, G159, G161, G162, G166, G174, G182, H1, H2, H3, H4, H5, H6, H13, H14, H15, H16, H17, H18, H19, H20, H21, H22, H26, H28, H29, H30, H31, H32, H33, H34, H35, H36, H37, H38, H39, H40, H41, H42, H43, H44, H45, H46, H47, H48, H49, H50, H51, H52, H53, H54, H55, H56, H57, H58, H62, H67, H68, H69, H70, H71, H72, H73, H74, H77, H78, H80, H81, H82, H83, H84, H85, H86, H87, H88, H89, H90, H91, H92, H93, H94, H95, H96, H97, H98, H101, H104, H105, H107	147

**Section 1 – A449 corridor, as far as the A5 north and south to Station Drive including Gailey roundabout (and A5 as far as the railway) and a section of the A449 south of Station Drive**

- 3.19 This section of the Site encompasses the corridor of the A449, as far south as Station Drive and northwards to the A5. The trees and hedges present within this section are as follows:
- **Individual Trees** – T9, T10, T12, T13, T34-T41, T301-T309, T313-T317, T326, T327 and T328
  - **Groups of Trees** – G10, G11, G21, G31, G33, G34, G35, G36, G61, G149, G153, G154, G157, G158, T166-T173 and T179-T183
  - **Hedgerows** – H1, H6, H7, H75, H76, H81, H82, H83, H84, H86, H95, H89-H94 and H105-H108
  - There were no woodlands present within this section of the Site
- 3.20 The notable arboricultural features of this portion of the Site consisted of the mature and established highway planting within the grass verges along most of the length of the A449 east and west, which consisted of high numbers of Norway Maple reaching up to approximately 12m in height. Collectively due to their structure and formality, these trees provided a visually pleasing landscape to the road and provided strong visual amenity. There were also several mature oak specimens of varying quality present along the length of the road as well as within the central reservation. Towards the northern section of the road corridor the planting became more sporadic and lower in quality mostly consisting of over mature whitebeam.

- 3.21 The vast majority of trees along the A449 corridor were regarded as retention category B for their moderate arboricultural quality although there were occasional retention category C and A grade specimens reflecting those with lower and higher qualities.
- 3.22 The hedgerow that was present along the field edges adjacent to the road verges on both sides comprised of hawthorn and had been regularly maintained. It was regarded as being retention category C for its limited arboricultural value.
- 3.23 The tree and hedgerow cover present along the northern most part of the A449 and including Gailey roundabout at the junction with the A5 was assessed for any impacts arising from new layby provisions that may potentially be required and any other offsite highway works requirements in the future.
- 3.24 This tree cover consisted of an established hawthorn boundary hedgerow which ran almost along the entire length of the section, several individual mature whitebeam consistent with the eastern side, a collection of ash trees in the southern part positioned within the adjacent field and a collection of mature lime trees around the roundabout within grass verges. For the most part, the tree quality on this eastern section was regarded as being retention category B.
- 3.25 Section 2 – Fields **between the railway line to the east and the A449 to the west, extending as far north as the A5 (northern extent) and as far south as Station Drive (southern extent) including several small sections of tree cover on Station Drive** This section of the Site encompasses the agricultural land between the A449 and the railway line, as far south as Station Drive and northwards to the A5 but excluding the tree cover along the access road to the chemical works (covered in Section 10). The trees, hedges and woodlands present within this section are as follows:
- **Individual Trees** – T1-T6, T8, T11, T14, T15, T17-T20, T21-T33, T319 and T320
  - **Groups of Trees** – G1-G9, G12-G15, G19, G20, G22, G23, G26, G27, G29, G30, G32, G36, G37, G38 and G160-G165
  - **Hedgerows** – H2, H3, H5, H8
  - **Woodlands** – W1
- 3.26 The notable arboricultural features of this portion of the Site consisted of the extensive network of well-established native species field boundary hedgerows which supported a range of trees of all retention categories, and which were predominantly mature ash or oak. Also present was a plantation of mature hybrid black poplar, amongst which were a small number of large mature oak, which was a feature in the section of land to the north of Gravelly Way that bisected this part of the Site and provided the entrance to the chemical works. The poplar had attained heights in excess of 25m and were therefore fully mature. Although they were prominent in the landscape by virtue of their large proportions, they were all found to be in declining condition housing a high burden of storm damaged crown material and as a result were subsequently in poor structural health. Collectively, due to the presence of the oak within the plantation, this group of trees was regarded as retention category B although there were several category C and U specimens reflecting the poor overall condition of some of the trees.

- 3.27 A solitary category A mature oak was situated in this section of the Site, close to the A449 corridor. It was typically characteristic for the species and there were no obvious defects recorded at the time of the assessment.
- 3.28 It would not however be regarded as being a true veteran tree as it did not possess the minimum number of characteristic features although with a large stem diameter it would be a future or transitional veteran.
- 3.29 Also, present within the southern part of this section close to the existing properties and closest to the A449 was a field pond around which were a number of good quality mature oak supported by outgrown hawthorn, hazel, blackthorn, elder and goat willow. Visually this collection of trees was typically characteristic of the agricultural landscape and provided moderate arboricultural quality and value.
- 3.30 To the north of the Four Ashes Public House was playing field and around its northern and eastern boundaries was a healthy belt of young mature buffer planting of mixed species including lime, cherry, field maple, ash, Norway maple, supported by a hawthorn hedgerow.
- 3.31 This group of trees was found to be in good condition and provided visual buffering to views in and out of the Site, thus was regarded as being retention category B.
- 3.32 Present also was a group of mature aspen *Populus tremula* positioned just south of Gravelly Way, containing specimens that had attained heights of up to 25m. For their collective presence, they were regarded as retention category B and were generally in good condition.
- 3.33 The remainder of the material in this section of the Site consisted of a number of hedgerows, mostly of unmaintained forms, comprising of native species as well as several other small groups of trees.

### **Section 3 – Railway corridor**

- 3.34 This section of the Site encompasses the corridor of the active mainline railway which passes in a north – south direction through the Site. The trees and hedges present within this section are as follows:
- **Individual Trees** – T247, T248
  - **Groups of Trees** – G15-G18, G24, G28, G39, G40, G126, G127, G129
  - **Hedgerows** – H63
  - There were no woodlands present within this section of the Site.
- 3.35 The notable arboricultural feature of this portion of the Site consisted of the several large linear belts of trees which made up the railway corridor. The planting was fairly patchy in its distribution and of mixed species and qualities, including English oak, common ash, field maple, hawthorn and goat willow. Despite not being an entirely continuous feature collectively, the planting still formed a strong ‘green’ corridor to both the north and south of Gravelly Way. Where there are “gaps”, the development proposals would provide an ideal opportunity to enhance the corridor, especially to the north where tree cover is more sporadic, with new buffer planting opportunities where it meets with the Site.

- 3.36 The various groups forming tree cover along the railway corridor were all category B, reflecting their moderate arboricultural value.

**Section 4 – Fields between the railway and the canal corridor, as far north as the A5 and south to the Gravelly Way access road leading to the chemical works**

- 3.37 This section of the Site encompasses all the land between the railway and the canal and extends to the A5 in the north and as far as south as the access road leading to the chemical work for the southern limit. The trees and hedges present within this section are as follows:
- **Individual Trees** – T44-T83, T120-T124, T129-T132
  - **Groups of Trees** – G41-G61, G72-G74, G77, G78
  - **Hedgerows** – H9-H12, H21, H25
  - **Woodlands** – W2, W4
- 3.38 The notable arboricultural features of this portion of the Site consisted of a high number of good quality open grown individual examples and groups of English oaks, with many possessing large stem diameters and therefore considered as being future or transitional veteran trees.
- 3.39 None of these were found to be true veteran trees however, as they did not possess the required minimum number of characteristic features. The collective presence of the large oaks within this section of the Site was characteristic of the local landscape and these sizable trees formed integral features along field boundaries and watercourses. Reflecting their arboricultural quality and significance within the landscape, there were several specimens which had been considered as retention category A, high quality and value with the remainder being retention category B.
- 3.40 A small block of mixed species tree cover was present within the field adjacent to the A5 and access lane alongside the canal which extends from off-Site, third party tree cover. The quality of this small tree group was generally low however as it had seen little targeted management over the years and subsequently contained a number of leaning and failed / collapsed specimens. Despite this, collectively the group did provide visual buffering and therefore for its maturity and contribution to the local landscape was regarded as retention category B.
- 3.41 A watercourse passed through the field systems in this section of the Site and along its length supported a number of mature and over mature alder displaying varying states of health and structural condition, some of which was poor and others good. For their moderate arboricultural quality, most of the alder were regarded as retention category B as they provide landscape character.
- 3.42 W2 was a triangular parcel plantation of mature Corsican pine. It was in good condition and by virtue of its evergreen nature and maturity formed a strong visual feature. Not considered as having the highest arboricultural quality however, W2 was downgraded to retention category B.
- 3.43 W4 and G74 formed two areas of mature woodland of mixed broad leaved tree cover predominantly comprised of English oak. G74 was a natural extension to W4, which was a typical woodland with a clearly defined structure consisting of an upper story stand of mature oak with a supporting understory of birch, holly and occasional rowan.

- 3.44 The woodland was regarded as retention category B to reflect the need for some management intervention and its maturity whereas for the lower quality and conditions, with reduced life expectancy of the extension group was regarded as retention category C.
- 3.45 Both were important however for their contribution to the local landscape and bio-diversity. If retained, both the wood and group would require future management within a specifically targeted management plan to see its continued contribution.
- 3.46 The remainder of the material in this section of the Site consisted of a number of hedgerows, mostly of unmaintained forms, comprising of native species as well as several other small groups of trees.

### **Section 5 – Canal Corridor from the A5 to Station Drive**

- 3.47 This section of the Site encompasses the corridor of the canal where it passes within the application Site boundary from the A5 all the way to Station Drive. The trees and hedges present within this section are as follows:
- **Individual Trees** – T124-T126 and T325
  - **Groups of Trees** – G65, G75, G76, G79 and G176-G178
  - **Hedgerows** – H23, H24
  - There were no woodlands present within this section of the Site.
- 3.48 The notable arboricultural features of this portion of the Site consisted of strong mature well-stocked belts of trees directly along the banks of the canal, comprising most entirely alder although there were a number of fully mature hybrid black poplar in places as well as good numbers of mature English oak. The tree cover was generally found to be of good quality and thus created a very leafy and attractive setting along which to walk the tow path that ran the length of the canal. In some parts, there were a number of mature oak either as individuals or part of more extensive wooded belts and collectively along with the alder provided high amenity. The value, quality and importance of the canal and its associated landscape have been recognized by the various Local Authorities through which it passes by being designated as a Conservation Area, entitled: the Staffordshire and Worcestershire Canal Conservation Area and which stretches for 46 miles. The development proposals would provide an opportunity to plant new tree cover which would not only serve to enhance this already scenic part of the Site but would importantly offer the mechanism by which future landscape can be created and managed thus maintaining the character of the Conservation Area.
- 3.49 For its good quality and condition, the vast majority of the tree cover along the canal corridor was regarded as retention category B.

### **Section 6 – Calf Heath Wood**

- 3.50 W3 describes Calf Heath Wood which took a central position within the Site.
- 3.51 The wood was comprised of two distinct types of tree cover. The largest part by area was a formally planted plantation of mature Corsican pine crop, set out in rows. The remainder, which made up a smaller area was mixed broadleaved species, predominantly comprised of mature oak supported by silver birch.

- 3.52 Around the northern and north-western outside edges i.e. around the plantation of Corsican pine were a number of mature and large oaks of varying quality and condition, considered to most likely be some of the original field boundary specimens.
- 3.53 The part of the pine plantation to the immediate north side of an internal access track was mature and uniformly structured with 3-4m intervals between stems and very little ground cover / under story element due to the closed canopy restricting light to the forest floor.
- 3.54 The size of the trees in this part of the plantation was circa 350-400mm in diameter at breast height. Where there were a few clearings, although these were seldom present, there had been natural colonisation by silver birch. Noted amongst the pine crop were a small number of mature oak, of similar sizes to the specimens present around the periphery, possibly these too having been retained original field boundary or open grown trees. None of the oak however, including those around the edges were of veteran status.
- 3.55 Rhododendron was present in several large clumps rather than in abundance throughout. There was an occasional fallen stem of pine where it had failed yet remained in situ and it is in these areas where colonisation of rhododendron and birch had occurred.
- 3.56 The mature pine crop encircled an area centrally and which extended to the north east boundary, of younger planting with stock with stem diameters in comparison to the older trees of circa 150-200mm hence being more recently planted, restocked Corsican pine. In this area of younger crop, there was no evidence of any specific management, and generally the cover was dense having not been subject to any thinning and individual tree guards were still in situ.
- 3.57 Extending from the wood to its north-west corner was a small triangle of silver birch, dense in structure and in good condition.
- 3.58 The mixed broad leaved component occupied two areas; firstly the southern part of the wood extending as far as an internal access track which bisected the wood. The access track delineated the start of the pine plantation and mixed broadleaved cover to the south. The second area occupied a triangular section in the south-eastern corner and extended as far as a ride which had been cleared for overhead power lines. The mixed broad leaved cover comprised of mature oak and occasional beech, amongst a high proportion of silver birch. However the southernmost extent (adjacent to the area where trees have been cleared for the consented sheds) had a more open structure and principally consisted of silver birch, but also present throughout this area was smaller groups of mature oak. An under story of rhododendron was present throughout all areas except the southernmost fringe.
- 3.59 The triangular south eastern parcel comprised predominantly mature oak, with an under story of rhododendron and occasional pine with a fairly structured and closed canopy. The size of the stock was circa 400mm dbh with tall and drawn forms. Throughout the oak crop very few "old" trees were observed and none of veteran status.
- 3.60 Collectively for its current landscape value and overall contribution to bio-diversity, Calf Heath Wood was regarded as retention category A.

**Section 7 – Land to the north, south and east of Calf Heath Wood to the A5 in the north, Vicarage Road in the south and M6 in the east; including the Quarry and tree cover around Calf Heath Reservoir and the northern edge of the A5**

- 3.61 This section of the Site encompasses all the land surrounding Calf Heath Wood, including the quarry as it extends to the A5 north, Vicarage Road south and the M6 east. The trees and hedges present within this section are as follows:
- **Individual Trees** – T84-T119, T134-T208, T297-T300, T311, T312, T318 and T321-T324
  - **Groups of Trees** – G62, G63, G64, G66-G71, G80-G92, G94-G103, G148, G152, G174 and G175
  - **Hedgerows** – H13-H20, H27-H32, H34-H42, H79, H80 and H96-H104
  - **Woodlands** – W5
- 3.62 The notable arboricultural features of this portion of the Site consisted of a number of veteran trees and a native black poplar along with a high number of other field boundary oak and groups of mixed species planting around the existing waterbody, Calf Heath Reservoir adjacent to the M6.
- 3.63 A large number of English oak were present along the field boundary hedgerows and were mostly good quality and form, thereby creating strong visual features and being landscape character forming. Several trees within the quarry area however had unfortunately been subjected to damage from operational activities and exhibited poor structural condition, with a number of broken limbs and branches as well as excavation within their rooting zones.
- 3.64 The veteran trees were tree reference numbers T153, T159, T166, T167, T168, T169, T175 and T178 and their positions were around the edges of the current quarrying area as well as two specimens within the quarry. The veteran specimens exhibited a range of characteristic attributes pertaining to veteran trees and were important components of the historic landscape. The specialist veteran habitats were of equal importance for their contribution to the Sites overall biodiversity.
- 3.65 Their future management will need to be carefully considered as part of a Site wide tree and landscape management program, targeted to ensure their continued survival and contribution to bio-diversity alongside other treatments.
- 3.66 For their veteran status, all eight specimens were regarded as retention category A, sub-category (iii) accordingly.
- 3.67 A black poplar, reference number T102 has been confirmed through DNA testing to be a native specimen. The condition of the tree was however considered to be poor as it had suffered crown collapse in parts and showed a high burden of dead and damaged crown material as a result. For its reduced quality and limited future life expectancy, arboriculturally T102 was regarded as retention category C.
- 3.68 G92, G94 and G99 formed a prominent belt of predominantly mature English oak along the southern edge of the quarry. Collectively, these groups of trees provided good amenity and would by virtue of the species continue to provide a strong landscape feature for many more years hence they were regarded as retention category A and B.



- 3.69 G84 was a small rectangular block of mixed species, mature tree cover to the south side of Woodside Farm and alongside the access track. Species present included aspen, sycamore, holly and some birch with no one species particularly dominant. For its good condition and visual prominence, G84 was regarded as retention category B.

The remainder of the material in this section of the Site consisted of a number of hedgerows, mostly of unmaintained forms, comprising of native species as well as several other small groups of trees. Tree cover along the northern edge of the A5 comprised of small groups of trees and a number of field boundary hedgerows most of which was within third party ownership.

### **Section 8 – Land to the south of Vicarage Road southwards to Straight Mile including Kings Road**

- 3.70 This section of the Site encompasses the area of land due south of Vicarage Road extending to Straight Mile, as far as Stable Lane and Woodlands Lane to the east and the several private properties at the western extent where Straight Mile joins with Vicarage Road. The trees and hedges present within this section are as follows:

- **Individual Trees** – T209-T219, T221-T230, T257-T296, T310
- **Groups of Trees** – G104-G110, G131-G147, G150, G151 and G159
- **Hedgerows** – H43-H58, H64-H74, H77, H78 and H87
- **Woodlands** – W6

- 3.71 The notable arboricultural features of this portion of the Site consisted of further veteran trees and a number of tree lined field boundary hedgerows which formed strong visual features within the landscape as many of the trees contained within them were large, open grown English oak.

- 3.72 There were three true veteran trees in this section of the Site, namely T222, T276 and T279. Again, these trees all possessed the required minimum number and quality of characteristic attributes pertaining to veteran trees.

- 3.73 Directly adjacent to Straight Mile Road and cornering with Woodlands Lane is a small area of tree cover, G145 around a pond feature. Within the group are a number of fallen and uprooted willow due to the waterlogged ground and present along the road edge are a number of larger oak, typical of others found across the Site. For its visual prominence and contribution to the local landscape, G145 was regarded as retention category A.

- 3.74 W6 is a large block of woodland which extends on the western side of Woodlands Lane and stretches across the lane, outside of the application boundary occupying the point of the triangle with Stable Lane. The woodland was comprised of mixed broadleaved species and predominantly English oak although there were a good number of mature aspen also within the planting. The woodland was mature and had a well-structured form thus by virtue of its visual prominence and good condition, with potential through management to continue contributing in the future to landscape visual amenity and bio-diversity, would be regarded as retention category A accordingly.

- 3.75 G144 formed a strong arboricultural feature comprising a belt of large number of mature English oak running along the length of Stable Lane connecting W6 and G145 abovementioned. The individual conditions and qualities of the component oak varied but they were generally found to be of conditions typical to the age of the stock and species. In recognition of their high visual amenity, good quality / condition and contribution to the local landscape, G144 was regarded as being retention category A.
- 3.76 The remainder of the material in this section of the Site consisted of a number of hedgerows, mostly of unmaintained forms, comprising of native species as well as several other small groups of trees.

### **Section 9 – Land to the south of Straight Mile to the Canal**

- 3.77 This section of the Site encompasses the land due south of Straight Mile as far south as the canal, extending eastwards to Deepmore Lane and west to the start of the industrial units along Station Road. The trees and hedges present within this section are as follows:
- **Individual Trees** – T231-T243
  - **Groups of Trees** – G11-G116
  - **Hedgerows** - H59-H61
  - **Woodlands** – W7, W8
- 3.78 The notable arboricultural features of this portion of the Site consisted of a strong visual belt of high quality mature, mixed English oak and alder tree cover along the northern banks of the canal which extended as far as Long Molls Bridge, referenced W7.
- 3.79 W5, a block of woodland was also present at the eastern end of Straight Mile and opposite G145.
- 3.80 Both woodlands would be considered as retention category A in recognition of their high arboricultural quality and value.
- 3.81 The remainder of the material in this section of the Site consisted of a limited number of hedgerows compared to the rest of the Site, mostly of unmaintained forms and more defunct in nature, comprising of native species as well as several other small groups of trees along with a small number of roadside trees, mostly ash.

### **Section 10 – Access road to the Chemical Works**

- 3.82 This section of the Site captures the tree cover along the route of the existing access road into the chemical works along with the landscaped areas around the entrances. The trees and hedges present within this section are as follows:
- **Individual Trees** – T16, T133, T244-T256
  - **Groups of Trees** – G25, G117-G130
  - **Hedgerows** - H4, H25, H62, H63
  - There were no woodlands within this section of the Site

- 3.83 The only notable arboricultural features of this portion of the Site consisted of the various amenity trees and shrub groups planted around entrance to works as part of previous landscaping to the car parking and existing industrial units / works. The species palette was very mixed including both evergreen and broadleaved varieties with a high proportion of cypress types. To reflect the mix in qualities and a more limited amenity value, the material in this area was regarded as mostly retention category C with an occasional category B.

### **Hedgerows**

- 3.84 The lengthy field boundaries were demarked by well-established hedgerows comprised of native species, of mostly continuous unbroken sections of partially managed and managed forms. Hedgerows varied in quality as a result of differing management practices both past and present. Typically, hedgerows were generally dominated by hawthorn with abundant blackthorn *Prunus spinosa* but some also contained varying quantities of ash, privet, sycamore, hazel, holly, elm *Ulmus spp*, elder *Sambucus nigra* and bramble *Rubus fruticosus* amongst others. There were a small number of evergreen screens present also around residential properties formed by Leyland and Lawson cypress types.
- 3.85 From an arboricultural perspective, the majority of hedgerows have been regarded as retention category C with a small number being of slightly higher quality and retention category B in recognition of this. Individual trees within the hedgerows and groups of trees with more significance due to their visual prominence / arboricultural value or quality have been separately recorded.

## **4.0 VETERAN TREES**

- 4.1 Recorded by the BS 5837 survey were eleven true veterans; according to accepted assessment methodologies and published guidance, cited in Chapter 2 Methodology.
- 4.2 All recorded specimens were English oak.
- 4.3 BS5837 class for such trees would be category A (high quality and value); sub category (iii) for recognition of their biological and cultural importance.
- 4.4 Any tree assessed as having veteran tree characteristics and qualifying as a veteran tree, regardless of its physical condition / structural integrity, would be given category A in recognition of its importance and contribution to nature conservation and local wildlife. Every effort in the design of the proposals has been taken to retain and conserve as many of the eleven recorded specimens present as possible as their veteran status is protected and safeguarded through national policy contained in the National Planning Policy Framework (2012).
- 4.5 In addition to the eleven true veterans, there were also found to be a further twenty-five specimens, all of which are also English oak, that have stem diameters in excess of 1000mm, which in accordance with the literature cited in Chapter 2, would for their respective species be "interesting". For this reason, their retention would be equally important and the proposals have been designed as to retain and integrate as many of these specimens as possible to form part of the veteran community of habitats in the local area. Such trees would be referred to as future or transitional veteran trees. These specimens are a combination of category A and B trees denoting their condition and quality.

- 4.6 Table 3 below details the eleven true veteran trees present within the Site and where they are located.

**Table 3: Summary table of the 11 True Veteran Trees**

<b>Tree Number (FPCR)</b>	<b>Description of location within the Site</b>
T159	Part of a small cluster of three veteran trees; two close to the existing quarry haul road and one at the southern side / western end of the reservoir
T153	Part of a small cluster of three veteran trees; two close to the existing quarry haul road and one at the southern side / western end of the reservoir
T166	Part of a small cluster of three veteran trees; two close to the existing quarry haul road and one at the southern side / western end of the reservoir
T167	Positioned within W5, Reservoir Plantation
T175	Positioned within the current quarry area; centrally located
T178	Positioned within the current quarry area; centrally located
T168	Positioned within the same hedgerow on southern limit of the current quarry area
T169	Positioned within the same hedgerow on southern limit of the current quarry area
T222	Positioned within the expansion land adjacent to the large centrally located field pond; to the east side
T276	Positioned within the same internal hedgerow towards the western end of the expansion land
T279	Positioned within the same internal hedgerow towards the western end of the expansion land

## **5.0 ARBORICULTURAL IMPACT ASSESSMENT (AIA)**

- 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 Key Plan - Parameters Plan / Green Infrastructure Plan - SUBMISSION (drawing no. 4049-1033 Rev 04 dated March 2018 – Chetwoods Architects) and has outlined the relationship between the proposed development and the existing trees and hedgerows. The proposals are for an intermodal freight terminal with connections to the West Coast Main Line, including container storage, HGV parking, rail control building and staff facilities. There will also be up to 473,200 sq m of rail served warehousing and ancillary service buildings, new road infrastructure and works to the existing road infrastructure. As part of the proposals, existing structures will be demolished and there will structural earthworks to create the development plots and landscaped zones. Supporting the proposals will be extensive strategic landscaping and new open space, to include alterations to public rights of way and the creation of new ecological enhancement areas and publicly accessible open areas.
- 5.3 An overlay of the proposed development layout has been incorporated in the Tree Retention Plans (Figure 3) to assist in identifying the relationship and between the proposals and the existing trees and hedgerows and any impacts, which have been separated and discussed under the various sub headed sections.

Table 4: Summary of Impact on Tree Stock

TOTALS	OVERALL NUMBER	LOST IN FULL	LOST IN PART	RETAINED IN FULL
<b>Individuals</b>				
Category A	73	25	NA	48
Category B	155	58	NA	97
Category C	87	45	NA	42
Category U	13	9	NA	4
<b>TOTALS</b>	328	137	NA	191
<b>Groups</b>				
Category A	14	1	1	12
Category B	99	26	8	65
Category C	66	14	1	51
Category U	3	2	0	1
<b>TOTALS</b>	182	43	10	129
<b>Hedgerows</b>				
Category A	0	0	0	0
Category B	27	3	3	21
Category C	81	25	11	45
Category U	0	0	0	0
<b>TOTALS</b>	108	28	14	66
<b>Total length of hedgerow surveyed = 16.04km</b>	<b>Total length of hedgerow being retained, either parts of hedgerows or full hedgerows as surveyed = 8.594km</b>		<b>Total length of hedgerow to be removed, either parts of hedgerows or full hedgerows as surveyed = 7.446km</b>	
<b>Woodlands</b>				
Category A	6	1	1	4
Category B	2	0	0	2
Category C	0	0	0	0
Category U	0	0	0	0
Total number of woodlands	8	1	1	6
Total area (excluding Calf Heath Wood)	10.4ha	0.4ha	-	10ha
Calf Heath Wood (total area)	28ha	-	15ha	13ha
Totals (all woodlands)	38.4ha	0.4ha	15ha	23ha

### **Tree, Hedgerow and Woodland Removals**

- 5.4 The scheme layout has been designed following a thorough and comprehensive assessment of all the constraints, which has included the findings of the tree survey. The considerations by way of arboricultural implications that would arise should such a development occur within the application area as per the above proposals are set out below.
- 5.5 The scheme design has in principle, and by following guidance within *BS5837* and where practicable, therefore sought to retain as many category A and B specimens, groups of trees and woodlands as possible thereby securing the main concentrations of higher quality trees and retaining the key hedgerow networks that occur throughout Site. The result has been that the vast majority of trees within the Site.
- 5.6 Importantly this has included thorough consideration of the veteran trees that are present seeing the design of the scheme paying particular attention to these specimens and retained as many as possible as well as ensuring that any adverse impacts are kept to an absolute minimum. The veteran trees are of significant importance and thus have informed the layout of the Parameters Plan from an early stage in the design process. Details of veteran trees to be retained have been given in par 5.26 and further discussion provided on the design measures that will prevent damage to root protection areas arising from construction of the soil bunds.
- 5.7 The Tree Retention Plans have illustrated all the surveyed tree cover pertaining to the four retention categories including those mature trees of category U, unsuitable for retention. At this stage, it would be the intension to retain all the category U trees that would not need to be removed to facilitate the proposals for the ecological and landscape value that these trees hold, where possible and practicable. Final decisions as to the most appropriate course of action / treatment for the future of such retained trees will be made at the appropriate stage so that suitable remedial treatment can applied accordingly in the interests of public safety, where it may be required.
- 5.8 The scheme has allowed for the retention of the large majority of the tree cover as part of the wider green infrastructure strategy which includes creation of two new Country Parks and sizable areas of new functional public open space that will serve to connect through “green links” with the surrounding countryside.
- 5.9 In order to facilitate a scheme of this scale and nature, clearly there will be tree and hedgerow losses. Table 4 above has summarised those losses and set out in the following paragraphs some of the particular losses relating to access points have been further detailed under the various sub-headings. The majority of losses would be to create the space needed for the units, car parking and structural mounding.
- 5.10 There is possibly a requirement to provide two new laybys along the northern section of the A449 (northbound and southbound) close to Gailey Roundabout, the provision for which has been indicated on the General Arrangement drawings (WPS Group).

- 5.11 Discussions in this regard however are still ongoing with Highways England as to the exact location and form, and therefore although there has yet to be a fixed decision regarding their delivery the trees and hedgerows potentially impacted upon and would need to be removed to facilitate construction of the laybys in their current location have been included as part of the arboricultural impact assessment and calculated within the overall losses of trees and hedgerows to the scheme, although this is on the understanding that these losses may also be subject to change.

#### **Category A**

- 5.12 Of the seventy-three individual category A trees, forty-eight are being retained. Of the fourteen category A groups of trees, twelve are being retained in full and a further one in part. Of the six category A woodlands, three are being retained in full and two in part requiring only small proportions to be removed, which includes a portion of Calf Heath Wood. There were no category A hedgerows.
- 5.13 A relatively large area of the coniferous component of Calf Heath Wood would be removed, however two sizable sections of the overall woodland would be retained, the first being the entire south eastern edge and the second being the south-western edge, both areas are predominantly broadleaved and include the associated mature boundary oaks. It is also the intension to retain as far as possible a number of the mature boundary oaks along the northern outer edges, where practical and achievable.

#### **Category B**

- 5.14 Of the one hundred and fifty-five individual category B trees, ninety-seven trees are being retained. Of the ninety-nine category B groups of trees, sixty-five are being retained in full and a further eight in part. Of the two category B woodlands, both are being retained in full. Of the twenty-seven category B hedgerows, there will be negligible losses as twenty-one are being retained in full and the three remaining hedgerows retained in part.

#### **Category C**

- 5.15 Of the eighty-seven individual category C trees, forty-two trees are being retained. Of the sixty-six category C groups of trees, fifty-one are being retained in full and a further one in part. Of the eighty-one category C hedgerows, forty-five are being retained and a further eleven retained in part. Overall, the highest number of hedgerows to be removed are of the lower quality and value, arboriculturally, with no net loss of the higher grade (category B hedgerows). There were no category C woodlands.

#### **Category U**

- 5.16 Of the thirteen individual category U trees, four would be possible to be retained and not required to be removed for the scheme's facilitation although these will be retained initially until further decisions have been made as to their future at the appropriate stage in the construction phases.
- 5.17 Of the three category U groups of trees, one would potentially be retained in full however, as above will be retained initially prior to final decisions regarding its future treatment. There were no category U hedgerows or woodlands.

**Access**

- 5.18 There will be three access points, two of which will be new (off the A5 and Vicarage Road) and upgrading of the existing junction currently serving the industrial estate.

**Access off A5**

- 5.19 To facilitate the access point the following trees would be removed:
- T84 (category C)
  - G62 (category C)
  - Part of H13 (category C)
  - G71 (category C)
  - T118 (category B)
  - T119 (category A)
- 5.20 There would be limited locations where access would be acceptable in highway terms and therefore the proposed access point and choice of junction arrangement has been designed to minimise the impact / loss of vegetation and disruption to existing habitats.
- 5.21 The loss of these trees will be mitigated for through a well-considered landscape design with new tree and hedgerow planting specifically designed to enhance the entrance.

**Access off A449**

- 5.22 To facilitate the access point the following trees would be removed:
- T12 (category B)
  - T13 (category C)
  - T16 (category B)
  - Part of H1 (category C)
  - H4 (category C)
  - Parts of G21 (category B)
  - G25 (category C)
- 5.23 As above, the loss of these trees will be mitigated for through a well-considered landscape design with new tree and hedgerow planting specifically designed to enhance the entrance.

**Southern Access of Vicarage Lane**

- 5.24 To facilitate the access point the following trees would be removed:
- T196 (category B)
  - T265 (category B)
  - H36 (category C)
  - Part of H37 (category C)



- 5.25 As above, the loss of these trees will be mitigated for through a well-considered landscape design with new tree and hedgerow planting specifically designed to enhance the entrance.

### **Veteran Trees**

- 5.26 The development proposal would require the loss of four of the eleven veteran trees, namely T153, T159, T175 and T178 but all the remaining seven specimens would be retained, namely T166, T167, T168, T169, T222, T276 and T279.
- 5.27 Veteran trees are important components of our present landscape and their importance can be for wildlife, social, cultural and historic reasons. Veteran trees are also records of our past through the way they are managed and treated.
- 5.28 From an ecological perspective, veteran trees provide a rare and very specialist habitat and therefore preservation of that habitat is considered highly important.
- 5.29 The veteran trees on the Site are of high arboricultural quality and will therefore need to be protected and managed appropriately as their future health and survival is of paramount importance and is recognised in the National Planning Policy Framework. Veteran trees are valuable in that they possess historic connections to former landscapes and have wildlife value in that they provide a unique natural habitat for a range of wildlife as well as creating an attractive and interesting focal points for the wider amenity of the areas where they are being retained.
- 5.30 Soil bunds in close proximity to the root protection areas of four of the retained veteran trees namely T166, T222, T276 and T279 will be carefully constructed at suitable distances away and the working method will be final levels built up by working towards the trees to ensure that machinery does not unnecessarily compact the ground. The final design of the bunds will also be sculpted as far as possible to minimise the amount of bunding within any of the root protection areas. Robust and appropriate Tree Protection Fencing will be used to ensure that machinery does not breach root protection areas. The setting out of Tree Protection Fencing will be under the supervision of an arboriculturalist.
- 5.31 Changes of land usage over time within close proximity to trees, especially veteran status trees can influence their physiology and overall health. The way in which veteran trees respond to any changes to their local environment can be minimised through appropriate protection measures and future management decisions. Therefore, continual re-appraisal of management operations in the light of tree response and condition is essential to ensure the long-term survival of our historic past and to guarantee the conservation of associated wildlife.
- 5.32 Due to the type and nature of the veteran trees detailed in this assessment and taking into account the change of land use around some of the retained specimens they will need to be managed selectively and carefully. It is recommended any general tree management should be directed towards protecting the veteran tree's longevity, wherever possible, to ensure that there is no avoidable loss of the veteran tree.
- 5.33 They are all to be retained either within new open space or retained as part of green corridors all as part of the Green Infrastructure.
- 5.34 For the future care and management of the retained seven veteran trees, in order to retain them in a "safe" condition and in order to, as far as practically possible, better guarantee their future survival, it is recommended that at this stage no pruning work is carried out.

- 5.35 A further more detailed assessment should be undertaken to evaluate their need for any remedial tree surgery which will need to sensitively applied, at the appropriate stage in the future development of this Site and it would be recommended that their future is considered within a specific Veteran Tree Management Program specifically crafted which will consider their long-term care and management as part of this Site. The management program will need to factor public safety as part of its recommendations.
- 5.36 It will be important as part of future recommendations for the care and management of the retained specimens to make sure the long-term use of the area around and under these trees is not altered from its current form.
- 5.37 This is because Veteran trees due to their greater maturity and aged condition are far more sensitive to changes to their growing environment and as a result are far less able to adapt compared to younger specimens. Therefore, protection of their rooting environment needs a more considered approach as to limit any significant changes.

#### **Mitigation for Veteran Tree Losses**

- 5.38 Unfortunately, and regrettably the scheme is not able to accommodate the four veteran oak specimens listed above due to their positions in relation to the design and without compromising their future survival or a major re-design.
- 5.39 The design process has been informed by the presence of the veteran trees so that working closely with the designers to achieve a “good design”, as many of the veteran trees as possible have been retained. Retention of more veterans would require significant modification to the design and is not achievable.
- 5.40 Therefore, as has been successfully undertaken in other situations, mitigation for the loss of the four veteran trees from both an arboricultural and ecological perspective would retain as far as possible the specialist habitat that their veteran condition currently offers to local bio-diversity and will be suitably tailored to ensure continuation of that habitat resource as best possible.
- 5.41 One such measure for mitigation can therefore be provided through retaining of as much of the physical structure of the trees as possible, in large sections i.e. trunk and key limbs / branches close to their original position, preferably where they would not be disturbed. This would be possible within the new landscaped areas immediately to the east and north around the Calf Heath Reservoir on the M6 side of the Site where there are large buffers of existing and proposed new planting. The retained dead wood, either as large pieces of the trees or the entire trees (it would be possible to move large sections using specialist equipment) without their crown structure, would continue to supply the local invertebrate population with a dead wood habitat as well as offering a Site for fungal interaction and increased opportunity for new fungal habitats.
- 5.42 Alternatively, and it would be possible, consideration could be given to “translocating” the entire tree albeit with a reduced form and to re-erect them also in the abovementioned landscaped areas.

- 5.43 In addition to retaining the main body of the tree, such as trunk and primary branch / limb structures and / or translocating, it is also recommended that propagation of the trees through hard wood cuttings and direct growing of acorns be undertaken as a viable form of mitigation and for the new trees to be used for use in planting on the Site in the future, close to the parent trees and other retained “future / transitional” veterans where they exist to expand the veteran community. Off-spring from the parent trees is highly important for succession to support the life that is supported by these valuable habitat trees.
- 5.44 In line with the recommended mitigation measures provided by Natural England and Forestry Commission guidance (known as ‘standing advice’; updated 27<sup>th</sup> November 2017, the buffer zones for retained ‘true’ veteran trees are at least 15 times larger than the diameter of the veteran tree in question or 5m from the edge of the canopy, whichever is greater. For all the retained veterans, where feasible open spaces have been designed as to provide as much undisturbed areas as possible for long term protection. During construction appropriate screening barriers will be erected to protect from dust and pollution.

#### **Transitional or Future Veteran Trees**

- 5.45 Of the additional 25 ‘transitional / future’ veterans (over 1000mm dbh), five specimens would need to be removed thus retaining 20. As mitigation for their loss, it is proposed to also undertake a similar suite of measures as for the ‘true veterans’ which will consist of propagation of hard wood cuttings and growing acorns from retained specimens in order to retain the local oak gene pool, strategically planting these off-spring trees to form new veteran tree communities / habitats in close proximity to retained specimens and retaining large sections of felled trunks close to retained specimens for their bio-diversity and connectivity to local invertebrate assemblages. The twenty retained trees grouped together in several parts of the Site and all positioned within proposed areas of green infrastructure thus allowing for the off-spring planting to be placed in the new GI.
- 5.46 All the proposed mitigation measures would form part of an overall veteran tree strategy for managing, maintaining and replenishing the veteran oak community for the long term.

#### **Black Poplar**

- 5.47 A single specimen has been confirmed through DNA testing to be a true native black poplar. The tree is T102 and it is located part way down (west side) the current approach road to the existing quarry entrance off the A5 along the northern boundary.
- 5.48 The tree would need to be removed to facilitate the development proposals.
- 5.49 By virtue of the growth characteristics of poplar where growth is rapid and at the deficit of wood strength, their form can often result in mature examples being highly vulnerable to limb / branch failure and crown collapse especially during periods of adverse weather. T102 was found to be in a very poor structural condition having suffered significant crown collapse and possessing high amounts of dead and damaged limbs and branches.

**Mitigation Strategy**

- 5.50 Its position adjacent to the haul road will not have aided the trees overall current poor health as well as having been exposed to strong winds having had little in the way of surrounding protection. For trees of this species, however mitigation for its loss can be successfully provided by propagation techniques due to its ability to grow well and fast; in the way of hard wood cuttings in order to perpetuate the species and continue to DNA of this true native specimen. The cuttings will be harvested from the parent tree during the spring of 2017 and grown on until strong and healthy enough for planting. The young off-spring trees will be planted within the Site as part of the GI in areas close to waterbodies to support their riparian nature and managed accordingly to ensure survival.

**Statutory Constraints**

- 5.51 The Site falls within the Staffordshire and Worcestershire Canal Conservation Area. The designation follows the full length of the canal which extends for 46 miles from Stourport in Worcestershire to Great Haywood in Staffordshire. The section which passes through the application Site is administered by South Staffordshire District Council.
- 5.52 Following consultation with the above planning authority, it has however been confirmed via email that there are no Tree Preservation Orders that apply to any trees within the application area.
- 5.53 Prior to any tree surgery and / or felling of trees within the Conservation Area designation it will be necessary to apply to the District Council to gain consent for the works. For more information regarding Conservation Areas it is advised that contact is made with the District Council's arboricultural officer, or other such relevant person.

**New Tree Planting**

- 5.54 As part of the scheme there will be extensive new landscaping with vast quantities of tree planting to be incorporated into the proposals. Tree planting will be included as part of hard landscaped areas of car parking or alongside the primary access roads and within the roadside verges. Planting of new trees and hedges, and woodlands / structural will also importantly form a large part of the overall Green Infrastructure Strategy seeing creation of a future "tree" landscape.
- 5.55 The success of any landscaping scheme relies on an adequate provision of a high-quality rooting environment within which trees can thrive and reach their full potential. Planting trees with due care and consideration can, in the long term, provide a greater return on a schemes green investment and ensure trees remain healthy and grow to mature proportions. Healthy mature trees integrate well into the built environment; increase the maturity of the landscape; help provide a natural green and leafy urban environment in which people would want to reside whilst also benefiting local wildlife.
- 5.56 The planting of trees within confined urban environments should consider the use of appropriately designed planting pits specifically engineered to promote tree health and longevity.

The rooting environment will need to provide an adequate volume of quality soil for roots to suitably develop by calculating the amount of available soil volumes needed and selecting species whose mature size is compatible with the Site. This is an integral component of the planning stage (Lindsey & Bassuk, 1991).

- 5.57 Wherever possible, following discussions with the utility company, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.
- 5.58 The landscaping scheme will use of both native tree species (for their low maintenance requirements and nature conservation value) and ornamental species (for their contribution to urban design and amenity value). Species choices will be selected on the basis of their suitability for the final Site use. Furthermore, during the design process consultation should be made with the Local Planning Authority to obtain information on their tree strategy and incorporate the planting proposals with any local policies and initiatives and/or Biodiversity Action Plans (BAP).
- 5.59 Careful consideration will 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.
- 5.60 Tree planting should be avoided where they may obstruct overhead power lines or cables. 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.

### **Tree Management**

- 5.61 At the appropriate stage a review of the relationship between the layout and the retained trees should be undertaken by a qualified arboriculturalist to assess the existing tree cover and prepare a schedule of tree works for works to be carried out where it may be required for aesthetic reasons and most importantly in the interests of public safety.
- 5.62 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 arboriculturalist or arborist to identify any potential public safety risks and to agree remedial works as required.
- 5.63 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.
- 5.64 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.

## **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 or ground protection measures 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 Arboriculturalist.
- 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 Where it has been agreed, construction access may take place within the root protection area if suitable ground protection measures are in place. This may comprise single scaffold boards over a compressible layer laid onto a geo-textile membrane for pedestrian movements. Vehicular movements over the root protection area will require the calculation of expected loading and the use of proprietary protection systems.
- 6.6 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**

- 6.7 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.
- 6.8 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. 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.

#### **Ground Protection**

- 6.10 Construction access may take place within Root Protection Areas if suitable ground protection measures are in place. Guidance on examples of appropriate ground protection for several different scenarios is provided in section 6.2.3 of BS5837. The location of and design for temporary ground protection should be detailed as part of an Arboricultural Method Statement required by conditioning should planning permission be granted. In all cases, the objective is to avoid compaction of the soil which can arise from a single passage of a heavy vehicle, especially in wet conditions, so that tree root functions remain unimpaired.

#### **Protection outside the exclusion zone**

- 6.11 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.
- 6.12 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.
- 6.13 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.
- 6.14 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.
- 6.15 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.
- 6.16 Notice boards, telephone cables or other services should not be attached to any part of a retained tree.
- 6.17 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 of Trees Close to the Site**

- 6.18 A number of trees were located on the boundaries of the Site and therefore the root protection area and crown spread of these trees will need to be protected in the same way as all the retained trees within the Site. All trees located outside the boundaries of the assessment Site yet within close proximity to works should be adequately protected during the course of the development by barriers or ground protection around the calculated root protection area.

- 6.19 Any trees which are to be retained and whose Root Protection Areas may be affected by the development should be monitored, during and after construction, to identify any alterations in quality with time and to assess and undertake any remedial works required as a result.

#### **Protection for Aerial Parts of Retained Trees**

- 6.20 Where it is deemed necessary to operate a wide or tall load, plant bearing booms, jibs and counterweights or other such equipment as part of the construction works it is best advised that appropriate, but limited tree surgery, be carried out beforehand to remove any obstructive branches. 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 arboriculturalist.
- 6.21 A pre-commencement Site meeting with contractors who are responsible for operating machinery will be required, as described above, 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.
- 6.22 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.

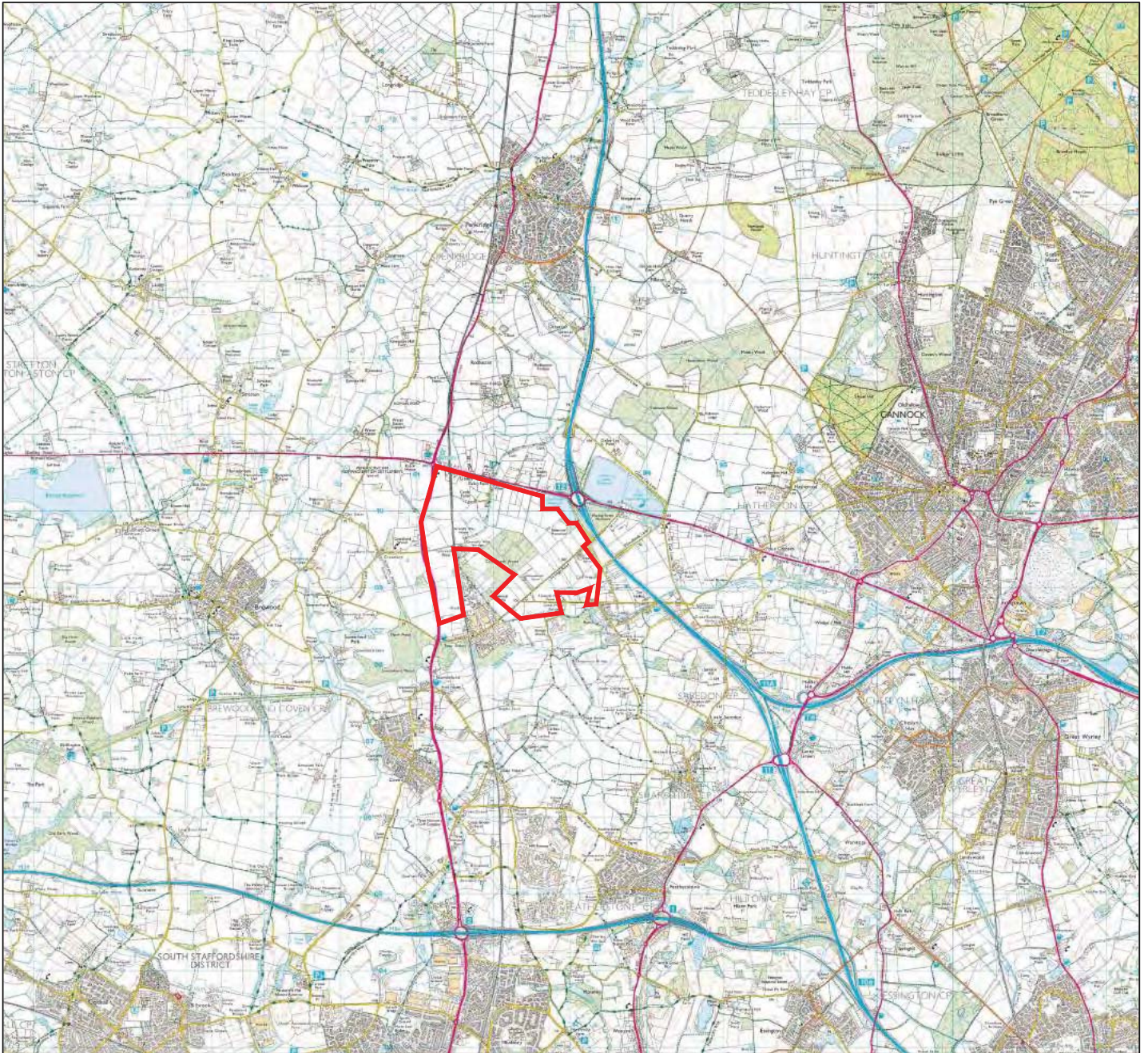
## **7.0 CONCLUSION**

- 7.1 The tree survey recorded three hundred and twelve individual trees, one hundred and fifty two groups of trees, eighty hedgerows and eight woodlands. These have been assessed as being mostly as category A and B grades, reflecting the high quality and value of the trees and woodlands to the local landscape. The larger tree groups have a higher collective intrinsic value as opposed to the individual component trees within them.
- 7.2 The dominant species is mature English oak, the vast majority of which are associated with the extensive network of field boundary hedgerows or as free-standing examples and / or as parts of woodlands. They are visually prominent, character forming integral features of the local landscape.
- 7.3 A total of eleven English oak were found to be of 'true veteran status' as they possessed the required minimum number of characteristic features pertaining to veteran trees to qualify under the definition. A further twenty-five oak specimens, possessed stem diameters in excess of 1000mm, which would for their respective species be "interesting" and therefore these trees are considered as being 'future' or 'transitional' veteran trees, as they had yet to develop the features associated with veteran trees beyond their larger stems.
- 7.4 Alongside the oak there is a broad range of other species types found across the Site including evergreen varieties as well as broadleaved recorded both as individual specimens and groups. The varied species range across the Site is complementary of the rural environment and typical of open countryside. Riparian species are present along watercourses and water bodies which include alder and willow types.



- 7.5 On the whole, the surveyed tree cover is largely in good physical and structural condition. The exceptions being where the effects of maturing ages and adverse weather conditions have had their natural effect and where targeted formal management has been absent meaning some trees are showing various signs associated with decline and reduced quality. Despite this, by virtue of the overall maturity of the tree cover and the resultant positive visual impact this has, trees are contributing significantly to the local landscape.
- 7.6 It has been confirmed through DNA testing that there is a native black poplar on the Site. This specimen will not be retained by the proposals however it will be propagated and grown on to enable the off-spring to be planted back around the Site thus ensuring continued survival of this nationally rare species.
- 7.7 The scheme layout has been designed following a thorough and comprehensive assessment of the constraints, which included the findings of the tree survey. This detailed constraint led design process has meant as many of the high quality and key trees, hedges, woodlands; alongside other existing natural features as possible, as possible have been retained seeing them incorporated into the layout.
- 7.8 Tree removals to facilitate the junctions are mostly of low quality to very modest arboricultural value to the extent that they should not hinder the highway design of the junctions and can be justifiably mitigated for within a future approved landscape scheme to form part of the supporting Green Infrastructure.
- 7.9 For a scheme of this nature and scale, clearly tree and hedgerow losses will occur but every effort in the evolution of the design has been made to incorporate as many of the existing trees and hedgerows as possible so that any losses are kept to an absolute minimum as it is recognised that the Sites existing tree cover is a significant asset to landscape quality, biodiversity and arboriculture alike. This includes the retention of seven out of the eleven true veteran trees.
- 7.10 To mitigate for the loss of trees to the scheme, an extensive Green Infrastructure design will support the proposals which will see two new Country Parks created, a number of new water features and well-considered structural landscaping. Across the scheme, there will be extensive new tree and woodland planting meaning the current aging population of trees will be supplemented with a much-needed new generation of trees to bridge the hiatus in age classes.
- 7.11 Seven of the eleven veteran trees are all to be retained either within new open space or retained as part of green corridors all as part of the Green Infrastructure.
- 7.12 Due to the type and nature of the veteran trees detailed in this assessment and taking into account the change of land use around some of the retained specimens they will need to be managed selectively and carefully. It is recommended any general tree management should be directed towards protecting the veteran tree's longevity, wherever possible, to ensure that there is no avoidable loss of the veteran tree.

- 7.13 The loss of veteran trees to the scheme, which total four true veterans and five future or transitional veteran will mitigated for through a broad range of measures to include propagation of hard wood cuttings and growing acorns from retained specimens in order to retain the local oak gene pool; strategically planting these trees to form new veteran tree communities / habitats in close proximity to retained specimens and retaining large sections of felled trunks close to retained specimens for their bio-diversity and connectivity to local invertebrate assemblages. These measures will form part of an overall veteran tree strategy for replenishing the veteran oaks community for the long term.
- 7.14 The proposed scheme is therefore considered to be arboriculturally sound as it will retain a high proportion of the significant tree cover seeing its integration into the design as part of the extensive Green Infrastructure being proposed with generous landscape buffers and new areas of multi-functional public open space. The majority of existing mature trees are being retained within areas designated for their environmental/recreational value and as such representing a minimal change from the historic growth environment thus reducing the need to undertake tree surgery unless for reasons of public safety.
- 7.15 Providing that retained trees, hedgerows and woodlands are suitably protected during the construction phases by the requisite tree protection barriers, the existing tree cover should be successfully integrated with the scheme and be able continue to provide high landscape value thereby ensuring continuation of that tree cover into the future.
- 7.16 As well as the successful retention and integration of the existing tree cover, the extensive new tree planting which will be delivered will provide an ideal opportunity to not only increase the amount of tree cover, but it will also diversify the species range to that which currently exists thus building stronger resilience into the local tree population safeguarding it from pests and diseases in the future ensuring survival of the tree'd landscape. New tree planting will use species that are in keeping and characteristic to the area thereby retaining local character.



**KEY**



Assessment Boundary

rev	date	description	by
-----	------	-------------	----



- masterplanning
  - environmental assessment
  - landscape design
  - urban design
  - ecology
  - architecture
  - arboriculture
- FPCR Environment and Design Ltd  
 Lockington Hall  
 Lockington  
 Derby DE74 2RH

t: 01509 672772  
 f: 01509 674565  
 e: mail@fpcr.co.uk  
 w: www.fpcr.co.uk

client  
**Four Ashes Limited**

project  
**West Midlands Interchange  
 Land south of the A5, west of J12 of the M6**

drawing title  
**ASSESSMENT BOUNDARY PLAN  
 FIGURE 1**

scale  
 1:25000 @ A4

drawn  
 LG

date  
 May 2017

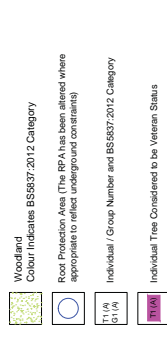
drawing number  
**7121-A-01**

rev  
 -

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part with written consent of FPCR Environment and Design Ltd.

Ordnance Survey material is used with the permission of The Controller of HMSO, Crown copyright 100018896.

- KEY**
- Category U - Trees / Groups Unsuitable for Retention (BS 5837:2012)
  - Category A - Trees / Groups of High Quality (BS 5837:2012)
  - Category B - Trees / Groups of Moderate Quality (BS 5837:2012)
  - Category C - Trees / Groups of Low Quality (BS 5837:2012)
  - Hedge/row Hatching (Colour indicates BS5837:2012 Category)
  - Woodland
  - Road Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
  - Individual / Group Number and BS5837:2012 Category
  - Individual Tree Considered to be Veteran Status



**NOTES**

All dimensions, to be verified on site. Do not scale this drawing, use figure dimensions only. All dimensions to be taken from project reference points. Drawings to be read in conjunction with the project reference points. Drawings to be read in conjunction with the project reference points. Drawings to be read in conjunction with the project reference points.

Drawings shall be produced in colour and based on digital information in AutoCAD format. All images shall be in vector format. A resolution of 300 dots per inch shall be used for all images. All images shall be in vector format. A resolution of 300 dots per inch shall be used for all images.

Woodland or hedge/row should be checked and set out on the plot to any obligations in the work. Woodland or hedge/row should be checked and set out on the plot to any obligations in the work. Woodland or hedge/row should be checked and set out on the plot to any obligations in the work.

Three starting or gates that change over time, the condition of all trees listed therein shall be the state of the survey.

SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ILLUSTRATED HERE WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION THROUGH PLANNING CONSENT.

This drawing is the property of fpcr Environment and Design Ltd and is loaned to the client for use in connection with the project. It is not to be used for any other purpose without the written consent of fpcr Environment and Design Ltd. (fpcr copyright 10/07/2006).

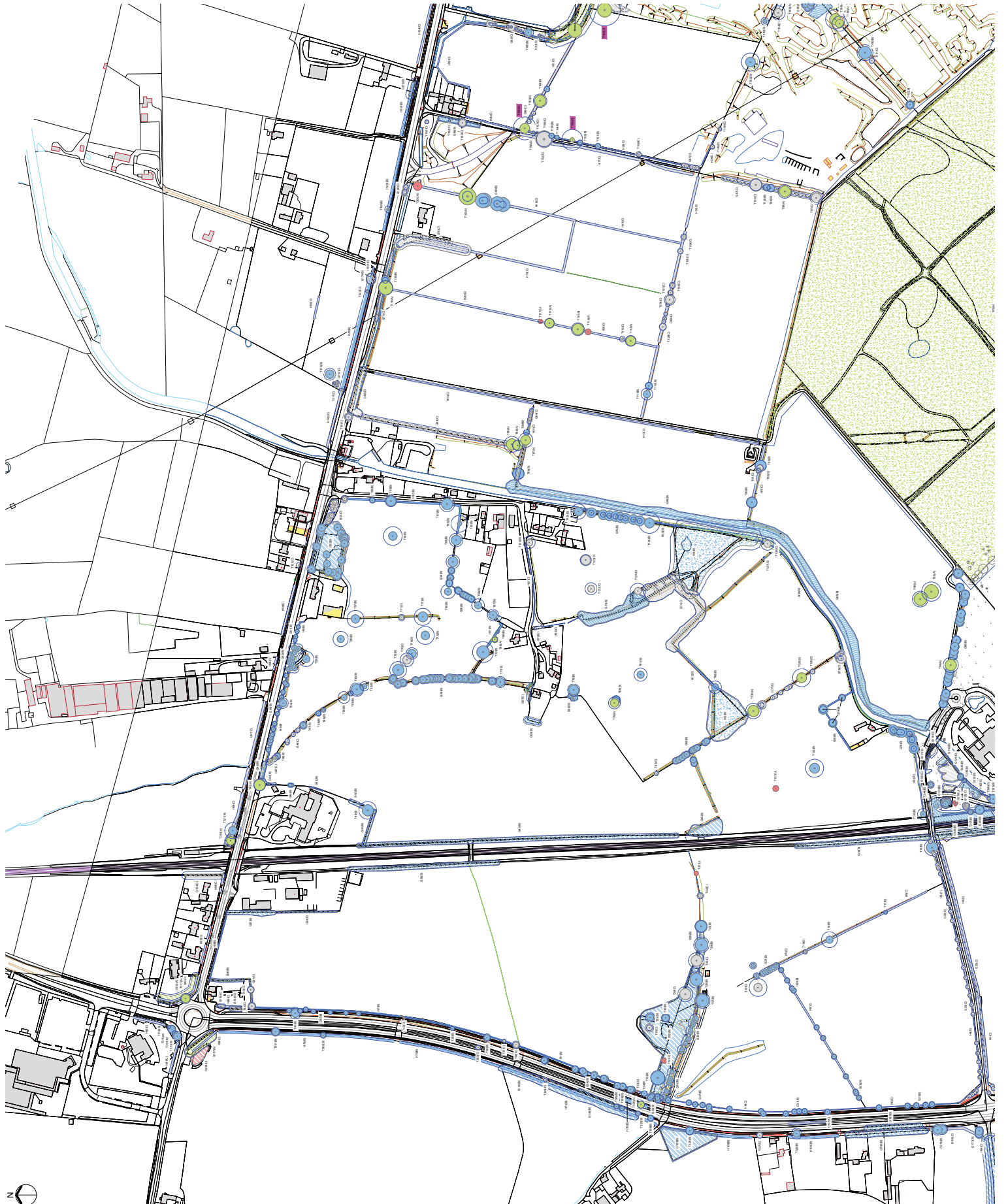
Ownership Survey method to be used with the permission of The Controller of HMSO. Crown copyright 10/07/2006.

**fpcr**

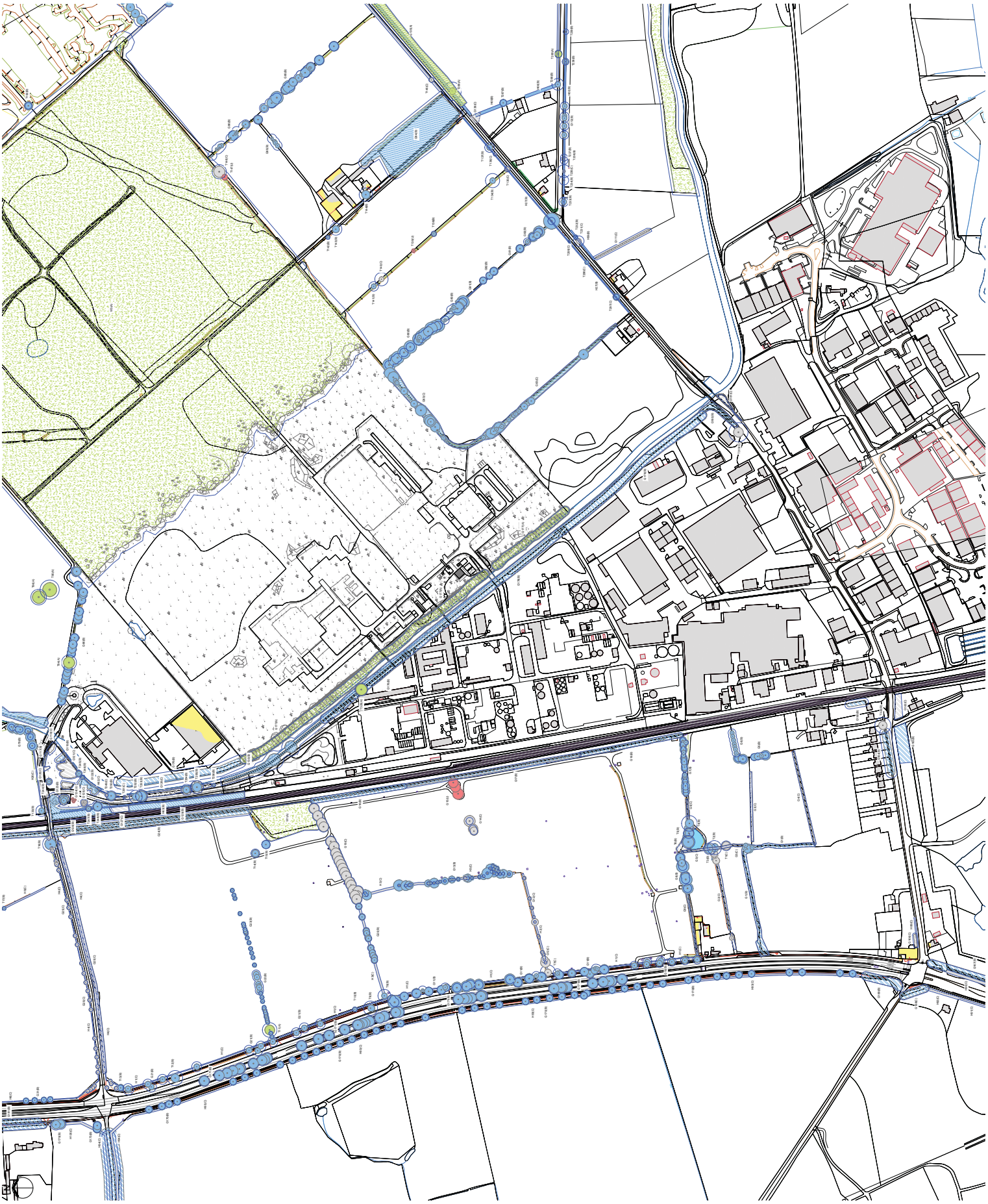
Environment and Design Ltd  
 14, 21, 27  
 14, 21, 27  
 14, 21, 27

Project: 14, 21, 27  
 Date: 14, 21, 27  
 Scale: 1:2500 @ A1  
 Date: 14, 21, 27

client: Four Ashes Limited  
 project: West Midlands Interchange  
 Land south of the A5, west of J12 of the M6  
 drawing title: TREE SURVEY PLAN  
 drawing number: 7121-A-02.1  
 scale: 1:2500 @ A1  
 date: March 2018  
 drawing author: TCB  
 drawing checker: TCB  
 drawing number: 7121-A-02.1  
 scale: 1:2500 @ A1  
 date: March 2018  
 drawing author: TCB  
 drawing checker: TCB



- KEY**
- Category U - Trees / Groups Unsuitable for Retention (BS 5837:2012)
  - Category A - Trees / Groups of High Quality (BS 5837:2012)
  - Category B - Trees / Groups of Moderate Quality (BS 5837:2012)
  - Category C - Trees / Groups of Low Quality (BS 5837:2012)
  - Hedgerow Hatching (Colour indicates BS5837:2012 Category)
  - Woodland (Colour indicates BS5837:2012 Category)
  - Road Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
  - Individual / Group Number and BS5837:2012 Category
  - Individual Tree Considered to be Veteran Status



**NOTES**

All dimensions to be verified on-site. Do not scale this drawing, use field dimensions only. All dimensions to be given with project reference number. Drawings to be read in conjunction with project reference number. Drawings to be read in conjunction with project reference number. Drawings to be read in conjunction with project reference number.

Drawings to be read in conjunction with project reference number. Drawings to be read in conjunction with project reference number. Drawings to be read in conjunction with project reference number.

SOME TREES MAY BE SUBJECT TO PLANTIVITY CONSTRAINTS. IT IS THEREFORE ILLUSTRATED IN RED WITH A RED BORDER TO INDICATE THAT THESE TREES ARE NOT TO BE PLANTED OR REPLACED. THESE TREES SHOULD BE RETAINED THROUGH PLANNING CONSENT.

This drawing is the property of FPC Environmental Design Ltd and is issued on the understanding that it is for the use of the client only. It is not to be used for any other purpose without the prior written consent of FPC Environmental Design Ltd. (FPC) copyright 1997/2006.

Drawings to be read in conjunction with project reference number. Drawings to be read in conjunction with project reference number. Drawings to be read in conjunction with project reference number.

1	14.12.17	PL115A	T2B
2	14.12.17	PL115A	T3B
		15.03.2018	Tree Survey

Author: [Name] | Checked: [Name]

Environment and Charge Ltd  
 100, High Street, London, UK  
 Tel: 020 7751 2272  
 Fax: 020 7751 2205  
 www.environmentandcharge.com

client: **Four Ashes Limited**

project: **West Midlands Interchange**  
 Land south of the A5, west of J12 of the M6

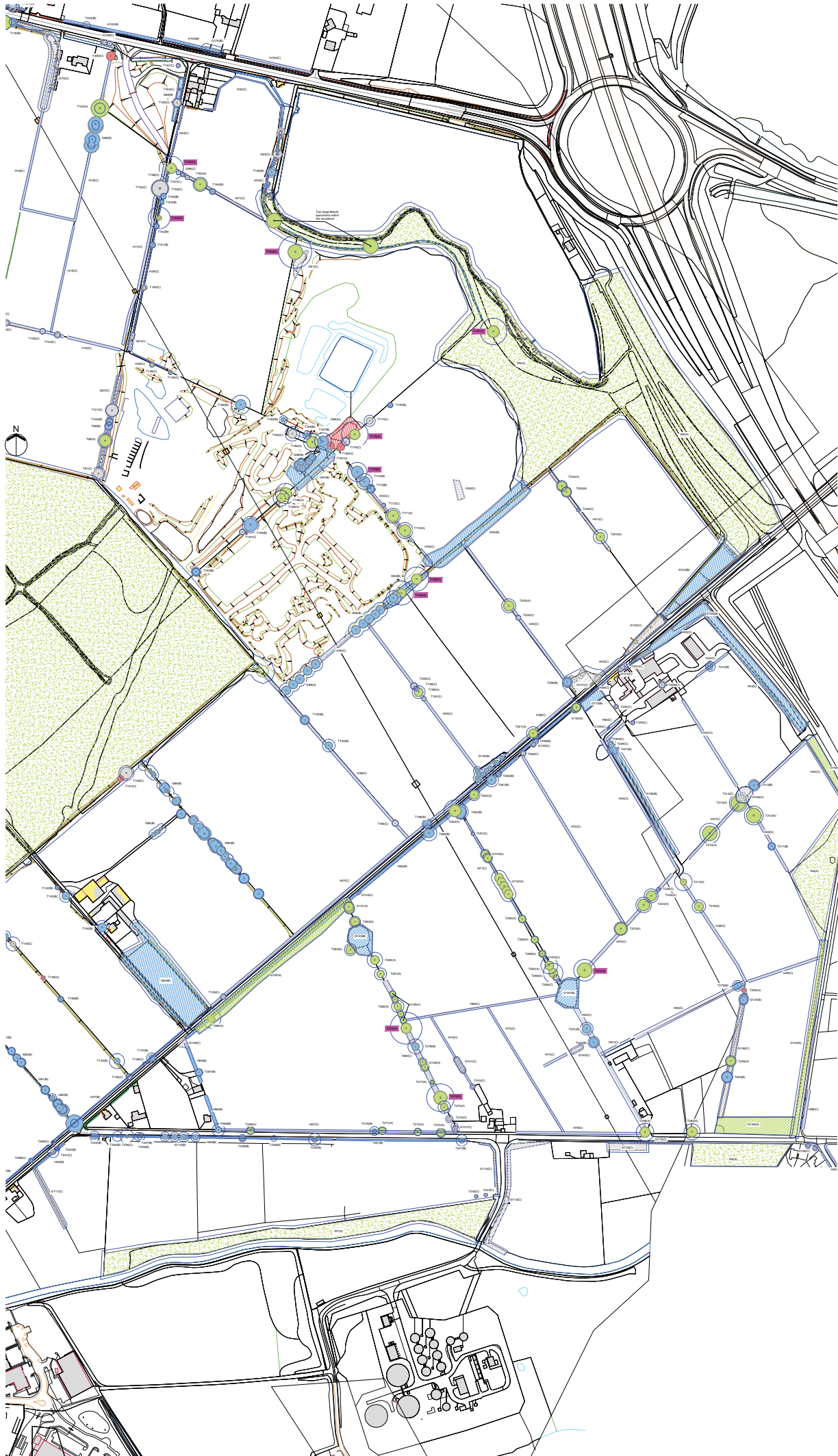
drawing title: **TREE SURVEY PLAN**  
 figure: **FIGURE 2.1**

scale: **1:2500 @ A1**

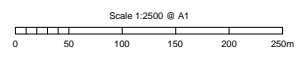
drawing number: **7121-A-02.2**

date: **March 2018**

revision: **A**



- KEY**
- Category U - Trees / Groups Unsuitable for Retention (BS 5837:2012)
  - Category A - Trees / Groups of High Quality (BS 5837:2012)
  - Category B - Trees / Groups of Moderate Quality (BS 5837:2012)
  - Category C - Trees / Groups of Low Quality (BS 5837:2012)
  - Hedgerow Hatching (Colour Indicates BS5837:2012 Category)
  - Woodland (Colour Indicates BS5837:2012 Category)
  - Root Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
  - T1 (A)  
G1 (A) Individual / Group Number and BS5837:2012 Category
  - Individual Tree Considered to be Veteran Status



**NOTES**

All dimensions to be verified on site. Do not scale this drawing. Use figured dimensions only. All discrepancies to be clarified with project arboriculturalists. 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.

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any individual person, either wholly or in part without written consent of FPCR Environment and Design Ltd. FPCR Environment and Design Ltd accept no liability for third party use.

Original Survey material is used with the permission of The Controller of HMSO, Crown copyright 100018898.

14.12.17	Final Issue	TCB
16.03.18	Updated Tree Survey	TCB
For	Issue	Description

fpcr

masterplanning ■  
environmental assessment ■  
landscape design ■  
urban design ■  
ecology ■  
architecture ■  
arboriculture ■

FPCR Environment and Design Ltd  
 Lockington Hill  
 Lockington  
 Derby, DE7A 2RH  
 t: 01509 672772  
 f: 01509 674665  
 e: mail@fpcr.co.uk  
 w: www.fpcr.co.uk

client  
**Four Ashes Limited**

project  
**West Midlands Interchange  
Land south of the A5, west of J12 of the M6**

drawing title  
**TREE SURVEY PLAN  
FIGURE 2.1**

scale  
1:2500 @ A1

drawn  
TCB

date  
March 2018

drawing number  
**7121-A-02.3 A**

CAD file: J171007121ARB\Plan\Fig 2 Tree Survey Plan.dwg

**KEY**

	Tree Group to be Retained
	Woodland to be Retained
	Tree Group/Woodland to be removed to facilitate the proposals
	Category U - Unstable for retention on archaeological grounds
	Hedge/row Proposed to be Retained and incorporated into the New Development
	Hedge/row Proposed to be Removed to Facilitate the Development upon Approval of the Application
	Root Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
	Individual Tree Group Number and BS5837:2012 Category
	Individual Tree Considered to be of Veteran Status

**NOTES**

All dimensions to be verified on site. Do not scale this drawing, use field dimensions only. All dimensions to be drawn with project North as datum. Drawings to be read in this orientation unless otherwise stated. Dimensions are based on digital information. All proposed dimensions are based on the proposed ground levels. A monument copy should be made of this drawing for use as a reference. A monument copy should not be used for any other purpose. A monument copy should not be used for any other purpose. A monument copy should not be used for any other purpose.

These are long garden that change over time, the condition of all trees illustrated on this drawing is based on the information provided to us by the client. The client has undertaken a detailed survey of the site to identify trees of veteran status. The client has undertaken a detailed survey of the site to identify trees of veteran status. The client has undertaken a detailed survey of the site to identify trees of veteran status.

SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS IF THEY ARE PROTECTED UNDER THE PROVISIONS OF THE PROTECTED TREES ACT 1999 OR OTHER LEGISLATION. THE CLIENT HAS UNDERTAKEN A DETAILED SURVEY OF THE SITE TO IDENTIFY TREES OF VETERAN STATUS. THE CLIENT HAS UNDERTAKEN A DETAILED SURVEY OF THE SITE TO IDENTIFY TREES OF VETERAN STATUS. THE CLIENT HAS UNDERTAKEN A DETAILED SURVEY OF THE SITE TO IDENTIFY TREES OF VETERAN STATUS.

The drawings are the property of Four Ashes Limited and are to be used only for the purposes stated. No part of this drawing is to be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written consent of Four Ashes Limited. Copyright © 2018 Four Ashes Limited.

Overseas storage marked as stated with the permission of The Controller of Her Majesty's Stationery Office.

18.05.2018 P11:18:56 TCB  
 03.06.2018 Revised layout TCB  
 18.05.2018 P11:18:56 TCB

**Scale 1:2500 @ A1**  
 0 50 100 150 200 250m

**Client:** Four Ashes Limited  
**Project:** West Midlands Interchange  
 Land south of the A5, west of J12 of the M6  
**Drawing title:** TREE RETENTION PLAN  
**Figure:** 3.1  
 Drawing Number: 12500 @ A1  
 Scale: 1:2500 @ A1  
 Date: June 2018  
 Drawn by: TCB  
 Check by: TCB  
 Project Manager: TCB  
 Approved by: TCB

**Environmental and Design Ltd**  
 27, Broad Street, Birmingham, B15 1DT  
 Tel: 0121 609 0265  
 Fax: 0121 609 0266  
 www.environmental-design.co.uk





- Tree Group to be Retained
- Woodland to be Retained
- Tree Group/Woodland to be removed to facilitate the proposals
- Category U - Unsuitable for retention on arboricultural grounds
- Hedge/row Proposed to be Retained and Incorporated into the New Development
- Hedge/row Proposed to be Removed to Facilitate the Development up to the Edge of the Application
- Root Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
- Individual Tree Number and BS5837:2012 Category
- Individual Tree Considered to be of Veteran Status



**NOTES**  
All dimensions to be verified on site. Do not scale this drawing, use scaled dimensions only. All dimensions to be derived with project AutoCAD files. It may be noted that drawings have been produced in colour and it is based on digital information. Any format, aerial images and/or GIS imagery were appropriate. A monochrome copy should be the ground, woodland, hedge/row should be checked and verified on site prior to any decisions on any work required for calculating foundation depths, constraints, etc.  
Trees are being retained that change over time, the condition of all trees illustrated on this drawing should be monitored and recorded in the next monitoring period.  
SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS (i.e. TREE PRESERVATION ORDERS) WHICH MUST BE OBTAINED BEFORE THE RELEVANT APPLICATION IS SUBMITTED TO THE LOCAL AUTHORITY. ALL SUCH APPLICATIONS MUST BE MADE THROUGH PLANNING CONSENT.  
The drawings are the property of Forest Environment and Design Ltd and shall not be used or copied without written consent of Forest Environment and Design Ltd. FPCR copyright 100078666.  
Ownership shared in part with the permission of The Controller of HMSO, Crown copyright 100078666.

10.09.2018 FPC/TJS/TJW  
13.09.2018 Revised layout  
TJS  
FPC  
JTS  
TJS

environmental and Design Ltd  
150, The Broadway,  
London, SE18 6NQ  
Tel: 0203 09 6205  
www.fpcor.co.uk

drawn by: Four Ashes Limited  
project: West Midlands Interchange  
Land south of the A5, west of J12 of the M6  
drawing title: TREE RETENTION PLAN  
drawing number: 7121-A-03.2 A  
scale: 1:2500 @ A1  
date: June 2018

04/16/18 - FPC/ash/Forest/7121-R08/Planning/3/TreeRetenPlan June 2018.dwg





- KEY**
- Tree Group to be Retained
  - Woodland to be Retained
  - Tree/Group/Woodland to be removed to facilitate the proposals
  - Category U - Unsuitable for retention on arboricultural grounds
  - Hedgerow Proposed to be Retained and Incorporated into the New Development
  - Hedgerow Proposed to be Removed to Facilitate the Development upon Approval of the Application
  - Root Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
  - T1 (A)  
G1 (A) Individual / Group Number and BS5837:2012 Category
  - Individual Tree Considered to be of Veteran Status

Scale 1:2500 @ A1

0 50 100 150 200 250m

**NOTES**

All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with project Arboriculturist. 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 decision 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 Arboriculturist 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.**

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised persons, either wholly or in part without written consent of FPCR Environment and Design Ltd. FPCR Environment and Design Ltd accept no liability for third party use.

Orthance Survey material is used with the permission of The Controller of HMSO, Crown copyright 100018896.

rev	date	description	TCB
A	19.03.2018	First Issue	TCB
	03.06.2018	Revised layout	TCB

**fpcr**

masterplanning  
 environmental assessment  
 landscape design  
 urban design  
 ecology  
 architecture  
 arboriculture

FPCR Environment and Design Ltd  
 Lockington Hall  
 Lockington  
 Derby DE14 2JH

t: 01509 872772  
 f: 01509 872666  
 e: mail@fpcr.co.uk  
 w: www.fpcr.co.uk

client  
**Four Ashes Limited**

project  
**West Midlands Interchange  
Land south of the A5, west of J12 of the M6**

drawing title  
**TREE RETENTION PLAN  
FIGURE 3.1**

scale  
1:2500 @ A1

drawn  
TCB

date  
June 2018

drawing number  
**7121-A-03.3 A**

### Appendix A - Tree Schedule

Measurements	Age Class	Overall Condition	Root Protection Area (RPA)
Height - Measured using a digital laser clinometer (m)	YNG: Young trees up to ten years of age	G - Good: Trees with only a few minor defects and in good overall health needing little, if any attention	<ul style="list-style-type: none"> <li>The RPA Radius column provides the extent of an equivalent circle from the centre of the stem (m).</li> <li>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.</li> <li>Where veteran trees have been identified the RPA has been calculated in accordance with Natural England guidance i.e. 15x the stem diameter, uncapped.</li> </ul>
Stem Dia. - Diameter measured (mm) in accordance with Annex C of the BS5837	SM: Semi-mature trees less than 1/3 life expectancy	F - Fair: Trees with minor rectifiable defects or in the early stages of stress from which it may recover	
Crown Radius - Measured using a digital laser clinometer radially from the main stem (m)	EM: Early mature trees 1/3 – 2/3 life expectancy	P - Poor: Trees with major structural and/or physiological defects such that it is unlikely the tree will recover in the long term	<ul style="list-style-type: none"> <li>The BS category particular consideration has been given to the following                             <ul style="list-style-type: none"> <li>The health, vigour and condition of each tree</li> <li>The presence of any structural defects in each tree/group and its future life expectancy</li> <li>The size and form of each tree/group and its suitability within the context of a proposed development</li> <li>The location of each tree relative to existing site features e.g. its screening value or landscape features</li> <li>Age class and life expectancy</li> </ul> </li> </ul>
Abbreviations est - Estimated stem diameter avg - Average stem diameter for multiple stems upto - Maximum stem diameter of a group	M: Mature trees over 2/3 life expectancy	D - Dead: This could also apply to trees in an advanced state of decline and unlikely to recover	
	OM: Over mature declining or moribund trees of low vigour		
	V: Veteran tree possessing certain attributes relating to veteran trees		

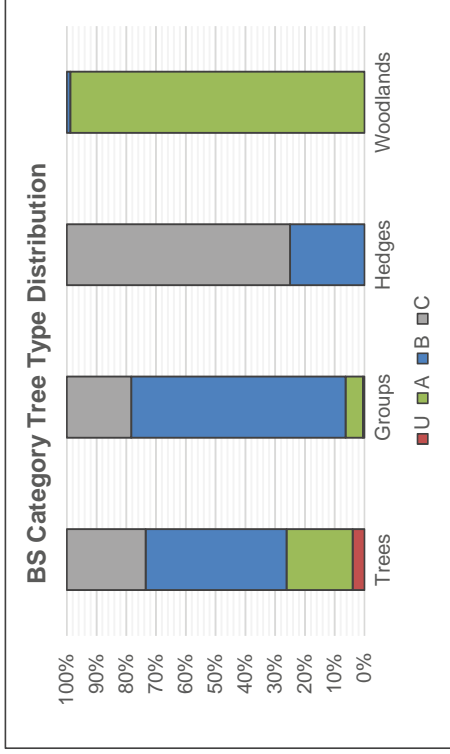
Structural Condition
<p>The following is an example of considerations when inspecting structural condition:</p> <ul style="list-style-type: none"> <li>• The presence of fungal fruiting bodies around the base of the tree or on the stem, as they could possibly indicate the presence of possible internal decay</li> <li>• Soil cracks and any heaving of the soil around the base</li> <li>• Any abrupt bends in branches and limbs resulting from past pruning</li> <li>• Tight or weak 'V' shaped forks and co-dominant stems</li> <li>• Hazard beam formations and other such biomechanical related defects (as described by Claus Mattheck, Body Language of Trees HMSO Research for Amenity Trees No. 4 1994)</li> <li>• Cavities as a result of limb losses or past pruning</li> <li>• Broken branches or storm damage</li> <li>• Damage to roots</li> <li>• Basal, stem or branch / limb cavities</li> <li>• Crown die-back or abnormal foliage size and colour</li> </ul>

Quality Assessment of BS Category
<p>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.</p> <p>Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years.</p> <p>Category B - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.</p> <p>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.</p> <p>Sub-categories: (i) - Mainly arboricultural value (ii) - Mainly landscape value (iii) - Mainly cultural or conservation value</p>

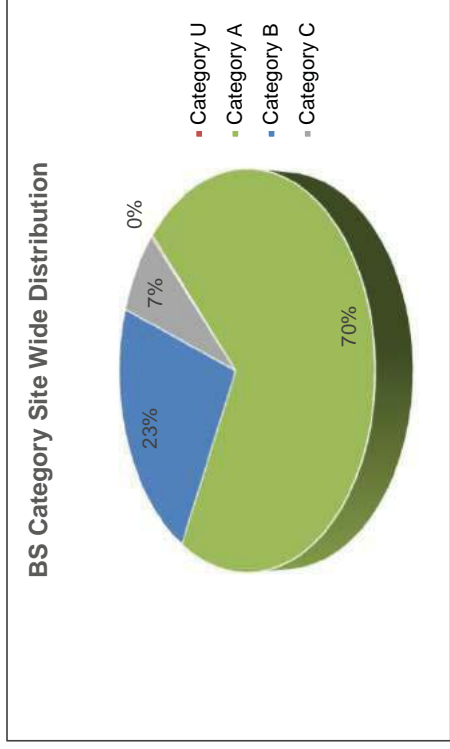
**Appendix Summary**

	Individual Trees	Totals	Tree Groups and Hedgerows	Totals
Category U	T21, T32, T35, T40, T114, T117, T131, T139, T147, T180, T181, T295, T300	13	G15, G96, G124, G158	4
Category A	T11, T68, T79, T85, T86, T87, T94, T95, T96, T98, T103, T112, T115, T116, T119, T129, T130, T153, T159, T163, T166, T167, T168, T169, T170, T171, T178, T186, T188, T189, T198, T201, T203, T204, T205, T207, T212, T215, T216, T217, T218, T222, T223, T224, T225, T262, T263, T266, T269, T271, T272, T273, T275, T276, T277, T279, T280, T281, T282, T283, T284, T286, T287, T288, T289, T290, T292, T294, T296, T309, T317, T318, T325	73	G99, G105, G132, G135, G138, G139, G141, G142, G143, G144, G145, G153, G157, G177, W1, W3, W5, W6, W7, W8	20
Category B	T2, T3, T4, T5, T6, T8, T9, T10, T12, T13, T14, T15, T16, T17, T18, T23, T24, T26, T27, T29, T30, T33, T34, T38, T39, T41, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T69, T70, T72, T73, T74, T76, T77, T78, T80, T81, T82, T88, T89, T90, T93, T99, T100, T110, T111, T118, T120, T124, T125, T132, T133, T134, T137, T138, T141, T142, T143, T144, T151, T152, T154, T155, T164, T165, T173, T174, T175, T176, T182, T183, T185, T187, T190, T192, T193, T194, T196, T208, T210, T211, T213, T219, T220, T221, T227, T232, T233, T234, T236, T237, T238, T239, T240, T241, T244, T245, T246, T247, T248, T250, T252, T253, T254, T255, T256, T258, T260, T261, T264, T265, T267, T268, T270, T278, T293, T301, T302, T305, T306, T307, T308, T312, T313, T314, T315, T316, T320, T321, T324, T326, T328	155	G1, G5, G6, G7, G8, G10, G11, G13, G16, G17, G18, G20, G21, G22, G23, G24, G26, G27, G28, G29, G30, G31, G32, G33, G34, G35, G36, G37, G39, G40, G41, G42, G43, G44, G45, G46, G49, G50, G51, G52, G54, G55, G56, G58, G59, G60, G65, G66, G68, G73, G75, G79, G80, G81, G82, G84, G85, G86, G88, G92, G94, G95, G97, G98, G100, G103, G104, G107, G108, G110, G112, G117, G119, G122, G123, G126, G129, G130, G140, G147, G149, G160, G163, G164, G165, G167, G168, G169, G170, G171, G172, G173, G175, G176, G178, G179, G180, G181, G183, H7, H8, H9, H10, H11, H12, H23, H24, H25, H27, H59, H60, H61, H63, H64, H65, H66, H75, H76, H79, H88, H99, H100, H102, H103, H106, H108, W2, W4	128
Category C	T1, T7, T19, T20, T22, T25, T28, T31, T36, T37, T42, T43, T71, T75, T83, T84, T91, T92, T97, T101, T102, T104, T105, T107, T108, T109, T113, T121, T122, T123, T126, T127, T128, T135, T136, T140, T145, T146, T148, T149, T150, T156, T157, T158, T160, T161, T162, T172, T177, T179, T184, T191, T195, T197, T199, T200, T202, T206, T209, T214, T226, T228, T229, T230, T231, T235, T242, T243, T249, T251, T257, T259, T274, T285, T291, T297, T298, T299, T303, T304, T310, T311, T319, T322, T323, T327	87	G2, G3, G4, G9, G12, G14, G19, G25, G38, G47, G48, G53, G57, G61, G62, G63, G64, G67, G69, G70, G71, G72, G74, G76, G77, G78, G83, G87, G89, G90, G91, G93, G101, G102, G106, G109, G111, G113, G114, G115, G116, G118, G120, G121, G125, G127, G128, G131, G133, G134, G136, G137, G146, G148, G150, G151, G152, G154, G155, G156, G159, G161, G162, G166, G174, G182, H1, H2, H3, H4, H5, H6, H13, H14, H15, H16, H17, H18, H19, H20, H21, H22, H26, H28, H29, H30, H31, H32, H33, H34, H35, H36, H37, H38, H39, H40, H41, H42, H43, H44, H45, H46, H47, H48, H49, H50, H51, H52, H53, H54, H55, H56, H57, H58, H62, H67, H68, H69, H70, H71, H72, H73, H74, H77, H78, H80, H81, H82, H83, H84, H85, H86, H87, H89, H90, H91, H92, H93, H94, H95, H96, H97, H98, H101, H104, H105, H107	147
	<b>Total</b>	<b>328</b>	<b>Total</b>	<b>299</b>

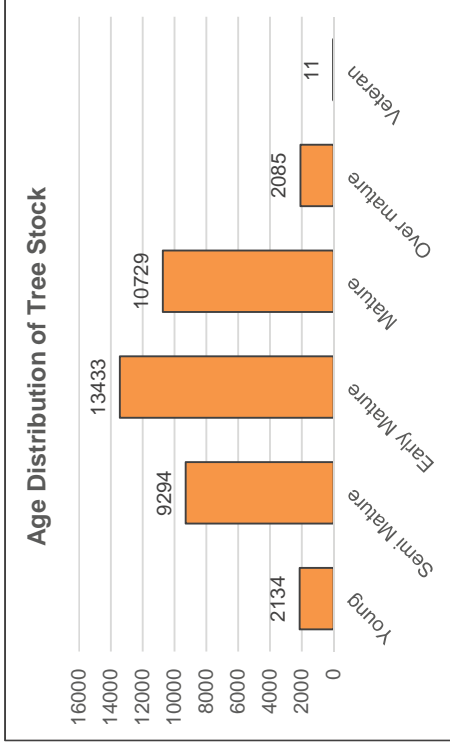
**BS Category Tree Type Distribution** displays the proportion of trees assessed in each type to enable a better understanding of the category distribution.



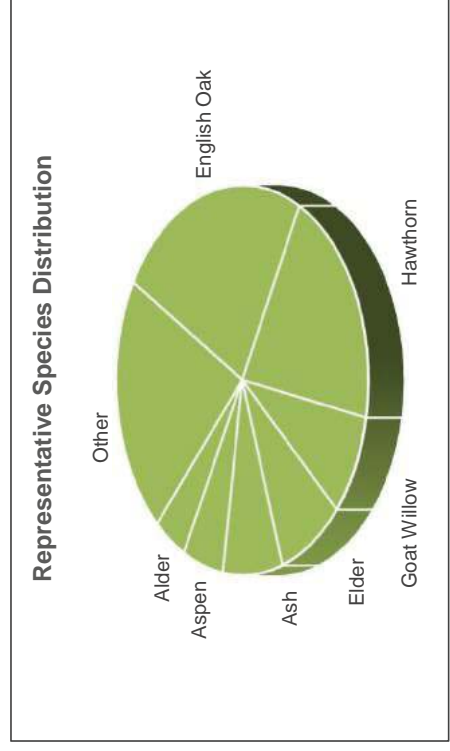
**BS Category Site Wide Distribution** shows the proportion of trees assessed in each category across the whole site which allows an interpretation of the site's overall quality.



**Age Distribution of Tree Stock** shows the number of trees in each age category across the tree stock allowing assessment of their longevity to be made.



**Representative Species Distribution** displays the proportion of the tree stock for each species with greater than 5% of the total.



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
<b>INDIVIDUAL TREES</b>										
T1	Ash Fraxinus excelsior	13	254 525	6	EM	F	Twin stemmed from base with fused Crossing and rubbing branches Low crown form Minor dead wood evident in the crown (<75mm) Poached ground at the base	154	7.0	C (i)
T2	English Oak Quercus robur	11	850	N - 3 S - 6 E - 6 W - 6	M	F	Bark wounds noted with heartwood exposed Low crown form Major dead wood evident in the crown (>75mm) Storm damage present central leader previously failed at 6m Uneven crown Barb wire attached to stem	327	10.2	B (i)
T3	White Willow Salix alba	14	515 490	N - 7 S - 3 E - 7 W - 7	M	F	Twin stemmed from base Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Leaning to north	229	8.5	B (i)
T4	English Oak Quercus robur	13	940	6	M	F	Bark wounds noted on southern side possible lightning strike Low crown form Retrenchment with major dead wood evident in the crown (>75mm)	400	11.3	B (i)
T5	English Oak Quercus robur	12	540 330	N - 4 S - 7 E - 6 W - 6	EM	F	Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) Twin stemmed from base	181	7.6	B (i)
T6	White Willow Salix alba	15	10x250	8	M	F	Multi stemmed from base No major defects were noted Typical crown form Characteristic of species	283	9.5	B (i)
T7	English Oak Quercus robur	8.5	920	5	M	P	Bark wounds noted with large cavity on main stem to east at 1m Broken branches evident Epicormic growth evident within the crown Light ivy cover Major dead wood evident in the crown (>75mm)	383	11.0	C (i)
T8	English Oak Quercus robur	13	415 647	4	M	G	Twin stemmed from base Minor dead wood evident in the crown (<75mm) Multi leadered form No major defects were noted	267	9.2	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T9	English Oak Quercus robur	14	est 850	N - 3 S - 6 E - 4 W - 4	M	F	Retrenchment with major dead wood evident in the crown (>75mm) Pruning wounds noted Situating offsite	327	10.2	B (i)
T10	Ash Fraxinus excelsior	10	275	3	SM	G	Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form Situating within hedgerow	34	3.3	B (i)
T11	English Oak Quercus robur	14	880	7	M	G	Light ivy cover Major dead wood evident in the crown (>75mm) No major defects were noted Typical crown form Close cultivation of soil at base	350	10.6	A (i)
T12	English Oak Quercus robur	14	est 900	6	M	F	Major dead wood evident in the crown (>75mm) No major defects were noted Pruning wounds noted Situating offsite	366	10.8	B (i)
T13	Silver Birch Betula pendula	13	340	5	EM	G	Light ivy cover No major defects were noted Typical crown form Situating within hedgerow	52	4.1	B (i)
T14	English Oak Quercus robur	9	526	5	EM	F	Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) No major defects were noted Single large hung up dead branch	125	6.3	B (i)
T15	English Oak Quercus robur	13	496	6	EM	F	Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted	111	6.0	B (i)
T16	English Oak Quercus robur	15	935	N - 6 S - 6 E - 8 W - 4	M	F	Bark wounds noted Epicormic growth evident within the crown Hazard beam present Pruning wounds noted Close cultivation of soil to north Recently constructed road within 2m of base to south	395	11.2	B (i)
T17	Alder Alnus glutinosa	7	120 190	2.5	EM	F	Twin stemmed from base Low crown form No major defects were noted Typical crown form	23	2.7	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T18	English Oak Quercus robur	14	950	5	M	F	Branch socket cavities observed Major dead wood evident in the crown (>75mm) Pruning wounds noted with branch stubs evident Close cultivation of the soil	408	11.4	B (i)
T19	Norway Maple Acer platanoides	2	268	1	SM	F	Crossing and rubbing branches Old laid forms NB height increases to 4m in the central section close to H51 and returns to 2m at the southern end	32	3.2	C (i)
T20	English Oak Quercus robur	16	1060	6	OM	P	Bark wounds noted with heartwood exposed possible lightning strike Broken branches evident Close cultivation of the soil Dieback of the crown observed with major dead wood evident (>75mm) Pruning wounds noted Ganoderma applanatum bracket noted at base	508	12.7	C (i)
T21	English Oak Quercus robur	6	520	3	EM	P	Close cultivation of the soil Limited future potential Minor dead wood evident in the crown (<75mm) Multiple pruning wounds noted Poor quality specimen	N/A	N/A	U
T22	English Oak Quercus robur	8	372	3	SM	F	Pruning wounds with branch stubs Burrows at base	63	4.5	C (i)
T23	English Oak Quercus robur	14	740	N - 5 S - 6 E - 8 W - 3	M	F	Branch socket cavities observed Pruning wounds with branch stubs evident Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) No major defects were noted	248	8.9	B (i)
T24	English Oak Quercus robur	19	920	9	M	F	Broken branches and branch stubs evident Dense undergrowth at the base Major and minor dead wood evident in the crown No major defects were noted	383	11.0	B (i)
T25	English Oak Quercus robur	19	950	N - 8 S - 6 E - 8 W - 2	M	P	Branch socket cavities observed Storm damage with broken branches and branch stubs evident Dense undergrowth at the base Major and minor dead wood evident in the crown	408	11.4	C (i)
T26	English Oak Quercus robur	19	1000	9	OM	F	Broken branches and branch stubs evident Dense undergrowth at the base Major and minor dead wood evident in the crown No major defects were noted Pruning wounds noted	452	12.0	B (i)



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T27	Hornbeam Carpinus betulus	19	910	N - 5 S - 9 E - 9 W - 9	M	G	Branch stubs evident Crossing and rubbing branches Hazard beam present Minor dead wood evident in the crown (<75mm) Multi leadered form Pruning wounds noted	375	10.9	B (i)
T28	Ash Fraxinus excelsior	22	est 900	8	M	P	Bark wounds noted with heartwood exposed Branch socket cavities observed Branch stubs evident Dieback of the crown observed with major dead wood evident (>75mm) Epicormic growth evident within the crown Multiple inonotus hispidus brackets noted on main stem	366	10.8	C (i)
T29	English Oak Quercus robur	12	avg 550	5	EM	F / G	Branch stubs evident Characteristic for species Dense undergrowth at the base Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Stood within field bounding drainage basin	137	6.6	B (i)
T30	English Oak Quercus robur	12	avg 500	5	EM	F / G	Branch stubs evident Characteristic for species Dense undergrowth at the base Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	113	6.0	B (i)
T31	Ash Fraxinus excelsior	14	est 350	6	M	F	Bark wounds noted Branch stubs evident Dense undergrowth at the base Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Multi leadered form	55	4.2	C (i)
T32	English Oak Quercus robur	7	400	3.5	M	D	Dead trees noted Major dead wood evident in the crown (>75mm) Dead tree	N/A	N/A	U
T33	English Oak Quercus robur	18	850	N - 6 S - 10 E - 9 W - 5	M	F	Bark wounds noted Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Pruning wounds noted Storm damage present Multiple large dead branches on lower main stem	327	10.2	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T34	Ash Fraxinus excelsior	14	340	4	EM	G	Bark wounds noted Minor dead wood evident in the crown (<75mm) Pruning wounds noted	52	4.1	B (i)
T35	Crab Apple Malus sylvestris	6	est 240	1	M	P	Bark wounds noted Broken branches evident Limited future potential Specimen in extensive decline	N/A	N/A	U
T36	Ash Fraxinus excelsior	14	310 320	4	EM	F	Branch stubs evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Multi stemmed from base	90	5.3	C (i)
T37	Crab Apple Malus sylvestris	6	est 220	2	M	F	Bark wounds noted Branch stubs evident Broken branches evident Limited future potential Minor dead wood evident in the crown (<75mm)	22	2.6	C (i)
T38	Norway Maple Acer platanoides	12	est 450	4	EM / M	G	Characteristic for species No major defects were noted Pruning wounds noted Situating offsite	92	5.4	B (i)
T39	Whitebeam Sorbus aria	6	est 240	3	M	G	Characteristic for species Close cultivation of the soil Situating offsite	26	2.9	B (i)
T40	Mountain Ash Sorbus aucuparia	2	200	1	SM	P	Bark wounds noted Heartwood exposed Major bark wound on west side of the stem extending from ground level to 2m	N/A	N/A	U
T41	English Oak Quercus robur	15	est 700	6	M	F	Branch socket cavities observed Minor dead wood evident in the crown (<75mm) Multi leadered form No major defects were noted Pruning wounds noted Situating offsite	222	8.4	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T42	Ash Fraxinus excelsior	11	Over ivy 450	4.5	EM	F	Basal suckers present Branch stubs evident Characteristic for species Close cultivation of the soil Dense ivy cover on main stem Dense undergrowth at the base Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm)	92	5.4	C (i)
T43	Ash Fraxinus excelsior	11	280 190 240	4.5	EM	F	Basal suckers present Branch stubs evident Characteristic for species Close cultivation of the soil Dense undergrowth at the base Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Old bundle planting or coppice	78	5.0	C (i)
T44	Hawthorn Crataegus monogyna	1.5	upto 75 75 75	0.5	EM	F	Three separate sections with gaps inbetween Maintained	8	1.6	B (i)
T45	Hawthorn Crataegus monogyna Hazel Corylus avellana	1.5	upto 75 75 75	0.5	EM	F	Contains a small section of hazel to the west of the gateway Laid form Maintained	8	1.6	B (i)
T46	English Oak Quercus robur	10	Over ivy 420	4	EM	G	Characteristic for species Close cultivation of the soil Light ivy cover No major defects were noted	80	5.0	B (i)
T47	Common Lime Tilia x europaea	12	330 240 190	4	EM	G	Basal suckers present Characteristic for species Close cultivation of the soil Crossing and rubbing branches Low crown form No major defects were noted	92	5.4	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T48	Common Lime Tilia x europaea	12	280	4	EM	G	Basal suckers present Characteristic for species Close cultivation of the soil Crossing and rubbing branches Low crown form No major defects were noted	35	3.4	B (i)
T49	Sycamore Acer pseudoplatanus	11	300	2	EM	G	Basal suckers present Characteristic for species Close cultivation of the soil Crossing and rubbing branches Low crown form Multi leadered form No major defects were noted	41	3.6	B (i)
T50	Common Lime Tilia x europaea	14	330 360 300 290 310	4	EM	G	Branch stubs evident Characteristic for species Close cultivation of the soil Crossing and rubbing branches Low crown form Multi stemmed from base No major defects were noted	230	8.6	B (i)
T51	Norway Maple Acer platanoides	10	300	3	SM / EM	G	Characteristic for species Close cultivation of the soil	41	3.6	B (i)
T52	English Oak Quercus robur	15	820	N - 5 S - 6 E - 5 W - 8	M	F	Bark wounds noted Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Storm damage present Cavity south side at 3.5m - possible previous limb failure	304	9.8	B (i)
T53	Common Lime Tilia x europaea	10	540	3.5	EM	G	Characteristic for species Close cultivation of the soil Crossing and rubbing branches Low crown form Multi stemmed from base No major defects were noted	132	6.5	B (i)
T54	English Oak Quercus robur	14	620	5	EM	F / G	Branch stubs evident Close cultivation of the soil Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form	174	7.4	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T55	English Oak Quercus robur	14	900	5	EM	F / G	Branch stubs evident Close cultivation of the soil Dense ivy cover on main stem Dense undergrowth at the base Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Multi leaved form No major defects were noted Exposed roots at base Sited on steep bank	366	10.8	B (i)
T56	English Oak Quercus robur	15	910	5	M	F	Bark wounds noted Branch stubs evident Characteristic for species Close cultivation of the soil Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted Central stem or central most leader failed at 6m resulting in large dead stub Multiple wounds and stubs from previous limb failure throughout crown	375	10.9	B (i)
T57	English Oak Quercus robur	14	1010	6	M	F	Bark wounds noted Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form	461	12.1	B (i)
T58	English Oak Quercus robur	9	Over ivy 340	3.5	EM	G	Dense undergrowth at the base Low crown form Multi leaved form No major defects were noted	52	4.1	B (i)
T59	Sycamore Acer pseudoplatanus	14	680	7	M	G	Basal suckers present Branch stubs evident Epicormic growth evident within the crown Light ivy cover Minor dead wood evident in the crown (<75mm) No major defects were noted Sparse in appearance	209	8.2	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T60	English Oak Quercus robur	18	1120	6	M	F	Branch socket cavities observed Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Major dead wood evident in the crown (>75mm) Splits and seams along length of several branches Fibre buckling at 1m on main stem	567	13.4	B (i)
T61	English Oak Quercus robur	17	Over ivy 900	N - 6 S - 8 E - 6 W - 3	M	F	Dense ivy cover on main stem Dense undergrowth at the base Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted	366	10.8	B (i)
T62	English Oak Quercus robur	10	est 1000	3	M	F	Branch stubs evident Crown had been heavily reduced Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Laetiporus sulphureus Chicken of the wood/Sulphur Polypore	452	12.0	B (i)
T63	English Oak Quercus robur	12	Over ivy 810	7	M	F	Bark wounds noted Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Light ivy cover Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Benefit from remedial management	297	9.7	B (i)
T64	English Oak Quercus robur	12	est 810	7	M	F	Bark wounds noted Branch stubs evident Close cultivation of the soil Dieback of the crown observed Epicormic growth evident within the crown Light ivy cover Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Benefit from remedial management	297	9.7	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T65	English Oak Quercus robur	13	850	5	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Dense undergrowth at the base Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted	327	10.2	B (i)
T66	English Oak Quercus robur	14	est 750	5	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Dense undergrowth at the base Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted Storm damage present	254	9.0	B (i)
T67	English Oak Quercus robur	13	Over ivy 600 300	6	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Dense ivy cover on main stem Dense undergrowth at the base Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Storm damage present	204	8.0	B (i)
T68	English Oak Quercus robur	11	est 300	4.5	EM	G	No major defects were noted Situated offsite Unable to gain access	41	3.6	A (i)
T69	Damson Prunus insititia	4	est 180	2	EM	G	Characteristic for species Close cultivation of the soil	15	2.2	B (i)
T70	English Oak Quercus robur	16	Over ivy 1270	9	M	F / G	Bark wounds noted Branch socket cavities observed Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Storm damage present Large wounds on lower main stem - west side - 1m in length Several large live stubs	707	Capped at 15m	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T71	Alder Alnus glutinosa	9	est 300 250	3	EM	F / G	Characteristic for species Limited future potential No major defects were noted	69	4.7	C (i)
T72	English Oak Quercus robur	18	1020	7	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Multiple fungal brackets around base of tree Inonotus dryadeus	471	12.2	B (i)
T73	English Oak Quercus robur	16	1070	6	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted	518	12.8	B (i)
T74	English Oak Quercus robur	14	690	6	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Elder at base	215	8.3	B (i)
T75	English Oak Quercus robur	13	810	6	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Elder at base Large cavity on southern most main leader - failed at 8m leaving large stub of 3m in length - stub hollowed with severe decay	297	9.7	C (i)



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T76	English Oak Quercus robur	15	1000	8	M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted Benefit from remedial management	452	12.0	B (i)
T77	English Oak Quercus robur	14	670	6	M	G	Branch socket cavities observed Close cultivation of the soil Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted	203	8.0	B (i)
T78	English Oak Quercus robur	14	720	7	M	F / G	Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	235	8.6	B (i)
T79	English Oak Quercus robur	14	710	6	M	G	Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted	228	8.5	A (i)
T80	English Oak Quercus robur	9	470	N - 3 S - 6 E - 5 W - 1	M	G	Bark wounds noted Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Suppressed crown form	100	5.6	B (i)
T81	English Oak Quercus robur	11	780	5	M	G	Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Included bark union Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted	275	9.4	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T82	Alder Alnus glutinosa	14	300 330 370 380 290	5	M	F / G	Characteristic for species Close cultivation of the soil Dense ivy cover on main stem Dense undergrowth at the base Multi stemmed from base No major defects were noted Edge of plantation	255	9.0	B (i)
T83	English Oak Quercus robur	5	220	N - 0.5 S - 2 E - 1 W - 3	EM	P / F	Bark wounds noted Heartwood exposed Limited future potential	22	2.6	C (i)
T84	Norway Maple Acer platanoides	14	est 370	N - 6 S - 6 E - 6 W - 2	EM	F	Dense undergrowth at the base Included bark union Minor dead wood evident in the crown (<75mm) Overhead cables Pruning wounds noted	62	4.4	C (i)
T85	English Oak Quercus robur	16	950	8	M	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	408	11.4	A (i)
T86	English Oak Quercus robur	15	630	7	M	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	180	7.6	A (i)
T87	English Oak Quercus robur	12	860	7	M	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	335	10.3	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T88	Field Maple Acer campestre	10	340	4	EM	F	Flail damage evident Included bark union Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	52	4.1	B (i)
T89	English Oak Quercus robur	12	est 680	8	EM	F	Broken branches evident Dense undergrowth at the base Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Typical crown form	209	8.2	B (i)
T90	English Oak Quercus robur	15	est 650	7	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Root damage to east	191	7.8	B (i)
T91	English Oak Quercus robur	9	230	4	SM	F	Bark wounds noted Minor dead wood evident in the crown (<75mm) Suppressed crown form Climber in crown	24	2.8	C (i)
T92	English Oak Quercus robur	10	380	5	EM	F	Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm) Suppressed crown form	65	4.6	C (i)
T93	English Oak Quercus robur	16	660	8	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm)	197	7.9	B (i)
T94	English Oak Quercus robur	14	900	8	M	F	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) Typical crown form	366	10.8	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T95	English Oak Quercus robur	17	1150	10	M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Close cultivation of the soil Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Typical crown form Woodpecker holes observed	598	13.8	A (i)
T96	English Oak Quercus robur	17	940	9	M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Close cultivation of the soil Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Woodpecker holes observed	400	11.3	A (i)
T97	English Oak Quercus robur	12	est 750	7	M	P	Branch socket cavities observed Branch stubs evident Dieback of the crown observed Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Specimen in extensive decline	254	9.0	C (i)
T98	English Oak Quercus robur	13	820	8	M	F	Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	304	9.8	A (i)
T99	English Oak Quercus robur	9	450	5	EM	F	Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown 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
T100	English Oak Quercus robur	8	430	4	SM	F	Branch stubs evident Close cultivation of the soil Crossing and rubbing branches Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	84	5.2	B (i)
T101	Ash Fraxinus excelsior	14	est 700	9	M	P	Base obscured Branch stubs evident Broken branches evident Close cultivation of the soil Dense undergrowth at the base Dieback of the crown observed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Multiple fungal brackets Inonotus hispidus, Shaggy bracket	222	8.4	C (i)
T102	Hybrid Black Poplar Populus x canadensis	15	est 900	12	M	P	Bark wounds noted Branch stubs evident Broken branches evident Dense ivy cover on main stem Dieback of the crown observed Lateral lever arm observed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Specimen in extensive decline	366	10.8	C (i)
T103	English Oak Quercus robur	14	est 600	12	M	G	Base obscured Dense undergrowth at the base Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	163	7.2	A (i)
T104	lime sp	6	140 150 260 80 130	3	M	F	Crossing and rubbing branches Included bark union Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base	60	4.4	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T105	Wild Cherry Prunus avium	6	170 170 170	4	SM	P	Crossing and rubbing branches Included bark union Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base	39	3.5	C (i)
T106	lime sp	6	6x 150	3	EM	F	Crossing and rubbing branches Included bark union Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base	61	4.4	C (i)
T107	Field Maple Acer campestre	6	150 150 150	4	EM	F	Crossing and rubbing branches Included bark union Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base Outgrown goat willow to west	31	3.1	C (i)
T108	English Oak Quercus robur	11	650	6	EM	P	Branch stubs evident Broken branches evident Dieback of the crown observed Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm) Sparse crown Outgrown goat willow to west	191	7.8	C (i)
T109	English Oak Quercus robur	9	400	5	EM	F	Base obscured Branch stubs evident Broken branches evident Crossing and rubbing branches Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm)	72	4.8	C (i)
T110	English Oak Quercus robur	9	420	5	EM	F	Base obscured Branch stubs evident Broken branches evident Crossing and rubbing branches Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm)	80	5.0	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T111	English Oak Quercus robur	7	est 700	5	M	F	Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Crossing and rubbing branches Dieback of the crown observed Epicormic growth evident within the crown Flail damage evident Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	222	8.4	B (i)
T112	English Oak Quercus robur	11	640	7	EM	F	Branch stubs evident Broken branches evident Close cultivation of the soil Crossing and rubbing branches Epicormic growth evident within the crown Flail damage evident Low crown form Minor dead wood evident in the crown (<75mm) Laetiporus sulphureus Chicken of the wood/Sulphur Polypore	185	7.7	A (i)
T113	English Oak Quercus robur	5	340	2	EM	P	Base obscured Branch stubs evident Broken branches evident Crossing and rubbing branches Dieback of the crown observed Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm) Specimen in extensive decline	52	4.1	C (i)
T114	English Oak Quercus robur	7	470	4	EM	D	Standing dead tree	N/A	N/A	U
T115	English Oak Quercus robur	12	770	8	M	G	Branch stubs evident Broken branches evident Close cultivation of the soil Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Typical crown form	268	9.2	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T116	English Oak Quercus robur	12	560	7	EM	G	Branch stubs evident Broken branches evident Close cultivation of the soil Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Typical crown form	142	6.7	A (i)
T117	2 Hawthorn Crataegus monogyna	6	250 180 100	N - 1 S - 2 E - 2 W - 3	EM	D	Outgrown hedgerow Pruned to 4m high on the north and south sides	N/A	N/A	U
T118	2 Holly Ilex aquifolium	5	350	N - 2 S - 3 E - 1 W - 1	EM	P / F	Has been pruned on east and west sides as part of the maintained hedgerow Some minor exposed heartwood on stems with signs of decay where mechanical damage has occurred through hedge maintenance	55	4.2	B (i)
T119	English Oak Quercus robur	16	est 850	10	EM / M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Positioned next to pond	327	10.2	A (i)
T120	English Oak Quercus robur	12	715	N - 3 S - 5 E - 5 W - 5	M	F	Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Overhead cables Pruning wounds noted Provide clearance from overhead lines	231	8.6	B (i)
T121	English Oak Quercus robur	16	920	5	M	P	Bark wounds noted Branch socket cavities observed Dieback of the crown observed Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm) Lightning strike Laetiporus sulphureus Chicken of the wood/Sulphur Polypore	383	11.0	C (i)



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T122	English Oak Quercus robur	13	722	5	M	G	Branch socket cavities observed Characteristic for species Close cultivation of the soil Dieback of the crown observed Major dead wood evident in the crown (>75mm) Woodpecker holes observed	236	8.7	C (i)
T123	English Oak Quercus robur	11	670	7	M	F	Bark wounds noted Basal cavity observed Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Laetiporus sulphureus, Chicken of the wood/Sulphur Polypore	203	8.0	C (i)
T124	English Oak Quercus robur	11	8x 320	6	M	F	Branch stubs evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Multi stemmed from base Pruning wounds noted	371	10.9	B (i)
T125	English Oak Quercus robur	16	1320	7	M	F	Close cultivation of the soil Crossing and rubbing branches Epicormic growth evident within the crown Included bark union Light ivy cover Minor dead wood evident in the crown (<75mm) Pruning wounds noted	707	Capped at 15m	B (i)
T126	Alder Alnus glutinosa	11	est 410 650	5	M	F	Branch socket cavities observed Branch stubs evident Characteristic for species Minor dead wood evident in the crown (<75mm)	267	9.2	C (i)
T127	Alder Alnus glutinosa	6	80 80	1.5	SM	P	Low crown form Sporadic self-seeded group of trees Twin stemmed from base	6	1.4	C (i)
T128	English Oak Quercus robur	8	300	3	SM	F	Characteristic for species Flail damage evident Low crown form	41	3.6	C (i)
T129	English Oak Quercus robur	16	1080	7	M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm)	528	13.0	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T130	English Oak Quercus robur	16	920	8	M	G	Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm)	383	11.0	A (i)
T131	English Oak Quercus robur	11	747	4	M	D	Major dead wood evident in the crown (>75mm) Standing dead tree	N/A	N/A	U
T132	English Oak Quercus robur	16.5	1080	7	M	F	Basal cavity observed Branch stubs evident Broken branches evident Close cultivation of the soil Dieback of the crown observed Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm)	528	13.0	B (i)
T133	Common Lime Tilia x europaea	16	est 350 580	4	EM	F	Characteristic for species Low crown form No major defects were noted Twin stemmed from base	208	8.1	B (i)
T134	Turkey Oak Quercus cerris	11	850	4	M	F	Bark wounds noted Epicormic growth evident within the crown Heartwood exposed Low crown form Minor dead wood evident in the crown (<75mm) Situated on top of field bounding ditch	327	10.2	B (i)
T135	Alder Alnus glutinosa	7	est 360	3	EM	F	Characteristic for species Dense ivy cover on main stem Dense undergrowth at the base Low crown form	59	4.3	C (i)
T136	Hawthorn Crataegus monogyna	6	est 220	2	EM / M	F	Characteristic for species Dense undergrowth at the base Flail damage evident Heartwood exposed Holly at base	22	2.6	C (i)
T137	English Oak Quercus robur	7	est 580	4	EM	F	Characteristic for species Close cultivation of the soil Dense ivy cover on main stem Dense undergrowth at the base Epicormic growth evident within the crown Low crown form	152	7.0	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T138	English Oak Quercus robur	9	290 150	3	EM	G	Characteristic for species Multi stemmed from base No major defects were noted	48	3.9	B (i)
T139	Alder Alnus glutinosa	4.5	320	2.5	EM	P / F	Bark wounds noted Branch stubs evident Heartwood exposed Low crown form Minor dead wood evident in the crown (<75mm)	N/A	N/A	U
T140	Alder Alnus glutinosa	10	800	3.5	M	F	Bark wounds noted Basal suckers present Branch socket cavities observed Branch stubs evident Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Main stem failed at 5m Epicormic regrowth established	290	9.6	C (i)
T141	Alder Alnus glutinosa	9	8x 200	3.5	M	F	Basal suckers present Characteristic for species Close cultivation of the soil Coppiced form Low crown form Multi stemmed from base	145	6.8	B (i)
T142	English Oak Quercus robur	7	240	2.5	SM	F / G	Close cultivation of the soil Crown had been topped Epicormic growth evident within the crown	26	2.9	B (i)
T143	English Oak Quercus robur	12	730	5	M	F	Bark wounds noted Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm)	241	8.8	B (i)
T144	English Oak Quercus robur	13	est 800	6	M	F	Bark wounds noted Branch stubs evident Characteristic for species Compacted ground at the base Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted	290	9.6	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T145	Holly <i>Ilex aquifolium</i>	8	est 310	3	M	F	Branch stubs evident Flail damage evident Limited future potential	43	3.7	C (i)
T146	Horse Chestnut <i>Aesculus hippocastanum</i>	15	850	8	M	F	Bark wounds noted Branch socket cavities observed Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Low crown form Resin / sap runs on stem <i>Pseudomonas syringae</i> pv. <i>Aesculi</i> , Bleeding canker of horse chestnut	327	10.2	C (i)
T147	Horse Chestnut <i>Aesculus hippocastanum</i>	15	est 950	4	M	D / P	Bark wounds noted Branch socket cavities observed Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Heartwood exposed Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Resin / sap runs on stem <i>Pseudomonas syringae</i> pv. <i>aesculi</i> , Bleeding canker of horse chestnut	N/A	N/A	U
T148	Hybrid Black Poplar <i>Populus x canadensis</i>	9	est 250	3	SM	P	Bark wounds noted Base obscured Broken branches evident Compacted ground at the base	28	3.0	C (i)
T149	Common Lime <i>Tilia x europaea</i>	6	190	3	SM	F	Low crown form No major defects were noted	16	2.3	C (i)
T150	Ash <i>Fraxinus excelsior</i>	8	140 100 210	N - 5 S - 1 E - 3 W - 1	M	P	Branch stubs evident Broken branches evident Multi stemmed from coppice stool Adjacent to access road	33	3.3	C (i)
T151	English Oak <i>Quercus robur</i>	8	340	3.5	SM	F	Broken branches evident Low crown form Adjacent to access road	52	4.1	B (i)
T152	Wild Cherry <i>Prunus avium</i>	6	est 300	3	EM	F	Multi leaved form No major defects were noted Adjacent to access road	41	3.6	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T153	English Oak Quercus robur	5	1000	3	V	F	Crown regrowth from large stump heartwood decay evident	707	15.0	A (i)
T154	English Oak Quercus robur	7	260	3	SM	F	Broken branches evident No major defects were noted Adjacent to access road	31	3.1	B (i)
T155	English Oak Quercus robur	7	340	3.5	SM	F	Broken branches evident Low crown form Adjacent to access road	52	4.1	B (i)
T156	Wild Cherry Prunus avium	6	100	2	Yng	F	Adjacent to access road	5	1.2	C (i)
T157	Wild Cherry Prunus avium	6	100 100	2	Yng	F	Adjacent to access road	9	1.7	C (i)
T158	English Oak Quercus robur	7	120	2	Yng	F	Adjacent to access road	7	1.4	C (i)
T159	English Oak Quercus robur	14	est 1100	7	V	F	Branch stubs evident Dense undergrowth at the base Dieback of the crown observed Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Stag heading	855	16.5	A (iii)
T160	Ash Fraxinus excelsior	13	530	N - 5 S - 4 E - 5 W - 2	M	P	Branch stubs evident Dense undergrowth at the base Dieback of the crown observed Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Hanging dead wood noted	127	6.4	C (i)
T161	English Oak Quercus robur	6	210	3	SM	G	Low crown form No major defects were noted	20	2.5	C (i)
T162	Ash Fraxinus excelsior	7	130	2	SM	G	No major defects were noted	8	1.6	C (i)
T163	English Oak Quercus robur	15	810	8	M	G	Characteristic for species Major dead wood evident in the crown (>75mm) No major defects were noted	297	9.7	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T164	Norway Maple Acer platanoides	6	350	3.5	EM	G	Low crown form Multi leafered form	55	4.2	B (i)
T165	English Oak Quercus robur	10	est 600	5	M	F	Base obscured Dense undergrowth at the base Light ivy cover Minor dead wood evident in the crown (<75mm)	163	7.2	B (i)
T166	English Oak Quercus robur	18	1500	10	V	G	Branch socket cavities observed Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Multi leafered form No major defects were noted	1590	22.5	A (iii)
T167	Sweet Chestnut Castanea sativa	18	est 1200	8	V	G	Bark wounds noted Basal suckers present Branch socket cavities observed Branch stubs evident Delaminating bark on main stem Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm)	1018	18.0	A (iii)
T168	English Oak Quercus robur	14	est 1100	7	V	G	Branch stubs evident Dense undergrowth at the base Even crown form Major dead wood evident in the crown (>75mm) Rpa excavated to north to a depth of 3m	855	16.5	A (iii)
T169	English Oak Quercus robur	13	est 1100	6	V	P	Basal cavity observed Branch stubs evident Broken branches evident Dense undergrowth at the base Dieback of the crown observed Epicormic growth evident within the crown Twin stem failed at 2m damaged limbs to north	855	16.5	A (iii)
T170	English Oak Quercus robur	15	900	8	M	F	Branch stubs evident Dense undergrowth at the base Even crown form Minor dead wood evident in the crown (<75mm) Rpa to West excavated to depth of 3m	366	10.8	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T171	English Oak Quercus robur	15	850	8	M	F	Bark wounds noted Branch stubs evident Minor dead wood evident in the crown (<75mm) Rpa to West and East excavated to depth of 3m	327	10.2	A (i)
T172	English Oak Quercus robur	6	est 200	3	SM	P	Dense undergrowth at the base Dieback of the crown observed Minor dead wood evident in the crown (<75mm)	18	2.4	C (i)
T173	English Oak Quercus robur	14	avg 400	6	EM	F	Branch stubs evident Broken branches evident Dense undergrowth at the base Interlocking crowns Major dead wood evident in the crown (>75mm)	72	4.8	B (ii)
T174	English Oak Quercus robur	14	est 900	7	M	F	Branch stubs evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Multi leaedered form Laetiporus sulphureus, Chicken of the wood/Sulphur Polypore	366	10.8	B (i)
T175	English Oak Quercus robur	18	est 1100	8	V	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Multi leaedered form Storm damage present	855	16.5	B (i)
T176	English Oak Quercus robur	7	est 300	3	EM	F	Typical crown form Unable to gain access	41	3.6	B (i)
T177	English Oak Quercus robur	8	est 630	4.5	M	F	Epicormic growth evident within the crown Main stem failed at 3m	180	7.6	C (i)
T178	English Oak Quercus robur	15	est 1200	7	V	F	Branch socket cavities observed Branch stubs evident Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Flooded with silt to the north	1018	18.0	A (iii)
T179	English Oak Quercus robur	9	est 460	5	EM	P	Dieback of the crown observed Minor dead wood evident in the crown (<75mm) Sparse crown Specimen in extensive decline Flooded at base with silt	96	5.5	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T180	English Oak Quercus robur	9	est 400	5	EM	D	Flooded at base with silt dead tree	N/A	N/A	U
T181	English Oak Quercus robur	9	est 400	5	EM	D	Flooded at base with silt dead tree	N/A	N/A	U
T182	English Oak Quercus robur	16	1080	7	M	F	Branch socket cavities observed Branch stubs evident Minor dead wood evident in the crown (<75mm) No major defects were noted	528	13.0	B (i)
T183	Common Lime Tilia x europaea	8	450	3	EM	F	Bark wounds noted Compacted ground at the base	92	5.4	B (i)
T184	English Oak Quercus robur	11	830	6	M	P	Branch socket cavities observed Broken branches evident Dieback of the crown observed Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm)	312	10.0	C (i)
T185	Common Lime Tilia x europaea	8	450	3	EM	F	Bark wounds noted Compacted ground at the base	92	5.4	B (i)
T186	English Oak Quercus robur	20	est 1000	8	M	G	Bark wounds noted Branch stubs evident Minor dead wood evident in the crown (<75mm)	452	12.0	A (i)
T187	English Oak Quercus robur	17	960	7	M	G	Bark wounds noted Branch stubs evident Minor dead wood evident in the crown (<75mm) Sparse crown	417	11.5	B (i)
T188	English Oak Quercus robur	22	1150	8	OM	G	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Soil bund burying the base by 1m	598	13.8	A (i)
T189	English Oak Quercus robur	17	900	6	M	G	Branch stubs evident Major dead wood evident in the crown (>75mm)	366	10.8	A (i)



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T190	English Oak Quercus robur	18	950	9	M	F	Bark wounds noted Broken branches evident Even crown form Major dead wood evident in the crown (>75mm) Soil bund up to stem on north and south side Rpa excavated to 3m on both sides	408	11.4	B (i)
T191	English Oak Quercus robur	8	est 100 200 200	4	EM	F	Minor dead wood evident in the crown (<75mm) Multi leaved form Soil bund to north and south	41	3.6	C (i)
T192	English Oak Quercus robur	11	est 400	6	EM	F	Base obscured Dense undergrowth at the base Even crown form No major defects were noted	72	4.8	B (i)
T193	English Oak Quercus robur	10	est 400 350	5	EM	F	Branch stubs evident Broken branches evident Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Twin stemmed from base Gravel works surrounding	128	6.4	B (i)
T194	English Oak Quercus robur	11	720	5	M	F	Branch stubs evident Broken branches evident Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Gravel works surrounding	235	8.6	B (i)
T195	English Oak Quercus robur	8	est 6x 150	4	EM	F	Base obscured Branch stubs evident Broken branches evident Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Multi stemmed from base Gravel works surrounding	61	4.4	C (i)
T196	English Oak Quercus robur	12	550	5	EM	F	Branch stubs evident Dense undergrowth at the base Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Overhead cables Pruning wounds noted	137	6.6	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T197	English Oak Quercus robur	7	240	3	SM	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident	26	2.9	C (i)
T198	English Oak Quercus robur	16	740	6	M	F	Branch socket cavities observed 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) Storm damage present	248	8.9	A (i)
T199	English Oak Quercus robur	7	220	N - 2 S - 2 E - 4 W - 0	SM	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident	22	2.6	C (i)
T200	English Oak Quercus robur	7	300 260	4	SM	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident	71	4.8	C (i)
T201	English Oak Quercus robur	14	750	6	M	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm) Pruning wounds noted	254	9.0	A (i)
T202	Hawthorn Crataegus monogyna	7	est 200 200	3	M	F	Base obscured Branch stubs evident Flail damage evident Minor dead wood evident in the crown (<75mm)	36	3.4	C (i)
T203	English Oak Quercus robur	16	800	7	M	F	Branch stubs evident Broken branches evident Close cultivation of the soil Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Typical crown form	290	9.6	A (i)
T204	English Oak Quercus robur	12	610	6	EM	F	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) Typical crown form	168	7.3	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T205	English Oak Quercus robur	13	590	6	EM	F	Bark wounds noted 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) Typical crown form	157	7.1	A (i)
T206	English Oak Quercus robur	5	180	2	SM	F	Flail damage evident	15	2.2	C (i)
T207	English Oak Quercus robur	10	800	6	M	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Flail damage evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	290	9.6	A (i)
T208	Common Walnut Juglans regia	11	est 400 400	5	M	F	Branch stubs evident Browsing damage noted on main stem Low crown form Minor dead wood evident in the crown (<75mm) Twin stemmed from base	145	6.8	B (i)
T209	Sycamore Acer pseudoplatanus	10	est 10x 100	5	M	P	Branch stubs evident Broken branches evident Crossing and rubbing branches Crown had been topped Dense ivy cover on main stem Multi leadered form	45	3.8	C (i)
T210	Sycamore Acer pseudoplatanus	10	est 550	N - 5 S - 4 E - 2 W - 5	M	F	Basal suckers present Branch stubs evident Minor dead wood evident in the crown (<75mm)	137	6.6	B (i)
T211	English Oak Quercus robur	10	est 380	5	EM	F	Branch stubs evident Epicormic growth evident within the crown Flail damage evident Minor dead wood evident in the crown (<75mm)	65	4.6	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T212	English Oak Quercus robur	16	1070	10	M	F	Bark wounds noted Branch socket cavities observed Branch stubs evident Broken branches evident Browsing damage noted on main stem Dieback of the crown observed Epicormic growth evident within the crown Flail damage evident Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Woodpecker holes observed Has veteran qualities apart from major hollowing	518	12.8	A (ii)
T213	English Oak Quercus robur	9	650	6	M	F	Bark wounds noted Branch stubs evident Broken branches evident Browsing damage noted on main stem Epicormic growth evident within the crown Flail damage evident Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	191	7.8	B (i)
T214	English Oak Quercus robur	9	520	4	M	P	Branch stubs evident Dieback of the crown observed Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Sparse crown Specimen in extensive decline Soil mounded around base	122	6.2	C (i)
T215	English Oak Quercus robur	15	1010	10	M	F	Bark wounds noted 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) Soil mounded around base	461	12.1	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T216	English Oak Quercus robur	17	1140	10	M	P	Bark wounds noted Branch stubs evident Broken branches evident Delaminating bark on main stem Dieback of the crown observed Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Specimen in extensive decline Potential transitional veteran stem hollowing not present	588	13.7	A (ii)
T217	English Oak Quercus robur	6	1000	4	M	F	Bark wounds noted Branch stubs evident Broken branches evident 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)	452	12.0	A (i)
T218	English Oak Quercus robur	13	750	6	M	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted	254	9.0	A (i)
T219	English Oak Quercus robur	10	610	5	EM	F	Branch stubs evident Broken branches evident Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted Small hawthorn to base	168	7.3	B (i)
T220	English Oak Quercus robur	14	650	6	M	F	Branch stubs evident Broken branches evident Browsing damage noted on main stem Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted	191	7.8	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T221	English Oak Quercus robur	16	730	6	M	F	Branch stubs evident Broken branches evident Browsing damage noted on main stem Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted Sparse crown Woodpecker holes observed	241	8.8	B (i)
T222	English Oak Quercus robur	18	1230	10	V	F	Branch stubs evident Broken branches evident Browsing damage noted on main stem Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Storm damage present Veteran in age but does not meet criteria	1069	18.5	A (ii)
T223	English Oak Quercus robur	15	750	8	M	F	Branch stubs evident Broken branches evident Browsing damage noted on main stem Epicormic growth evident within the crown Heartwood exposed Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Poached ground at the base Storm damage present	254	9.0	A (i)
T224	English Oak Quercus robur	15	880	8	M	F	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) Poached ground at the base	350	10.6	A (i)
T225	English Oak Quercus robur	16	800	7	M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Dense undergrowth at the base Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	290	9.6	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T226	Goat Willow Salix caprea	4	220	N - 2 S - 0 E - 2 W - 0	M	P	Bark wounds noted Browsing damage noted on main stem Low crown form	22	2.6	C (i)
T227	English Oak Quercus robur	8	600	N - 2 S - 5 E - 5 W - 5	M	F	Branch stubs evident Dense undergrowth at the base Minor dead wood evident in the crown (<75mm)	163	7.2	B (i)
T228	English Oak Quercus robur	8	est 220 120 180	3	M	F	Branch stubs evident Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Multi stemmed from base	43	3.7	C (i)
T229	English Oak Quercus robur	6	est 200	3	SM	F	Branch stubs evident Dense undergrowth at the base Minor dead wood evident in the crown (<75mm)	18	2.4	C (i)
T230	Holly Ilex aquifolium	6	est 200	3	EM	F	Base obscured Dense undergrowth at the base	18	2.4	C (i)
T231	English Oak Quercus robur	8	225 260 380 360	3.5	EM	F	Bark wounds noted Branch stubs evident Browsing damage noted on main stem Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm)	177	7.5	C (i)
T232	English Oak Quercus robur	7	245	3	EM	F	Epicormic growth evident within the crown Low crown form No major defects were noted Poached ground at the base	27	2.9	B (i)
T233	English Oak Quercus robur	7	566	4	EM / M	F	Bark wounds noted Branch socket cavities observed Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Poached ground at the base Small and compact form	145	6.8	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T234	Lombardy Poplar <i>Populus nigra 'Italica'</i>	17	est 565	1	EM	F / G	Characteristic for species No major defects were noted Situated within 2m of road	144	6.8	B (i)
T235	Lombardy Poplar <i>Populus nigra 'Italica'</i>	21	est 780	2	EM	F / G	Characteristic for species Dense undergrowth at the base Included bark union Multi leadered form No major defects were noted Situated within 2m of road	275	9.4	C (i)
T236	Lombardy Poplar <i>Populus nigra 'Italica'</i>	18	est 450	1.5	EM	F / G	Base obscured Characteristic for species Dense undergrowth at the base No major defects were noted Situated within 2m of road	92	5.4	B (i)
T237	Lombardy Poplar <i>Populus nigra 'Italica'</i>	18	est 430	1.5	EM	F / G	Base obscured Characteristic for species Dense undergrowth at the base No major defects were noted Situated within 2m of road	84	5.2	B (i)
T238	English Oak <i>Quercus robur</i>	8.5	252 326	3.5	EM	F	Branch stubs evident Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base Hedgerow tree	77	4.9	B (i)
T239	Lombardy Poplar <i>Populus nigra 'Italica'</i>	14	330	1	EM	G	Characteristic for species No major defects were noted	49	4.0	B (i)
T240	English Oak <i>Quercus robur</i>	12	Over ivy 550 430	3.5	EM	F	Branch stubs evident Dense ivy cover on main stem Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted Hedgerow tree	220	8.4	B (i)



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T241	English Oak Quercus robur	7	650	3.5	EM / M	F	Branch stubs evident Browsing damage noted on main stem Crossing and rubbing branches Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted Hedgerow tree	191	7.8	B (i)
T242	Alder Alnus glutinosa	7.5	195	2	SM	F	Characteristic for species No major defects were noted Poached ground at the base Pruning wounds noted	17	2.3	C (i)
T243	Alder Alnus glutinosa	8	204	2	SM	F	Bark wounds noted Characteristic for species Multi leadered form No major defects were noted Poached ground at the base Pruning wounds noted	19	2.4	C (i)
T244	Silver Birch Betula pendula	16	295 287	3	EM	F	Bark wounds noted Branch stubs evident Broken branches evident Multi stemmed from base Surrounded by ash and oak of a young age	77	4.9	B (i)
T245	Silver Birch Betula pendula	16	est 330 250	3.5	M	F	Base obscured Characteristic for species Dense ivy cover on main stem Dense undergrowth at the base Multi stemmed from base No major defects were noted	78	5.0	B (i)
T246	Lawson Cypress Chamaecyparis lawsoniana	16	est 300	2	EM / M	G	Base obscured Characteristic for species Dense undergrowth at the base	41	3.6	B (i)
T247	Silver Birch Betula pendula	16	est 360	3	EM / M	G	Base obscured Characteristic for species No major defects were noted	59	4.3	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T248	English Oak Quercus robur	16	est 560	6	M	F	Bark wounds noted Branch stubs evident Characteristic for species Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted Pruning wounds noted	142	6.7	B (i)
T249	Crab Apple Malus sylvestris	4	210	2	EM / M	F	Bark wounds noted Heartwood exposed Light ivy cover Limited future potential No major defects were noted	20	2.5	C (i)
T250	English Oak Quercus robur	10	612	6	M	G	Branch stubs evident Characteristic for species Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) No major defects were noted Pruning wounds noted	169	7.3	B (i)
T251	English Oak Quercus robur	3	100	1	Yng	G	Young tree planted amongst shrub mass	5	1.2	C (i)
T252	English Oak Quercus robur	7	780	N - 5 S - 1 E - 4 W - 4	EM	G	Branch stubs evident Characteristic for species Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Multi leadered form No major defects were noted Pruning wounds noted Large stem due to three leaders which have grown together (fused)	275	9.4	B (i)
T253	English Oak Quercus robur	7	710	7	M	G	Branch stubs evident Characteristic for species Epicormic growth evident within the crown Minor dead wood evident in the crown (<75mm) Multi leadered form No major defects were noted Pruning wounds noted Tree tagged multiple times Phone lime runs through crown	228	8.5	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T254	English Oak Quercus robur	14	656	5	EM / M	G	Branch stubs evident Light ivy cover Minor dead wood evident in the crown (<75mm) No major defects were noted Overhead cables Pruning wounds noted Tag number 0040	195	7.9	B (i)
T255	English Oak Quercus robur	14	785	6.5	EM / M	G	Bark wounds noted Branch stubs evident Light ivy cover Minor dead wood evident in the crown (<75mm) No major defects were noted Overhead cables Pruning wounds noted	279	9.4	B (i)
T256	Crab Apple Malus sylvestris	4.5	220	2	EM / M	G	Characteristic for species Pruning wounds noted	22	2.6	B (i)
T257	Sycamore Acer pseudoplatanus	11	400	5	M	F	Bark wounds noted Basal suckers present Branch stubs evident Minor dead wood evident in the crown (<75mm)	72	4.8	C (ii)
T258	English Oak Quercus robur	7	270	3	EM	G	Bark wounds noted Even crown form No major defects were noted Damage to trunk appears to be caused by vehicle collision	33	3.2	B (ii)
T259	English Oak Quercus robur	6.5	300	3	EM	F	Even crown form No major defects were noted Stem has an s shape	41	3.6	C (ii)
T260	English Oak Quercus robur	6	Over ivy 340	2.5	EM	F	Crown had been topped Dense ivy cover on main stem Even crown form Pollarded form(s) Suspect crown has been topped possibly naturally but ivy obscures views	52	4.1	B (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T261	English Oak Quercus robur	14	Over ivy 760	6	M	F	Broken branches evident Dense ivy cover on main stem Established ivy cover Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Sparse crown Showing signs of crown decline Ivy cover high in to the crown extending along most primary laterals	261	9.1	B (ii)
T262	English Oak Quercus robur	12	Over ivy 680	6	M	G	Characteristic for species Dense ivy cover on main stem Established ivy cover Even crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted	209	8.2	A (ii)
T263	English Oak Quercus robur	15	Over ivy 1300	8	M	G	Branch stubs evident Broken branches evident Characteristic for species Dense ivy cover on main stem Established ivy cover Even crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	707	Capped at 15m	A (i),A (ii)
T264	English Oak Quercus robur	16	850	N - 6 S - 9 E - 7 W - 9	M	F	Branch stubs evident Broken branches evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	327	10.2	B (ii)
T265	English Oak Quercus robur	9	Over ivy 900	N - 4 S - 6 E - 7 W - 7	M	F	Branch stubs evident Dense ivy cover on main stem Established ivy cover Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Crown in clear decline	366	10.8	B (ii)
T266	English Oak Quercus robur	12	Over ivy 1100	N - 3 S - 5 E - 5 W - 5	M	G	Base obscured Branch stubs evident Dense ivy cover on main stem Established ivy cover Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Largest specimen of the roadside group	547	13.2	A (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T267	English Oak Quercus robur	7	est 400	5	M	F	Branch stubs evident Broken branches evident Minor dead wood evident in the crown (<75mm) Pruning wounds noted Situating offsite Unable to gain access	72	4.8	B (ii)
T268	Common Lime Tilia x europaea	8	est 8x 250	4	M	G	Basal suckers present Coppiced form Even crown form Multi stemmed from base Corner of field Wasps present at time of survey so assessment made from safe distance	226	8.5	B (ii)
T269	English Oak Quercus robur	7	450	5	EM	G	Even crown form No major defects were noted	92	5.4	A (i),A (ii)
T270	English Oak Quercus robur	6.5	370 350	3	M	F	Low crown form Twin stemmed from base Compact form and stems misshapen	117	6.1	B (ii)
T271	English Oak Quercus robur	8.5	430	5	EM	G	Characteristic for species Even crown form Low crown form No major defects were noted	84	5.2	A (ii)
T272	English Oak Quercus robur	7.5	400	5	EM	G	Characteristic for species Even crown form Low crown form No major defects were noted	72	4.8	A (ii)
T273	English Oak Quercus robur	8.5	250 300 360	5	EM	G	Even crown form Low crown form No major defects were noted	128	6.4	A (ii)
T274	English Oak Quercus robur	6	250 350	3	M	F	Failed trees Specimen has partially uprooted in the past and now leans east Has regained stability it appears and crown is evenly balanced	84	5.2	C (ii)
T275	English Oak Quercus robur	9	710	5	M	G	Characteristic for species Even crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted	228	8.5	A (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T276	English Oak Quercus robur	18	1260	9	V	G	Browsing damage noted on main stem Characteristic for species Even crown form Heartwood exposed Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Pruning wounds noted Storm damage present Typical crown form Prominent side lateral buttress south side which has been damaged possibly through horse browsing Future transitional veteran Fistulina hepatica, Beefsteak fungus Laetiporus sulphureus, Chicken of the wood/Sulphur Polypore	1122	18.9	A (i),A (ii),A (iii)
T277	English Oak Quercus robur	6	210	3	EM	G	Characteristic for species Even crown form No major defects were noted	20	2.5	A (ii)
T278	Ash Fraxinus excelsior	11	6x 350	5	M	G	Coppiced form Old laid forms Single tree with multiple upright stems	333	10.3	B (ii)
T279	English Oak Quercus robur	13	1450	7	V	G	Bark wounds noted Basal cavity observed Branch socket cavities observed Branch stubs evident Broken branches evident Browsing damage noted on main stem Characteristic for species Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Pruning wounds noted Future transitional veteran Laetiporus sulphureus, Chicken of the wood/Sulphur Polypore	1486	21.8	A (i),A (ii),A (iii)
T280	English Oak Quercus robur	11	280 470 440	5	M	G	Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted	223	8.4	A (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T281	English Oak Quercus robur	10	680	5	M	G	Characteristic for species Even crown form Low crown form No major defects were noted	209	8.2	A (ii)
T282	English Oak Quercus robur	12	280 450 430 430 340	6	M	G	Characteristic for species Even crown form Low crown form Multi stemmed from base No major defects were noted	347	10.5	A (ii)
T283	English Oak Quercus robur	13	680	6	M	G	Broken branches evident Characteristic for species Even crown form Included bark union Beside pond	209	8.2	A (ii)
T284	English Oak Quercus robur	15	est 500 380	6	M	G	Broken branches evident Characteristic for species Even crown form Included bark union Beside pond	178	7.5	A (ii)
T285	English Oak Quercus robur	7	240 190	N - 2 S - 4 E - 3 W - 5	EM	F	Branch stubs evident Broken branches evident Suppressed crown form	42	3.7	C (ii)
T286	English Oak Quercus robur	18	1120	6	M	G	Bark wounds noted Broken branches evident Browsing damage noted on main stem Characteristic for species Even crown form Heartwood exposed Included bark union Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Woodpecker holes observed	567	13.4	A (ii)
T287	English Oak Quercus robur	17	960	6	M	G	Broken branches evident Characteristic for species Even crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	417	11.5	A (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T288	English Oak Quercus robur	10	320	5	M	G	Characteristic for species Even crown form Low crown form No major defects were noted	46	3.8	A (ii)
T289	English Oak Quercus robur	9	380	5	M	G	Characteristic for species Even crown form Low crown form No major defects were noted	65	4.6	A (ii)
T290	English Oak Quercus robur	9	410	5	M	G	Characteristic for species Even crown form Low crown form No major defects were noted	76	4.9	A (ii)
T291	Alder Alnus glutinosa	6	est 200	2	EM	F	Minor dead wood evident in the crown (<75mm)	18	2.4	C (ii)
T292	English Oak Quercus robur	16	Over ivy 920	7	M	G	Characteristic for species Dense ivy cover on main stem Established ivy cover Even crown form Minor dead wood evident in the crown (<75mm) Typical crown form	383	11.0	A (ii)
T293	Silver Birch Betula pendula	12	420 480	7	M	F	Characteristic for species Minor dead wood evident in the crown (<75mm) No major defects were noted Twin stemmed from base	184	7.7	B (ii)
T294	Crab Apple Malus sylvestris	8	610	6	M	G	Basal suckers present Crossing and rubbing branches Epicormic growth evident within the crown Even crown form Minor dead wood evident in the crown (<75mm)	168	7.3	A (ii)
T295	Alder Alnus glutinosa	6	510 610	3	M	P	Basal cavity observed Heartwood exposed Hollowing trunks Failed crowns in the past	N/A	N/A	U
T296	English Oak Quercus robur	16	est 1000	7	M	G	No surveyed due to no access Typical crown form	452	12.0	A (ii)



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T297	English Oak Quercus robur	8	140 120 100	3	SM	F	Multi-stemmed from base No major defects Outgrown specimen in hedgerow	20	2.5	C (i)
T298	English Oak Quercus robur	5	100	2	SM	F	No major defects Outgrown specimen in hedgerow	5	1.2	C (i)
T299	English Oak Quercus robur	5	110	2	SM	F	No major defects Outgrown specimen in hedgerow	5	1.3	C (i)
T300	Ash Fraxinus excelsior	12	est 500	6	M	D	Dead specimen	N/A	N/A	U
T301	Whitebeam Sorbus aria	8.5	520	5	M	G	Characteristic for species Even crown form Multi leaved form No major defects were noted Typical crown form Metal tag 0444	122	6.2	B (ii)
T302	English Oak Quercus robur	9.5	360	3	EM	F	Characteristic for species Even crown form Pruning wounds noted Typical crown form	59	4.3	B (ii)
T303	Damson Prunus insititia	4	est 150 150 180 60	N - 4 S - 3 E - 2 W - 2	M	F	Characteristic for species	37	3.4	C (ii)
T304	Whitebeam Sorbus aria	8	200	3	M	F	Characteristic for species Pruning wounds noted	18	2.4	C (ii)
T305	Whitebeam Sorbus aria	8.5	300	3	M	G	Characteristic for species Even crown form Multi leaved form No major defects were noted Typical crown form	41	3.6	B (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T306	Whitebeam Sorbus aria	8.5	310	3	M	G	Branch stubs evident Characteristic for species Even crown form Multi leadered form Pruning wounds noted Typical crown form Leaning stem	43	3.7	B (ii)
T307	Whitebeam Sorbus aria	8.5	300	3	M	G	Branch stubs evident Characteristic for species Even crown form Multi leadered form Pruning wounds noted Typical crown form	41	3.6	B (ii)
T308	Whitebeam Sorbus aria	9.5	360	4	M	G	Basal cavity observed Branch stubs evident Characteristic for species Even crown form Multi leadered form Pruning wounds noted Typical crown form	59	4.3	B (ii)
T309	English Oak Quercus robur	12	440	5	M	G	Characteristic for species Even crown form No major defects were noted Typical crown form	88	5.3	A (ii)
T310	Holly Ilex aquifolium	6	est 300	2	M	G	Offsite and typical for the species	41	3.6	C (ii)
T311	Hawthorn Crataegus monogyna	5	est 350	2	M	F	Heavily festooned with ivy obscuring entire structure Outgrown from hedgerow Topped at 5m for clearance of power lines overhead	55	4.2	C (ii)
T312	Ash Fraxinus excelsior	16	710	Up to 6	M	F	Appears to have been heavily reduced, possibly for historic power line clearance, with regrowth from approximately 9m Would appear to fall outside of the red line but in close proximity Noted a collapsed branch in the lower crown on the northern side	228	8.5	B (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T313	Common Lime Tilia x europaea	13	580	5	M	G	Crown has been previously lifted Epicormic shoots are regularly cut back at the base and on the lower stem Minor dead wood Crown material around adjacent street lamp	152	7.0	B (ii)
T314	Common Lime Tilia x europaea	11	290	4	M	G	Crown has been previously lifted Epicormic shoots are regularly cut back at the base and on the lower stem Minor dead wood	38	3.5	B (ii)
T315	Common Lime Tilia x europaea	13	480	5	M	G	Crown has been previously lifted Epicormic shoots are regularly cut back at the base and on the lower stem Minor dead wood Minor basal wound in bark south facing at ground level	104	5.8	B (ii)
T316	Silver Birch Betula pendula	8	180	2	M	G	Characteristic for the species No obvious defects	15	2.2	B (ii)
T317	Common Lime Tilia x europaea	14	620	N - 6 S - 5 E - 6 W - 4	M	G	Stem possesses a prominent fold in the bark north facing from ground level to approximately 2.5m above ground level Basal and stem epicormic shoots light Minor dead wood	174	7.4	A (ii)
T318	Beech Fagus sylvatica	17	690	6	M	G	Tree positioned slightly outside of red line boundary yet within influencing distance Growing on grass slope facing northwards and therefore base of stem is a lower height than footway / road level Characteristic for the species Crown has been previously lifted	215	8.3	A (ii)
T319	Crack Willow Salix fragilis	20	680 480 630 480	7	M	F	Multiple stemmed form from close to ground level Unions obscured by ivy and specimen is offsite thus access restricted Failure of stems, many fractured and cracked	597	13.8	C (ii)
T320	Common Lime Tilia x europaea	17	960	6	M	G	Dense ivy growth on stem obscuring views and extending high into the crown and main primary branch / limb scaffold Specimen positioned offsite and within private ownership Relatively low hanging crown over the footway	417	11.5	B (ii)
T321	English Oak Quercus robur	12	est 800	Up to 6	M	F	Lower stem is densely burred with high amounts of epicormic shoots Past pruning has been carried out to raise the level of the crown Storm damage branch material within crown Minor dead wood	290	9.6	B (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T322	Flowering Cherry Prunus 'Kanzan'	3	est 350	1	M	F	Heavily reduced resulting in a framework of stubs with regrowth Situated in private garden immediately behind the boundary wall adjacent to the footway	55	4.2	C (ii)
T323	Holly Ilex aquifolium	5	est 200	2	M	G	Standard tree within hedgerow Characteristic for the species	18	2.4	C (ii)
T324	Holly Ilex aquifolium	7	est 400	2	M	G	Standard tree within hedgerow Characteristic for the species	72	4.8	B (ii)
T325	English Oak Quercus robur	17	750	8	M	G	Metal numbered tags affixed to lower stem; 0421 / 1598 Characteristic for the species Major dead wood Broken branches visible	254	9.0	A (ii)
T326	English Oak Quercus robur	13	650	5	M	F	Damaged area to lower stem south side close to ground level whereby an area of bark has been removed creating an open wound Heartwood has become exposed but at present decay is restricted to patches on the surface and limited penetration beyond Crown supports major dead wood Noted a prominent bulge / line feature in the bark extending the full circumference of the lower stem at approximately 0.5m above ground level (possibly included wire?)	191	7.8	B (ii)
T327	Whitebeam Sorbus aria	9	350	4	M	F	Branch socket cavities visible Characteristic for the species	55	4.2	C (ii)
T328	Ash Fraxinus excelsior	15	450	6	M	G	Characteristic for the species	92	5.4	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
<b>GROUPS OF TREES</b>										
G1	Ash Fraxinus excelsior Common Lime Tilia x europaea Elder Sambucus nigra Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Wild Cherry Prunus avium Hazel Corylus avellana	12	upto 235	3	SM	F	Buffer planting Browsing damage noted on main stem Dead trees noted Interlocking crowns Low crown form Multi stemmed and single stem forms	25	2.8	B (ii)
G2	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Damson Prunus insititia	4.5	6x 60	2	EM	P	Un-maintained hedgerow Gaps present Multi stemmed from base Outgrown forms Overhead cables	10	1.8	C (ii)
G3	Hawthorn Crataegus monogyna	4.5	80 70 50 40	2	EM	P	Un-maintained hedgerow Gaps present Multi stemmed from base Outgrown forms	7	1.5	C (ii)
G4	Hawthorn Crataegus monogyna	7	upto 160	2	EM	P	Un-maintained hedgerow Dead trees noted Gaps present Multi stemmed from base Outgrown forms	12	1.9	C (ii)
G5	Ash Fraxinus excelsior Common Lime Tilia x europaea Crack Willow Salix fragilis Wild Cherry Prunus avium	8.5	upto 420	3	SM	F	Group of 6 trees Bark wounds noted Basal cavity observed Browsing damage noted on main stem Poached ground at the base	80	5.0	B (ii)
G6	Lombardy Poplar Populus nigra 'Italica'	17.5	472	2.5	EM	G	Group of 7 trees Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form	101	5.7	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G7	Blackthorn Prunus spinosa Common Lime Tilia x europaea Field Maple Acer campestre Sycamore Acer pseudoplatanus	9	avg 300	3	EM	G	Flail damage Interlocking crowns No major defects were noted Gaps present	41	3.6	B (ii)
G8	English Oak Quercus robur	13	avg 500	5	EM	F	5 trees with deep ditch at base Bark wounds noted Dieback of the crown noted in single specimen Minor dead wood evident in the crown (<75mm) Epicormic growth evident within the crown Typical crown form	113	6.0	B (i)
G9	Blackthorn Prunus spinosa Elder Sambucus nigra Goat Willow Salix caprea Hawthorn Crataegus monogyna Hazel Corylus avellana	5	avg 70	2	EM	P	Un-maintained hedgerow Dead trees noted Gaps present Multi stemmed from base Outgrown forms Self-seeded trees within hedgerow	2	0.8	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G10	Ash Fraxinus excelsior English Oak Quercus robur Norway Maple Acer platanoides Norway Maple King Acer platanoides 'Crimson King'	12	avg 520	4	EM / M	F	Linear planting within road side verge Bark wounds noted Branch stubs evident Crossing and rubbing branches No major defects were noted Pruning wounds noted Typical crown form	122	6.2	B (ii)
G11	Ash Fraxinus excelsior English Oak Quercus robur Hawthorn Crataegus monogyna Norway Maple Acer platanoides Norway Maple King Acer platanoides 'Crimson King'	12	avg 520	4	EM / M	F	Linear planting within road side verge Bark wounds noted Branch stubs evident Crossing and rubbing branches No major defects were noted Pruning wounds noted Typical crown form	122	6.2	B (ii)
G12	Ash Fraxinus excelsior English Oak Quercus robur Sycamore Acer pseudoplatanus Wild Cherry Prunus avium	7	upto 180	2	SM	F	Sporadic self-seeded trees within hedgerow Typical crown forms	15	2.2	C (ii)
G13	Ash Fraxinus excelsior English Oak Quercus robur Sycamore Acer pseudoplatanus	11	avg 200	3	EM	G	Dead trees noted Interlocking crowns Low crown form No major defects were noted Typical crown form	18	2.4	B (ii)
G14	Ash Fraxinus excelsior English Oak Quercus robur	12	upto 190 180 220 265	5	EM / M	P	Basal cavity observed Limited future potential Low crown forms Multi stemmed likely lapsed coppice Close cultivation of soil	85	5.2	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G15	Ash Fraxinus excelsior Holly Ilex aquifolium	12	upto 443 472	6	M	P	3 trees Bark wounds noted with heartwood exposed Basal cavity observed Compacted ground at the base Dead trees noted Limited future potential Major dead wood evident in the crown (>75mm) Close cultivation	N/A	N/A	U
G16	Silver Birch Betula pendula	13	avg 300	3	EM	G	Planting along railway line Interlocking crowns No major defects were noted Typical crown form Moderate screening value	41	3.6	B (ii)
G17	Common Lime Tilia x europaea English Oak Quercus robur Field Maple Acer campestre Wild Cherry Prunus avium Swedish Whitebeam Sorbus intermedia	7	avg 280	2	EM	G	Buffer planting along railway line Interlocking crowns Low crown forms No major defects were noted Typical crown forms	35	3.4	B (ii)
G18	English Oak Quercus robur	11	upto 320	4	EM	F	Planting along railway line Gaps present Crowns reduced to east Pruning wounds noted	46	3.8	B (ii)
G19	English Oak Quercus robur Aspen Populus tremula	21	upto 640	7	M	F	Basal suckers present Dead and failed trees noted Minor dead wood evident in the crown (<75mm) Typical crown forms	185	7.7	C (ii)
G20	Ash Fraxinus excelsior Common Lime Tilia x europaea English Oak Quercus robur Wild Cherry Prunus avium	12	240 260 180	4	EM	F	Hedgerow specimens Multi stemmed and single stem forms No major defects were noted Typical crown form	71	4.8	B (ii)



Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G21	Hawthorn Crataegus monogyna Norway Maple Acer platanoides Norway Maple Crimson King Acer platanoides 'Crimson King'	15	avg 600	4	EM / M	F	Linear planting within road side verge Bark wounds noted Branch stubs evident Crossing and rubbing branches No major defects were noted Pruning wounds noted Typical crown form	163	7.2	B (ii)
G22	Aspen Populus tremula	19.5	upto 500	4	EM	F	Minor dead wood evident in the crown (<75mm) No major defects were noted Typical crown form Close cultivation of soil	113	6.0	B (i)
G23	Ash Fraxinus excelsior English Oak Quercus robur Field Maple Acer campestre Sycamore Acer pseudoplatanus	10	avg 220	3	EM	F	Epicormic growth evident within the crown Flail damage Interlocking crowns Close cultivation of soil	22	2.6	B (ii)
G24	Elder Sambucus nigra English Oak Quercus robur Silver Birch Betula pendula Aspen Populus tremula Swedish Whitebeam Sorbus intermedia	14	upto 600	5	EM	F	Planting along railway line Epicormic growth evident within the crown Interlocking crowns Minor dead wood evident in the crown (<75mm) Multi stemmed and single stem forms Typical crown form	163	7.2	B (ii)
G25	Ash Fraxinus excelsior Silver Birch Betula pendula Rowan Sorbus aucuparia	10	avg 220	3	SM	F	Hedgerow specimens Branch stubs evident No major defects were noted Pruning wounds noted Typical crown form Close cultivation of soil	22	2.6	C (ii)
G26	Hawthorn Crataegus monogyna Norway Maple Acer platanoides Sycamore Acer pseudoplatanus Sweet Chestnut Castanea sativa	10	upto 150	3	SM / EM	F	Un-maintained hedgerow Flail damage Interlocking crowns Outgrown forms Larger individual trees	10	1.8	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G27	English Oak Quercus robur Sweet Chestnut Castanea sativa	11.5	upto 400	3	SM / EM	G	Close cultivation of the soil Interlocking crowns No major defects were noted Typical crown form	72	4.8	B (ii)
G28	Ash Fraxinus excelsior English Oak Quercus robur	16	avg 350	3	EM	F	No major defects were noted Pruning wounds noted Multi stemmed and single stem forms Situating offsite Typical crown form	55	4.2	B (ii)
G29	Hawthorn Crataegus monogyna Norway Maple Acer platanoides Sycamore Acer pseudoplatanus Hornbeam Carpinus betulus	11	upto 250	3	EM	G	Interlocking crowns Low crown form No major defects were noted Single stem forms Typical crown form	28	3.0	B (ii)
G30	Lombardy Poplar Populus nigra 'Italica'	25	avg 540	3	M	F	Buffer planting Broken branches and branch stubs evident Characteristic for species Typical crown form	132	6.5	B (ii)
G31	Ash Fraxinus excelsior English Oak Quercus robur	11	avg 300	4	EM	F	Hedgerow specimens Bark wounds noted Dead trees noted No major defects were noted Overhead cables Pruning wounds noted Typical crown forms	41	3.6	B (ii)
G32	Elder Sambucus nigra Goat Willow Salix caprea Hawthorn Crataegus monogyna	7	avg 6x 50	2	EM / M	F	Characteristic for species Close cultivation of the soil Dense undergrowth at the base Multi leadered forms Multi stemmed from base No major defects were noted Sporadic self-seeded group of trees	7	1.5	B (ii)
G33	Ash Fraxinus excelsior Hawthorn Crataegus monogyna	16	upto 300	5	EM	G	Branch stubs evident Close cultivation of the soil Epicormic growth evident within the crown Flail damage evident Interlocking crowns No major defects were noted	41	3.6	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G34	Ash Fraxinus excelsior English Oak Quercus robur Whitebeam Sorbus aria	14	upto 480	4.5	EM	F / G	Characteristic for species Close cultivation of the soil Minor dead wood evident in the crown (<75mm)	104	5.8	B (ii)
G35	Whitebeam Sorbus aria	6.5	avg 280	3	EM / M	G	Characteristic for species Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Pruning wounds noted Situated offsite	35	3.4	B (ii)
G36	Leyland Cypress Cupressocyparis leylandii	10	est 200	1.5	EM	F / G	Characteristic for species Close cultivation of the soil Crown had been topped Partially maintained planted hedgerow	18	2.4	B (iii)
G37	Norway Maple Acer platanoides	10	upto 260	3	EM	F	Characteristic for species Low crown form No major defects were noted 3 trees	31	3.1	B (ii)
G38	Hawthorn Crataegus monogyna Wild Cherry Prunus avium Damson Prunus insititia Holly Ilex aquifolium	7	avg 50 60 80	1	EM / M	F	Characteristic for species Close cultivation of the soil Gaps present in hedgerow Un-maintained hedgerow Sporadic positions	6	1.3	C (iii)
G39	English Oak Quercus robur Field Maple Acer campestre Goat Willow Salix caprea Hawthorn Crataegus monogyna	7	upto 300	3	EM	G	Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Multi leadered form Multi stemmed from base Positioned along railway embankment	41	3.6	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G40	English Oak Quercus robur Field Maple Acer campestre Goat Willow Salix caprea Hawthorn Crataegus monogyna	7	upto 300	3	EM	G	Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Low crown form Multi leadered form Multi stemmed from base Positioned along railway embankment	41	3.6	B (ii)
G41	Common Lime Tilia x europaea Hawthorn Crataegus monogyna	7	avg 230	2	SM / EM	G	Characteristic for species No major defects were noted Situating offsite	24	2.8	B (ii)
G42	Ash Fraxinus excelsior Common Lime Tilia x europaea	7	avg 250	3	SM / EM	G	Characteristic for species No major defects were noted Situating offsite	28	3.0	B (ii)
G43	Hawthorn Crataegus monogyna	4	avg 70	1	M	G	Maintained hedgerow	2	0.8	B (ii)
G44	Wild Cherry Prunus avium	7	est 200	3	EM	G	Characteristic for species Close cultivation of the soil Interlocking crowns Low crown form	18	2.4	B (ii)
G45	Wild Cherry Prunus avium	7	est 200	3	EM	G	Characteristic for species Close cultivation of the soil Interlocking crowns Low crown form	18	2.4	B (ii)
G46	Hawthorn Crataegus monogyna	4	avg 70	1	M	G	Dead trees noted Maintained hedgerow	2	0.8	B (ii)
G47	Alder Alnus glutinosa	10	upto 350	2	EM	F / G	Characteristic for species Close cultivation of the soil Limited future potential	55	4.2	C (ii)
G48	Hawthorn Crataegus monogyna Alder Alnus glutinosa Hazel Corylus avellana	10	avg 240	3	EM / M	F	Bark wounds noted Basal cavity observed Branch stubs evident Close cultivation of the soil Dense undergrowth at the base Limited future potential Several dead stems amongst the group	26	2.9	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G49	Ash Fraxinus excelsior Beech Fagus sylvatica Elder Sambucus nigra Hawthorn Crataegus monogyna Silver Birch Betula pendula Sycamore Acer pseudoplatanus Hazel Corylus avellana Holly Ilex aquifolium Whitebeam Sorbus aria	14	avg 280	3	SM / EM	F	Bark wounds noted Branch stubs evident Close cultivation of the soil Dense undergrowth at the base Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) Dense group of mixed tree species of similar age classes and conditions	35	3.4	B (ii)
G50	Beech Fagus sylvatica English Oak Quercus robur Norway Maple Acer platanoides Sycamore Acer pseudoplatanus Hazel Corylus avellana	12	upto 520	3	EM	F	Bark wounds noted Branch stubs evident Characteristic for species Close cultivation of the soil Epicormic growth evident within the crown Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Multi leaved form Positioned around attenuation basin	122	6.2	B (ii)
G51	Silver Birch Betula pendula	11	upto 240	3	EM	F / G	Characteristic for species No major defects were noted	26	2.9	B (ii)
G52	Ash Fraxinus excelsior Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus	2	upto 550	1	EM / M	F	Crossing and rubbing branches Old laid forms NB height increases to 4m in the central section close to H51 and returns to 2m at the southern end	137	6.6	B (ii)
G53	English Oak Quercus robur Austrian Pine Pinus nigra ssp. Nigra	10	est 400	3	EM / M	F	Characteristic for species Dense undergrowth at the base Limited future potential Minor dead wood evident in the crown (<75mm)	72	4.8	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G54	English Oak Quercus robur Hawthorn Crataegus monogyna Holly Ilex aquifolium	12	upto 350	5	EM / M	G	Bark wounds noted Branch stubs evident Characteristic for species Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted 3 larger oaks set amongst outgrown hedgerow tree cover	55	4.2	B (ii)
G55	English Oak Quercus robur Hawthorn Crataegus monogyna Wych Elm Ulmus glabra English Elm Ulmus procera Holly Ilex aquifolium Mountain Ash Sorbus aucuparia	12	upto 350	5	EM / M	G	Bark wounds noted Branch stubs evident Characteristic for species Dead trees noted Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted 8 larger oaks set amongst outgrown hedgerow tree cover	55	4.2	B (ii)
G56	English Oak Quercus robur Hawthorn Crataegus monogyna Wild Cherry Prunus avium Hazel Corylus avellana Mountain Ash Sorbus aucuparia	13	upto 500	4.5	EM / M	F	Characteristic for species Close cultivation of the soil Dead trees noted Epicormic growth evident within the crown Light ivy cover Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted	113	6.0	B (ii)
G57	Leyland Cypress Cupressocyparis leylandii	7	est 80 100 150 180	1	M	F	Crown had been heavily reduced Dead trees noted Limited future potential	32	3.2	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G58	Blackthorn Prunus spinosa Wild Cherry Prunus avium Alder Alnus glutinosa Apple Malus domestica Damson Prunus insititia Hazel Corylus avellana Plum Prunus domestica Weeping Willow Salix x sepulcralis 'Chrycosoma' Fig Ficus carica English Oak Quercus robur Hawthorn Crataegus monogyna Alder Alnus glutinosa	16	avg 250	5	EM / M	F / G	Bark wounds noted Branch socket cavities observed Branch stubs evident Close cultivation of the soil Low crown form Situating offsite Garden group	28	3.0	B (ii)
G59	Crataegus monogyna Alder Alnus glutinosa	8	upto 250	3	EM	G	Characteristic for species Low crown form Multi leaved form Multi stemmed from base No major defects were noted Sporadic self-seeded group of trees	28	3.0	B (ii)
G60	Alder Alnus glutinosa	12	avg 400	4	EM / M	F	Characteristic for species Epicormic growth evident within the crown Interlocking crowns Low crown form Multi stemmed from base No major defects were noted	72	4.8	B (ii)
G61	Hawthorn Crataegus monogyna Damson Prunus insititia	3	avg 50 60 80	1	EM / M	F	Characteristic for species Close cultivation of the soil Dead trees noted Gaps present in hedgerow Un-maintained hedgerow	6	1.3	C (iii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G62	Ash Fraxinus excelsior Crack Willow Salix fragilis Elder Sambucus nigra Hawthorn Crataegus monogyna Aspen Populus tremula English Elm Ulmus procera Hazel Corylus avellana Prunus sp.	11	est 6x 190	5	EM / M	F	Crossing and rubbing branches Dead trees noted Dense ivy cover on main stem Dense undergrowth at the base Minor dead wood evident in the crown (<75mm) Multi stemmed from base Roadside planting	98	5.6	C (ii)
G63	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Wych Elm Ulmus glabra Aspen Populus tremula English Elm Ulmus procera Hazel Corylus avellana Holly Ilex aquifolium Prunus sp.	7	est 150	3	EM / M	P / F	Base obscured Crossing and rubbing branches Dense undergrowth at the base Outgrown hedgerow	10	1.8	C (ii)
G64	Sycamore Acer pseudoplatanus	8	upto 250	2	SM	F	Branch stubs evident Flail damage evident Multi stemmed from base Single stem forms	28	3.0	C (ii)



Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G65	Ash Fraxinus excelsior Crack Willow Salix fragilis Elder Sambucus nigra English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Horse Chestnut Aesculus hippocastanum Silver Birch Betula pendula Wild Cherry Prunus avium Alder Alnus glutinosa Mountain Ash Sorbus aucuparia	12	est 350	6	EM / M	F	Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Crossing and rubbing branches Dead trees noted Dense undergrowth at the base Dieback of the crown observed Interlocking crowns Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Boundary tree cover along canal high quantity of self set material on edge	55	4.2	B (ii)
G66	English Oak Quercus robur Hawthorn Crataegus monogyna Silver Birch Betula pendula Alder Alnus glutinosa Hazel Corylus avellana Mountain Ash Sorbus aucuparia	13	upto 480	6	EM / M	F	Branch stubs evident Broken branches 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) Single stem forms Old laid forms in hedgerow	104	5.8	B (ii)
G67	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Holly Ilex aquifolium	5	est 100 100 100	4	EM	F	Base obscured Dense undergrowth at the base Interlocking crowns Low crown form Outgrown hedgerow	14	2.1	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G68	English Oak Quercus robur	14	upto 400	10	EM	F	Branch stubs evident Epicormic growth evident within the crown Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted	72	4.8	B (ii)
G69	lime sp.	6	upto 150 150	3	SM / EM	F	Base obscured Crossing and rubbing branches Interlocking crowns Low crown form Multi stemmed from base	20	2.5	C (ii)
G70	Ash Fraxinus excelsior English Oak Quercus robur Hawthorn Crataegus monogyna English Elm Ulmus procera Prunus sp.	12	est 200 200 200	8	EM / M	F	Base obscured Branch stubs evident Broken branches evident Crossing and rubbing branches Dense ivy cover on main stem Dense undergrowth at the base Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base Situating offsite	54	4.2	C (ii)
G71	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Holly Ilex aquifolium Prunus sp.	7	est 100 100 100	3	EM	P / F	Broken branches evident Crossing and rubbing branches Dense ivy cover on main stem Dense undergrowth at the base Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Sparse crown	14	2.1	C (ii)
G72	Hawthorn Crataegus monogyna Damson Prunus insititia	4.5	avg 140	2	SM	P	Dense undergrowth at the base Low crown form Multi leadered form Sporadic self-seeded group of trees	9	1.7	C (ii)
G73	Blackthorn Prunus spinosa English Oak Quercus robur Goat Willow Salix caprea Rowan Sorbus aucuparia	2	upto 420	4	EM	G	Branch stubs evident Flail damage evident Gaps present in hedgerow Multi stemmed from base Single stem forms	80	5.0	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G74	English Oak Quercus robur Aspen Populus tremula	16	avg 300	4	EM	F	Branch stubs evident Dead trees noted Dense undergrowth at the base Etiolated form Interlocking crowns Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Suppressed crown form	41	3.6	C (ii)
G75	English Oak Quercus robur Silver Birch Betula pendula	10	avg 310	4	EM	F	Characteristic for species Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm)	43	3.7	B (ii)
G76	Sambucus nigra Hawthorn Crataegus monogyna Alder Alnus glutinosa	8	avg 250	4	EM	P	Dense undergrowth at the base Failed trees Limited future potential Sporadic self-seeded group of trees	28	3.0	C (ii)
G77	Hawthorn Crataegus monogyna	1.5	upto 75 75 75	0.5	EM	P	Three separate sections with gaps inbetween Maintained	8	1.6	C (ii)
G78	Hawthorn Crataegus monogyna Hazel Corylus avellana	1.5	upto 75 75 75	0.5	EM	P	Contains a small section of hazel to the west of the gateway Laid form Maintained	8	1.6	C (ii)
G79	English Oak Quercus robur Hawthorn Crataegus monogyna Silver Birch Betula pendula Damson Prunus insititia Hazel Corylus avellana	11	avg 330	4	EM	F	Bark wounds noted Branch stubs evident Broken branches evident Close cultivation of the soil Minor dead wood evident in the crown (<75mm) Multi stemmed from base Pruning wounds noted	49	4.0	B (ii)
G80	Aspen Populus tremula	24	avg 510	6	M	F	Branch stubs evident Broken branches evident Characteristic for species Minor dead wood evident in the crown (<75mm) 10m spacing	118	6.1	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G81	English Oak Quercus robur Hawthorn Crataegus monogyna	4	avg 50	1	EM	F	Characteristic for species Un-maintained hedgerow Would benefit from laying	1	0.6	B (ii)
G82	English Oak Quercus robur	8	avg 435	4	SM	F	Characteristic for species No major defects were noted Typical crown form Situated within hedge	86	5.2	B (ii)
G83	Blackthorn Prunus spinosa English Oak Quercus robur Hawthorn Crataegus monogyna Hazel Corylus avellana	9	upto 330	3	EM	P	Branch stubs evident Flail damage evident Gaps present in hedgerow Limited future potential Sporadic self-seeded group of trees Un-maintained hedgerow	49	4.0	C (ii)
G84	Elder Sambucus nigra Sycamore Acer pseudoplatanus Aspen Populus tremula False Acacia Robinia pseudoacacia	22	upto 620	4	EM / M	F	Bark wounds noted Branch stubs evident Broken branches evident Characteristic for species Dead trees noted Dense ivy cover on main stem Dense undergrowth at the base Failed trees Light ivy cover Minor dead wood evident in the crown (<75mm) Suppressed crown form Small plantation of mainly mature upper canopy aspen trees	174	7.4	B (iii)
G85	English Oak Quercus robur Hawthorn Crataegus monogyna Silver Birch Betula pendula Sycamore Acer pseudoplatanus	12	upto 550	3.5	EM / M	F / G	Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Dead trees noted Epicormic growth evident within the crown Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted	137	6.6	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G86	False Acacia Robinia pseudoacacia	12	avg 300	3.5	EM / M	F / G	Branch stubs evident Characteristic for species Close cultivation of the soil Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted	41	3.6	B (ii)
G87	Sycamore Acer pseudoplatanus Wild Cherry Prunus avium	7	260	3	SM	P	Bark wounds noted Branch stubs evident Broken branches evident Compacted ground at the base Adjacent to site access for quarry	31	3.1	C (i)
G88	English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna	6	120	2.5	SM / EM	F / G	Outgrown hedgerow	7	1.4	B (ii)
G89	Norway Maple Acer platanoides Sycamore Acer pseudoplatanus Sycamore (purple leaved) Acer pseudoplatanus 'Atropurpureum'	7	190 150	4	SM	P / F	Bark wounds noted Branch stubs evident Multi leadered form Sparse crown	27	2.9	C (i)
G90	English Oak Quercus robur Holly Ilex aquifolium Sweet Chestnut Castanea sativa	8	est 150	3	SM	P / F	Dense undergrowth at the base Light ivy cover Sporadic self-seeded group of trees	10	1.8	C (i)
G91	Goat Willow Salix caprea Silver Birch Betula pendula	6	100	2	Yng / SM	D / P	Specimen in extensive decline Sporadic self-seeded group of trees	5	1.2	C (i)
G92	English Oak Quercus robur	15	700	7	EM / M	G	Branch stubs evident Interlocking crowns Minor dead wood evident in the crown (<75mm) Adjacent to quarry bund	222	8.4	B (ii)
G93	Goat Willow Salix caprea Silver Birch Betula pendula	5	est 50	1	Yng	F	Growing on soil mound in silt lagoon	1	0.6	C (i)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G94	English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Holly Ilex aquifolium	8	est 350	4	SM / EM	F	Outgrown hedgerow	55	4.2	B (ii)
G95	English Oak Quercus robur	13	850	6	M	F	Branch stubs evident Broken branches evident Major dead wood evident in the crown (>75mm) Broken limbs to the north	327	10.2	B (i)
G96	Goat Willow Salix caprea Hawthorn Crataegus monogyna	4	50	2	Yng / SM	D	Dead trees willow surviving but in poor condition	N/A	N/A	U
G97	English Oak Quercus robur	14	470	6	EM	G	Branch stubs evident Broken branches evident Dense undergrowth at the base Broken limbs adjacent to access road	100	5.6	B (ii)
G98	Balsam Poplar (Western) Populus trichocarpa	21	450	4	EM	G	Minor dead wood evident in the crown (<75mm) Typical crown form Growing in depression in ground possibly an old pond	92	5.4	B (ii)
G99	English Oak Quercus robur	13	upto 800	6	M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Epicormic growth evident within the crown Interlocking crowns Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Storm damage present Gravel works surroundings	290	9.6	A (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G100	English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Wild Cherry Prunus avium Alder Alnus glutinosa Elder	11	upto 450	3	EM / M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Dense undergrowth at the base Epicormic growth evident within the crown Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm)	92	5.4	B (ii)
G101	Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Wild Cherry Prunus avium Alder Alnus glutinosa Swedish Whitebeam Sorbus intermedia Ash	10	est 550	4	SM / EM / M	F	Broken branches evident Crossing and rubbing branches Dense ivy cover on main stem Dense undergrowth at the base Dieback of the crown observed Flail damage evident Minor dead wood evident in the crown (<75mm) Some trees have been pollarded	137	6.6	C (ii)
G102	Fraxinus excelsior English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Apple Malus domestica	6	est 150 150 150	2	EM	F	Crossing and rubbing branches Dense ivy cover on main stem Dense undergrowth at the base Interlocking crowns Low crown form Outgrown hedgerow Overhead cables Group is divided down the middle by power cables	31	3.1	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G103	Elder Sambucus nigra English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Alder Alnus glutinosa Apple Malus domestica	10	est 400	4	EM	F	Crossing and rubbing branches Dense ivy cover on main stem Dense undergrowth at the base Interlocking crowns Low crown form Outgrown hedgerow Overhead cables Group is divided down the middle by power cables in places edge of woodland	72	4.8	B (ii)
G104	English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Silver Birch Betula pendula Sycamore Acer pseudoplatanus Turkey Oak Quercus cerris Scots Pine Pinus sylvestris	10	est 350	4	EM	F	Base obscured Crossing and rubbing branches Dieback of the crown observed Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm)	55	4.2	B (ii)
G105	Common Lime Tilia x europaea Sycamore Acer pseudoplatanus Turkey Oak Quercus cerris	12	est 250	4	EM	F	Base obscured Crossing and rubbing branches Epicormic growth evident within the crown Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm)	28	3.0	A (i)
G106	Crack Willow Salix fragilis	12	520	6	EM / M	F	Minor dead wood evident in the crown (<75mm) Multi leadered form Soil mounded around base	122	6.2	C (ii)



Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G107	Crack Willow Salix fragilis English Oak Quercus robur Hawthorn Crataegus monogyna Alder Alnus glutinosa	14	upto 630	7	EM / M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form Multi stemmed from base Single stem forms Trees around pond	180	7.6	B (ii)
G108	English Oak Quercus robur Silver Birch Betula pendula Wild Cherry Prunus avium Turkey Oak Quercus cerris	12	upto 650	5	M	F	Bark wounds noted Basal cavity observed Branch stubs evident Broken branches evident Epicormic growth evident within the crown Heartwood exposed Interlocking crowns Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) One tree up to 990 stem	191	7.8	B (ii)
G109	Goat Willow Salix caprea Prunus sp.	5	250	3	EM	P	Base obscured Crossing and rubbing branches Dense undergrowth at the base 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
G110	English Oak Quercus robur Hawthorn Crataegus monogyna Horse Chestnut Aesculus hippocastanum Wild Cherry Prunus avium Holly Ilex aquifolium Weeping Willow Salix x sepulcralis 'Chrycosoma' Austrian Pine Pinus nigra ssp. Nigra Scots Pine Pinus sylvestris Tree of Heaven Ailanthus altissima	14	580	6	EM / M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Epicormic growth evident within the crown Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Pruning wounds noted Garden group	152	7.0	B (ii)
G111	Field Maple Acer campestre Goat Willow Salix caprea Hawthorn Crataegus monogyna	7	avg 9x 120	2	EM / M	F / G	Characteristic for species Interlocking crowns Low crown form Multi stemmed from base Poached ground at the base	59	4.3	C (ii)
G112	English Oak Quercus robur	8	upto 525	3.5	EM / M	F	Bark wounds noted Branch stubs evident Light ivy cover Minor dead wood evident in the crown (<75mm) Multi leadered form No major defects were noted Row of uniform small and compact oak trees stood amongst hedgerow	125	6.3	B (ii)
G113	Elder Sambucus nigra Hawthorn Crataegus monogyna English Elm Ulmus procera	6	avg 50 70 110 100	2	SM / EM	F	Dead trees noted Low crown form Outgrown hedgerow Dead elms amongst group	13	2.1	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G114	Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna Alder Alnus glutinosa Hazel Corylus avellana	6.5	avg 110	2	EM / M	F	Multi leadered form Multi stemmed from base Outgrown hedgerow	5	1.3	C (ii)
G115	Blackthorn Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna Alder Alnus glutinosa	4	avg 70	2	EM / M	F	Multi leadered form Multi stemmed from base Outgrown hedgerow	2	0.8	C (ii)
G116	English Oak Quercus robur	8.5	upto 500	3.5	EM	F	Bark wounds noted Branch stubs evident	113	6.0	C (ii)
G117	Leyland Cypress Cupressocyparis leylandii	12	avg 250	2	EM	G	Characteristic for species Low crown form Multi leadered form	28	3.0	B (ii)
G118	Sycamore Acer pseudoplatanus Apple Malus domestica Lawson Cypress Chamaecyparis lawsoniana Leyland Cypress Cupressocyparis leylandii	8	upto 185 320	2	SM / EM	F	Characteristic for species Limited future potential Low crown form Sporadic self-seeded group of trees Old landscape planting	62	4.4	C (ii)
G119	Lawson Cypress Chamaecyparis lawsoniana Leyland Cypress Cupressocyparis leylandii Norway Spruce Picea abies	8	upto 185 300	2	SM / EM	F	Characteristic for species Limited future potential Low crown form Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted Sporadic self-seeded group of trees Old landscape planting Row of interlocking leylandii 1 x single spruce	56	4.2	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G120	Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Holly Ilex aquifolium	8	upto 120 110 90 80	2	SM / EM	F	Characteristic for species Limited future potential Low crown form Multi leadered form Multi stemmed from base	19	2.4	C (ii)
G121	Elder Sambucus nigra Hawthorn Crataegus monogyna Alder Alnus glutinosa Apple Malus domestica Laural Prunus Laurocerasus Privet Ligustrum ovalifolium Purple Plum Prunus cerasifera Pissardi	9	upto 375	3	SM / EM / M	F	Bark wounds noted Branch stubs evident Characteristic for species Dense undergrowth at the base Dieback of the crown observed Interlocking crowns Low crown form Multi leadered form Multi stemmed from base Mix of landscape planted trees on site frontage which have become outgrown and developed with poor forms Understory bramble growth throughout group and competing with trees Several trees in a poor condition	64	4.5	C (ii)
G122	Hawthorn Crataegus monogyna Holly Ilex aquifolium Privet Ligustrum ovalifolium Leyland Cypress Cupressocyparis leylandii	15	upto 410	3	EM / M	F / G	Characteristic for species No major defects were noted Landscape planting Two larger leylandii set amongst trimmed group of interlocking privet and holly shrubs	76	4.9	B (ii)
G123	Swedish Whitebeam Sorbus intermedia	12	upto 560	4	M	F / G	Bark wounds noted Branch stubs evident Characteristic for species Compacted ground at the base Multi leadered form No major defects were noted Three trees growing within 2m of one and other to form one large uniform and balanced crown	142	6.7	B (ii)
G124	Apple Malus domestica	5	avg 190	2	EM / M	D / P	Bark wounds noted Dieback of the crown observed Limited future potential Minor dead wood evident in the crown (<75mm) Specimen in extensive decline Sparse in appearance	N/A	N/A	U

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G125	Laburnum Laburnum anagyroides	5.5	upto 340	2.5	EM / M	F	Bark wounds noted Characteristic for species Compacted ground at the base Limited future potential Sparse in appearance	52	4.1	C (ii)
G126	Ash Fraxinus excelsior English Oak Quercus robur Wild Cherry Prunus avium Purple Plum Prunus cerasifera Pissardii Cotoneaster Dogwood Cornus sanguinea	15	upto 250 380 320	4	EM	F / G	Characteristic for species Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Pruning wounds noted Landscape buffer group along edge of pawned area	140	6.7	B (ii)
G127	Wild Cherry Prunus avium Laural Prunus Laurocerasus Purple Plum Prunus cerasifera Pissardii	8	avg 50 70 110	2	SM / EM	F	Limited future potential Low crown form No major defects were noted Outgrown hedgerow Strip of mainly laurel about 20m in length	9	1.7	C (ii)
G128	English Oak Quercus robur Hawthorn Crataegus monogyna Silver Birch Betula pendula Apple Malus domestica	10	upto 280	3	SM / EM / M	F / G	Bark wounds noted Branch socket cavities observed Branch stubs evident Characteristic for species Limited future potential Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted Landscape trees spaced at regular 2-5m intervals Set amongst linear strip of shrub mass planting	35	3.4	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G129	English Oak Quercus robur Silver Birch Betula pendula Wild Cherry Prunus avium Purple Plum Prunus cerasifera Pissardii	16	upto 380 300	5	SM / EM	F / G	Base obscured Branch stubs evident Characteristic for species Dense undergrowth at the base Epicormic growth evident within the crown Low crown form Minor dead wood evident in the crown (<75mm) Multi leadered form No major defects were noted Row of mainly oak and silver birch growing alongside railway line with understorey formed of nature laurel hedge Runs length of access road and past gated entrance stopping at security cabin	106	5.8	B (ii)
G130	Blackthorn Prunus spinosa English Oak Quercus robur Hawthorn Crataegus monogyna	15	upto 485 370 250	3.5	SM / EM	F / G	Bark wounds noted Branch stubs evident Characteristic for species Coppiced form Light ivy cover Minor dead wood evident in the crown (<75mm) Multi stemmed from base No major defects were noted Coppiced hawthorn set with several larger and more established upper canopy oak trees Positioned along boundary of chemical works and diving canal tow path	197	7.9	B (iii)
G131	Holly Ilex aquifolium	8	upto 280	3	M	F	Basal suckers present Branch stubs evident Outgrown hedgerow Some stems have basal damage and hollowing	35	3.4	C (ii)
G132	English Oak Quercus robur	13	upto 450	6	M	G	Interlocking crowns Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) No major defects were noted One of the two trees in this group is twin stemmed	92	5.4	A (ii)
G133	Aspen Populus tremula	10	upto 210	3	EM	G	Basal suckers present No major defects were noted	20	2.5	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G134	Hawthorn Crataegus monogyna Holly Ilex aquifolium	4	upto 170 30 40	2	M	F	Basal suckers present Outgrown hedgerow	14	2.1	C (ii)
G135	English Oak Quercus robur Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Alder Alnus glutinosa Rowan Sorbus aucuparia Whitebeam Sorbus aria Scots Pine Pinus sylvestris	15	upto 450	6	M	F / G	Basal suckers present Branch socket cavities observed Branch stubs evident Broken branches evident Interlocking crowns Light ivy cover Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Multi stemmed from base Single stem forms Twin stemmed from base Prominent roadside group Dominated by oak Minor amounts of other species listed Varying conditions and forms Understorey hedgerow sporadic and unmaintained	92	5.4	A (ii)
G136	Crack Willow Salix fragilis Elder Sambucus nigra	7	est 120 150 100 210	4	EM	F	Characteristic for species Situated offsite Unable to gain access	41	3.6	C (ii)
G137	Leyland Cypress Cupressocyparis leylandii	11.5	upto 400	2	M	G	Characteristic for species Interlocking crowns No major defects were noted	72	4.8	C (ii)
G138	English Oak Quercus robur	9	450 200	4	M	G	Characteristic for species Even crown form No major defects were noted	110	5.9	A (ii)
G139	English Oak Quercus robur	7	upto 350	4	EM	G	Characteristic for species Even crown form No major defects were noted	55	4.2	A (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G140	Blackthorn Prunus spinosa Elder Sambucus nigra English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna	8	upto 200 150 120 80	4	M	F	Broken branches evident Characteristic for species Multi stemmed from base Single stem forms	38	3.5	B (ii)
G141	English Oak Quercus robur	15	upto 580	6	M	G	Broken branches evident Characteristic for species Even crown form Minor dead wood evident in the crown (<75mm) Two trees separated by 3m	152	7.0	A (ii)
G142	English Oak Quercus robur	10	upto 380 220 480 550	6	M	G	Characteristic for species Even crown form Low crown form No major defects were noted	328	10.2	A (ii)
G143	English Oak Quercus robur	10	upto 540	5	M	G	Characteristic for species Even crown form Low crown form No major defects were noted	132	6.5	A (ii)
G144	Ash Fraxinus excelsior English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Silver Birch Betula pendula Holly Ilex aquifolium Rowan Sorbus aucuparia	18	upto 950	8	M	G	Bark wounds noted Branch stubs evident Broken branches evident Characteristic for species Interlocking crowns Light ivy cover Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Storm damage present Major tree group along lane and field Mixed species understorey Dominated by oak Dry ditch between the trees and lane	408	11.4	A (ii)



Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G145	Crack Willow Salix fragilis English Oak Quercus robur Silver Birch Betula pendula Alder Alnus glutinosa Holly Ilex aquifolium Rowan Sorbus aucuparia	16	upto 820	7	M	F / G	Broken branches evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Willow predominantly around a seasonal wet area Wet ditch roadside Large mature oaks directly adjacent to the south along roadside edge Some fallen larger willows in situ showing active regenerative growth Some branch pruning of overhanging material on roadside Woodland type cover which also extends across the road	304	9.8	A (ii)
G146	Hawthorn Crataegus monogyna	5	upto 120 100 80 60 150	3	M	F	Characteristic for species Gaps present in hedgerow Outgrown hedgerow Large individual specimen's Patchy distribution	26	2.9	C (ii)
G147	Alder Alnus glutinosa	8	upto 530	5	M	G	Bark wounds noted Browsing damage noted on main stem Characteristic for species Interlocking crowns Two trees separated by 1.5m Minor branch socket cavities Basal damage	127	6.4	B (ii)
G148	Ash Fraxinus excelsior	9	230	4	EM	F	Self-seeded specimens Adjacent to entrance No major defects noted	24	2.8	C (i)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G149	Ash Fraxinus excelsior English Oak Quercus robur Hawthorn Crataegus monogyna	11	upto 360	4	EM / M	G	Predominantly ash, totalling 40 individual specimens 4 oak 1 hawthorn Branch stubs evident Broken branches evident Characteristic for species Established ivy cover Even crown form Light ivy cover Minor dead wood evident in the crown (<75mm) Single stem forms Twin stemmed from base Typical crown form	59	4.3	B (ii)
G150	2 Hawthorn Crataegus monogyna	6	250 180 100	N - 1 S - 2 E - 2 W - 3	M	G	Outgrown hedgerow Pruned to 4m high on the north and south sides	47	3.9	C (ii)
G151	2 Holly Ilex aquifolium	5	350	N - 2 S - 3 E - 1 W - 1	M	F	Has been pruned on east and west sides as part of the maintained hedgerow Some minor exposed heartwood on stems with signs of decay where mechanical damage has occurred through hedge maintenance	55	4.2	C (ii)
G152	1 Field Maple Acer campestre 2 Horse Chestnut Aesculus hippocastanum	6	est 140	3	Yng	G	Young trees Typical form	9	1.7	C (ii)
G153	7 Common Lime Tilia x europaea	16	600	5	M	G	Collection of trees around the boundaries of the church yard, close to the boundary wall Some have been subjected to pollarding, others are still of maiden form Minor dead wood Root develop restrained by presence of low level dry stone wall at edge of church yard and back of footway Extensive basal epicormic growth Some specimens support a light burden of ivy on the lower stems Some branch socket cavities visible Crowns have been lifted in the past	163	7.2	A (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G154	Leyland Cypress Cupressocyparis leylandii	1.5	200 200 200 200 200	2	M	P	All specimens have been topped Forms a boundary hedge at the edge of the property	90	5.4	C (ii)
G155	3 Lawson Cypress Chamaecyparis lawsoniana	7	260	2	M	F	Typically characteristic for the species	31	3.1	C (ii)
G156	3 Whitebeam Sorbus aria	7	330	3	M	F	Ivy growth on lower stems Occasional broken branch Typically characteristic for the species	49	4.0	C (ii)
G157	7 Common Lime Tilia x europaea	17	650	7	M	G	Major and minor dead wood Light ivy growth on lower stems, on some specimens Characteristic for the species Row around the roundabout; closely planted Interlocked crowns	191	7.8	A (ii)
G158	Several Crack Willow Salix fragilis	16	400 400 400	6	OM	P	Many fractured and failed stems Group situated around the field pond Nearest tree to A5 has a crown that overhangs the verge, but not the road Abundant dead wood Multiple stemmed forms	N/A	N/A	U
G159	2 Flowering Cherry Prunus 'Kanzan'	4	est 280	2	M	F	Situated within a private garden and set back from road by 2-3m Ivy on stems Heavily crown reduced which has resulted in a framework of unproductive stubs	35	3.4	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G160	Hybrid Black Poplar Populus x canadensis Sycamore Acer pseudoplatanus Rowan Sorbus aucuparia Silver Birch Betula pendula Hawthorn Crataegus monogyna	Up to 17	670	7	M	F	Tag no 1204 on a stem of poplar Situated alongside industrial complex Poplar are large and mature Other species are part of hedgerow and self-set specimens Ivy growth on stems	203	8.0	B (ii)
G161	1 Field Maple Acer campestre 1 English oak Quercus robur 1 Poplar spp 1 Sycamore Acer pseudoplatanus	7	250	Up to 4	M	F	Self seeded origin most likely Situated within small grass verge at side of Station Road and the slip road to canal access Limited growth potential due to growing position	28	3.0	C (ii)
G162	Lawson Cypress Chamaecyparis lawsoniana Hawthorn Crataegus monogyna Silver Birch Betula pendula Holly Ilex aquifolium	7	250	Up to 3	M	F	No access for closer assessment; viewed from the road Unmaintained hedgerow on outer edge of group with a small number of standard trees	28	3.0	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G163	Sycamore Acer pseudoplatanus Hawthorn Crataegus monogyna Scots Pine Pinus sylvestris Common Larch Larix decidua Common Beech Fagus sylvatica	17	500	Up to 6	M	F and G	Limited access for closer assessment; most carried out from the road Hedgerow to edge of group forming an unmaintained boundary Mixed species group Ivy present on many stems Would be in need of management	113	6.0	B (ii)
G164	Common Lime Tilia x europaea Magnolia	6	690	5	M	G	Private trees within the front gardens of properties	215	8.3	B (ii)
G165	Lawson Cypress Chamaecyparis lawsoniana	14	500	Up to 3	M	G	No access for closer assessment; viewed from the road Typically characteristic for the species	113	6.0	B (ii)
G166	2 Holly Ilex aquifolium	5	300	1.5	M	F	Typically characteristic for the species	41	3.6	C (ii)
G167	Holly Ilex aquifolium Common Ash Fraxinus excelsior Hawthorn Crataegus monogyna Elm spp English Oak Quercus robur	16	460	6	M	F and G	Offsite group Edge of woodland formed by an outgrown, unmaintained hawthorn hedgerow	96	5.5	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G168	Box Buxus sempervirens Lawson Cypress Chamaecyparis lawsoniana Laurel 1 Common Ash Fraxinus excelsior 1 Silver Birch Betula pendula Hornbeam Carpinus betulus Sycamore Acer pseudoplatanus	8-13	350 350	Up to 5	M	F	Typically characteristic for the various species Most material offsite and therefore no access for assessment; viewed from the road	111	5.9	B (ii)
G169	Common Ash Fraxinus excelsior Sycamore Acer pseudoplatanus English Oak Quercus robur	13	510	6	M	F	Edge of a small field copse and of sporadic distribution Ivy growth abundant Group includes two freestanding specimens within the triangular grass verge adjacent to the highway	118	6.1	B (ii)
G170	Norway Maple Acer platanoides Whitebeam Sorbus aria	13	400	5	M	F and G	Highway planting; numerous specimens spaced fairly uniformly along the A449 corridor and matching the opposite side Typically characteristic for their respective species	72	4.8	B (ii)
G171	Common Ash Fraxinus excelsior English Oak Quercus robur Horse Chestnut Aesculus hippocastanum	15	650	7	M	F and G	Typically characteristic for the species Some larger oak present Central verge planting Parts of a hedgerow in sections along the length; hawthorn	191	7.8	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G172	Norway Maple Acer platanoides (south side) English Oak Quercus robur (north side)	12-16	450	9	M	F and G	Tree and hedge lined lane off the A449 Trees positioned within the field boundary hedgerow Numerous specimens and due to close spacing, crowns had interlocked Minor and major dead wood Ivy growth present	92	5.4	B (ii)
G173	2 Silver Birch Betula pendula	15	440	6	M	F	Typically characteristic for the species	88	5.3	B (ii)
G174	2 Ash Fraxinus excelsior	11	Up to 450 250	7	M	F	Coppiced forms with multiple stems Dense ivy growth extending into crowns	120	6.2	C (ii)
G175	Leyland Cypress Cupressocyparis leylandii Silver Birch Betula pendula Scots Pine Pinus sylvestris	11	Up to 500	2	M	G	5 Cypress present Set behind the property boundary fence Typically characteristic for their respective species	113	6.0	B (ii)
G176	Alder Alnus glutinosa Hybrid Black Poplar Populus x canadensis Sycamore Acer pseudoplatanus Willow spp Silver Birch Betula pendula English Oak Quercus robur	6-25	350 350 350 350 350	5	M	G and F	No access Stem estimated maximum Prominent belt of trees lining the eastern side of the canal banks forming a tree lined corridor Mixed species, qualities and conditions with little signs of active management Hybrid Black Poplar are planted in a uniform row at approximately 6m intervals and are fully mature, forming the dominant component of this group (dbh est max 600mm) Major dead wood visible Poplar are interplanted with birch and alder; coppiced	277	9.4	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G177	English Oak Quercus robur Alder Alnus glutinosa Silver Birch Betula pendula	18	500	Up to 7	M	G and F	Continuation of the prominent belt of trees lining the eastern side of the canal banks forming a tree lined corridor; separated from G176 due to change in species composition Dead and fallen trees present Ivy growth present on stems Interlocked crowns Visible evidence of self-seeded sycamore in places	113	6.0	A (ii)
G178	Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Ash Fraxinus excelsior Silver Birch Betula pendula English Oak Quercus robur Hybrid Black Poplar Populus x canadensis	8-22	Up to 500	Up to 7	M	G and F	Belt of trees lining the western side of the canal banks forming a tree lined corridor; some trees are within the perimeter fencing of the chemical works yet in proximity to the canal to form a continual canopy with those on the banks of the canal Many coppiced and multiple stemmed forms through historic management of the canal side vegetation For most of the length there is an outgrown, unmaintained hedgerow of hawthorn Hybrid Black Poplar are situated towards the southern end and have been formally row planted with equal spacing around the boundary of the chemical works; fully mature	113	6.0	B (ii)
G179	2 English Oak Quercus robur	14	Up to 650	Up to 6	M	G	Typically characteristic for the species Ivy present on lower stems	191	7.8	B (ii)
G180	English Oak Quercus robur Beech Fagus sylvatica Hawthorn Crataegus monogyna	13	400	5	M	G and F	Hawthorn hedgerow running along the length of the boundary with private dwellings, occasional breaks for access points Trees within the hedgerow at random intervals West side of the dual footway / cycleway Occasional holly noted Ivy present on lower stems	72	4.8	B (ii)



Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G181	Hawthorn Crataegus monogyna Hazel Corylus avellana English Oak Quercus robur Common Lime Tilia x europaea	12	ave 350	4	M	G and F	Hawthorn and hazel hedgerow running along the length of the section with trees at random intervals East side of the dual footway / cycleway Ivy present on lower stems Noted, a lime has been crown reduced Noted, single oak of larger proportions with stem of 750mm dbh	55	4.2	B (ii)
G182	Leyland Cypress Cupressocyparis leylandii	7	up to 150	1	M	G	Offsite group forming a conifer screen to the boundary of the dwelling Topped in height	10	1.8	C (ii)
G183	Scots Pine Pinus sylvestris Black Pine Pinus nigra Ash Fraxinus excelsior Sycamore Acer pseudoplatanus Beech Fagus sylvatica	16	Up to 450	4	M	G	Offsite wooded copse of mixed deciduous and evergreen species Noted, some failed specimens Little evidence of any active management	92	5.4	B (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
<b>HEDGEROWS</b>										
H1	Hawthorn Crataegus monogyna	2	avg 50	0.5	SM	F	Maintained hedgerow	1	0.6	C (ii)
H2	Blackthorn Prunus spinosa Common Lime Tilia x europaea English Oak Quercus robur Hawthorn Crataegus monogyna	2	100	1	SM / EM	F	Maintained hedgerow Gaps present in hedgerow	5	1.2	C (ii)
H3	Blackthorn Prunus spinosa Common Lime Tilia x europaea English Oak Quercus robur Hawthorn Crataegus monogyna	2	100	1	SM / EM	F	Maintained hedgerow Gaps present in hedgerow	5	1.2	C (ii)
H4	English Oak Quercus robur Hawthorn Crataegus monogyna	1.5	est 30	0.5	SM	P	Maintained hedgerow Dense undergrowth at the base	0	0.4	C (ii)
H5	Hawthorn Crataegus monogyna Hazel Corylus avellana	2.5	avg 90	1	EM / M	F	Maintained hedgerow Gaps present in hedgerow Dead trees noted Close cultivation of soil	4	1.1	C (ii)
H6	Ash Fraxinus excelsior Hawthorn Crataegus monogyna	1.5	avg 30	0.5	SM	F	Maintained hedgerow Self seeded hedgerow specimens present Dense undergrowth at the base	0	0.4	C (ii)
H7	Ash Fraxinus excelsior English Oak Quercus robur Hawthorn Crataegus monogyna	1.5	avg 50	1	EM / M	G	Maintained hedgerow	1	0.6	B (iii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H8	Hawthorn Crataegus monogyna	2	avg 50	0.5	EM	G	Maintained hedgerow	1	0.6	B (iii)
H9	Hawthorn Crataegus monogyna	1.5	avg 60	0.5	EM / M	G	Maintained hedgerow	2	0.7	B (iii)
H10	Hawthorn Crataegus monogyna	2	50 50 60	0.5	M	G	Maintained hedgerow	4	1.1	B (iii)
H11	Leyland Cypress Cupressocyparis leylandii	2	avg 80	0.5	EM / M	G	Maintained hedgerow	3	1.0	B (iii)
H12	Hawthorn Crataegus monogyna	2	avg 50 40 60	0.5	M	G	Maintained hedgerow	3	1.1	B (iii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H13	Ash Fraxinus excelsior Elder Sambucus nigra Hawthorn Crataegus monogyna	2	est 50 50 50	2	EM	F	Dense undergrowth at the base Flail damage evident Gaps present in hedgerow Maintained hedgerow Overhead cables	3	1.0	C (ii)
H14	Elder Sambucus nigra Hawthorn Crataegus monogyna Holly Ilex aquifolium	1	est 40 40 40	0.5	EM	F	Maintained hedgerow	2	0.8	C (ii)
H15	English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna	2	est 6x 50	1	EM	F	Crossing and rubbing branches Flail damage evident Maintained hedgerow	7	1.5	C (ii)
H16	Elder Sambucus nigra English Oak Quercus robur Field Maple Acer campestre Goat Willow Salix caprea Hawthorn Crataegus monogyna	3	est 6x 60	1	EM	F	Crossing and rubbing branches Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H17	Elder Sambucus nigra English Oak Quercus robur Hawthorn	2	est 6x 60	1	EM	F	Crossing and rubbing branches Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H18	Elder Sambucus nigra Hawthorn Crataegus monogyna Holly Ilex aquifolium Prunus sp.	5	est 6x 50	1	EM	F	Crossing and rubbing branches Interlocking crowns Low crown form Outgrown hedgerow Overhead cables	7	1.5	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H19	Hawthorn Crataegus monogyna English Elm Ulmus procera Privet Ligustrum ovalifolium Elder	2	est 6x 40	0.5	EM	F	Base obscured Dense undergrowth at the base Interlocking crowns Low crown form Maintained hedgerow	4	1.2	C (ii)
H20	Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna	1	est 6x 40	0.5	EM	F	Dense undergrowth at the base Gaps present in hedgerow Maintained hedgerow	4	1.2	C (ii)
H21	English Oak Quercus robur Hawthorn Crataegus monogyna Alder Alnus glutinosa Rowan Sorbus aucuparia	1.5	20 40	0.5	EM	P	Dense ivy cover on main stem Dense undergrowth at the base Un-maintained hedgerow	1	0.5	C (ii)
H22	English Oak Quercus robur Hawthorn Crataegus monogyna Alder Alnus glutinosa Rowan Sorbus aucuparia	1.5	20 40	0.5	EM	P	Dense ivy cover on main stem Dense undergrowth at the base Un-maintained hedgerow	1	0.5	C (ii)
H23	English Oak Quercus robur Hawthorn Crataegus monogyna	2	avg 60	0.5	EM	F	Characteristic for species Maintained hedgerow	2	0.7	B (ii)
H24	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna	2	avg 60	0.5	EM	F	Characteristic for species Maintained hedgerow	2	0.7	B (ii)
H25	Hawthorn Crataegus monogyna Laural Prunus Laurocerasus	2.5	avg 70	0.5	EM	F	Characteristic for species Maintained hedgerow	2	0.8	B (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H26	Hawthorn Crataegus monogyna Holly Ilex aquifolium	1.5	60	0.5	EM	F	Dense undergrowth at the base Gaps present in hedgerow Un-maintained hedgerow Outgrown specimen's	2	0.7	C (ii)
H27	Hawthorn Crataegus monogyna	2	upto 100	0.5	EM	F	Dense undergrowth at the base Maintained hedgerow	5	1.2	B (ii)
H28	Ash Fraxinus excelsior Elder Sambucus nigra Hawthorn Crataegus monogyna	2	est 50 50	0.5	SM / EM	P	Un-maintained hedgerow Happy and broken with bracken taking over	2	0.8	C (i)
H29	Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Wild Cherry Prunus avium	1.5	est 50 50	0.5	SM / EM	F	Maintained hedgerow	2	0.8	C (i)
H30	English Oak Quercus robur Hawthorn Crataegus monogyna Holly Ilex aquifolium	2	est 50 50	1	SM / EM	F	Un-maintained hedgerow	2	0.8	C (i)
H31	Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Wild Cherry Prunus avium	1.5	est 50 50	0.5	SM / EM	F	Maintained hedgerow	2	0.8	C (i)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H32	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Wild Cherry Prunus avium	3	est 50 50	1.5	SM / EM	F	Un-maintained hedgerow	2	0.8	C (i)
H33	English Oak Quercus robur Hawthorn Crataegus monogyna	1.5	50	0.5	SM / EM	F	Maintained hedgerow	1	0.6	C (i)
H34	English Oak Quercus robur Hawthorn Crataegus monogyna Holly	4	120	1	SM / EM	F	Un-maintained hedgerow	7	1.4	C (i)
H35	English Oak Quercus robur Hawthorn Crataegus monogyna	2	est 150 150 150	1	M	F	Crossing and rubbing branches Old laid forms Un-maintained hedgerow	31	3.1	C (ii)
H36	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna	2	est 80 80 80 80	1	EM	F	Crossing and rubbing branches Dense undergrowth at the base Maintained hedgerow Gravel works surrounding	12	1.9	C (ii)
H37	English Oak Quercus robur Hawthorn Crataegus monogyna	2	est 60 60 60 60 60	1	M	F	Crossing and rubbing branches Dense ivy cover on main stem Dense undergrowth at the base Gaps present in hedgerow Maintained hedgerow	8	1.6	C (ii)
H38	Hawthorn Crataegus monogyna Alder Alnus glutinosa	1.5	est 6x 60	0.5	EM	F	Crossing and rubbing branches Dense undergrowth at the base Maintained hedgerow	10	1.8	C (ii)
H39	English Oak Quercus robur Goat Willow Salix caprea Hawthorn	2	est 6x 60	1	EM	F	Base obscured Crossing and rubbing branches Dense undergrowth at the base Maintained hedgerow	10	1.8	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H40	Elder Sambucus nigra Hawthorn Crataegus monogyna Holly Ilex aquifolium	2	est 6x 60	1	EM	F	Crossing and rubbing branches Flail damage evident Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H41	Elder Sambucus nigra Hawthorn Crataegus monogyna	1.5	est 100 100 100	0.5	M	F	Crossing and rubbing branches Flail damage evident Maintained hedgerow Old laid forms	14	2.1	C (ii)
H42	Elder Sambucus nigra Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus	1	est 6x 50	0.5	EM	P	Base obscured Dense ivy cover on main stem Dense undergrowth at the base Un-maintained hedgerow	7	1.5	C (ii)
H43	Hawthorn Crataegus monogyna Holly Ilex aquifolium	1.5	est 6x 60	0.5	EM	F	Maintained hedgerow	10	1.8	C (ii)
H44	Hawthorn Crataegus monogyna	4	upto 120	1	M	F	Dense undergrowth at the base Outgrown hedgerow	7	1.4	C (ii)
H45	Hawthorn Crataegus monogyna	2	6x 60	0.5	EM	F	Crossing and rubbing branches Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H46	Hawthorn Crataegus monogyna	1.5	est 6x 60	1	EM	F	Dense undergrowth at the base Maintained hedgerow	10	1.8	C (ii)
H47	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna	1.5	est 6x 60	0.5	EM	F	Crossing and rubbing branches Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)



Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H48	Hawthorn Crataegus monogyna Alder Alnus glutinosa Holly Ilex aquifolium	1.5	est 6x 60	1	M	F	Crossing and rubbing branches Dense undergrowth at the base Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H49	Goat Willow Salix caprea Hawthorn Crataegus monogyna Alder Alnus glutinosa	1.5	est 6x 60	1	M	F	Crossing and rubbing branches Dense undergrowth at the base Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H50	Elder Sambucus nigra Hawthorn Crataegus monogyna Holly Ilex aquifolium	1	est 150 150 150	0.5	M	F	Broken branches evident Crossing and rubbing branches Gaps present in hedgerow Maintained hedgerow Old laid forms Some sections outgrown	31	3.1	C (ii)
H51	Elder Sambucus nigra Hawthorn Crataegus monogyna	4	est 6x 60	0.5	M	F	Broken branches evident Crossing and rubbing branches Outgrown hedgerow	10	1.8	C (ii)
H52	Elder Sambucus nigra Hawthorn Crataegus monogyna	2	est 150 150 150	1	M	F	Crossing and rubbing branches Old laid forms NB height increases to 4m in the central section close to H51 and returns to 2m at the southern end	31	3.1	C (ii)
H53	Hawthorn Crataegus monogyna	2	est 6x 70	1	M	F	Crossing and rubbing branches Dense undergrowth at the base Gaps present in hedgerow Interlocking crowns Maintained hedgerow Outgrown in places	13	2.1	C (ii)
H54	Elder Sambucus nigra Hawthorn Crataegus monogyna Wild Cherry Prunus avium	1.5	est 6x 60	1	EM	F	Crossing and rubbing branches Dense undergrowth at the base Maintained hedgerow	10	1.8	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H55	English Oak Quercus robur Hawthorn Crataegus monogyna Holly Ilex aquifolium	1.5	est 6x 60	1	EM	F	Base obscured Dense undergrowth at the base Un-maintained hedgerow	10	1.8	C (ii)
H56	Hawthorn Crataegus monogyna Alder Alnus glutinosa	1.5	est 6x 60	1	EM	F	Base obscured Dense undergrowth at the base Un-maintained hedgerow	10	1.8	C (ii)
H57	Hawthorn Crataegus monogyna	1.5	est 6x 60	0.5	EM	F	Crossing and rubbing branches Dense undergrowth at the base Maintained hedgerow	10	1.8	C (ii)
H58	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Hazel Corylus avellana Holly Ilex aquifolium Privet Ligustrum ovalifolium Prunus sp.	1	est 60 60 60	0.5	EM / M	F	Maintained hedgerow	5	1.2	C (ii)
H59	Hawthorn Crataegus monogyna	2.5	upto 100 80 50	0.5	M	G	Maintained hedgerow	9	1.6	B (iii)
H60	Hawthorn Crataegus monogyna	2	upto 100 80 50	0.5	M	G	Maintained hedgerow	9	1.6	B (iii)
H61	Hawthorn Crataegus monogyna Wych Elm Ulmus glabra	2.5	upto 100 80 50	0.5	M	G	Maintained hedgerow	9	1.6	B (iii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H62	Hawthorn Crataegus monogyna	1	avg 40	0.25	EM	F	Dense ivy cover on main stem Poor hedgerow	1	0.5	C (iii)
H63	Laural Prunus Laurocerasus	1.2	avg 70	1	M	G	Maintained hedgerow Runs along the length of the access road set back by 1m Regularly trimmed	2	0.8	B (iii)
H64	Hawthorn Crataegus monogyna Alder Alnus glutinosa	1.5	avg 50 80 100 60	0.5	M	G	Maintained hedgerow Lots of honeysuckle	10	1.8	B (ii)
H65	Elder Sambucus nigra Hawthorn Crataegus monogyna	6	est 80 120 100 70	2	M	F	Basal suckers present Base obscured Crossing and rubbing branches Dead trees noted Dieback of the crown observed Established ivy cover Outgrown hedgerow Situated offsite Un-maintained hedgerow	16	2.3	B (ii)
H66	Elder Sambucus nigra Hawthorn Crataegus monogyna Holly	4	est 80 60 100 120	1.5	M	G	Base obscured Characteristic for species Outgrown hedgerow Un-maintained hedgerow	16	2.2	B (ii)
H67	Elder Sambucus nigra Hawthorn Crataegus monogyna	1.5	est 50 50 60 40	0.5	M	G	Maintained hedgerow	5	1.2	C (ii)
H68	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna	4	upto 120 250 100	3	M	G	Outgrown hedgerow Un-maintained hedgerow Single large hawthorn to a height of around 7m at northern end	39	3.5	C (ii)
H69	Hawthorn Crataegus monogyna	1.5	avg 50 60 80	0.5	M	G	Maintained hedgerow	6	1.3	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H70	Holly <i>Ilex aquifolium</i>	5	upto 40 60 80 60	1.5	M	G	Outgrown hedgerow	7	1.5	C (ii)
H71	Elder Sambucus nigra Hawthorn Crataegus monogyna Alder	2	upto 60 60 50	1	M	G	Maintained hedgerow In places gappy	4	1.2	C (ii)
H72	Elder Sambucus nigra Hawthorn Crataegus monogyna	2	upto 60 80 80 40	1	M	G	Maintained hedgerow	8	1.6	C (ii)
H73	Hawthorn Crataegus monogyna	2	avg 50 60 80	0.5	M	G	Maintained hedgerow	6	1.3	C (ii)
H74	Hawthorn Crataegus monogyna	1.5	avg 50 60 80	0.5	M	G	Maintained hedgerow	6	1.3	C (ii)
H75	Elder Sambucus nigra English Oak Quercus robur Hawthorn	1.5	upto 80 100 80	0.5	M	G	Maintained hedgerow	10	1.8	B (ii)
H76	Ash Fraxinus excelsior Hawthorn Crataegus monogyna	5	upto 120 180 80 120	2	M	G	Characteristic for species Interlocking crowns Multi stemmed from base Outgrown hedgerow	31	3.1	B (ii)
H77	Hawthorn Crataegus monogyna	1.5	upto 75 75 75	0.5	M	G	Three separate sections with gaps inbetween Maintained	8	1.6	C (ii)
H78	Hawthorn Crataegus monogyna Hazel Corylus avellana	1.5	upto 75 75 75	0.5	M	G	Contains a small section of hazel to the west of the gateway Laid form Maintained	8	1.6	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H79	Hawthorn Crataegus monogyna Holly Ilex aquifolium	3	est 300	1.5	M	G	Maintained Well established hedgerow with individual tree forms Ivy clad stems for a number of specimens	41	3.6	B (ii)
H80	Hawthorn Crataegus monogyna	1	upto 60 60 50	1.5	M	G	Maintained Evidence of laid form	4	1.2	C (ii)
H81	Privet	1	50 50 50 50 50	1.5	M	G	Maintained hedgerow	6	1.3	C (ii)
H82	Privet	1	50 50 50 50	1.5	M	G	Maintained hedgerow	6	1.3	C (ii)
H83	Hawthorn Crataegus monogyna Holly Ilex aquifolium	0.5	60 60 60	0.5	M	G	Maintained hedgerow	5	1.2	C (ii)
H84	Hawthorn Crataegus monogyna	2	80 80 80	0.5	M	G	Maintained hedgerow; private boundary	9	1.7	C (ii)
H85	Hawthorn Crataegus monogyna English Oak Quercus robur	2	60 60 60	1.5	M	G	Unmaintained hedgerow with sporadic growth	5	1.2	C (ii)
H86	Hawthorn Crataegus monogyna	4	90	0.5	M	G	Unmaintained hedgerow with sporadic growth	4	1.1	C (ii)
H87	Hawthorn Crataegus monogyna Holly Ilex aquifolium Forsythia	1.5	60 60 60	0.5	M	G	Maintained hedgerow; private boundary	5	1.2	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H88	Hawthorn Crataegus monogyna	2	70 70 70 70 70	1	M	G	Maintained hedgerow; field boundary	11	1.9	B (ii)
H89	Holly Ilex aquifolium Common Lime Tilia europaea	0.5	50 50 50	0.5	M	F	Maintained hedgerow	3	1.0	C (ii)
H90	Hawthorn Crataegus monogyna Holly Ilex aquifolium	5	100 100 100	1.5	M	G	Broken into several sections Unmaintained hedgerow Festooned with ivy	14	2.1	C (ii)
H91	Hawthorn Crataegus monogyna	1	60 60 60	0.5	M	G	Maintained hedgerow; field boundary	5	1.2	C (ii)
H92	Ash Fraxinus excelsior Sycamore Acer pseudoplatanus	3	150	0.5	M	F	Some specimens have been topped at 3m with 3m regrowth and others not Boundary hedge to private dwelling Ivy growth present	10	1.8	C (ii)
H93	Hawthorn Crataegus monogyna	1.5	50 50 50 50	0.5	M	G	Maintained hedgerow	5	1.2	C (ii)
H94	Ash Fraxinus excelsior Hawthorn Crataegus monogyna Elder Holly	1.5	70 70 70 70	0.5	M	G	Maintained hedgerow; either side of the lane South side is more sporadic in nature and gappy North side is more continual and in better condition	9	1.7	C (ii)
H95	Ilex aquifolium Sycamore Acer pseudoplatanus Privet	1.5	50 50 50 50	0.5	M	G	Maintained hedgerow	6	1.3	C (ii)
H96	Hawthorn Crataegus monogyna	4	150	2	M	F	Edge of a waterlogged field Unmaintained Outgrown form and fully tree forms Situating at lower level than the road / footway	10	1.8	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H97	Hawthorn Crataegus monogyna Elm spp	1	80 80 80	0.5	M	G	Laid form Maintained Dense and compacted structure Ivy present in places	9	1.7	C (ii)
H98	Leyland Cypress Cupressocyparis leylandii Hawthorn Crataegus monogyna Holly Ilex aquifolium	3	120	0.5	M	F	NB Weeping willow tree on western edge Situated behind private boundary wall of property Conifer have been topped / reduced in height	7	1.4	C (ii)
H99	Hawthorn Crataegus monogyna	1.5	80 80 80	0.5	M	G	Maintained Dense and compacted structure	9	1.7	B (ii)
H100	Hawthorn Crataegus monogyna	1.5	80 80 80	0.5	M	G	Maintained Dense and compacted structure	9	1.7	B (ii)
H101	Snowberry and Privet	1	30 30 30 30 30	0.5	M	G	Maintained	2	0.8	C (ii)
H102	Hawthorn Crataegus monogyna	3	90 90 90	0.5	M	G	Maintained	11	1.9	B (ii)
H103	Hawthorn Crataegus monogyna	6	100 100 100	0.5	M	G	Maintained Previously topped at 3m, now with regrowth at 2m	14	2.1	B (ii)
H104	Hawthorn Crataegus monogyna	2	Up to 120	1	M	G	Maintained Previously topped at 1m, with with regrowth at 1m	7	1.4	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H105	Hawthorn Crataegus monogyna	3	80 80 80	1	M	G	Maintained Previously topped at 2m	9	1.7	C (ii)
H106	Hawthorn Crataegus monogyna	2	90 90 90	0.5	M	G	Maintained	11	1.9	B (ii)
H107	Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus	4	Up to 100	1	M	F	Outgrown and unmaintained	5	1.2	C (ii)
H108	Hawthorn Crataegus monogyna	2	90 90 90	0.5	M	G	Maintained	11	1.9	B (ii)

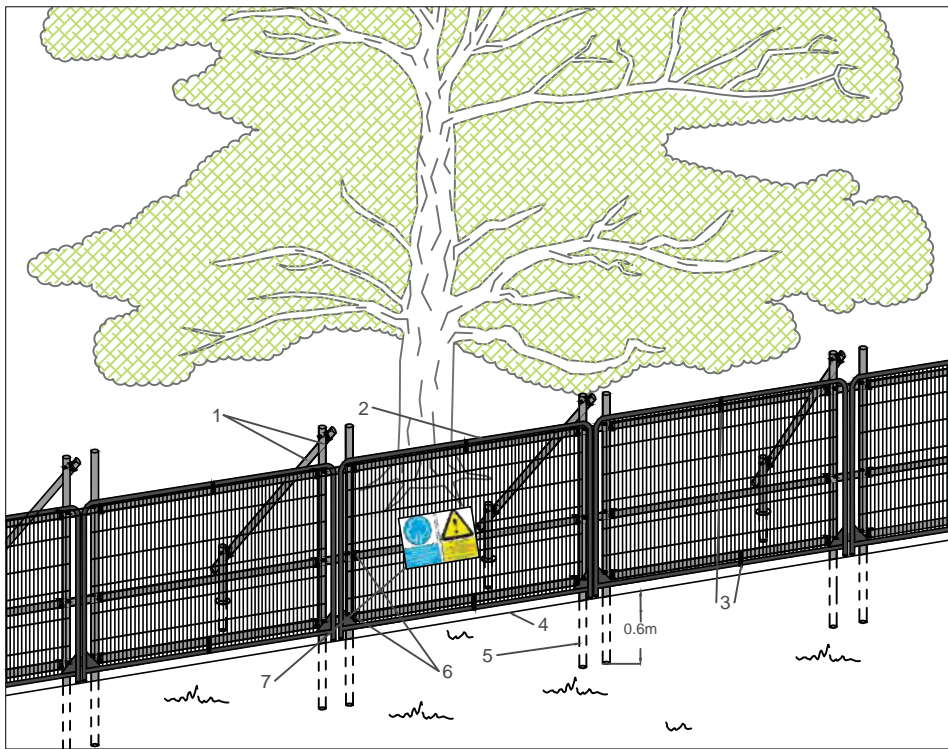


Wood No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
<b>WOODLANDS</b>										
W1	Elder Sambucus nigra English Oak Quercus robur Sycamore Acer pseudoplatanus Sweet Chestnut Castanea sativa Austrian Pine Pinus nigra ssp. Nigra Scots Pine Pinus sylvestris	12	avg 400	4	EM	G	Dense undergrowth Interlocking crowns Minor dead wood evident in the crown (<75mm) Storm damage present Understorey species present	72	4.8	A (ii)
W2	Elder Sambucus nigra Hawthorn Crataegus monogyna Alder Alnus glutinosa Austrian Pine Pinus nigra ssp. Nigra Scots Pine Pinus sylvestris	20	avg 350	3	EM / M	G	Characteristic for species Interlocking crowns Minor dead wood evident in the crown (<75mm) No major defects were noted	55	4.2	B (iii)
W3	Elder Sambucus nigra English Oak Quercus robur Silver Birch Betula pendula Holly Ilex aquifolium Laural Prunus Laurocerasus Mountain Ash Sorbus aucuparia Turkey Oak Quercus cerris Austrian Pine Pinus nigra ssp. Nigra Scots Pine Pinus sylvestris	17	upto 700	8	SM / EM / M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Crossing and rubbing branches Dead trees noted Dense undergrowth at the base Dieback of the crown observed Epicormic growth evident within the crown Etiolated form Interlocking crowns Low crown form Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Mixture of broadleaf and conifer plantation Fomes fomentarius, Tinder fungus	222	8.4	A (iii)

Wood No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
W4	English Oak Quercus robur Horse Chestnut Aesculus hippocastanum Silver Birch Betula pendula Alder Alnus glutinosa Holly Ilex aquifolium Rowan Sorbus aucuparia	18	upto 960	6	M	G	Characteristic for species Dead trees noted Failed trees Interlocking crowns Multi stemmed from base Single stem forms Sporadic self-seeded group of trees Holly understorey would benefit from future management	417	11.5	B (ii)
W5	Beech Fagus sylvatica English Oak Quercus robur Silver Birch Betula pendula Mountain Ash Sorbus aucuparia Sweet Chestnut Castanea sativa Austrian Pine Pinus nigra ssp. Nigra Scots Pine Pinus sylvestris Sitka Spruce Picea sitchensis	23	950	7	Yng / SM / EM / M / OM	G	Interlocking crowns Light ivy cover Minor dead wood evident in the crown (<75mm) Trees at north west corner poorly pruned to clear EL Limited understorey	408	11.4	A (ii)

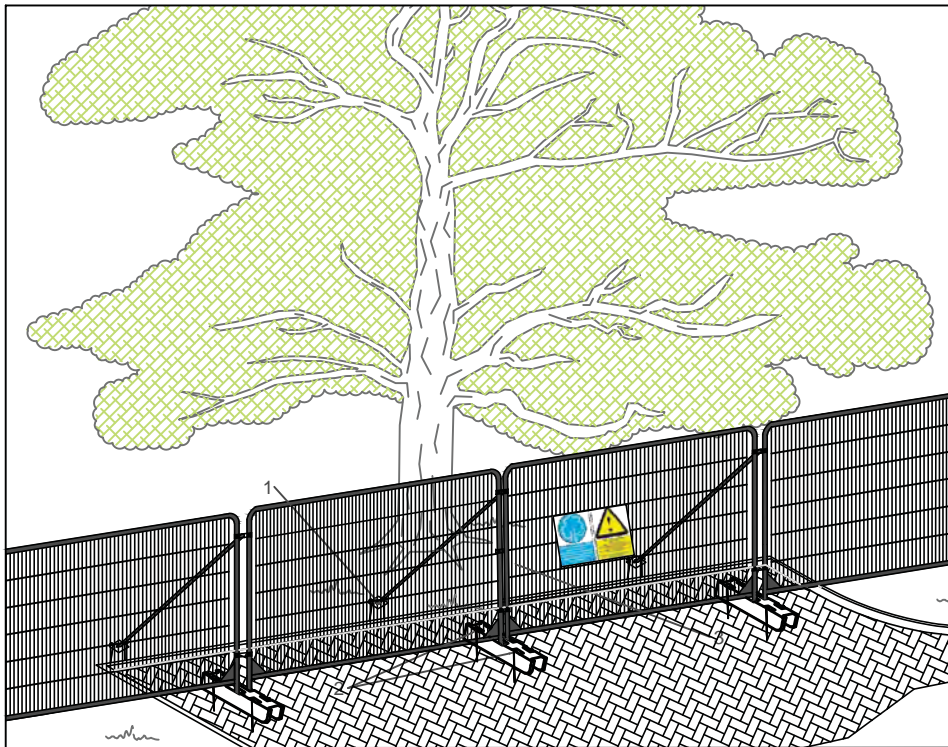
Wood No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
W6	Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Aspen Populus tremula False Acacia Robinia pseudoacacia Grey Poplar Populus x canescens Holly Ilex aquifolium Turkey Oak Quercus cerris	20	upto 700	8	SM / EM / M	F	Branch stubs evident Broken branches evident Crossing and rubbing branches Dense ivy cover on main stem Dense undergrowth at the base Interlocking crowns Low crown form Minor dead wood evident in the crown (<75mm) Typical crown form	222	8.4	A (i)
W7	Ash Fraxinus excelsior Common Lime Tilia x europaea English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Horse Chestnut Aesculus hippocastanum Silver Birch Betula pendula Wych Elm Ulmus glabra Mountain Ash Sorbus aucuparia Turkey Oak Quercus cerris	20	upto 820	6	SM / EM / M	F / G	Characteristic for species Dead trees noted Dense undergrowth at the base Epicormic growth evident within the crown Interlocking crowns Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Multi leaved form Multi stemmed form Oak and chestnut form upper canopy with several larger oak along northern edge of woodland Distinct canopy layers separate woodland from being classified as a group Good species diversity making for attractive landscape feature	304	9.8	A (iii)

Wood No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
W8	Ash Fraxinus excelsior Blackthorn Prunus spinosa Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna Silver Birch Betula pendula Wych Elm Ulmus glabra Alder Alnus glutinosa Holly Ilex aquifolium Mountain Ash Sorbus aucuparia Turkey Oak Quercus cerris	20	avg 450	6	SM / EM / M	F / G	Characteristic for species 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 Interlocking crowns Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Multi leaved form Multi stemmed form base Oak and chestnut form upper canopy with several larger oak along northern edge of woodland Distinct canopy layers separate woodland from being classified as a group Good species diversity making for attractive landscape feature Wet underfoot toward north east corner (close to mile road) Several birch stood in waterlogged ground dying back	92	5.4	A (iii)



### 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

Protective Fencing to be positioned to the specified dimensions in accordance with Figure 3 Tree Retention Plan

#### NOTES

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part with written consent of FPCR Environment and Design Ltd.



masterplanning ■  
 environmental assessment ■  
 landscape design ■  
 urban design ■ FPCR Environment and Design Ltd  
 ecology ■ Lockington Hall  
 architecture ■ Lockington  
 arboriculture ■ Derby DE74 2RH

t: 01509 672772  
 f: 01509 674565  
 e: mail@fpcr.co.uk  
 w: www.fpcr.co.uk

drawing title

## APPENDIX B PROTECTIVE FENCING SPECIFICATIONS