Higham Lane

Dodworth

BS 5837:2012 Tree Survey, Arboricultural Impact Assessment and Arboricultural Method Statement

Barnsley Metropolitan Borough Council

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Executive Summary

On behalf of Barnsley Metropolitan Borough Council (BMBC), Ecus Limited (Ecus) has carried out a tree survey to BS 5837:2012 '*Trees In Relation To Design, Demolition and Construction-Recommendations'* in January and April 2020 at the land alongside Higham Lane, Dodworth. The survey has formed the basis of an assessment of the impact development proposals may have on existing trees and any methodologies to be adopted to protect any retained trees.

The survey records all trees within the site and all those which may be affected by any development proposals within the site boundary, recording a number of parameters including species, crown spread and Root Protection Area (RPA).

The RPA of any given tree is the area of ground around that tree which should not be disturbed by excavation, compaction, changes in level or other construction/demolition operations. The extent of the RPA is calculated in accordance with BS 5837:2012, and is an important part of the methodologies described in this report.

A tree survey of the area to BS5837:2012 standards was completed by Wardell Armstrong in February 2019. This survey recorded the woodland area to the west of Higham Lane as a single group with general characteristics of the trees contained within it. However, BMBC requires more detailed clarification of the number, classification and size of trees that will be impacted by the scheme. Therefore this survey has recorded the majority of individual trees within this woodland area.

The survey recorded eight hedgerows, 509 individual trees and 32 tree groups containing approximately 704 trees.

None of the trees are protected by a BMBC Tree Preservation Order (TPO). The site is not located within a Conservation Area.

BMBC proposes highway improvements that will include road realignment, widening and the construction of a new roundabout. The proposals also make provision for the associated footpaths and verges including a combined footpath and cycle path. This will require the removal of 314 individual trees, six hedgerows, a section of one hedgerow, 15 tree groups and the partial removal of 7 other groups containing approximately 398 trees. In total the proposed scheme would require the removal of approximately 712 trees. The scheme may also have an impact on above and below ground parts of retained trees unless adequate protection of these trees is provided.

This report details the arboricultural impact and offers a range of protection measures that should be put in place prior to works starting on site as well as construction methodologies which should be adopted. These measures as described in detail in Chapter 5 will prevent accidental damage and other adverse effects on the health of retained trees and cover:

- Protective fencing;
- Construction within RPA;
- Installation of utilities and services within RPA;
- Level changes within RPA; and
- Arboricultural Clerk of Works.

This report also makes further recommendations for any measures to mitigate or compensate the loss of trees within the site and the likely impact on the site and the local landscape. These include:

- Replacement tree planting to compensate the loss of trees.
- Planting of hedgerows to mitigate the loss of screening of the site.
- Planting of native to compensate the loss of habitat.

At present the full details of the scheme are not fully decided. It is recommended that when a detailed scheme of works is available the Arboricultural Method Statement and Tree Protection Plan is updated accordingly, in consultation with the design team and local authority tree officer.

For ready reference, Figure 1.1 (Chapter 1) is a simplified version of the 'Design and Construction Process and Tree Care' table outlined in BS 5837:2012. The table clearly identifies processes and obligations expected at the various stages of the construction project. BS 5837:2012 is considered an iterative process, and as such the project arboriculturist's advice should be ongoing.

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1. Introduction

1.1 Context of this document in the Planning System

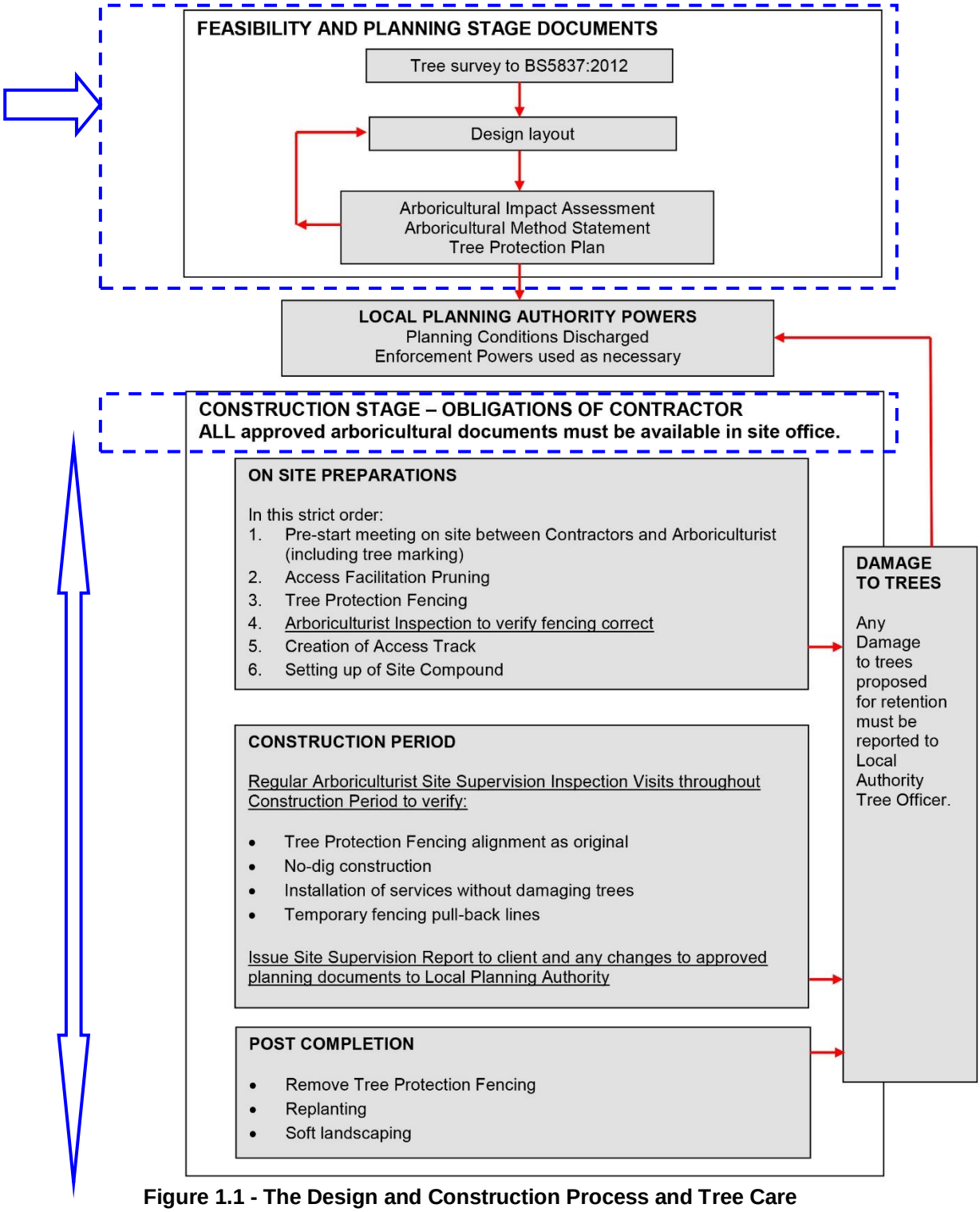


Figure 1.1 - The Design and Construction Process and Tree Care

1.1.1 This document has been prepared at the feasibility and planning stage of a project.

1.1.2 If it becomes an approved Planning Arboricultural Method Statement of tree protection measures and/or Tree Protection Plan, **a copy should be to hand in the Site Office at all times during the Construction Stage**.

1.2 Location

1.2.1 Ecus Limited (Ecus) was commissioned by Barnsley Metropolitan Borough Council (BMBC) to undertake a tree survey Arboricultural Impact Assesment and Arboricultural Method Statement of the site at land adjacent to Higham Lane, Dodworth, S75 1PN, UK grid reference SE 31617 06174. The site location is shown on Figure 1.2.

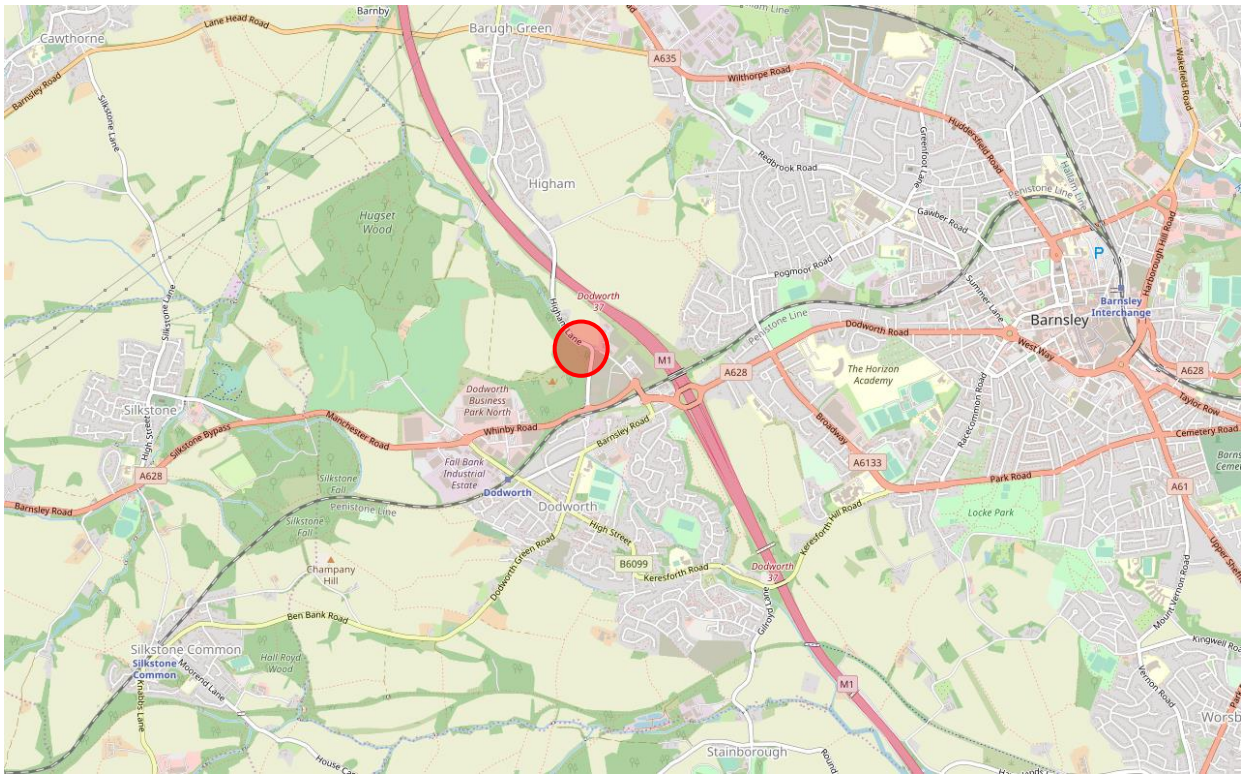


Figure 1.2 – Location Plan
© OpenStreetMap contributors

1.2.2 The survey was carried out in accordance with BS 5837:2012 '*Trees in Relation to Design, Demolition and Construction- Recommendations*'. This report sets out the findings of the survey and recommendations have been made for preliminary tree work that may be required.

1.3 Tree Designations

1.2.3 The survey included identification of any existing designations affecting trees on site such as Tree Preservation Orders (TPO) and Conservation Area status by checking the map information available on BMBC website www.barnsley.gov.uk.

1.2.1 This check confirmed that there are no TPOs on any of the trees surveyed. The site is not within a Conservation Area.

Ancient woodland and veteran trees

1.3.1 The site does not contain any recorded veteran trees as shown on the Ancient Tree Inventory maintained by the Woodland Trust (ati.woodlandtrust.org.uk).

1.3.2 An online search of the Department of Farming and Rural Affairs (defra) online mapping system Multi Agency Government Information for the Countryside (MAGIC)

(magic.defra.gov.uk) confirmed that no parts of the site are included in the Ancient Woodland Inventory England.

Other Designations

1.3.3 The southern section of the woodland, as far north as Lane Side Farm (UK Grid reference SE 31448 06345) is designated as Deciduous Woodland in the Priority Habitat Inventory. This is a spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance. This inventory replaces Natural England's previous separate Biodiversity Action Plan (BAP) habitat inventories: blanket bog, coastal & floodplain

Felling Licence

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

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

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

1.2.5 The most relevant exemption is;

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

(d) is immediately required for the purpose of carrying out development authorised by planning permission granted or deemed to be granted under the Town and Country Planning Act 1990 or the enactments replaced by that Act, or under the Town and Country Planning (Scotland) Act 1997.

1.2.6 Advice from a suitably qualified arboricultralist should be sought before any felling takes place onsite.

2. Tree Survey Methodology

2.1 Site survey

2.1.1 Ecus carried out two tree surveys. The first was in January 2020 when the trees were not in leaf. Following discussions with the Client the scope of the arboricultural report was increased to include the trees to the north and east of Higham Lane. Following an updated topographical survey, these trees where surveyed in April 2020. The tree surveys were a ground based visual inspection carried out by a suitably qualified arboriculturalist. The trees were not tagged as part of the survey.

2.1.2 The inspection of the trees, the site and the immediate surrounding area in January 2020 was carried out by Tom Planner MSc, MArborA and Peter Simpson, MICFor, MArborA. The April survey was carried out by Peter Simpson, MICFor, MArborA.

2.1.3 Weather on the day of the January and April surveys was clear and bright. Weather conditions on the day of the survey allowed for a thorough inspection of all trees included in this survey.

2.1.2 During a standard BS5837:2012 tree survey the following information is recorded:

- Species
- Stem diameter at 1.5 m above ground level (mm).
- Estimated height (m)
- Approximate crown spread (m) as North, South, East and West measurements.
- An estimate of the number of years that the tree is likely to remain suitable for retention.
    - <10 = less than 10 years;
    - 10+ = 10 - 20 years;
    - 20+ = 20 - 40 years; or
    - 40+ = more than 40 years
- Age classification
    - YNG = Young and recently established trees;
    - SM = Semi-mature trees age less than 1/3 life expectancy;
    - EM = Middle age trees 1/3 – 2/3 life expectancy;
    - M = Mature trees over 2/3 life expectancy; and
    - OM = Over mature – declining or moribund trees of low vigour.
- Condition category in accordance with BS 5837:2012 ‘Trees In Relation To Design, Demolition and Construction- Recommendations’. The categories listed are defined as per BS 5837:2012 and briefly are:
    - Category U = Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years;
    - Category A = Those of high quality and value, best trees with a long expected safe life;
    - Category B = Those of moderate quality and value; and
    - Category C = Those of low quality and value and trees less than 15cm diameter.
- Value subcategories in accordance with BS 5837:2012. The subcategories listed are defined as per BS 5837:2012 and briefly are:

  - 1 = Mainly arboricultural values
  - 2 = Mainly landscape values
  - 3 = Mainly cultural values, including conservation
- General notes about physiological and structural condition and any management recommendations.

2.1.4 The survey recorded all trees on site with a stem diameter of 75 mm or more at 1.5 m height and includes all trees outside the site boundary which may be affected by any future development of the site, either by their crown overhanging the site or their Root Protection Area (RPA) potentially extending into the site.

2.1.5 A full topographic survey of the site was provided; this was used as the basis for producing the tree survey plan. The topographic survey did not pick up some tree locations within or outside the development site and therefore some tree locations were estimated. These trees are marked with a cross on Figure 3.1.

2.1.6 Estimated tree locations are plotted with the internal GPS of a handheld data collection device, and an accuracy of +/- 2 m should be assumed.

2.1.7 Where densely wooded areas are not expected to be affected by any development proposals (e.g. woods located outside the site boundary) the mapping of trees was limited to significant trees located along the woodland perimeter.

2.1.8 The area surveyed for this report included a band of continuous woodland which runs the length of the western boundary of Higham Lane. During the initial 2019 tree survey carried out by Wardell Armstrong (*Sterling Capitol PLC, Capitol Park, Dodworth, Barnsley, S75 3BU. Arboricultural Constraints & Opportunities Report, February 2019, ref: SH11957*) only general characteristics of this woodland group were recorded.

2.1.9 Following discussions with Barnsley Metropolitan Borough Council it was agreed that greater detail was required in the tree survey than would normally be required for a BS5837:2012. Section 4.4.2.6 of the BS5837:2012 schedule contains a note '*Note 1 It is not always practical or necessary to record branch spread for every tree within a woodland group*'. The 2020 survey therefore recorded;

- Identification number
- Tree Species
- Diameter at breast height (dbh)
- Age classification

2.1.10 Where it was still necessary to record areas as groups due to either the density of stems, lack of gps signal to allow accurate plotting, or detail missing from the topographical survey, groups where kept as small as possible and the number of stems within each group recorded in the comments section.

2.1.11 Following discussions with BMBC the area covered by this report was increased to cover the land to the north and east of Higham Lane. The extended survey areas contained discreet individual trees, groups and hedges, and these have been surveyed and plotted as per the BS5837:2012 standard. The Tree Schedule for the April tree survey is presented in Table 3.2, Appendix 1.

2.1.12 At the time of carrying out a site survey it is not always possible to know which trees will be in conflict with development proposals. Therefore, when proposals are confirmed, it may be that arrangements are made to check measurements on site, especially where

development is proposed very close to existing trees.

2.1.13 Trees are living organisms that change over time. The condition of all trees described by this survey must be checked by a qualified arboriculturalist or tree surgeon before works commence, especially if there have been any storm events or 12 months or more have passed since the survey was carried out.

2.2 Calculation of Root Protection Area (RPA)

2.2.1 Below ground constraints to development are represented by the root plate around a tree which needs protecting in order for the tree to be incorporated into a proposed scheme, without adverse harm to the tree or structural integrity of any proposed foundation structures. This area is illustrated by the RPA and is calculated according to the formulae set out in BS 5837:2012 clause 4.6.1.

2.2.2 Any deviation in the RPA from the original circular plot should take account of physical site conditions that influence the disposition of tree roots, e.g. streams, building foundations and retaining walls.

3. Tree Survey Results

3.1 General Site Description

3.1.1 The site is located to the west of the Capitol Park industrial estate in Dodworth, Barnsley. The site comprises Higham Lane, a wet woodland area to the west of the highway, Lane Head Farm, the highway boundary to the north and east, and a small planted area that lies between the industrial estate and the highway.

3.1.2 The majority of the trees surveyed are located within the woodland to the west of Higham Lane. This area is an old coal mine bund that has been planted with native and near-native tree species that have further colonised the area to become successional woodland.

3.1.3 There are also a large number of young trees that have been planted on the land between the industrial estate and Higham Lane. Lane Head Farm is located where Higham Lane makes a sharp turn to the west. Its grounds contain a number of exotic specimen trees. Then building itself is vacant. The northern boundary of Higham Lane generally consists of a hedgerow with individual hedgerow trees.

3.1.4 There is a drainage ditch that runs through this woodland and it is clear that the entire area is subject to large volumes of water.

3.1.5 There is footpath that runs through the woodland on the western side of the drainage ditch.

3.2 Results of Tree Survey

3.2.1 The Tree Survey Schedules in Appendix 1 describe the results of the tree surveys and include preliminary management recommendations. Table 3.1 contains the tree schedule from the January site visit, Table 3.2 contains the tree schedule from the April site visit (both Appendix 1). The tables should be read in conjunction with Figure 3.1 Tree Survey and Tree Constraints Plan (Appendix 3). This drawing illustrates the location of the trees surveyed, the extent of their canopies as well as the RPA of each tree and tree group.

3.2.2 Eight hedgerows, 509 individual trees and 32 tree groups containing approximately 704 trees have been recorded during the survey. A full survey was carried out for those trees, including the recording of the stem diameter to determine the RPA of the trees. The survey was not completed to BS5837:2012 due to the scale of the area that was surveyed.

3.2.3 All trees and groups from T001 to T496, other than G213-215 form the woodland to the west of Higham Lane. The RPA of the individual trees and groups within the woodland has been calculated as per the BS5837:2012 recommendations. Indicated as a thin dashed pink line on figures 3.1 and 3.2, in reality, the whole woodland area is an RPA allowing the trees it contains unrestricted access to suitable rooting opportunities. While assessing the impact of the proposed development individual tree RPAs where used to assess the viability of trees close to the construction boundary.

3.2.4 The majority of the trees found within the wet woodland area are native or near native species. The trees are predominantly in the early mature life stage and they have a limited future potential due to the extensive waterlogging of the site. The majority of trees are silver birch *(Betula pendula)* and alder *(Alnus sp.)*. There is a mix of common alder *(Alnus glutinosa)* and Italian alder *(Alnus cordata)* and grey alder (*Alnus incana*) found within this woodland. They have been recorded as *Alnus sp.* As it is difficult to correctly

identify them when they are not in leaf. The alder trees are the most established and healthiest trees in the woodland as they are well suited to wet Ground conditions and occasional waterlogging of the soil.

3.2.5 There are a few oak trees within the woodland including English oak *(Quercus robur)*, pin oak *(Quercus palistris)* and red oak *(Quercus rubra)*. A number of these trees have also been recorded as *Quercus sp.* due to the difficulty in identifying these trees during the winter. There are relatively few oak trees within the woodland and this is likely because the soil is too wet for the species, therefore if a larger number of oak trees had been planted here they have likely died.

3.2.6 T427 is a roadside sessile oak. Probably around the oldest tree included in the survey this tree was noted as having bat roost potential in a number of large cavities in its lower stem.

3.2.7 Along the edge of the highway there are a large number of field elm *(Ulmus minor)* that are in poor condition with the larger trees succumbing to Dutch Elm Disease (DED). There are a number of young elm growing that are in good health but due to the cyclical nature of DED they will have a limited future potential.

3.2.8 There are also a number of field maple *(Acer campestre) and* hawthorn *(Crataegus monogyna)* along the edge of the woodland and highway. The majority of these trees are in poor condition due to the past management, whereby the trees have been flailed to keep them back from the highway.

3.2.9 The other notable species within the site are a number of mature common hawthorn *(Crataegus monogyna)* that form hedgerows along the edge of the woodland alongside the highway. The management of these hedgerows has long ceased, thought there is evidence of layering in the past. In places small trees such as sycamore and ash have become established in the hedgerow and now form part of the linear grouping. Many of these trees have also been flailed and so there quality is limited.

3.2.10 Whilst the individual trees within the woodland have limited future potential due to the waterlogged soil. It is evident that the woodland has become successional and would continue to cover the area in the future as there is extensive regrowth of trees in the understorey. Historic aerial imagery from Google Earth also shows that the area has had established woodland cover since at least 2002, the earliest imagery available. Therefore the woodland as a whole would be classed as category B within BS5837:2012, despite the majority of individual trees only being category C.

3.2.11 At the southern end of Higham Lane, and on its east side there is an area of trees between the highway of Higham Lane and the neighbouring industrial estate. The roadside boundary is formed by a hawthorn hedge H497 which shows evidence of past management through laying. Behind the hawthorn hedge and the industrial estate is an area of amenity screen planting. Semi mature, it mainly consists of hazel *(Corylus avellana),* aspen *(Populus tremula)* birch and cherry. At the point where Higham Lane turns sharply north west a footpath extension from Capitol Close connects foot traffic with the highway.

3.2.12 To the south of this footpath there is an area which has been planted with a mixture of common and Italian alder, English oak, silver birch, wild cherry *(Prunus avium)* and hazel. G213 to G215 forms a small area of amenity woodland planting which currently occupies the area between the Capitol Industrial Estate and Higham Lane. These trees are all less than 20 years old and the lack of management intervention means that they have a limited future potential for growth due to a small spacing.

3.2.13 A similar area of planting exists to the north of the footpath. G503 is of a similar composition to those areas to the south of the path, and currently screens foot traffic from Lane End Farm.

3.2.14 On the lawn at the front of Lane End Farm is a fine open grown specimen tree, Colorado Spruce (*Picea pungens*) T500. This tree is the only A category tree included in this survey. The grounds of the Farm contain a number of exotic trees, but none are of any merit.

3.2.15 The northern boundary of Higham Lane, from Lane Head Farm at the east to Lane Side Farm at the west is bounded by a hawthorn and holly hedge H528. Around 80% hawthorn and 30% holly, the hedgerow shows signs of past management by laying. In areas, ancient woodland indicators were present below the hedge in the field layer. Towards Lane Head Farm a section of the hedge is dominated by elms (*Ulmus sp*.) H210, many of which show signs of DED. The hedgerow terminates at Lane Head Farm with three field maples, G517 which are prominent trees of B category. Hedgerow H528 contains a number of multi stemmed ash trees (T518 – T525), typical of the species. The hedgerow has been given a B category as it is a prominent feature of the highway and in good condition. The ash trees have been given a C category, and a number showed signs of ash die back.

3.2.16 Where Higham Lane climbs the ramp to the bridge over the M1 many of the trees on the north side of the ramps northern face have been felled for power line clearance for the overhead electric power lines. This has left behind a rather untidy fringe of roadside trees G541 and G542, which in places are beginning to encroach on to the highway. None of the trees surveyed on the north of the road, west of T531 have been given a category greater than a C. T530 is a semi mature common alder showing excellent vigour and health and with good form. It has been given a B category.

3.2.17 A number of trees have been identified as category U trees as they are either dead, dying or otherwise damaged. These trees have not automatically been tagged for removal as in the context of a woodland, standing dead and dying trees are not considered to be a hazard or of poor amenity value. Therefore there are a number of dead and dying trees that can be retained. It is recommended that a second survey is carried out to ensure that hazards are managed correctly within the context of the scheme once a layout has been finalised.

3.2.18 The quality of trees on site is summarised in Table 3.3 below.

Table 3.3: Summary of Tree Survey Findings.

Category A	Category B	Category C	Category U
T500 – Colorado spruce	T017, H364, H497, H528 – Common Hawthorn	423 Trees	33 Trees
	T337, T347, T529 - Alder Sp.	28 Groups	1 Group
	T365, T366, T367, T368 – Field Maple	5 Hedgerows	
	T412, T427 – Oak Sp.		
	T495 – Silver Birch		
	G499, G503, G517 – Mixed species groups		
Total 1 Tree	**Total** 11 Trees 3 Hedgerows 3 Groups (containing approximately 53 trees)	**Total** 464 Trees 23 Groups (containing approximately 636 trees) 5 Hedgerows	**Total** 33 Trees 1 Group (Containing approximately 15 trees)

4. Arboricultural Impact Assessment (AIA)

4.1 Scheme Proposals

4.1.1 An Arboricultural Impact Assessment of the proposed scheme has been undertaken to assess the likely impact on existing trees and tree groups. This assessment is based on the General Layout provided by BMBC (ref: GA(DEC19)*).

4.1.2 BMBC proposes highway improvements that will include road realignment, widening and the construction of a new roundabout. The proposals also make provision for the associated footpaths and verges including a combined footpath and cycle path.

4.2 Arboricultural Impact Assessment

4.2.1 The impact of the proposed development is shown on Arboricultural Impact Assessment drawings figure 4.1 and 4.2, Appendix 3.

Direct Impact from Scheme Layout

4.2.2 The General Layout indicates that approximately 712 (including individually plotted and trees within groups) trees within the scheme footprint will need to be removed to accommodate the new scheme, including the widened highway, roundabout, footpaths, cycleways and earthworks. Tree loss includes the removal of 314 individual trees, six hedgerows, a section of one hedgerow, 15 tree groups and the partial removal of 7 other groups containing approximately 398 trees.

4.2.3 The northern most exit from the new roundabout will involve the demolition or Lane Head Farm and presumably the remediation of the remaining yard and hardstanding not directly under the new roadway. This will involve the removal of T500 to T503 and part of G503, G503 and part of H210. The realignment of Higham Lane south of Lane Head Farm will involve the removal of H497 and part of G499.

4.2.4 The creation of the new link section between Capital Close and Higham Lane, including the realignment of the road boundary will involve the loss of five trees, T543 to T547 which were planted as part of the landscaping scheme of the industrial park.

4.2.5 At the western most end of the scheme the road realignment and embankment work will lead to the loss of many of the trees on the southernmost ramp sides of the roadway embankment which rises to carry the highway over the M1 motorway.

4.2.6 Until the footprint of the proposed new road and its embankment is pegged out on site it is difficult to assess the effect on trees which are close to, but not directly within the zone of construction activity and the completed highway. As a rule the report has tried to give as realistic level of impact taking into account retained trees form, stability and likely canopy influence on the new highway.

Potential Indirect Impact from Construction Operations

4.2.7 As previously noted, the woodland was very wet. The construction of the roadway and its associated embankment may have an effect on the woodland drainage and water table which may have an indirect effect of increased tree mortality due impacted or altered drainage and increased levels of soil waterlogging.

4.2.8 The wet nature of the woodland will also affect tree stability and a number of windblown trees were evident in the northern part of the site. By removing the windfirm edge trees, to create space for the proposed scheme, there could be an increased risk of wind blow of newly exposed trees within the interior of the woodland group.

4.2.9 There may be a visual impact resulting from the loss of the woodland, which was clearly planted as a shelterbelt/screen to the former land use to the west. While the industrial activity has now ceased, the shelter belt now has considerable amenity value.

Summary

Table 4.1 below summarises the direct impact the proposed scheme may have on existing trees:Table 4.1: Summary of Tree removals

Category A	Category B	Category C	Category U
T500 – Colorado spruce	T337, T347 – Alder Sp.	287 Trees 5 Hedgerows 13 Groups; and Partial removal of 5 Groups (Containing approx. 326 trees)	18 Trees 1 Group (Containing 18 trees)
	H364, part of H497 – Hawthorn		
	T365, T366, T367, T368, G517 – Field Maple		
	T412, T427 – Oak Sp.		
	Part of G499, G503 – mixed species group		
Total 1 Tree	**Total** 8 Trees 1 Hedgerow and part of 1 hedgerow 1 group and part of 2 groups (Containing approx. 53)	**Total** 287 Trees 5 Hedgerows 13 Groups Partial removal of 5 Groups (Containing approx. 326 trees)	**Total** 18 Trees 1 Group (Containing 18 trees)

4.3 Recommendations

4.3.1 As the development proposals assume the removal of approximately 650 trees growing within the site, no protection measures will be required for those trees.

4.3.2 Chapter 5 Arboricultural Method Statement describes measures to protect the retained trees during the development, and operations within the RPA of retained trees including:

- Protective fencing;
- Temporary ground protection;
- Construction and change of level within the RPA;
- Installation of power supply services;
- Removal of temporary ground protection and protective fencing;
- Excavation for soft landscaping; and
- Arboricultural Clerk of Works.

4.3.3 It is recommended that replacement tree planting is carried out at a suitable replacement ratio in a suitable location. The trees should be planted at a suitable size for the scale of any new replacement planting. Proposed tree species should be suitable for the spatial constraints of their location. Recommended tree species include Northern England Broadleaved woodland trees including oak, birch, lime, willow and aspen.

4.3.4 Tree planting and establishment should be carried out in accordance with BS 8545:2014 '*Trees: From Nursery to Independence in the Landscape – Recommendations'.*

4.3.5 It is recommended that tree planting follows 5 – 10 – 20 - 30 formula (i.e. No more than

5% of any one cultivar, no more than 10% of any one species, no more than 20% of any one genus, and no more than 30% of any one family.) This gives any new tree population maximum resilience against pests and diseases.

5. Arboricultural Method Statement (AMS)

5.1 Important Founding Principle of BS 5837:2012

5.1.1 The most important and effective process, in terms of preventing damage to trees on a construction site, is the timely erection of tree protection fencing. **This must be erected as the first operation on site**, for example, before access track construction, before Contractors site cabins, and before trenching for service runs.

5.1.2 The founding principle of BS 5837:2012 '*Trees In Relation To Design, Demolition And Construction- Recommendations*' is that the protective fencing is erected before any other operation. However, it is noted that the fencing provides an unnecessary and potentially dangerous restriction to essential tree works and therefore tree works can be carried out before fencing is erected.

5.2 General

5.2.1 The Arboricultural Method Statement should be read in conjunction with Figure 5.1 Tree Protection Plan in Appendix 3. The Arboricultural Method Statement (AMS) paragraphs below are written in the chronological sequence they are to be carried out.

5.2.2 At present the full details of the scheme are not fully decided. It is recommended when a detailed scheme of works is available the Arboricultural Method Statement and Tree Protection Plan is updated accordingly, in consultation with the design team and local authority tree officer.

5.3 Pre-Commencement

5.3.1 It is advised that a Pre-Commencement Site Meeting is held with contractors who are responsible for operating machinery on site. The meeting will firstly highlight the potential for damage occurring to tree crowns, but thereafter ensure that extra care is applied when manoeuvring any machinery within close proximity of retained trees to prevent any contact with the tree and consequent damage to crown, stem or roots.

5.3.2 For clarity, prior to any construction or development work proceeding, the alignment of the protective fencing (Section 5.4 and the RPAs of any individual trees to be retained which are not able to be protected by fencing should be marked out using the distances provided in the table within the tree survey report. Marking out should be completed or approved by a person with arboricultural expertise as individual trees will have root zones that may be affected by local conditions and allowances will need to be made to accommodate this. This may be done prior to, or during, the Pre-Commencement Site Meeting.

5.4 Protective Barrier/Tree Protection Fencing

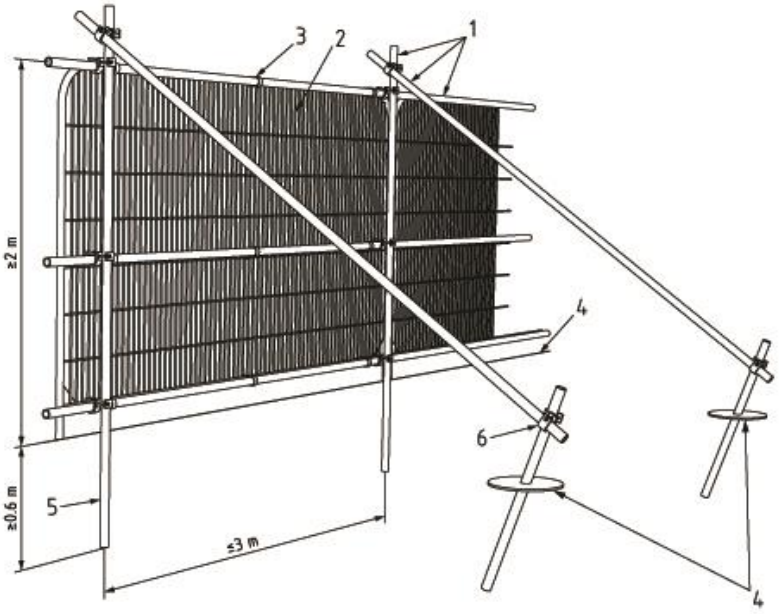
5.4.1 The development design prepared for the site indicates that a large number of trees within the site are being retained. In addition there are several trees off site but within 12m of the site boundary. All these trees need to be protected from all construction operations by a protective barrier (fencing to BS 5837:2012 which creates a sacrosanct Construction Exclusion Zone (CEZ).

5.4.2 The alignment of the protective barrier is based on the calculated extent of the RPA in accordance with BS 5837:2012. The detailed alignment is shown in Figure 5.1 to 5.2 Tree Protection Plan in Appendix 3.

5.4.3 At present, it is not clear what the scale of the works will be between Lane Head and

Lane Side Farm will be. This stretch of highway is currently bordered by hawthorn hedge with standard trees. The Tree protection Plan does not show a tree protective fence along the full length of the highway on the northern boundary. It may be possible to carry out the works in this area without damage or disturbance to the trees if it simply involves the careful removal of redundant road surfacing by an excavator located on the existing highway. This work could be carried out under arboricultural supervision. It is recommended this report is updated once detailed construction plans are clearer, and the tree protection amended as necessary.

5.4.4 In principle, protective fencing should be erected before any construction/demolition operations start on site and should be removed only on completion of all construction/demolition works on site.



Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 5.3: Default Specification for Protective Barrier to BS 5837:2012

5.4.5 The default specification for protective barrier is shown in Figure 5.3 above. Site hoarding is an acceptable alternative. It may be appropriate on some sites to use temporary site offices as components of the protection barriers, on the understanding that they will remain *in situ* for the duration of the construction/demolition works and their removal will be planned to ensure the Contractor's co-ordinated withdrawal from site away from the trees rather than towards them.

5.4.6 BS 5837:2012 clause 6.2.2.3 specifies an alternative protective barrier where site circumstances and associated risk of damage incursion into the RPA do not necessitate the default level of protection. This can include 2 m tall welded mesh panels (e.g. Heras fencing) on rubber or concrete feet to protect from cars, vans, pedestrians and manually operated plant. The alternative specification for the protective barrier should only be used if and where agreed with the Local Planning Authority.

5.4.7 All weather notices should be placed on fencing to indicate that operations are not

permitted within the fenced area, for example "CONSTRUCTION EXCLUSION ZONE – NO ACCESS" or similar.

5.4.8 Once set up fences should not be removed or altered without prior consultation with the arboricultural advisor.

5.4.9 The presence of long grass and other vegetation in the 'Construction Exclusion Zone' is a welcome indicator that the protected area has been left undisturbed. However, on occasion, and certainly towards the end of the project, it is acceptable to cut the vegetation by hand held strimmer or scythe taking care not to work within 300 mm of the tree trunk (to avoid damaging the bark). Vegetation within 300 mm of the trunk can be cut with non-mechanised shears.

5.5 Installation of power supply and services

5.5.1 There are currently no proposals to route services or utilities through the RPA of any retained trees. If this changes at a later stage of the project, proposals should be submitted to the local planning authority Tree Officer for approval.

5.5.2 As guidance only, it is noted here that any underground power supply and services routed through the RPA should be installed in accordance with BS 5837:2012 clause 7.7.2 and National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.

5.6 Construction within RPA

Changes of level within RPAs

5.6.1 Generally, the levels within the RPA or protected area should not be changed. Tree roots are considered to be, in the main, within the top 600 mm of the soil. Obviously, any excavation into this will remove part of the root system and potentially affect the vigour or stability of the tree. Conversely, any additional material built up above ground level will compact the soil beneath it, potentially compacting all the air pores in the 600 mm depth of soil that most roots are in, effectively suffocating the roots and thus affecting the vigour or stability of the tree.

5.6.2 On occasion, additional soil may be gently spread by hand within the RPA/protected area, for example, to marry levels in small areas between raised levels of no-dig construction and the existing levels. The maximum depth of this would be to 150 mm, reducing to nil. However, it is not generally acceptable, in large areas of the RPA/protected area to raise the level as a blanket. Any areas which will need to be raised are to be agreed Local Planning Authority prior to construction. Specifically there will be no mechanical equipment within the RPA/protected area to spread, compact, or level out soil levels as this would compact the soil.

5.7 Excavations for soft landscaping

5.7.1 Where soft landscaping is proposed within the RPA of retained trees, excavations should be kept to the minimum required to provide adequate conditions for the establishment of new shrubs and trees. Excavations should be carried out carefully and by hand, avoiding the severance of any roots larger than 25mm diameter.

Removal of Existing Hard Standing (northern boundary of Higham Lane between Lane Head and Lane Side Farm)

5.7.2 Where soft landscaping is proposed within the RPA in existing hard surfaces, the wearing course and its sub-base should be carefully lifted using handheld tools. Should any roots

be exposed in the process, they should be immediately wrapped or covered to prevent desiccation and to protect them from rapid temperature changes. Any wrapping should be removed prior to backfilling, which should take place as soon as possible.

Soil Improvements and Mulching

5.7.3 To compensate for root damage and stress caused by construction activities, retained trees onsite should be mulched. The materials that may be used for mulching include coarsely divided plant matter, such as wood chip, pulverized bark, or leaf mould, any of which may be combined with well-rotted animal manure. The mulched area should extend over as much of the root system as can be allowed by other site-usage requirements. The depth of an organic mulch should not be so much as to inhibit aeration of the root system or to cause overheating of uncomposted material (normally no more than 80 mm to 100 mm). The mulch should be periodically replenished as it decomposes, so that it does not become depleted.

6. Arboricultural Site Supervision

6.1.1 The Project Arboriculturalist will make random site inspection visit every 4 - 6 weeks throughout the construction period to observe that the operations on site comply with the Arboricultural Method Statement and Tree Protection Plan.

6.1.2 The Project Arboriculturalist will bring any indication of non-compliance to the attention of the Main Contractor, any relevant sub-contractors and the client, with the intention that non-compliant matters will be rectified within seven days when the Project Arboriculturalist will make a re-inspection.

6.1.3 Records of arboricultural site inspections will be kept in the Site Diary and at the Project Arboriculturalist's office. The Local Authority can request a copy of the arboricultural site inspection records at any time during the construction period.

6.1.4 The Project Arboriculturalist will request the ceasing of work which actively damages the trees or compacts the soil of the RPAs until such time as the non-compliant actions are rectified. The Project Arboriculturalist will contact the Local Authority to help with this if necessary.

7. Tree Management

7.1.1 The following section provides guidance as to how retained trees will best be protected during construction. More detailed guidelines for tree protection during construction are given in BS 5837:2012 '*Trees In Relation To Design, Demolition And Construction-Recommendations*'.

7.1.2 Any tree roots severed during site clearance works will be wrapped or covered with hessian sheets (wet in summer, dry in winter) as an immediate protection measure against desiccation and rapid temperature changes. This will be removed prior to backfilling which should be carried out as soon as possible. In addition the advice of an arboriculturalist, or the Tree Officer of the local planning authority, will be sought as soon as possible on the potential effect of the root damage on the tree's stability, vitality and legal implications.

7.1.3 All tree works will follow best practice procedures as set out in BS 3998:2010. All trees should be maintained in good condition on site and be inspected annually (where overall condition requires) or every two years and after any major storm events, with safety a priority.

7.1.4 The best practice principles have been broadly summarised below:

- Once areas around trees have been protected by fencing, any works on the remaining site area may be commenced providing activities do not impinge on protected areas;
- Wide or tall loads etc. will not come into contact with retained trees. Banksperson will supervise transit of vehicles, jibs, booms etc. where this is in close proximity to retained trees;
- Oil, bitumen, cement or other material that is potentially injurious to trees will not be stacked or discharged within 10 m of a tree bole. No concrete mixing will be done within 10 m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree;
- No fires will be lit where flames are anticipated to extend to within 5 m of tree foliage, branches or trunk, taking into consideration wind direction and size of fire;
- Notice boards, telephone cables or other services should not be attached to any part of a retained tree; and
- In the event of having caused any branch or limb damage to retained trees, the advice of an arboriculturalist will be sought on what tree surgery can be carried out, in accordance with BS 3998:2010, to correct the damage, and the best timescale for that tree surgery which will be determined by season, species, gravity of damage and legal status of the tree (Tree Preservation Order/ Conservation Area/nesting birds/roosting bats).

7.1.5 All of the above precautionary measures will be applied to minimise the effect of any damage to long-term tree health and safety.

7.1.6 It is recommended that any trees that require removal or significant canopy works should be checked in advance of works by an ecologist to ensure there is no possibility of any disturbance to nesting birds or roosting bats.

8. References

Books and Papers

BS 3998:2010 *Tree Work – Recommendations*. ISBN 978 0 580 53777 6

BS 5837:2012 *Trees in Relation to Design, Demolition and Construction – Recommendations*. ISBN 978 0 580 69917 7

BS 8545:2014 *Trees: From Nursery to Independence in the Landscape – Recommendations.*

Volume 4 NJUG *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees*, Volume 4: Issue 2: 16/11/2007, www.njug.org.uk

Appendix 1 – Tables

Table 3.1 – BS 5837:2012 Tree Survey Schedule January 2020 Survey

Key:	**Measurements**	**Age – Class**	**Overall Condition**	**BS 5837:2012 : Cascade Chart for Quality Assessment/Retention Category**	**Symbols:**
	MS – Multi-stemmed	YNG – Young Mature	G – Good	A – High	**<** = less than
	Ht - Height in metres	SM – Semi-mature	F – Fair	B – Moderate	**~** = approximately
	Stem – Stem Diameter at 1.5m in mm	EM – Early mature	P – Poor	C – Low	**>** = greater than
	Crown – Crown spread in metres	M – Mature	D - Dead	U – Unsuitable for retention	
	TD - Trunk division (height in metres)	OM – Over mature **Est Yrs –** estimate of years remaining (40+ years; 20+ years; 10+ years, <10 years)	ADB – Ash Die Back DED – Dutch Elm Disease	**Sub-categories:** **1** = mainly arboricultural values **2** = mainly landscape values **3** = mainly cultural values.	
RPA = Root protection area (equivalent to a circle with a radius 12 x the stem diameter of single stem trees or 12 x the notional stem diameter of multi stemmed trees as per BS 5837:2012 clause 4.6). This will be capped to 707m² for trees with a stem diameter larger than 1.25m.					

Ref	Species	Height (m)	**Stem Diam (mm)**	**Life Stage**	**Rem. Contrib.**	**Overall Cond**	**General Observations**	**Pre construction**	Retention Category	**RPA Radius**	**RPA Area**
T001	Hawthorn, Common *(Crataegus monogyna)*	4	160	Mature	20+ Years	Fair	"pollarded" at 1m	-	C	1.92	11
T002	Hawthorn, Common *(Crataegus monogyna)*	4	90	Mature	20+ Years	Fair	flailed	-	C	1.08	4
T003	Not identified *(Not identified)*	4	75	Dead	Dead	Dead	-	-	U	0	0
T004	Hawthorn, Common *(Crataegus monogyna)*	4	90	Dead	Dead	Dead	-	-	U	0	0
T005	Hawthorn, Common *(Crataegus monogyna)*	4	160	Mature	20+ Years	Fair	-	-	C	1.92	11
T006	Maple, Field *(Acer campestre)*	5	140	Early Mature	20+ Years	Fair	leaning to north	-	C	1.68	9
T007	Hawthorn, Common *(Crataegus monogyna)*	6	130	Mature	20+ Years	Fair	-	-	C	1.56	8
T008	Birch, Silver *(Betula pendula)*	12	200	Mature	40+ Years	Good	-	-	C	2.4	18
T009	Oak *(Quercus sp.)*	10	120	Early Mature	40+ Years	Good	-	-	C	1.44	6
T010	Hawthorn, Common *(Crataegus monogyna)*	3	75	Early Mature	20+ Years	Fair	leaning heavily north	-	C	0.9	3
T011	Birch, Silver *(Betula pendula)*	12	190	Mature	40+ Years	Good	-	-	C	2.28	17

T012	Birch, Silver *(Betula pendula)*	12	190	Mature	40+ Years	Good	-	-	C	2.28	17
T013	Hawthorn, Common *(Crataegus monogyna)*	4	90	Dead	Dead	Dead	-	-	U	0	0
T014	Hawthorn, Common*(Crataegus monogyna)*	4	90	Mature	20+ Years	Fair	flailed	-	C	1.08	4
T015	Hawthorn, Common *(Crataegus monogyna)*	4	90,80,70	Dead	Dead	Dead	-	-	U	0	0
T016	Alder (Alnus glutinosa)	10	220, 130, 90, 70,	Mature	40+ Years	Fair	-	-	C	3.36	36
T017	Hawthorn, Common *(Crataegus monogyna)*	6	500	Mature	40+ Years	Good	very mature hawthorn. DBH measured at base.	-	B	6	113
T018	Hawthorn, Common *(Crataegus monogyna)*	5	130	Mature	20+ Years	Fair	flailed	***Remove for scheme.***	C	1.56	8
T019	Ash, Common *(Fraxinus excelsior)*	8	100	Early Mature	20+ Years	Good	-	-	C	1.2	5
T020	Willow, Goat *(Salix caprea)*	8	130, 120,	Mature	20+ Years	Poor	1 stem leaning toward road	-	C	2.124	14
T021	Alder (Alnus glutinosa)	10	180	Mature	40+ Years	Good	-	-	C	2.16	15
T022	Alder (Alnus glutinosa)	10	180, 180,	Mature	40+ Years	Good	one stem topped at 2m	-	C	3.06	30
T023	Alder (Alnus glutinosa)	10	150, 150,	Mature	40+ Years	Good	-	-	C	2.544	20
T024	Birch, Silver *(Betula pendula)*	8	100	Early Mature	40+ Years	Fair	-	-	C	1.2	5

T025	Birch, Silver *(Betula pendula)*	8	160	Early Mature	40+ Years	Good	-	-	C	1.92	11
T026	Alder (Alnus glutinosa)	10	180	Mature	40+ Years	Good	-	-	C	2.16	15
T027	Not identified*(Not identified)*	6	80	Dead	Dead	Dead	-	-	U	0	0
T028	Alder (Alnus glutinosa)	6	90, 80, 70,	Early Mature	20+ Years	Poor	one stem dead	-	C	1.668	9
T029	Not identified *(Not identified)*	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T030	Alder (Alnus glutinosa)	6	75	Early Mature	20+ Years	Poor	one stem dead	-	C	1.56	8
T031	Alder (Alnus glutinosa)	7	90	Early Mature	40+ Years	Fair	-	-	C	1.08	4
T032	Birch, Silver *(Betula pendula)*	10	180	Mature	40+ Years	Good	-	-	C	2.16	15
T033	Alder (Alnus glutinosa)	10	180	Mature	40+ Years	Good	-	-	C	2.16	15
T034	Alder (Alnus glutinosa)	7	110	Early Mature	40+ Years	Fair	-	-	C	1.32	5
T035	Alder (Alnus glutinosa)	7	110	Early Mature	40+ Years	Fair	-	-	C	1.32	5
T036	Birch, Silver *(Betula pendula)*	10	180	Mature	40+ Years	Good	-	-	C	2.16	15
T037	Birch, Silver *(Betula pendula)*	10	160	Mature	40+ Years	Good	-	-	C	1.92	11
T038	Birch, Silver *(Betula pendula)*	10	130	Mature	40+ Years	Good	-	-	C	1.56	8

T039	Alder (Alnus glutinosa)	8	120	Early Mature	40+ Years	Good	-	-	C	1.44	6
T040	Alder (Alnus glutinosa)	6	80	Early Mature	20+ Years	Fair	-	-	C	0.96	3
T041	Alder (Alnus glutinosa)	6	80	Early Mature	20+ Years	Fair	-	-	C	0.96	3
T042	Alder (Alnus glutinosa)	5	80	Early Mature	40+ Years	Fair	flailed	***Remove for scheme.***	C	0.96	3
T043	Alder (Alnus glutinosa)	5	80	Early Mature	40+ Years	Fair	flailed	-	C	0.96	3
T044	Alder (Alnus glutinosa)	5	80	Early Mature	40+ Years	Fair	flailed	-	C	0.96	3
T045	Hawthorn, Common *(Crataegus monogyna)*	10	140	Mature	40+ Years	Good	-	-	C	1.68	9
T046	Not identified *(Not identified)*	5	80, 80,	Dead	Dead	Dead	-	-	U	0	0
T047	Alder (Alnus glutinosa)	8	160	Early Mature	40+ Years	Good	-	-	C	1.92	11
T048	Alder (Alnus glutinosa)	8	130	Early Mature	40+ Years	Good	-	-	C	1.56	8
T049	Alder (Alnus glutinosa)	8	140,160,60	Early Mature	40+ Years	Good	-	-	C	2.652	23
T050	Alder (Alnus glutinosa)	8	100,75	Early Mature	40+ Years	Good	-	-	C	1.5	7
T051	Alder (Alnus glutinosa)	10	180	Mature	40+ Years	Good	-	-	C	2.16	15
T052	Alder (Alnus glutinosa)	10	180, 150, 120,	Mature	20+ Years	Fair	-	-	C	3.156	32

T053	Alder (Alnus glutinosa)	6	90	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.08	4
T054	Alder (Alnus glutinosa)	6	130	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T055	Alder (Alnus glutinosa)	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T056	Alder (Alnus glutinosa)	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T057	Alder (Alnus glutinosa)	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T058	Not identified *(Not identified)*	5	90	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T059	Not identified *(Not identified)*	5	90	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T060	Alder (Alnus glutinosa)	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T061	Alder (Alnus glutinosa)	6	90	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T062	Alder (Alnus glutinosa)	12	280	Mature	40+ Years	Good	-	-	C	3.36	36
T063	Oak *(Quercus sp.)*	10	170	Mature	40+ Years	Good	-	-	C	2.04	13
T064	Oak *(Quercus sp.)*	12	310	Mature	40+ Years	Good	-	-	C	3.72	43
T065	Birch, Silver *(Betula pendula)*	12	240	Mature	40+ Years	Good	-	-	C	2.88	26
T066	Birch, Silver *(Betula pendula)*	10	140	Mature	40+ Years	Good	-	-	C	1.68	9

T067	Alder (Alnus glutinosa)	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T068	Alder (Alnus glutinosa)	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T069	Alder (Alnus glutinosa)	6	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T070	Birch, Silver *(Betula pendula)*	10	220	Mature	40+ Years	Good	-	-	C	2.64	21
T071	Birch, Silver *(Betula pendula)*	10	200	Mature	<10 years	Poor	-	***Remove for scheme.***	U	0	0
T072	Field Maple *(Acer campestre)*	5	80	Early Mature	40+ Years	Fair	-	***Remove for scheme.***	C	0.96	3
T073	Field Maple *(Acer campestre)*	5	80	Early Mature	40+ Years	Fair	-	***Remove for scheme.***	C	0.96	3
T074	Hawthorn, Common *(Crataegus monogyna)*	6	90, 90, 90, 90, 80,	Mature	40+ Years	Fair	flailed	***Remove for scheme.***	C	2.364	18
T075	Birch, Silver *(Betula pendula)*	10	160	Mature	20+ Years	Fair	snapped out main stem	-	C	1.92	11
T076	Birch, Silver *(Betula pendula)*	10	160	Mature	20+ Years	Good	ivy clad	-	C	1.92	11
T077	Sycamore *(Acer pseudoplatanus)*	12	300	Mature	40+ Years	Good	ivy	-	C	3.6	41
T078	Sycamore *(Acer pseudoplatanus)*	6	80	Semi Mature	40+ Years	Good	ivy	-	C	0.96	3
T079	Field Maple *(Acer campestre)*	5	80	Early Mature	40+ Years	Fair	-	-	C	0.96	3
T080	Birch, Silver *(Betula pendula)*	2	160	Dead	Dead	Dead	snapped out at 2m	-	U	0	0

T081	Birch, Silver *(Betula pendula)*	10	140	Mature	20+ Years	Good	ivy clad	-	C	1.68	9
T082	Oak *(Quercus sp.)*	14	470	Mature	<10 years	Poor	dead and dying stems	-	U	0	0
T083	Alder (Alnus glutinosa)	12	450	Mature	40+ Years	Good	-	-	C	5.4	92
T084	Birch, Silver *(Betula pendula)*	4	160	Dead	Dead	Dead	snapped out at 4m	-	U	0	0
T085	Cherry, wild *(Prunus avium)*	14	190, 190,	Mature	20+ Years	Fair	one stem snapped out	-	C	3.228	32
T086	Not identified *(Not identified)*	2	160	Dead	Dead	Dead	snapped out	-	U	0	0
T087	Field Maple *(Acer campestre)*	4	80	Semi Mature	20+ Years	Fair	-	-	C	0.96	3
T088	Alder (Alnus glutinosa)	14	230	Mature	20+ Years	Fair	-	-	C	2.76	25
T089	Alder (Alnus glutinosa)	6	200	Mature	10+ Years	Poor	fallen into T88	-	C	2.4	18
T090	Alder (Alnus glutinosa)	14	300	Mature	20+ Years	Poor	-	***Remove for scheme.***	C	3.6	41
T091	Not identified *(Not identified)*	4	90	Dead	Dead	Dead	-	-	U	0	0
T092	Alder (Alnus glutinosa)	14	260	Mature	20+ Years	Good	ivy clad	-	C	3.12	30
T093	Alder (Alnus glutinosa)	14	280	Mature	20+ Years	Good	ivy clad	-	C	3.36	36
T094	Not identified *(Not identified)*	4	90	Dead	Dead	Dead	-	-	U	0	0

T095	Alder (Alnus glutinosa)	5	80	Semi Mature	40+ Years	Good	-	-	C	0.96	3
T096	Hawthorn, Common *(Crataegus monogyna)*	5	80	Semi Mature	40+ Years	Good	-	-	C	0.96	3
T097	Alder (Alnus glutinosa)	12	180	Mature	40+ Years	Good	-	-	C	2.16	15
T098	Alder (Alnus glutinosa)	14	300	Mature	20+ Years	Good	ivy clad	-	C	3.6	41
T099	Alder (Alnus glutinosa)	14	220	Mature	20+ Years	Good	-	***Remove for scheme.***	C	2.64	21
T100	Alder (Alnus glutinosa)	12	220	Mature	40+ Years	Good	-	***Remove for scheme.***	C	2.64	21
T101	Birch, Silver *(Betula pendula)*	12	200	Mature	40+ Years	Good	-	***Remove for scheme.***	C	2.4	18
T102	Birch, Silver *(Betula pendula)*	12	120	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.44	6
T103	Birch, Silver *(Betula pendula)*	8	120	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.44	6
T104	Birch, Silver *(Betula pendula)*	8	120	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.44	6
T105	Birch, Silver *(Betula pendula)*	10	120	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.44	6
T106	Alder (Alnus glutinosa)	12	180	Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T107	Alder (Alnus glutinosa)	5	180	Mature	20+ Years	Poor	heavy lean east	***Remove for scheme.***	C	2.16	15
T108	Birch, Silver *(Betula pendula)*	14	310	Mature	<10 years	Poor	-	***Remove for scheme.***	C	3.72	43
T109	Alder (Alnus glutinosa)	14	280	Mature	20+ Years	Good	ivy clad	-	C	3.36	36

T110	Birch, Silver *(Betula pendula)*	14	280	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	3.36	36
T111	Birch, Silver *(Betula pendula)*	14	180	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	2.16	15
T112	Birch, Silver *(Betula pendula)*	14	180	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	2.16	15
T113	Alder (Alnus glutinosa)	14	180	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	2.16	15
T114	Alder (Alnus glutinosa)	12	150	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	1.8	10
T115	Alder (Alnus glutinosa)	12	150	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	1.8	10
T116	Alder (Alnus glutinosa)	12	180	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	2.16	15
T117	Birch, Silver *(Betula pendula)*	10	130	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	1.56	8
T118	Alder (Alnus glutinosa)	10	90	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	1.08	4
T119	Alder (Alnus glutinosa)	14	260	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	3.12	30
T120	Alder (Alnus glutinosa)	14	140	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	1.68	9
T121	Birch, Silver *(Betula pendula)*	14	150	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	1.8	10
T122	Birch, Silver *(Betula pendula)*	8	80	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	0.96	3
T123	Alder (Alnus glutinosa)	14	160	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	1.92	11
T124	Birch, Silver *(Betula pendula)*	14	280	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	3.36	36

T125	Alder (Alnus glutinosa)	8	80	Mature	20+ Years	Good	ivy clad	***Remove for scheme.***	C	0.96	3
G126	A group of 20 Alder	14	180	Mature	40+ Years	Fair	A group of 20 trees. Predominantly alder.	***Partially remove for scheme.***	C	0	95
G127	A group of 15 Field Elm *(Ulmus minor)*	18	260	Dead	Dead	Dead	A group of approxiamtely 15 dead field elm.	***Remove for scheme.***	U	0	0
G128	A group of 20 Alder *(Alnus glutinosa)*	14	220	Mature	40+ Years	Fair	A group of around 20 trees. Predominantly alder with occasional birch.	***Remove for scheme.***	C	0	301
G129	A group of 35 Alder *(Alnus glutinosa)*	14	180	Mature	40+ Years	Fair	A group of around 35 trees. Predominantly alder with occasional birch.	***Partially remove for scheme.***	C	0	347
G130	A group of 20 Silver Birch *(Betula pendula)*	14	200	Mature	40+ Years	Fair	A group of around 20 trees. Predominantly birch on woodland edge with occasional alder.	***Remove for scheme.***	C	0	134
G131	A group of 30 Alder *(Alnus glutinosa)*	12	160	Mature	40+ Years	Fair	A group of around 30 trees. Predominantly alder with occasional birch.	***Remove for scheme.***	C	0	641
G132	A group of 40 Silver Birch *(Betula pendula)*	14	200	Mature	40+ Years	Fair	A group of around 40 trees. Group is roughly 50% birch, 50% alder.	***Partially remove for scheme.***	C	0	511
T133	Alder (Alnus glutinosa)	12	180	Mature	20+ Years	Fair	stem removed, stem snapped	***Remove for scheme.***	C	2.16	15
T134	Alder (Alnus glutinosa)	14	330	Mature	20+ Years	Fair	stem removed, stem snapped	-	C	3.96	50
T135	Alder (Alnus glutinosa)	12	160	Mature	20+ Years	Fair	stem removed, stem snapped	-	C	1.92	11
T136	Alder (Alnus glutinosa)	14	230, 270,	Mature	20+ Years	Fair	stem removed, stem snapped	-	C	4.26	58
T137	Birch, Silver *(Betula pendula)*	12	160, 160,	Mature	20+ Years	Fair	stem removed, stem snapped	-	C	2.712	23
T138	Birch, Silver *(Betula pendula)*	12	160	Mature	20+ Years	Fair	stem removed, stem snapped	-	C	1.92	11

T139	Alder (Alnus glutinosa)	14	220	Mature	20+ Years	Fair	stem removed, stem snapped	-	C	2.64	21
T140	Alder (Alnus glutinosa)	14	220	Mature	20+ Years	Fair	stem removed, stem snapped	-	C	2.64	21
T141	Oak *(Quercus sp.)*	12	120	Dead	<10 years	Dead	stem removed, stem snapped	***Remove for scheme.***	U	0	0
T142	Alder (Alnus glutinosa)	12	200, 210,	Mature	40+ Years	Fair	-	***Remove for scheme.***	C	3.48	38
G143	A group of 10 Alder *(Alnus glutinosa)*	12	210	Mature	40+ Years	Fair	A small group of 10 dense alder stems.	***Remove for scheme.***	C	0	137
T144	Elder *(Sambucus nigra)*	8	130, 290, 90,	Over Mature	10+ Years	Poor	very old and large elder	***Remove for scheme.***	C	3.96	50
T145	Hawthorn, Common *(Crataegus monogyna)*	8	120	Mature	40+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T146	Hawthorn, Common *(Crataegus monogyna)*	8	130, 120, 80,	Mature	40+ Years	Fair	-	***Remove for scheme.***	C	2.328	17
T147	Elder *(Sambucus nigra)*	8	130, 290, 90,	Over Mature	10+ Years	Poor	very old and large elder	***Remove for scheme.***	C	3.96	50
T148	Hawthorn, Common *(Crataegus monogyna)*	4	80	Mature	40+ Years	Fair	-	***Remove for scheme.***	C	0	23
T149	Oak *(Quercus sp.)*	16	290	Mature	40+ Years	Good	-	***Remove for scheme.***	C	3.48	38
T150	Alder (Alnus glutinosa)	14	230	Mature	40+ Years	Fair	-	***Remove for scheme.***	C	2.76	25
T151	Birch, Silver *(Betula pendula)*	12	280	Mature	40+ Years	Good	-	***Remove for scheme.***	C	3.36	36
T152	Alder (Alnus glutinosa)	15	340	Mature	40+ Years	Good	-	-	C	4.08	53

T153	Alder (Alnus glutinosa)	15	250, 250,	Mature	40+ Years	Good	-	-	C	4.248	55
T154	Alder (Alnus glutinosa)	15	200	Mature	40+ Years	Good	-	-	C	2.4	18
T155	Alder (Alnus glutinosa)	15	220, 110,	Mature	40+ Years	Good	-	-	C	2.952	28
T156	Alder (Alnus glutinosa)	15	240	Mature	40+ Years	Good	-	-	C	2.88	26
T157	Not identified *(Not identified)*	10	300	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T158	Sycamore *(Acer pseudoplatanus)*	15	230	Mature	40+ Years	Good	-	***Remove for scheme.***	C	2.76	25
T159	Alder (Alnus glutinosa)	16	370	Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.44	61
T160	Birch, Silver *(Betula pendula)*	8	160	Early Mature	40+ Years	Fair	-	***Remove for scheme.***	C	1.92	11
T161	Hawthorn, Common *(Crataegus monogyna)*	5	90	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.08	4
T162	Alder (Alnus glutinosa)	14	360	Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.32	58
T163	Not identified *(Not identified)*	10	250	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T164	Not identified *(Not identified)*	10	250	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T165	Alder (Alnus glutinosa)	14	240	Mature	40+ Years	Good	-	-	C	2.88	26

T166	Alder (Alnus glutinosa)	12	160	Mature	40+ Years	Good	-	-	C	1.92	11
T167	Alder (Alnus glutinosa)	12	210	Mature	40+ Years	Good	-	-	C	2.52	20
T168	Alder (Alnus glutinosa)	12	330	Mature	40+ Years	Good	-	-	C	3.96	50
T169	Alder (Alnus glutinosa)	12	390	Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.68	69
T170	Alder (Alnus glutinosa)	12	370	Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.44	61
T171	Not identified *(Not identified)*	4	80	Dead	Dead	Dead	-	***Remove for scheme.***	U	0	0
T172	Field Maple *(Acer campestre)*	4	80	Early Mature	40+ Years	Good	-	***Remove for scheme.***	C	0.96	3
T173	Birch, Silver *(Betula pendula)*	10	180	Mature	40+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T174	Birch, Silver *(Betula pendula)*	10	190	Mature	40+ Years	Good	-	***Remove for scheme.***	C	2.28	17
T175	Hawthorn, Common *(Crataegus monogyna)*	3	90	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.08	4
T176	Alder (Alnus glutinosa)	4	75	Early Mature	40+ Years	Good	-	***Remove for scheme.***	C	0.9	3
T177	Alder (Alnus glutinosa)	4	160	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.92	11
T178	Alder (Alnus glutinosa)	14	320	Mature	40+ Years	Good	-	-	C	3.84	45
T179	Alder (Alnus glutinosa)	4	190	Dead	Dead	Dead	-	-	U	0	0

T180	Alder (Alnus glutinosa)	14	330	Mature	40+ Years	Good	-	-	C	3.96	50
T181	Alder (Alnus glutinosa)	14	330	Mature	40+ Years	Good	-	-	C	3.96	50
T182	Alder (Alnus glutinosa)	14	320	Mature	40+ Years	Good	-	-	C	3.84	45
T183	Birch, Silver *(Betula pendula)*	15	270	Mature	40+ Years	Good	-	-	C	3.24	32
T184	Birch, Silver *(Betula pendula)*	12	180	Mature	40+ Years	Good	-	-	C	2.16	15
T185	Birch, Silver *(Betula pendula)*	15	290	Mature	40+ Years	Good	-	-	C	3.48	38
T186	Birch, Silver *(Betula pendula)*	3	120	Dead	Dead	Dead	-	-	U	0	0
T187	Alder (Alnus glutinosa)	15	230	Mature	40+ Years	Fair	-	-	C	2.76	25
T188	Birch, Silver *(Betula pendula)*	15	190	Mature	40+ Years	Good	-	-	C	2.28	17
T189	Birch, Silver *(Betula pendula)*	15	190	Mature	40+ Years	Good	-	-	C	2.28	17
T190	Alder (Alnus glutinosa)	15	230, 110,	Mature	40+ Years	Good	-	***Remove for scheme.***	C	3.06	30
T191	Alder (Alnus glutinosa)	4	75	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	0.9	3
T192	Alder (Alnus glutinosa)	4	75	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	0.9	3
T193	Alder (Alnus glutinosa)	4	75	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	0.9	3
T194	Alder (Alnus glutinosa)	10	150, 150,	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	2.544	20

T195	Alder (Alnus glutinosa)	4	80, 80, 80, 80,	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.92	11
T196	Alder (Alnus glutinosa)	15	400	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.8	72
T197	Sycamore *(Acer pseudoplatanus)*	15	380	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.56	66
T198	Alder (Alnus glutinosa)	4	80, 80, 80, 80,	Semi Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.92	11
T199	Alder (Alnus glutinosa)	8	130	Early Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.56	8
T200	Alder (Alnus glutinosa)	15	350	Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.2	55
T201	Alder (Alnus glutinosa)	15	350	Mature	40+ Years	Good	-	***Remove for scheme.***	C	4.2	55
T202	Cherry, wild *(Prunus avium)*	15	360,290	Mature	40+ Years	Good	-	***Remove for scheme.***	C	5.544	95
T203	Hawthorn, Common *(Crataegus monogyna)*	4	80,90,75	Mature	40+ Years	Fair	-	***Remove for scheme.***	C	1.704	9
T204	Alder (Alnus glutinosa)	15	210, 160,	Mature	40+ Years	Good	-	-	C	3.168	32
T205	Alder (Alnus glutinosa)	15	350	Mature	40+ Years	Good	-	-	C	4.2	55
T206	Alder (Alnus glutinosa)	6	90	Dead	Dead	Dead	-	-	U	0	0
T207	Alder (Alnus glutinosa)	15	310, 280,	Mature	40+ Years	Good	-	***Remove for scheme.***	C	5.016	79
T208	Alder (Alnus glutinosa)	15	100	Mature	40+ Years	Good	-	***Remove for scheme.***	C	1.2	5

H209	Hawthorn, Common *(Crataegus monogyna)*	4	80	Mature	40+ Years	Fair	hawthorn hedge by highway. flailed	***Remove for scheme.***	C	0	155
H210	Elm, Field *(Ulmus minor)*	8	90	Mature	<10 years	Poor	overgrown flailed hedge	***Remove for scheme.***	C	0	99
H211	Blackthorn *(Prunus spinosa)*	4	90	Mature	20+ Years	Poor	old blackthorn hedge. flailed and collapsing.	***Remove for scheme.***	C	0	131
H212	Field Maple *(Acer campestre)*	4	80	Mature	20+ Years	Poor	from old hedge	***Remove for scheme.***	C	0	47
G213	A group of 40 Alder *(Alnus glutinosa)*	5	75	Semi Mature	40+ Years	Good	A group of around 40 trees. Predominantly alder with some oak and cherry.	***Remove for scheme.***	C	0	186
G214	A group of 20 Alder *(Alnus glutinosa)*	6	90	Early Mature	40+ Years	Good	A group of around 20 trees. Predominantly alder with oak and cherry. Appear to be slightly larger than two neighbouring groups.	***Remove for scheme.***	C	0	166
G215	A group of 30 Alder *(Alnus glutinosa)*	4	80	Semi Mature	40+ Years	Good	A group of around 40 trees. Predominantly alder with some silver birch and hazel.	***Remove for scheme.***	C	0	204
T216	Ash, Common *(Fraxinus excelsior)*	8	160, 120,	Semi Mature	10+ Years	Fair	leans over road	***Remove for scheme.***	C	2.4	18
T217	Hawthorn, Common *(Crataegus monogyna)*	6	130, 130,	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.208	15
T218	Cherry, wild *(Prunus avium)*	6	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T219	Ash, Common *(Fraxinus excelsior)*	14	240	Early Mature	10+ Years	Fair	-	***Remove for scheme.***	C	2.88	26
T220	Ash, Common *(Fraxinus excelsior)*	6	130	Early Mature	10+ Years	Fair	-	***Remove for scheme.***	C	1.56	8

T221	Ash, Common *(Fraxinus excelsior)*	12	190	Early Mature	10+ Years	Fair	-	***Remove for scheme.***	C	2.28	17
T222	Maple, Field *(Acer campestre)*	12	160	Early Mature	40+ Years	Fair	-	***Remove for scheme.***	C	1.92	11
T223	Ash, Common *(Fraxinus excelsior)*	6	80	Early Mature	10+ Years	Poor	-	***Remove for scheme.***	C	0.96	3
T224	Alder (Alnus glutinosa)	6	100	Dead	Dead	Dead	-	***Remove for scheme.***	C	1.2	5
T225	Cherry, wild *(Prunus avium)*	10	120,120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.04	13
T226	Ash, Common *(Fraxinus excelsior)*	14	130, 130,	Early Mature	10+ Years	Poor	occlusion at base	***Remove for scheme.***	C	2.208	15
T227	Maple, Field *(Acer campestre)*	14	90	Early Mature	10+ Years	Poor	-	***Remove for scheme.***	C	1.08	4
T228	Cherry, wild *(Prunus avium)*	12	140	Early Mature	10+ Years	Poor	-	***Remove for scheme.***	C	1.68	9
T229	Ash, Common *(Fraxinus excelsior)*	14	100	Early Mature	10+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T230	Maple, Field *(Acer campestre)*	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T231	Maple, Field *(Acer campestre)*	10	80	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.96	3
T232	Maple, Field *(Acer campestre)*	10	80	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.96	3
T233	Hawthorn, Common *(Crataegus monogyna)*	4	80	Early Mature	20+ Years	Poor	-	***Remove for scheme.***	C	0.96	3

T234	Ash, Common *(Fraxinus excelsior)*	10	220	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.64	21
T235	Maple, Field *(Acer campestre)*	10	170, 120,	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.496	20
T236	Maple, Field *(Acer campestre)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.692	9
T237	Cherry, wild *(Prunus avium)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.396	36
T238	Cherry, wild *(Prunus avium)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T239	Ash, Common *(Fraxinus excelsior)*	10	220, 220,	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.732	43
T240	Maple, Field *(Acer campestre)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.396	36
T241	Cherry, wild *(Prunus avium)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.396	36
T242	Maple, Field *(Acer campestre)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.872	11
T243	Ash, Common *(Fraxinus excelsior)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.544	20
T244	Hawthorn, Common *(Crataegus monogyna)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.396	36
T245	Ash, Common *(Fraxinus excelsior)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.544	20
T246	Ash, Common *(Fraxinus excelsior)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.544	20

T247	Alder (Alnus glutinosa)	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.544	20
T248	Maple, Field *(Acer campestre)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.04	13
T249	Maple, Field *(Acer campestre)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.04	13
T250	Cherry, wild *(Prunus avium)*	10	130	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.208	15
T251	Alder (Alnus glutinosa)	10	130	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.208	15
T252	Cherry, wild *(Prunus avium)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T253	Ash, Common *(Fraxinus excelsior)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T254	Oak, Pedunculate *(Quercus robur)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T255	Blackthorn *(Prunus spinosa)*	10	75	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.9	3
T256	Blackthorn *(Prunus spinosa)*	10	75	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.9	3
T257	Blackthorn *(Prunus spinosa)*	10	75	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.9	3
T258	Ash, Common *(Fraxinus excelsior)*	10	260	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.12	30
T259	Rowan *(Sorbus aucuparia)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T260	Maple, Field *(Acer campestre)*	10	180,110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.532	20

T261	Maple, Field *(Acer campestre)*	10	140	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.68	9
T262	Ash, Common *(Fraxinus excelsior)*	10	130	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.56	8
T263	Hawthorn, Common *(Crataegus monogyna)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T264	Cherry, wild *(Prunus avium)*	10	230	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.76	25
T265	Maple, Field *(Acer campestre)*	10	180,120,100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.856	26
T266	Maple, Field *(Acer campestre)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T267	Alder (Alnus glutinosa)	10	75	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	0.9	3
T268	Alder (Alnus glutinosa)	10	75	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	0.9	3
T269	Ash, Common *(Fraxinus excelsior)*	10	190,190	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.228	32
T270	Maple, Field *(Acer campestre)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T271	Ash, Common *(Fraxinus excelsior)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T272	Cherry, wild *(Prunus avium)*	10	190	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.28	17
T273	Cherry, wild *(Prunus avium)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T274	Cherry, wild *(Prunus avium)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10

T275	Ash, Common *(Fraxinus excelsior)*	10	120,120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.04	13
T276	Alder (Alnus glutinosa)	10	220	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	2.64	21
T277	Cherry, wild *(Prunus avium)*	10	120	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.44	6
T278	Cherry, wild *(Prunus avium)*	10	120	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.44	6
T279	Cherry, wild *(Prunus avium)*	10	120	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.44	6
T280	Cherry, wild *(Prunus avium)*	10	120	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.44	6
T281	Cherry, wild *(Prunus avium)*	10	120	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.44	6
T282	Hawthorn, Common *(Crataegus monogyna)*	10	100	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.2	5
T283	Cherry, wild *(Prunus avium)*	10	150	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.8	10
T284	Hawthorn, Common *(Crataegus monogyna)*	10	110	Dead	20+ Years	Dead	-	***Remove for scheme.***	C	1.32	5
T285	Hawthorn, Common *(Crataegus monogyna)*	10	130	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.56	8
T286	Ash, Common *(Fraxinus excelsior)*	10	190	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.28	17
T287	Hawthorn, Common *(Crataegus monogyna)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5

T288	Maple, Field *(Acer campestre)*	10	80,110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.632	8
T289	Ash, Common *(Fraxinus excelsior)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T290	Cherry, wild *(Prunus avium)*	10	80	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.96	3
T291	Cherry, wild *(Prunus avium)*	10	80	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.96	3
T292	Cherry, wild *(Prunus avium)*	10	80	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.96	3
T293	Maple, Field *(Acer campestre)*	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T294	Cherry, wild *(Prunus avium)*	10	210	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.52	20
T295	Hawthorn, Common *(Crataegus monogyna)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T296	Hawthorn, Common *(Crataegus monogyna)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T297	Ash, Common *(Fraxinus excelsior)*	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
G298	A group of cherry (*Prunus sp*.) and ash (F*raxinus excelsior*)	10	200	Early Mature	20+ Years	Fair	Approximately 10 stems on steep slope	***Remove for scheme.***	C	0	22
T299	Maple, Field *(Acer campestre)*	10	120,120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.04	13
T300	Cherry, wild *(Prunus avium)*	10	200,100,100,130,190	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	4.032	50

T301	Hawthorn, Common *(Crataegus monogyna)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T302	Hawthorn, Common *(Crataegus monogyna)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T303	Maple, Field *(Acer campestre)*	10	200,120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.796	25
T304	Ash, Common *(Fraxinus excelsior)*	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T305	Cherry, wild *(Prunus avium)*	10	75	Early Mature	20+ Years	Poor	-	***Remove for scheme.***	C	0.9	3
T306	Rowan *(Sorbus aucuparia)*	10	90,90	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.524	7
T307	Not identified *(Not identified)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T308	Maple, Norway *(Acer platanoides)*	16	500	Early Mature	20+ Years	Poor	weak occluded union	-	C	6	113
T309	Maple, Norway *(Acer platanoides)*	16	360	Early Mature	20+ Years	Poor	-	-	C	4.32	58
T310	Hawthorn, Common *(Crataegus monogyna)*	16	200	Early Mature	20+ Years	Poor	-	***Remove for scheme.***	C	2.4	18
T311	Sycamore *(Acer pseudoplatanus)*	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T312	Alder (Alnus glutinosa)	10	150	Early Mature	20+ Years	Fair	-	-	C	1.8	10

T313	Blackthorn *(Prunus spinosa)*	10	80	Early Mature	20+ Years	Poor	leans over path	***Remove for scheme.***	C	0.96	3
T314	Birch, Silver *(Betula pendula)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T315	Birch, Silver *(Betula pendula)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T316	Birch, Silver *(Betula pendula)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T317	Birch, Silver *(Betula pendula)*	10	160	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.92	11
T318	Cherry, wild *(Prunus avium)*	10	90	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0	45
T319	Cherry, wild *(Prunus avium)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T320	Cherry, wild *(Prunus avium)*	10	190	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.28	17
T321	Sycamore *(Acer pseudoplatanus)*	10	80,100	Early Mature	20+ Years	Poor	-	-	C	0.9	3
T322	Sycamore *(Acer pseudoplatanus)*	16	180,180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.9	3
T323	Sycamore *(Acer pseudoplatanus)*	16	250	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3	28
T324	Sycamore *(Acer pseudoplatanus)*	16	250	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3	28
T325	Cherry, wild *(Prunus avium)*	10	75	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.9	3
T326	Cherry, wild *(Prunus avium)*	10	75	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.9	3

T327	Sycamore *(Acer pseudoplatanus)*	10	75	Early Mature	20+ Years	Fair	-	-	C	0.9	3
T328	Birch, Silver *(Betula pendula)*	10	200,190	Early Mature	20+ Years	Fair	-	-	C	3.312	34
T329	Alder (Alnus sp.)	10	320	Early Mature	20+ Years	Fair	-	-	C	3.84	45
T330	Alder (Alnus sp.)	10	220	Early Mature	20+ Years	Fair	-	-	C	2.64	21
T331	Alder (Alnus sp.)	10	300,300	Early Mature	20+ Years	Fair	-	-	C	5.088	82
T332	Alder (Alnus sp.)	10	180	Early Mature	20+ Years	Dead	-	-	C	2.16	15
T333	Sycamore *(Acer pseudoplatanus)*	10	150, 150,	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.544	20
G334	Birch, Silver *(Betula pendula)*	10	150	Early Mature	20+ Years	Poor	8 birch, 2 Rowan, 1 nm, sycamore moribund	***Partially remove for scheme.***	C	0	119
G335	Cherry, wild *(Prunus avium)*	10	150	Early Mature	20+ Years	Fair	approximately 35 stems on steep slope, not plotted on topo, similar to previous trees plotted on this Embankment	***Remove for scheme.***	C	0	195
T336	Maple, Norway *(Acer platanoides)*	10	220	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.64	21
T337	Alder (Alnus glutinosa)	18	420	Mature	20+ Years	Fair	lost dominant at base	***Remove for scheme.***	B	5.04	79
T338	Alder (Alnus glutinosa)	18	120, 80,	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.728	9
T339	Birch, Silver *(Betula pendula)*	18	80	Early Mature	<10 years	Poor	-	***Remove for scheme.***	C	0.96	3
T340	Maple, Field *(Acer campestre)*	12	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T341	Birch, Silver *(Betula pendula)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10

T342	Alder (Alnus glutinosa)	10	350	Mature	20+ Years	Fair	-	***Remove for scheme.***	C	4.2	55
T343	Alder (Alnus glutinosa)	10	280,280,300	Early Mature	20+ Years	Fair	-	-	C	0.9	3
T344	Alder (Alnus glutinosa)	10	200	Early Mature	20+ Years	Fair	-	-	C	2.4	18
T345	Alder (Alnus glutinosa)	10	150	Early Mature	20+ Years	Fair	-	-	C	1.8	10
G346	Alder (Alnus glutinosa)	10	100	Early Mature	20+ Years	Fair	approximately 18 alders in shallow ditch	-	C	0	75
T347	Alder (Alnus glutinosa)	20	600	Mature	20+ Years	Fair	-	***Remove for scheme.***	B	7.2	163
T348	Maple, Norway *(Acer platanoides)*	10	180,280,260	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	5.064	82
T349	Birch, Silver *(Betula pendula)*	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T350	Birch, Silver *(Betula pendula)*	10	150	Early Mature	<10 years	Poor	-	***Remove for scheme.***	C	1.8	10
T351	Birch, Silver *(Betula pendula)*	10	110	Dead	Dead	Poor	-	***Remove for scheme.***	C	1.32	5
T352	Alder (Alnus glutinosa)	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T353	Alder (Alnus glutinosa)	10	300,360	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	5.628	99
T354	Alder (Alnus glutinosa)	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T355	Alder (Alnus glutinosa)	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T356	Alder (Alnus glutinosa)	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41

G357	Alder (Alnus glutinosa)	10	75	Early Mature	20+ Years	Fair	approximately 50 alder and birch growing in ditch	-	C	0	159
T358	Maple, Norway *(Acer platanoides)*	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T359	Alder (Alnus glutinosa)	10	200,200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.396	36
T360	Birch, Silver *(Betula pendula)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T361	Maple, Norway *(Acer platanoides)*	10	400	Early Mature	10+ Years	Poor	occluded union at base	***Remove for scheme.***	C	4.8	72
T362	Maple, Norway *(Acer platanoides)*	10	230	Early Mature	10+ Years	Poor	occluded union	***Remove for scheme.***	C	2.76	25
T363	Ash, Common *(Fraxinus excelsior)*	10	320	Early Mature	10+ Years	Fair	-	***Remove for scheme.***	C	3.84	45
H364	Hawthorn, Common *(Crataegus monogyna)*	8	120	Mature	20+ Years	Fair	hawthorn hedge, unmanaged so now row of individual trees, evidence of laying	***Remove for scheme.***	B	0	170
T365	Maple, Field *(Acer campestre)*	10	300, 300, 230,	Early Mature	20+ Years	Fair	in hedgerow	***Remove for scheme.***	B	5.796	106
T366	Maple, Field *(Acer campestre)*	10	320	Early Mature	20+ Years	Fair	in hedgerow	***Remove for scheme.***	B	3.84	45
T367	Maple, Field *(Acer campestre)*	10	350	Early Mature	20+ Years	Fair	in hedgerow	***Remove for scheme.***	B	4.2	55
T368	Maple, Field *(Acer campestre)*	10	220	Early Mature	20+ Years	Fair	in hedgerow	***Remove for scheme.***	B	2.64	21
G369	Alder (Alnus sp.)	10	200	Early Mature	20+ Years	Fair	approx 30 alder and Rowan, stems not plotted on Topo	***Remove for scheme.***	C	0	252
T370	Alder (Alnus sp.)	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41

T371	Alder (Alnus sp.)	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T372	Alder (Alnus sp.)	10	75	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	0.9	3
T373	Alder (Alnus sp.)	10	180,180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.06	30
T374	Alder (Alnus sp.)	10	250	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3	28
T375	Alder (Alnus sp.)	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T376	Alder (Alnus sp.)	10	200,200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.396	36
T377	Alder (Alnus sp.)	10	210	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.52	20
T378	Alder (Alnus sp.)	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T379	Alder (Alnus sp.)	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T380	Alder (Alnus sp.)	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T381	Alder (Alnus sp.)	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T382	Alder (Alnus sp.)	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T383	Alder (Alnus sp.)	10	200,180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.228	32
T384	Alder (Alnus sp.)	10	120,120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.04	13
T385	Alder (Alnus sp.)	10	140	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.68	9
T386	Alder (Alnus sp.)	10	140	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.68	9
T387	Alder (Alnus sp.)	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
G388	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	approximately 40 stems, alder dominated woodland, with occasional birch	-	C	0	222
T389	Alder *(Alnus sp.)*	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T390	Alder *(Alnus sp.)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T391	Alder *(Alnus sp.)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5

T392	Alder *(Alnus sp.)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T393	Alder *(Alnus sp.)*	10	140	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.68	9
T394	Alder *(Alnus sp.)*	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T395	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	-	C	1.8	10
T396	Sycamore *(Acer pseudoplatanus)*	10	120,120,120,100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.772	25
T397	Oak, Pedunculate *(Quercus robur)*	10	500	Early Mature	20+ Years	Fair	multi stemmed, measured at base	***Remove for scheme.***	C	6	113
T398	Birch, Silver *(Betula pendula)*	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T399	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.64	21
T400	Maple, Norway *(Acer platanoides)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T401	Maple, Norway *(Acer platanoides)*	10	250	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3	28
T402	Maple, Norway *(Acer platanoides)*	10	250	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3	28
T403	Birch, Silver *(Betula pendula)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T404	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T405	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T406	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10

T407	Hawthorn, Common *(Crataegus monogyna)*	10	120,120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.04	13
G408	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	9 alder stems	-	C	0	33
T409	Birch, Silver *(Betula pendula)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T410	Alder *(Alnus sp.)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
G411	Alder *(Alnus sp.)*	10	250	Early Mature	20+ Years	Fair	approximately 20 stems, not plotted on Topo, birch, alder and hawthorn	***Remove for scheme.***	C	0	223
T412	Oak, Pin *(Quercus palustris)*	16	320	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	B	3.84	45
G413	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	approximately 22 stems, alder dominated with occasional birch	-	C	0	152
T414	Alder *(Alnus sp.)*	10	300	Early Mature	20+ Years	Fair	-	-	C	3.6	41
T415	Birch, Silver *(Betula pendula)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T416	Alder *(Alnus sp.)*	10	130	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.56	8
T417	Birch, Silver *(Betula pendula)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T418	Alder *(Alnus sp.)*	10	250	Dead	10+ Years	Poor	-	***Remove for scheme.***	C	3	28
T419	Alder *(Alnus sp.)*	10	110	Dead	10+ Years	Poor	-	***Remove for scheme.***	C	1.32	5
T420	Hawthorn, Common *(Crataegus monogyna)*	10	110	Semi Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T421	Hawthorn, Common *(Crataegus monogyna)*	10	110	Semi Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5

T422	Hawthorn, Common *(Crataegus monogyna)*	10	110	Semi Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T423	Hawthorn, Common *(Crataegus monogyna)*	10	110	Semi Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T424	Hawthorn, Common *(Crataegus monogyna)*	10	110	Semi Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
G425	Alder *(Alnus sp.)*	10	150	Semi Mature	20+ Years	Fair	approximately 12 alder with occasional birch	-	C	0	30
H426	Hawthorn, Common *(Crataegus monogyna)*	10	150	Mature	20+ Years	Fair	remains of old hedgerow growing on bank, mainly hawthorn, unmanaged, and some with ivy, also contains occasional sycamore, field maple and birch growing as small, unmanaged trees from hedgerow line, stems around 200 mm dbh common	***Remove for scheme.***	C	0	133
T427	Oak, Pedunculate *(Quercus robur)*	10	300	Mature	40+ Years	Fair	old hedgerow trees, hollows in stem at around 2 m, bat roost potential	***Remove for scheme.***	B	3.6	41
T428	Hawthorn, Common *(Crataegus monogyna)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T429	Hawthorn, Common *(Crataegus monogyna)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T430	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T431	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T432	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	-	C	1.8	10
T433	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	-	C	1.8	10

T434	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	-	-	C	2.4	18
T435	Sycamore *(Acer pseudoplatanus)*	10	150	Early Mature	20+ Years	Fair	-	-	C	1.8	10
T436	Alder *(Alnus sp.)*	10	140	Early Mature	20+ Years	Fair	-	-	C	1.68	9
T437	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	-	C	2.64	21
T438	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	-	-	C	2.4	18
T439	Alder *(Alnus sp.)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T440	Alder *(Alnus sp.)*	10	200	Early Mature	20+ Years	Fair	-	-	C	2.4	18
T441	Alder *(Alnus sp.)*	10	90	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.08	4
T442	Alder *(Alnus sp.)*	10	100	Early Mature	20+ Years	Fair	-	-	C	1.2	5
T443	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	-	C	1.8	10
T444	Birch, Silver *(Betula pendula)*	10	210	Early Mature	20+ Years	Fair	-	-	C	2.52	20
T445	Birch, Silver *(Betula pendula)*	10	120	Early Mature	20+ Years	Fair	-	-	C	1.44	6
T446	Hawthorn, Common *(Crataegus monogyna)*	10	140	Early Mature	20+ Years	Fair	-	-	C	1.68	9
T447	Birch, Silver *(Betula pendula)*	10	200	Early Mature	20+ Years	Fair	-	-	C	2.4	18
T448	Blackthorn *(Prunus spinosa)*	10	110	Early Mature	20+ Years	Fair	-	-	C	1.32	5
T449	Blackthorn *(Prunus spinosa)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T450	Blackthorn *(Prunus spinosa)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5

T451	Blackthorn *(Prunus spinosa)*	10	110	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.32	5
T452	Birch, Silver *(Betula pendula)*	10	170	Early Mature	20+ Years	Fair	-	-	C	2.04	13
T453	Birch, Silver *(Betula pendula)*	10	110	Early Mature	20+ Years	Fair	-	-	C	1.32	5
T454	Birch, Silver *(Betula pendula)*	10	130	Early Mature	20+ Years	Fair	-	-	C	1.56	8
T455	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.64	21
T456	Hawthorn, Common *(Crataegus monogyna)*	10	260	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.12	30
T457	Hawthorn, Common *(Crataegus monogyna)*	10	180	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.16	15
T458	Birch, Silver *(Betula pendula)*	10	200,200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.396	36
G459	Maple, Field *(Acer campestre)*	10	200	Early Mature	20+ Years	Fair	approximately 8 trees, mainly field maple, between old hedge line and plotted trees	***Remove for scheme.***	C	0	240
G460	Alder *(Alnus sp.)*	10	170	Early Mature	20+ Years	Fair	approximately 10 trees, mainly alder, with occasional birch	***Remove for scheme.***	C	0	157
T461	Sycamore *(Acer pseudoplatanus)*	10	100	Early Mature	20+ Years	Fair	-	-	C	1.2	5
T462	Sycamore *(Acer pseudoplatanus)*	10	310	Early Mature	20+ Years	Fair	-	-	C	3.72	43
T463	Maple, Norway *(Acer platanoides)*	10	320	Early Mature	20+ Years	Fair	-	-	C	3.84	45

T464	Maple, Norway *(Acer platanoides)*	10	300	Early Mature	20+ Years	Fair	-	-	C	3.6	41
T465	Hawthorn, Common *(Crataegus monogyna)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T466	Hawthorn, Common *(Crataegus monogyna)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T467	Hawthorn, Common *(Crataegus monogyna)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T468	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T469	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T470	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T471	Alder *(Alnus sp.)*	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T472	Alder *(Alnus sp.)*	10	250	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3	28
T473	Ash, Common *(Fraxinus excelsior)*	10	200	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.4	18
T474	Alder *(Alnus sp.)*	10	330	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.96	50
T475	Birch, Silver *(Betula pendula)*	10	330	Early Mature	20+ Years	Fair	-	-	C	3.96	50
T476	Hawthorn, Common *(Crataegus monogyna)*	10	180	Early Mature	20+ Years	Fair	-	-	C	2.16	15
T477	Alder *(Alnus sp.)*	10	150	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.8	10
T478	Birch, Silver *(Betula pendula)*	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41

T479	Hawthorn, Common *(Crataegus monogyna)*	10	300	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.6	41
T480	Alder *(Alnus sp.)*	10	180	Early Mature	Dead	Dead	-	-	C	2.16	15
T481	Birch, Silver *(Betula pendula)*	10	260	Early Mature	20+ Years	Fair	-	-	C	3.12	30
T482	Birch, Silver *(Betula pendula)*	10	200,150	Early Mature	20+ Years	Fair	-	-	C	3	28
T483	Birch, Silver *(Betula pendula)*	10	270	Early Mature	20+ Years	Fair	-	-	C	3.24	32
T484	Alder *(Alnus sp.)*	10	270	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.24	32
T485	Alder *(Alnus sp.)*	10	320	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	3.84	45
T486	Alder *(Alnus sp.)*	10	310	Early Mature	20+ Years	Fair	-	-	C	3.72	43
T487	Alder *(Alnus sp.)*	10	100	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.2	5
T488	Alder *(Alnus sp.)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T489	Alder *(Alnus sp.)*	10	120	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	1.44	6
T490	Hawthorn, Common *(Crataegus monogyna)*	10	190	Early Mature	20+ Years	Fair	-	***Remove for scheme.***	C	2.28	17
T491	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	-	C	2.64	21
T492	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	-	C	2.64	21
T493	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	-	C	2.64	21
T494	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	-	C	2.64	21

T495	Birch, Silver *(Betula pendula)*	10	220	Early Mature	20+ Years	Fair	-	-	B	2.64	21
T496	Birch, Silver *(Betula pendula)*	10	480	Early Mature	20+ Years	Fair	-	-	C	5.76	106

Table 3.2 – BS 5837:2012 Tree Survey Schedule April 2020 Survey

Key:	**Measurements**	**Age – Class**	**Overall Condition**	**BS 5837:2012 : Cascade Chart for Quality Assessment/Retention Category**	**Symbols:**
	MS – Multi-stemmed	YNG – Young Mature	G – Good	A – High	**<** = less than
	Ht - Height in metres	SM – Semi-mature	F – Fair	B – Moderate	**~** = approximately
	Stem – Stem Diameter at 1.5m in mm	EM – Early mature	P – Poor	C – Low	**>** = greater than
	Crown – Crown spread in metres	M – Mature	D - Dead	U – Unsuitable for retention	
	TD - Trunk division (height in metres)	OM – Over mature	ADB – Ash Die Back	**Sub-categories:**	
		Est Yrs – estimate of years remaining (40+ years; 20+ years; 10+ years, <10 years)	DED – Dutch Elm Disease	**1** = mainly arboricultural values **2** = mainly landscape values **3** = mainly cultural values.	
RPA = Root protection area (equivalent to a circle with a radius 12 x the stem diameter of single stem trees or 12 x the notional stem diameter of multi stemmed trees as per BS 5837:2012 clause 4.6). This will be capped to 707m² for trees with a stem diameter larger than 1.25m.					

Tree No	**Species**	**Ht (m)**	**Stem Diam @ 1.5 m (mm)**	**Canopy Spread (m) N- E- S- W**	**Height of Crown Clearance**	**Age Class**	**Est yrs**	**Overall Condition**	**Comments**	**Management Recommendations**	**BS 5837 Category**	**RPA Radius (m)**	**RPA (m²)**
H497	Hedgerow of Common Hawthorn *(Crataegus monogyna)*	Ave. 7	Ave. 100	As per plan	0	Mature	20+ Years	Fair	Roadside hedge, with screen planting behind, evidence of previous management by laying. Hedge no longer managed and growing out, occasional small, multi stemmed ash	-	B2	0	187

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W	Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
G498	Group of Aspen *(Populus tremula),* birch (*Betula sp.*), hazel (*Corylus avellana*) and cherry (*Prunus sp*.)	Ave. 10	Ave. 150	As per plan	0	Semi Mature		Fair	Screen planting on bank, aspen, cherry and birch, with occasional hazel. Largest trees 150 mm dbh, approximately 17 trees	-	C2	0	364
G499	Group of Aspen *(Populus tremula),* birch (*Betula sp.*), Field Maple *(Acer campestre),* hazel (*Corylus avellana*), and cherry (*Prunus sp*.)	Ave. 12	Ave. 200	As per plan	0	Semi Mature	40+ Years	Fair	Approximately 20 trees, aspen, ash and field maple, with multi stemmed hazel below. Aspen's largest and best trees in the group. Screen industrial estate	-	B2	0	587

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T500	Colorado Spruce *(Picea pungens)*	11	75	3	3	3	3	0	Early Mature	40+ Years	Good	A fine, open growing specimen tree	-	A1	0.9	3
T501	Lawson Cypress *(Chamaecyparis lawsoniana)*	6	80, 80, 80,	2	2	2	2	0	Early Mature	20+ Years	Fair	Garden tree, typical of species, of no merit	-	C2	1.668	9
T502	Lawson Cypress *(Chamaecyparis lawsoniana)*	6	80, 80, 80,	2	2	2	2	0	Early Mature	20+ Years	Fair	Garden tree, typical of species, of no merit	-	C2	1.668	9
G503	Group of Field Maple *(Acer campestre),* (*Corylus avellana*), alder (*Alnus glutinosa*) and cherry (*Prunus sp*.)	Ave. 10	Ave. 80	As per plan				0	Semi Mature	40+ Years	Fair	Area of dense utility planting between footpath and house, field maple, alder, ash and hazel at approximately 1 m centres. Many multi stemmed. Approximately 30 trees	-	B2	0	242
T504	Rowan *(Sorbus aucuparia)*	5	75	1	1	1	1	1	Semi Mature	10+ Years	Fair	On mown bank at rear of offices	-	C2	0.9	3

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T505	Common Ash *(Fraxinus excelsior)*	8	140	1.5	1.5	1.5	1.5	1	Semi Mature	10+ Years	Fair	On mown bank at rear of offices	-	C2	1.68	9
T506	Common Ash *(Fraxinus excelsior)*	5	80	1	1	1	1	1	Semi Mature	10+ Years	Fair	On mown bank at rear of offices	-	C2	0.96	3
T507	Rowan *(Sorbus aucuparia)*	5	75	1	1	1	1	1	Semi Mature	10+ Years	Fair	On mown bank at rear of offices	-	C2	0.9	3
T508	Rowan *(Sorbus aucuparia)*	5	75	1	1	1	1	1	Semi Mature	10+ Years	Fair	On mown bank at rear of offices	-	C2	0.9	3
T509	Hazel *(Corylus avellana)*	5	75	1.5	1.5	1.5	1.5		Semi Mature	40+ Years	Fair	Multi stemmed	-	C2	0.9	3
T510	Pedunculate Oak *(Quercus robur)*	6	140	2	2	2	2	0	Semi Mature	20+ Years	Fair	Edge tree of screening boundary tree group	-	C2	1.68	9
T511	Weeping Willow *(Salix babylonica)*	11	220	3	3	3	3	0	Early Mature	20+ Years	Fair	Growing on fence line, typical of species	-	C2	2.64	21

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T512	Laurel Cherry *(Prunus laurocerasus)*	3	75	1	1	1	1	0	Mature	10+ Years	Fair	Growing under willow, of no merit	-	C2	0.9	3
T513	Field Maple *(Acer campestre)*	9	160	2	2	2	2	0	Semi Mature	40+ Years	Fair	Typical of species, screen between office and farm	-	C2	1.92	11
T514	Sycamore *(Acer pseudoplatanus)*	6	80, 80, 80, 80,	2	2	2	2	0	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow, below OH electric lines, so limited future potential	-	C2	1.92	11
T515	Pedunculate Oak *(Quercus robur)*	7	100, 100, 80, 80,	2	2	2	2	0	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow, below OH electric lines, so limited future potential	-	C2	2.172	15

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
G516	Hedgerow of Common Hawthorn *(Crataegus monogyna)*	Ave. 7	Ave. 100	As per plan				0	Early Mature	20+ Years	Fair	Field boundary hedge, below power line, contains small trees and is backed on the south by amenity planting on the industrial estate. Many multi stemmed trees which have been cut for power line clearance, and have now regenerated	-	C2	0	96
G517	Group of 3 Field Maple *(Acer campestre)*	Ave. 15	Ave. 200	As per plan				4	Early Mature	20+ Years	Fair	Approximately 3 multi stemmed field maples forming the end of the elm dominant hedge section	-	B2	0	58
T518	Common Ash *(Fraxinus excelsior)*	11	80, 80, 80, 80, 80, 80, 80, 80, 80,	3	3	3	3	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow	-	C2	2.88	26
T519	Common Ash *(Fraxinus excelsior)*	11	200, 180, 150, 150,	2	2	2	2	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow	-	C2	4.116	53

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T520	Common Ash *(Fraxinus excelsior)*	11	200,120,120,100,100	2	2	2	2	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow	-	C2	3.576	41
T521	Common Ash *(Fraxinus excelsior)*	11	150,150,160,120	2	2	2	2	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow	-	C2	3.504	38
T522	Common Ash *(Fraxinus excelsior)*	11	150,150,100,100,100,80	2	2	2	2	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow	-	C2	3.42	36
T523	Common Ash *(Fraxinus excelsior)*	11	150,150,150,150,140,140	2	2	2	2	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow	-	C2	4.308	58
T524	Common Ash *(Fraxinus excelsior)*	11	200, 250,	1.5	1.5	1.5	1.5	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow, pollarded at 1.5 m	-	C2	3.84	45
T525	Common Ash *(Fraxinus excelsior)*	11	160, 100, 100, 160, 110,	2	2	2	2	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow, pollarded at 1.5 m	-	C2	3.468	38

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T526	Sycamore *(Acer pseudoplatanus)*	11	150, 150,	2	2	2	2	3	Early Mature	10+ Years	Fair	Multi stemmed tree in hedgerow	-	C2	2.544	20
T527	Cultivar Apple *(Malus domestica)*	6	80,	1.5	1.5	1.5	1.5	1	Early Mature	20+ Years	Fair	Multi stemmed tree in hedgerow, next to wall pillar	-	C2	0.96	3
H528	Hedgerow of Common Hawthorn *(Crataegus monogyna)*	Ave. 6	Ave. 100	As per plan				0	Mature	40+ Years	Fair	Roadside hedge, around 80 % hawthorn, with the rest Holly, evidence of previous management by laying, currently unmanaged. Some ancient woodland indicators below	-	B2	0	283
T529	Italian Alder *(Alnus cordata)*	10	180	2	2	2	2	0	Semi Mature	40+ Years	Fair	Showing good form and potential	-	B2	2.16	15
G530	Group of 30 Common Alder *(Alnus glutinosa)*	Ave. 6	Ave. 75	As per plan				0	Young	40+ Years	Fair	Dense group of self-set alders, typical of species, non-larger than 75 mm, approximately 30 stems	-	C2	0	111
T531	Field Maple *(Acer campestre)*	6	75	1.5	1.5	1.5	1.5	0	Semi Mature	40+ Years	Fair	-	-	C2	0.9	3

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T532	Common Ash *(Fraxinus excelsior)*	12	200, 200,	3	3	3	3	2	Early Mature	10+ Years	Fair	-	-	C2	3.396	36
T533	Common Hawthorn *(Crataegus monogyna)*	6	160	2	2	2	2	0	Early Mature	20+ Years	Fair	Leans over stone wall	-	C2	1.92	11
T534	Hazel *(Corylus avellana)*	6	80, 80, 80,	2	2	2	2	0	Early Mature		Fair	Nest in crown	-	C2	1.668	9
T535	Common Hawthorn *(Crataegus monogyna)*	8	120, 80,	2	2	2	2	0	Early Mature	20+ Years	Fair	-	-	C2	1.728	9
T536	Common Ash *(Fraxinus excelsior)*	9	200	2	2	2	2	1	Early Mature	10+ Years	Fair	Partially fallen, now regrowing upright	-	C	2.4	18
T537	Grey Alder *(Alnus incana)*	12	250, 200,	2.5	2.5	2.5	2.5	2	Early Mature	20+ Years	Fair	Two closely growing stems	-	C2	3.84	45
T538	Rowan *(Sorbus aucuparia)*	9	150	1.5	1.5	1.5	1.5	1	Early Mature	20+ Years	Fair	-	-	C2	1.8	10

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T539	Grey Alder *(Alnus incana)*	10	250, 250,	2	2	2	2	1	Early Mature	20+ Years	Poor	Topped for power line clearance	-	C2	4.248	55
T540	Field Maple *(Acer campestre)*	10	250	2	2	2	2	1	Early Mature	20+ Years	Poor	Topped for power line clearance	-	C2	4.248	55
G541	Group of 9 Wild Cherry *(Prunus avium)*	Ave. 6	Ave. 80	As per plan				1	Semi Mature	20+ Years	Fair	Group of 9 similar cherries, all around 80 mm dbh, power line clearance on slope behind, now regenerating	-	C	0	97
G542	Group of Wild Cherry *(Prunus avium) and* Field Maple *(Acer campestre)*	Ave. 10	Ave. 150	As per plan				1	Early Mature	20+ Years	Fair	Approximately 30 trees, alongside road at the top of the bank, left following clearance for power lines. Mostly cherry and field maple, occasional ash, bank behind now regenerating	-	C2	0	328
T543	Norway Maple *(Acer platanoides)*	8	100	2	2	2	2	2	Semi Mature	40+ Years	Fair	Some basal damage on road side	-	C	1.2	5

Tree No	Species	Ht (m)	Stem Diam @ 1.5 m (mm)	Canopy Spread (m) N- E- S- W				Height of Crown Clearance	Age Class	Est yrs	Overall Condition	Comments	Management Recommendations	BS 5837 Category	RPA Radius (m)	RPA (m^2)
T544	Common Lime *(Tilia x vulgaris)*	6	80	1.5	1.5	1.5	1.5	2	Semi Mature	40+ Years	Fair	-	-	C	0.96	3
T545	Norway Maple *(Acer platanoides)*	8	90	2	2	2	2	2	Semi Mature	40+ Years	Fair	-	-	C	1.08	4
T546	Common Lime *(Tilia x vulgaris)*	6	90	1.5	1.5	1.5	1.5	2	Semi Mature	40+ Years	Fair	-	-	C2	1.08	4
T547	Norway Maple *(Acer platanoides)*	8	90	2	2	2	2	2	Semi Mature	40+ Years	Fair	-	-	C2	1.08	4
T548	Common Lime *(Tilia x vulgaris)*	7	90	2	2	2	2	1	Semi Mature	40+ Years	Fair	-	-	C2	1.08	4
T549	Norway Maple *(Acer platanoides)*	7	90	2	2	2	2	2	Semi Mature	40+ Years	Fair	-	-	C2	1.08	4

Appendix 2 – Site Photographs



Plate 1: **G203 looking east from Higham Lane**



Plate 2: **G127 looking north west**



Plate 3: **General view west into woodland near G143**



Plate 4: **Elm hedgerow H210 looking east**



Plate 5: **Looking north along Higham Lane, T202 tree closest to road middle picture.**



Plate 6: **Northern end of survey area, looking south, near T225.**

Appendix 3 – Figures

Root Protection Areas.
Drawn as calculated as per BS5837:2012 standards and not adjusted for underground constraints to rooting.

Trees on the west side of the road.
Continous woodland extending up to highway boundary. Canopy spreads of individuals ommitted from drawing for clarity.

RPA's of groups and individuals shown as faint pink dashed line

The Barn

Lane Side Farm

159.6m

N

REV	DATE	DRAWN BY	CHECKED BY	REVISION COMMENT
B	04.04.20	PS	Ecus	Updated survey north and east of road
A	18.02.20	TP	Ecus	Preliminary

DRAWING STATUS: For Planning

0m 10m 20m 50m

SCALE BAR 1:500

The original version of the drawing was produced in colour. Monochrome copies should not be relied upon.

GENERAL NOTES - TREE SURVEY

- Drawing for Planning purposes only.
- Refer to arboricultural report produced by ECUS Ltd titled 14477 Higham Lane, Dodworth - BS5837:2012 Tree Survey, Arboricultural Impact Assessment and Arboricultural Method Statement.
- Based on topographic survey provided by Survey Solutions dated 14.02.2020, updated by Premier Design Surveys Limited on 21.04.20.
- Check all dimensions on site.
- Do not scale from this drawing.
- Report any discrepancies and omissions to Ecus Ltd.
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3RD-PARTY INFORMATION
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KEY

Trunk location from topographic survey

Trunk location approximated by ECUS

Tree categories (BS 5837:2012)

Category A Trees

Category B Trees

Category C Trees

Category U Trees

Root Protection Area (RPA) of trees as calculated by BS5837:2012 and unadjusted for rooting restrictions

Root Protection Area (RPA) of trees within woodland as calculated by BS5837:2012 and unadjusted for rooting restrictions

KEY PLAN (not to scale)

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Job
HIGHAM LANE, DODWORTH

Title
Figure 3.1
Tree Survey and Tree Constraints Plan

By	Date	Scale @ A1	Drg. no.
TP	Feb 2020	1:500	14477-ARB-01

Root Protection Areas.
Drawn as calculated as per BS5837:2012 standards and not adjusted for underground constraints to rooting.

Trees on the west side of the road.
Continous woodland extending up to highway boundary. Canopy spreads of individuals ommitted from drawing for clarity.

RPA's of groups and individuals shown as faint pink dashed line

Lane Head Farm

CAPITOL CLOSE

HIGHAM LANE

Capitol Park

Drain

Path (um)

159.6m

153.1m

GENERAL NOTES - TREE SURVEY

- Drawing for Planning purposes only.
- Refer to arboricultural report produced by ECUS Ltd titled 14477 Higham Lane, Dodworth - BS5837:2012 Tree Survey, Arboricultural Impact Assessment and Arboricultural Method Statement.
- Based on topographic survey provided by Survey Solutions dated 14.02.2020, updated by Premier Design Surveys Limited on 21.04.20.
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KEY

Trunk location from topographic survey

Trunk location approximated by ECUS

Tree categories (BS 5837:2012)

Category A Trees

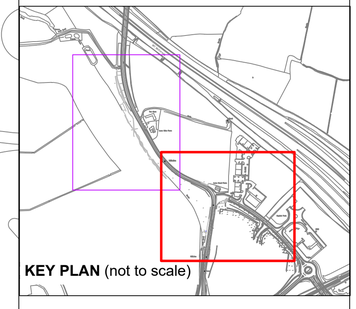
Category B Trees

Category C Trees

Category U Trees

Root Protection Area (RPA) of trees as calculated by BS5837:2012 and unadjusted for rooting restrictions

Root Protection Area (RPA) of trees within woodland as calculated by BS5837:2012 and unadjusted for rooting restrictions



KEY PLAN (not to scale)

REV	DATE	DRAWN BY	CHECKED BY	REVISION COMMENT
B	04.04.20	PS	Ecus	Updated survey north and east of road
A	18.02.20	TP	Ecus	Preliminary

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Job
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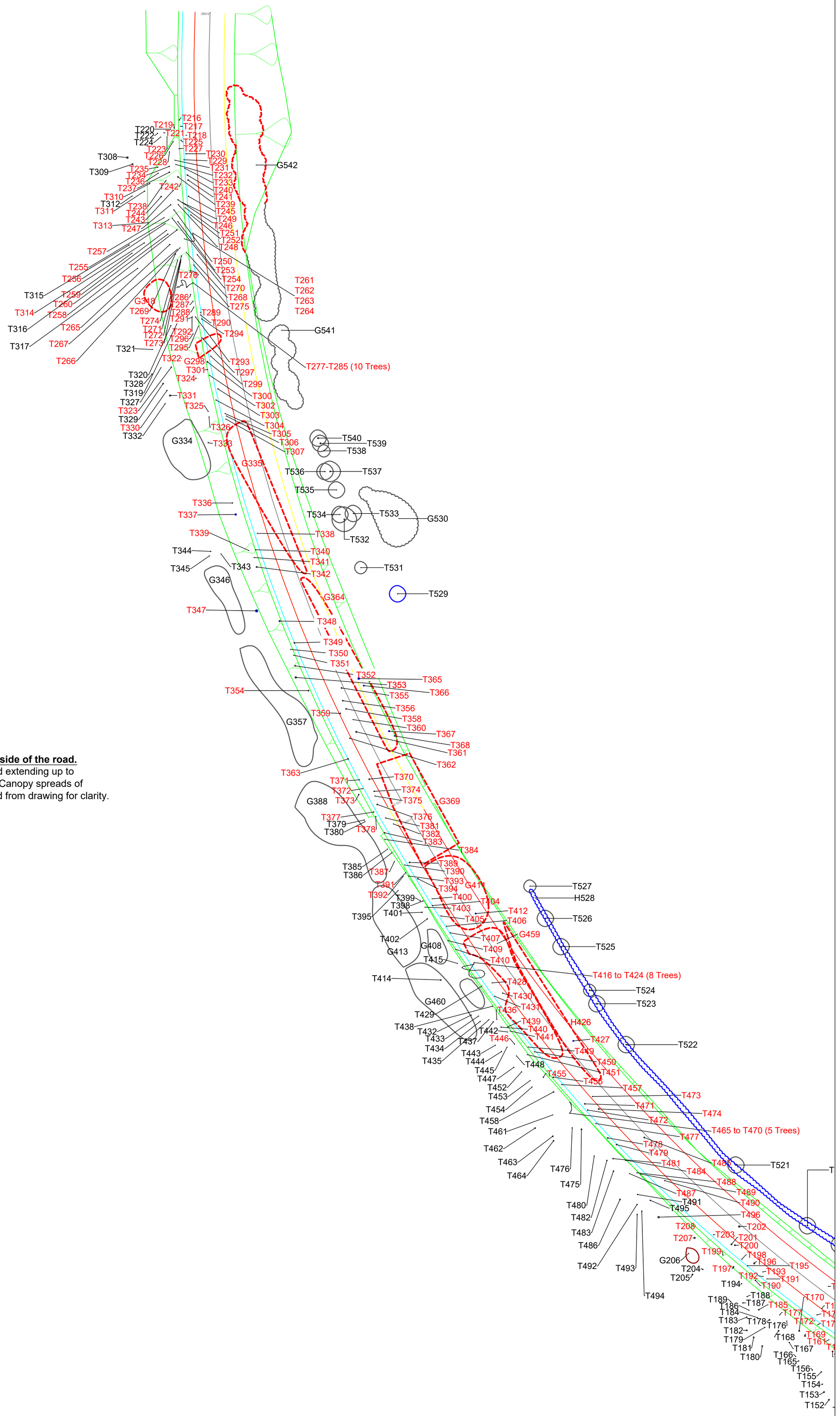
Title
Figure 3.2
Tree Survey and Tree Constraints Plan

By	Date	Scale @ A1	Drg. no.
TP	**Feb 2020**	**1:500**	**14477-ARB-02**

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0m 10m 20m 50m
SCALE BAR 1:500

N



Trees on the west side of the road.
Continous woodland extending up to highway boundary. Canopy spreads of individuals ommitted from drawing for clarity.

REV	DATE	DRAWN BY	CHECKED BY	REVISION COMMENT
B	04.04.20	PS	Ecus	Updated survey north and east of road
A	18.02.20	TP	Ecus	Preliminary

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GENERAL NOTES - AIA

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- Refer to arboricultural report produced by ECUS Ltd titled 14477 Higham Lane, Dodworth - BS5837:2012 Tree Survey, Arboricultural Impact Assessment and Arboricultural Method Statement.
- Based on topographic survey provided by Survey Solutions dated 14.02.2020, , updated by Premier Design Surveys Limited on 21.04.20. Impact Assessment based on drawing provided by BMBC ref:GA(19)*
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KEY

Trunk location from topographic survey

Trunk location approximated by ECUS

Existing tree to be removed

Red group or tree number indicates the tree of group will be removed to facilitate the scheme.

Shrubs and hedges

Tree categories (BS 5837:2012)

Category A Trees

Category B Trees

Category C Trees

Category U Trees

Root Protection Area (RPA) ommitted for clarity

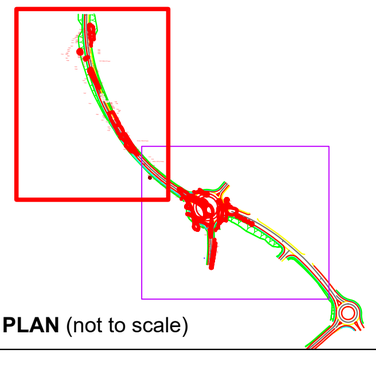
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N

0m 10m 20m 50m

SCALE BAR 1:500

KEY PLAN (not to scale)

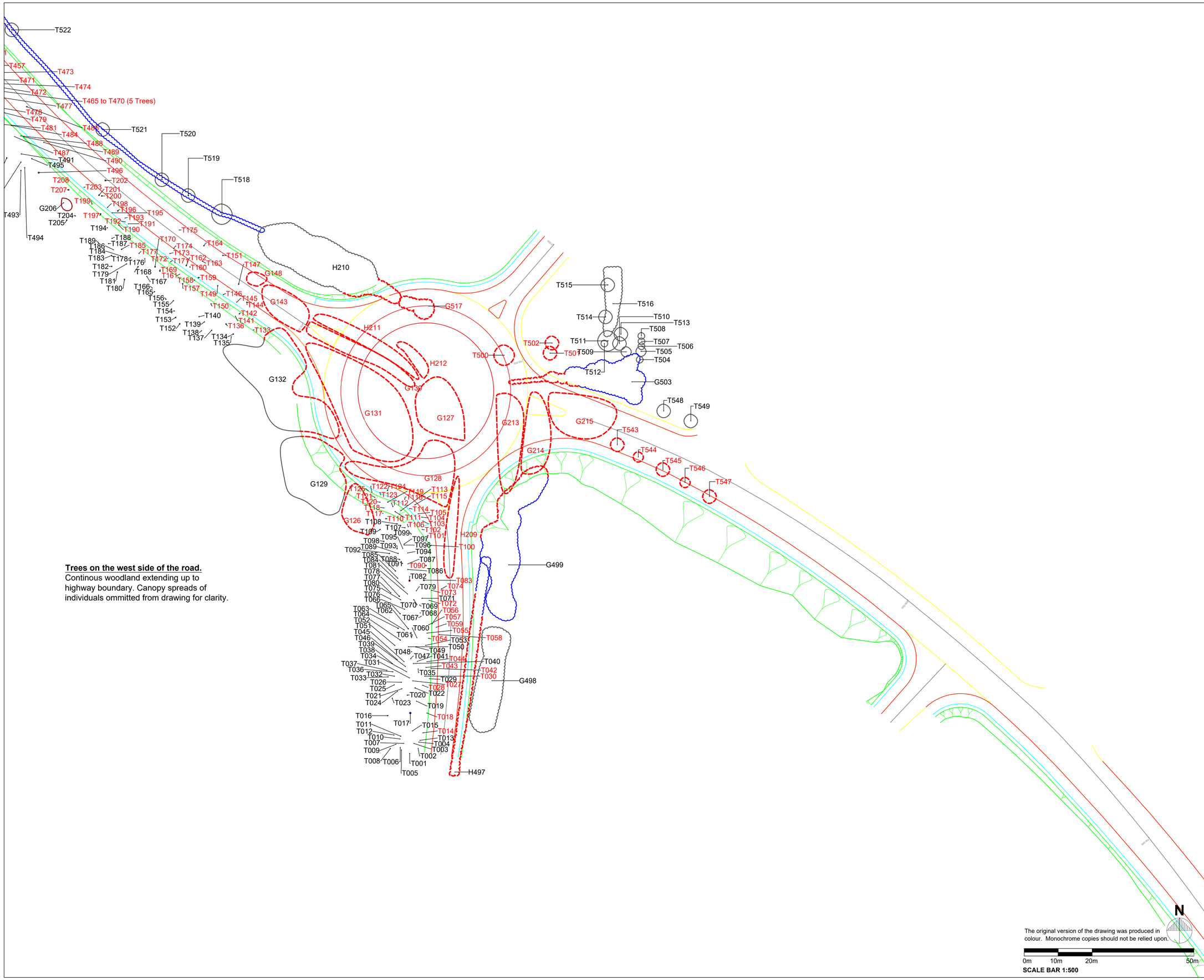


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Job
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Title
Figure 4.1
Arboricultural Impact Assessment

By	Date	Scale @ A1	Drg. no.
TP	Feb 2020	1:500	14477-ARB-03



Trees on the west side of the road.
Continous woodland extending up to highway boundary. Canopy spreads of individuals ommitted from drawing for clarity.

GENERAL NOTES - TREE SURVEY

- Drawing for Planning purposes only.
- Refer to arboricultural report produced by ECUS Ltd titled 14477 Higham Lane, Dodworth - BS5837:2012 Tree Survey, Arboricultural Impact Assessment and Arboricultural Method Statement.
- Based on topographic survey provided by Survey Solutions dated 14.02.2020 , updated by Premier Design Surveys Limited on 21.04.20.
Impact Assessment based on drawing provided by BMBC ref:GA(19)*
- Check all dimensions on site.
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KEY

Trunk location from topographic survey

Trunk location approximated by ECUS

Shrubs and hedges

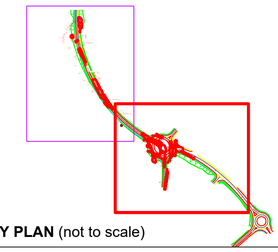
Tree categories (BS 5837:2012)

Category A Trees | Category B Trees | Category C Trees | Category U Trees

Root Protection Area (RPA) ommitted for clarity

Existing tree to be removed

Red group or tree number indicates the tree of group will be removed to facilitate the scheme.



KEY PLAN (not to scale)

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N

0m 10m 20m 50m

SCALE BAR 1:500

REV	DATE	DRAWN BY	CHECKED BY	REVISION COMMENT
B	04.04.20	PS	Ecus	Updated survey north and east of road
A	18.02.20	TP	Ecus	Preliminary

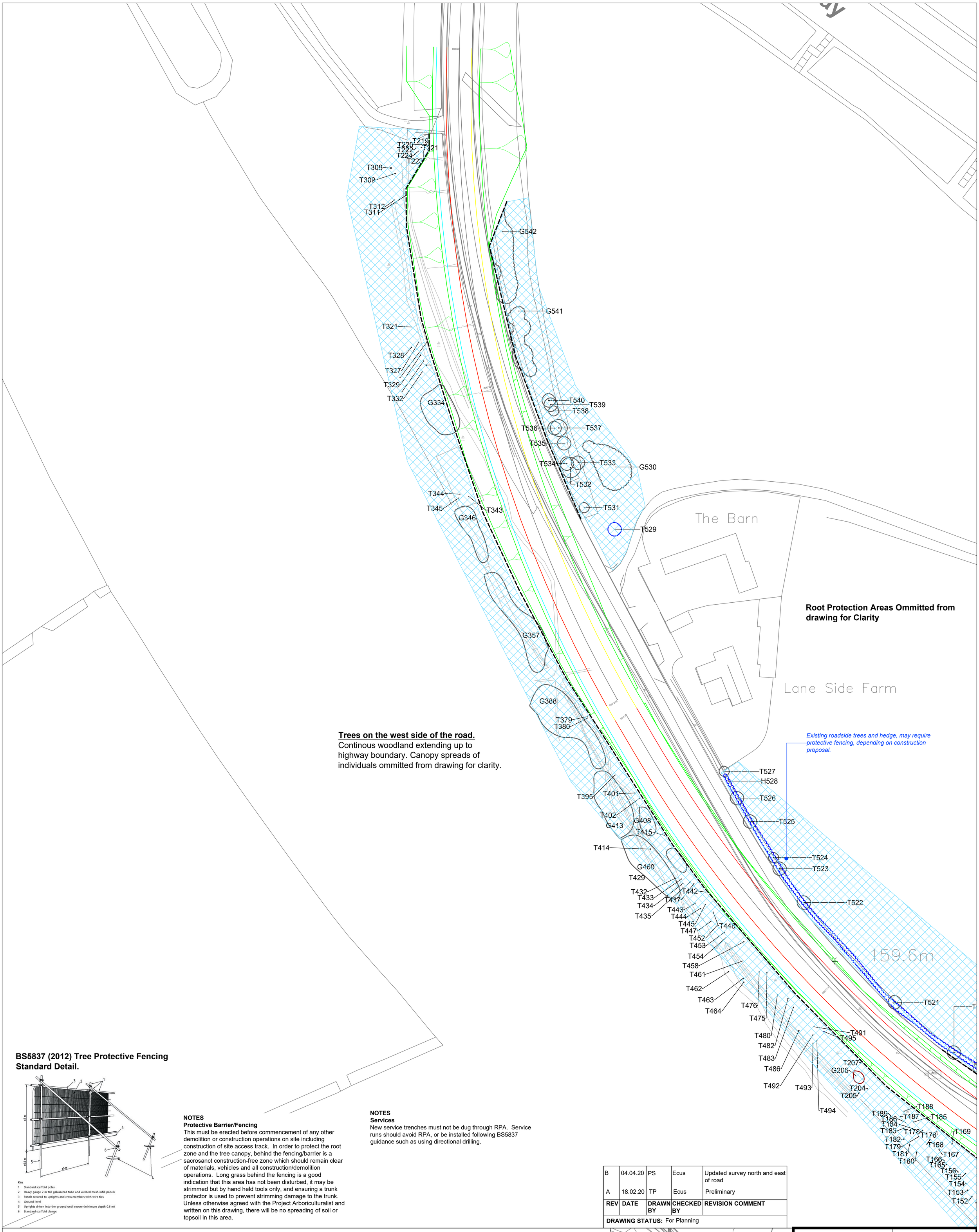
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Title
Figure 4.2
Arboricultural Impact Assessment

By	Date	Scale @ A1	Drg. no.
TP	Feb 2020	1:500	14477-ARB-04



Root Protection Areas Ommitted from drawing for Clarity

Trees on the west side of the road.
Continous woodland extending up to highway boundary. Canopy spreads of individuals ommitted from drawing for clarity.

BS5837 (2012) Tree Protective Fencing Standard Detail.

Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

NOTES
Protective Barrier/Fencing
This must be erected before commencement of any other demolition or construction operations on site including construction of site access track. In order to protect the root zone and the tree canopy, behind the fencing/barrier is a sacrosanct construction-free zone which should remain clear of materials, vehicles and all construction/demolition operations. Long grass behind the fencing is a good indication that this area has not been disturbed, it may be strimmed but by hand held tools only, and ensuring a trunk protector is used to prevent strimming damage to the trunk. Unless otherwise agreed with the Project Arboriculturalist and written on this drawing, there will be no spreading of soil or topsoil in this area.

NOTES
Services
New service trenches must not be dug through RPA. Service runs should avoid RPA, or be installed following BS5837 guidance such as using directional drilling.

REV	DATE	DRAWN BY	CHECKED BY	REVISION COMMENT
B	04.04.20	PS	Ecus	Updated survey north and east of road
A	18.02.20	TP	Ecus	Preliminary

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GENERAL NOTES - TREE PROTECTION PLAN
- Drawing for Planning purposes only
- Refer to arboricultural report produced by ECUS Ltd titled 14477 Higham Lane Tree Survey, AIA, AMS
- Based on topographic survey provided by Survey Solutions dated 14.02.2020.
- Scheme layout provided by BMBC on drawing ref; GA(19)*
- Refer to Engineer's details for level and drainage information.
- Check all dimensions on site.
- Do not scale from this drawing.
- Report any discrepancies and omissions to Ecus Ltd.
- This drawing is Copyright.

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KEY
Trunk location from topographic survey
Trunk location approximated by ECUS

Tree categories (BS 5837:2012)
Category A Trees
Category B Trees
Category C Trees

Protective Barrier/Fencing* - BS5837 (2012), clause 6.2.2

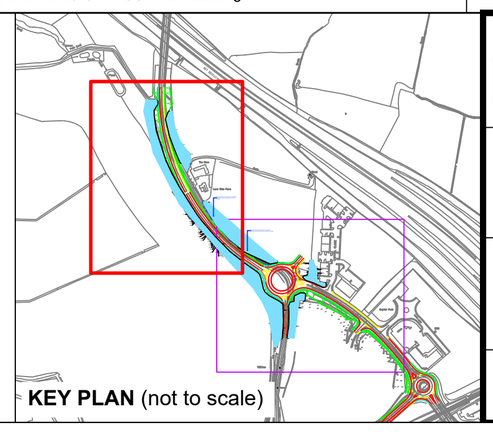
***See note on drawing about Protective Fencing.**

Construction Exclusion Zone

The original version of the drawing was produced in colour. Monochrome copies should not be relied upon.

N

0m 10m 20m 50m
SCALE BAR 1:500

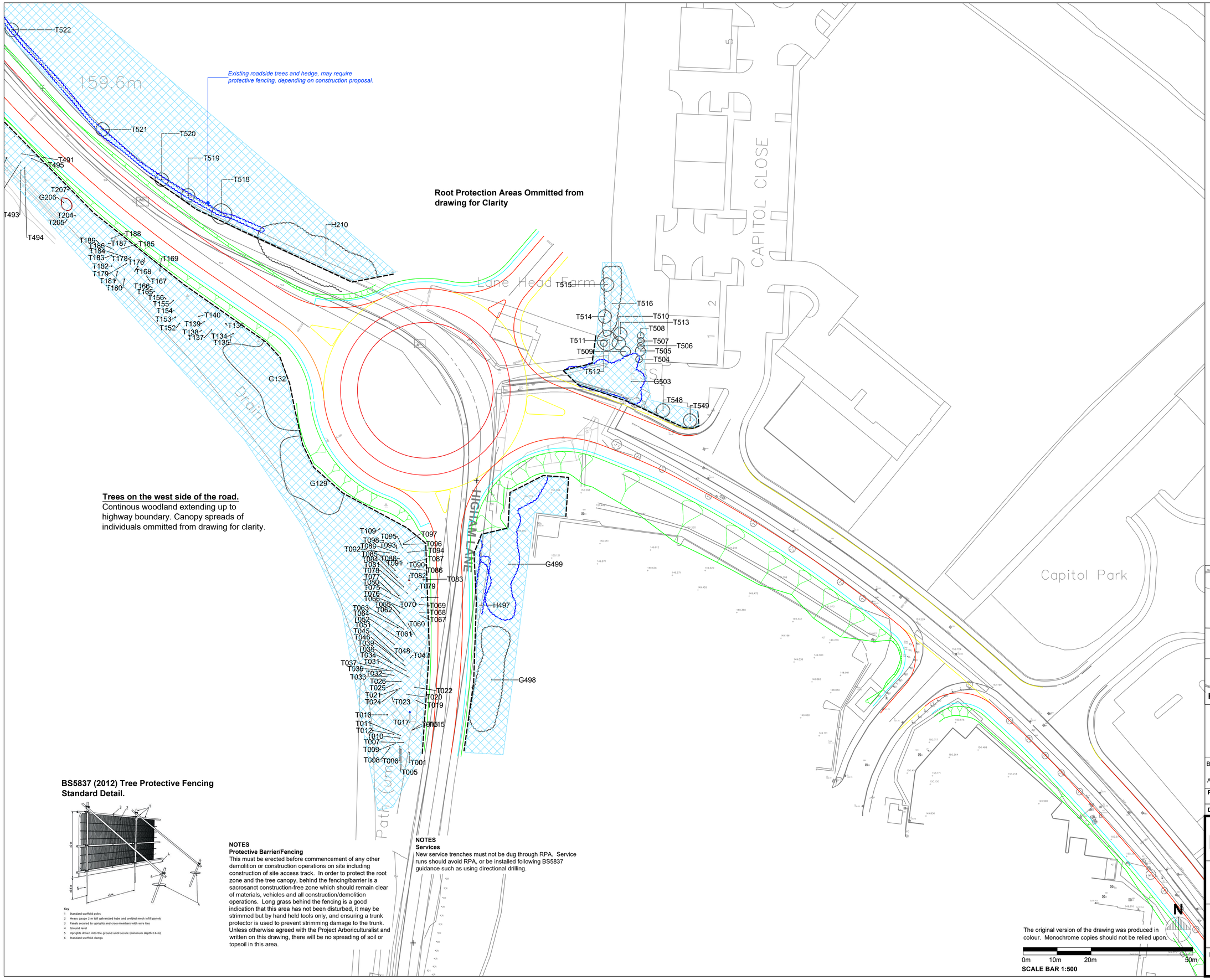

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Title
Figure 5.1
Tree Protection Plan

By	Date	Scale @ A1	Drg. no.
TP	Feb 2020	1:500	14477-ARB-05



Trees on the west side of the road.
Continous woodland extending up to highway boundary. Canopy spreads of individuals ommitted from drawing for clarity.

BS5837 (2012) Tree Protective Fencing Standard Detail.

Key
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

NOTES
Protective Barrier/Fencing
This must be erected before commencement of any other demolition or construction operations on site including construction of site access track. In order to protect the root zone and the tree canopy, behind the fencing/barrier is a sacrosanct construction-free zone which should remain clear of materials, vehicles and all construction/demolition operations. Long grass behind the fencing is a good indication that this area has not been disturbed, it may be strimmed but by hand held tools only, and ensuring a trunk protector is used to prevent strimming damage to the trunk. Unless otherwise agreed with the Project Arboriculturalist and written on this drawing, there will be no spreading of soil or topsoil in this area.

NOTES
Services
New service trenches must not be dug through RPA. Service runs should avoid RPA, or be installed following BS5837 guidance such as using directional drilling.

GENERAL NOTES - TREE PROTECTION PLAN
- Drawing for Planning purposes only
- Refer to arboricultural report produced by ECUS Ltd titled 14477 Higham Lane Tree Survey, AIA, AMS
- Based on topographic survey provided by Survey Solutions dated 14.02.2020, , updated by Premier Design Surveys Limited on 21.04.20.
- Scheme layout provided by BMBC on drawing ref; GA(19)*
- Refer to Engineer's details for level and drainage information.
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KEY

Trunk location from topographic survey

Trunk location approximated by ECUS

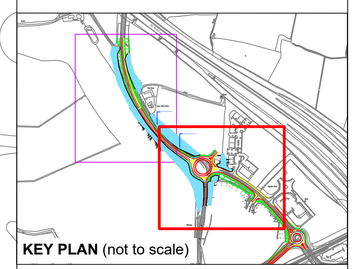
Tree categories (BS 5837:2012)

Category A Trees | Category B Trees | Category C Trees | Existing tree to be removed

Protective Barrier/Fencing* - BS5837 (2012), clause 6.2.2

***See note on drawing about Protective Fencing.**

Construction Exclusion Zone



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0m 10m 20m 50m
SCALE BAR 1:500

N

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A	18.02.20	TP	Ecus	Preliminary

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Title
Figure 5.2
Tree Protection Plan

By	Date	Scale @ A1	Drg. no.
TP	**Feb 2020**	**1:500**	**14477-ARB-06**