

M5 Junction 10 Improvements Scheme

Environmental Statement

Appendix 9.4 Arboricultural Impact Assessment

Part 1 of 2

TR010063 – APP 6.15

Regulation 5 (2) (a)

Planning Act 2008

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

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M5 Junction 10 Improvements Scheme Development Consent Order 202[x]

6.15 Environmental Statement: Appendix 9.4 Arboricultural Impact Assessment

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1. Introduction

1.1. Scope of assessment

- 1.1.1. Atkins Limited (Atkins) has been commissioned by Gloucestershire County Council (GCC) to undertake a tree survey in support of an Environmental Impact Assessment (EIA) and Environmental Statement (ES) for a Development Consent Order (DCO) to authorise the construction of the M5 Junction 10 Improvements Scheme (the "Scheme").
- 1.1.2. This report is an Arboricultural Impact Assessment (AIA) and presents the findings of the tree survey which has been undertaken for the Scheme. It is a scheme-wide AIA and reports on the impacts on the recorded trees within and adjacent to the Order Limits of the DCO and is supplemented by the production of Tree Protection Plans (TPPs), which are included within Appendix C of this AIA.
- 1.1.3. This AIA forms Appendix 9.4 (application document TR010063 - APP 6.15) to Chapter 9 of the ES (Landscape and Visual, application document TR010063 – APP 6.7), and data is also referenced by further chapters within the ES.
- 1.1.4. The trees, woodlands and hedgerows have been recorded in accordance with the British Standard *BS5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'* to report on the impacts of the Scheme.
- 1.1.5. The tree survey also identified veteran trees; this included those trees which can be considered as ancient. It also identified those that are deemed 'locally notable'.
- 1.1.6. The Scheme extents are illustrated on the TPPs.

1.2. Location of the scheme

- 1.2.1. M5 Junction 10 is located 76 km to the south of Birmingham, 64 km to the north of Bristol, 8 km to the south of Tewkesbury, 6.5km to the north-west of Cheltenham, and 12 km to the north-east of Gloucester.
- 1.2.2. The junction is in a strategically important location for the region, particularly as northern and western Cheltenham are the sites of a number of large retail parks and employment areas, and the location of planned future housing and nationally significant business development.
- 1.2.3. The location of M5 Junction 10 is described in Chapter 2 (application document TR010063 - APP 6.2).

2. Methodology

2.1. General

- 2.1.1. This AIA has been undertaken in accordance with *BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations*. The Standard gives recommendations and guidance on the relationship between trees and the design, demolition and construction process, setting out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures.
- 2.1.2. *BS5837:2012* does not set explicit parameters for measuring the sensitivity of an arboricultural resource; nor does it assess the magnitude of impact of a proposed development on trees (other than by providing a record of the number or areas of trees that would need to be removed to facilitate the Scheme). Rather, the British Standard provides parameters which enable the arboriculturist to assess the quality of all the trees, hedges and other arboricultural features that may be affected by the development that is proposed.
- 2.1.3. Whilst the BS categories are open to varied interpretation, the guidelines in the cascade chart of *BS5837:2012* (see insert A.1 in Appendix A of this AIA) provide details on how to determine tree qualities and can be used to inform the design process to retain those trees of higher quality where possible.

2.2. Definition of veteran trees and planning policy

- 2.2.1. The definition of veteran trees for the purposes of this assessment follows the core standing advice and planning policy.
- 2.2.2. The ‘Standing¹’ advice on ancient woodland, ancient trees and veteran trees provides guiding principles for the classification of ancient and veteran trees. These principles are also covered within the Forestry Commission and Natural England (NE) guidance.
- 2.2.3. The standing advice clearly defines veteran trees as:
“All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value”.
- 2.2.4. The definition provides a degree of ambiguity, but provides clear guiding principles namely that veteran trees have:
- Decay features, such as branch death and hollowing.
 - These features contribute to its biodiversity, cultural and heritage value.
- 2.2.5. The definition of ancient trees supplements this by focusing the definition of veteran trees arguably (but not definitively) on:
- Great age.
 - Size.
 - Condition.
 - Biodiversity value as a result of significant wood decay and the habitat created from the ageing process.
 - Cultural and heritage value.

¹ <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>

- Very few trees of any species become ancient.
- 2.2.6. As such this assessment determines that the classification of veteran trees should take account of the specific features of trees (size and condition) alongside their biodiversity, cultural and heritage value.
- 2.2.7. The relevant planning policy is detailed within the National Planning Policy Framework (NPPF) and National Policy Statement for National Networks² (NPS NN).
- 2.2.8. The NPS NN provides clear consideration of veteran trees but does not present a definition. The NPPF provides a joint definition:
Ancient or veteran tree: ‘a tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage’.
- 2.2.9. This definition extends that within the standing advice to include additional criteria:
- Exceptional biodiversity, cultural or heritage value.
 - Old relative to other trees of the same species.
- 2.2.10. Therefore, in line with policy compliance veteran trees have been classified in accordance with:
- Size.
 - Condition (decay features, such as branch death and hollowing, plus associated species).
 - Exceptional biodiversity value as a result of significant wood decay and the habit created from the ageing process.
 - Exceptional cultural and heritage value.
 - Old relative to other trees of the same species.
- 2.2.11. Further guidance to assist in classifying trees as old for their species based on stem size criteria was obtained from Figure 1.3 ‘Chart of girth in relation to age and developmental classification of trees’ from the *Ancient and other veteran trees: further guidance on management* (Lonsdale, 2013). This lists tree species against ascending girth measurements to help define whether a tree is locally notable; veteran/notable; ancient or late ancient¹.
- 2.2.12. The National Planning Policy Framework (NPPF) was updated in July 2018 to provide greater protection for veteran trees (and subsequently updated so the latest published version is July 2021). The pertinent section being paragraph 180 c) which states;
‘development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists’.
- 2.2.13. Footnote 58 from the same section of the NPPF references applicable exceptional reasons as being;
‘for example, infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat’.
- 2.2.14. In relation to NSIPs, within the National Policy Statement for National Networks, paragraph 5.32 states;
“The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient

² National Policy Statement for National Networks, 2014, Department for Transport

woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.” This has a footnote stating, “This does not prevent the loss of such trees where the decision-maker is satisfied that their loss is unavoidable”.

- 2.2.15. Locally notable trees for the purposes of this assessment include those that can be defined as mature and standing out locally because of large size in comparison to other trees in locality or given the presence of veteran habitat features, but do not meet the criteria to be deemed a veteran tree in line with the approach adopted.
- 2.2.16. Locally notable trees are not veteran specimens, so the NPPF protection is not afforded to these trees. However, they are trees that are locally significant and deemed worthy of retention.
- 2.2.17. Further planning policy in relation to trees and their impacts is covered within Local Planning Policy set by Cheltenham Borough Council, Tewksbury Borough Council and Gloucestershire County Council. The policies are covered within pertinent chapters of the ES.

2.3. Statutory protection

- 2.3.1. Trees may be protected through a Tree Preservation Order (TPO) or through being located within a Conservation Area. The law on TPOs is in Part VIII of the Town and Country Planning Act 1990 as amended and in the Town and Country Planning (Tree Preservation) (England) Regulations 2012.
- 2.3.2. A TPO is made by a local authority in respect of a tree(s) as the tree is considered to bring amenity value to the surrounding area. A TPO makes it an offence to cut down, uproot, lop, top, wilfully damage or wilfully destroy a protected tree without authorisation.
- 2.3.3. Trees in a conservation area that are not protected by a TPO are protected under the provisions in section 211 of the Town and Country Planning Act 1990. There is a requirement to notify the local planning authority six weeks before carrying out certain work on such trees, unless an exception applies.
- 2.3.4. The local planning authorities of Cheltenham Borough Council and Tewksbury Borough Council were contacted to identify the presence of any TPOs or Conservation Areas within the Scheme boundary. The results are detailed in section 3 of this report.

2.4. Spatial scope

- 2.4.1. The survey has targeted trees within and adjacent to the DCO Boundary.
- 2.4.2. This AIA is targeted at the impacts on the trees. It does not cover the subsequent impacts such tree removal would have on ecological or landscape receptors which are outline in the Chapter 8 (Biodiversity, application document TR010063 - APP 6.15) and Chapter 8 (Landscape and Visual, application document TR010063 - APP 6.15) of the ES.
- 2.4.3. The TPPs (see Appendix C of this report) show trees that have been surveyed.

2.5. Limitations to survey

- 2.5.1. Where access was restricted due to safety concerns, particularly where trees were growing along the motorway then measurements were estimated.
- 2.5.2. Where access permitted, trees were identified and inspected from ground level only and were not climbed. No invasive examination techniques (such as increment boring, or

- internal decay detection) were carried out and as such no assessment of the internal condition of the wood of these trees can be given.
- 2.5.3. The tree survey undertaken is not intended to be a tree risk management survey targeting safety-related issues. However, where specific hazards have been identified these have been recorded and management recommendations provided and are detailed within the tree survey schedules (see Appendix B of this AIA).
- 2.5.4. Validity, accuracy and findings of the tree locations will relate directly to the accuracy of the supplied topographical data, available aerial imagery and the GIS data capture software being used. As such the accuracy of the tree locations is potentially open to discrepancies and their locations may need verifying.
- 2.5.5. Where tree groups have been illustrated as an outline this covers the extents of the tree group. It does not always illustrate individual trees within the groups. Where individual trees were identified they were plotted separately.
- 2.5.6. The report does not comment on possible effects of trees on neighbouring properties, including in relation to subsidence or heave, or with regard to possible hazards presented by trees surveyed.
- 2.5.7. Trees are living organisms subject to changes outside human control. Trees and their environment alter with the seasons and it is as well to inspect trees whilst in full leaf and when out of leaf. Following harsh or unexpected weather conditions, or heavy storms it is also prudent to inspect trees. Changes to ground water conditions will affect the root growth of a tree. Such changes are not always the result of human influence and other factors may be involved.
- 2.5.8. It is not considered that these limitations and/or assumptions have affected the ability to undertake the assessment, nor the conclusions reported in this report.

3. Existing tree data

3.1. Existing tree stock

3.1.1. The survey recorded the following trees in relation to arboricultural feature and BS Category:

Table 3-1 – Arboricultural Features and total BS Categories

Arboricultural Features	BS Category Reference			
	Category A No.	Category B No.	Category C No.	Category U No.
Individual Tree (T)	5	46	59	2
Groups (G) or individually referenced trees in groups	6	78	115	1
Woodlands (W)	n/a	3	n/a	n/a
Hedgerows (H)	n/a	14	45	n/a

3.1.2. The existing tree stock along the M5 motorway corridor is typical of highways planted plots with groups of trees and shrubs growing on embankments or as part of larger groups on and around the slip roads for the M5 junction.

3.1.3. The trees are a mixture of broad leaf and evergreen specimens. The age classifications range between young to mature specimens. There are also sporadic clumps of scrub vegetation, with some dense pockets of successional growth recorded.

3.1.4. The trees outside of the motorway corridor form part of primarily linear groups along the A4019; Withybridge Lane; the B4634 (Old Gloucester Road); and along field boundaries where the proposals pass through agricultural land and grazing pasture. Again there is a range of age classifications present, including young to over-mature specimens. The tree species present is varied and includes ash, alder, willow and poplar. The shrubs species present includes hazel, hawthorn, blackthorn and goat willow, with the majority forming part of flail managed field boundary hedgerows.

3.1.5. The notable over-mature trees present include a linear group of crack willows (G081) that are growing to the south of the A4019 where the new Link Road is planned. These trees being historically pollarded and now reaching over-maturity with extensive storm damage recorded in their crowns where regenerated branches/stems have failed. These branch/stem failures are synonymous with crack willow specimens in advanced maturity. In the majority of cases the main stems are also hollow, offering some saproxylic habitat value. The stem diameters range between 800-1000mm, meaning they are not large for the species. Those trees that are being retained have been recommended for pollarding to manage the risk of further branch/stem failures, especially given the close proximity of the proposals and increased risk of harm to adjacent people or property. See figure 3-1 showing a few of the trees in G081.



Figure 3-1 – part of group G081, over mature crack willow specimens

- 3.1.6. There are further crack willows and also large poplars growing sporadically along the River Chelt that passes broadly through the centre point of the Link Road. The Scheme has kept the Link Road corridor as narrow as possible to try and limit the tree losses. The vast crowns of some of the poplars, especially within G179 mean exclusion zones should be installed around these trees or the crown subjected to management operations given their large size and hybrid black poplars being high susceptible to branch failures, especially at or beyond full maturity.
- 3.1.7. At the southern extents of the Link Road there are again occasional crack willow specimens growing along B4634, with similar hazards that include collapsed branches/stem and areas of dieback or dead wood.
- 3.1.8. In general where the Scheme passes through agricultural land the field boundaries are defined by continuous sections of managed hedgerows and sporadic trees. The trees within the garden areas to the south east of the existing motorway junction include more ornamental specimens and smaller grown tree species.

3.2. Protected trees

- 3.2.1. There are trees protected by TPOs within the DCO boundary. A TPO makes it an offence to cut down, uproot, lop, top, wilfully damage or wilfully destroy a protected tree without authorisation. However, a DCO may include powers to undertake works to trees which are subject to a TPO.
- 3.2.2. Cheltenham Borough Council (CBC) confirmed that there are no TPOs under their jurisdiction within the DCO boundary. However, they noted TPO reference no. 675 is located to the north of the Gallagher Retail Park that falls outside of the Scheme boundary. See figure 3-2 for location specifically trees T1 to T5.



Figure 3-2 – CBC TPO reference 675. Exert from TPO citation and exert from Google aerial

- 3.2.3. Tewksbury Borough Council (TBC) have confirmed that there are TPOs under their jurisdiction within the DCO boundary and those in close proximity to this boundary.
- 3.2.4. TPO reference A1 from TPO294 North West Cheltenham is located to the east of the M5 and falls outside of the DCO boundary. Description Oak & Willow made in November 2008.



Figure 3-3 – TBC TPO reference A1 from TPO294. Exert from TPO citation and exert from Google aerial

- 3.2.5. TPO reference A11 from TPO294 North West Cheltenham is located to the north of the A4019 and to the west of The Green, and falls outside of the DCO boundary. Description orchard trees and Ash made in November 2008.



Figure 3-4 – TBC TPO reference A11 from TPO294. Exert from TPO citation and exert from Google aerial

3.2.6. TPO reference G1 from TPO325 North West Cheltenham, Uckington is located to the north of the A4019 falls partially within the DCO boundary. Description Poplar (*Populus nigra 'Italica'*) made in May 2010. The tree group is referenced G003 as part of the tree survey.

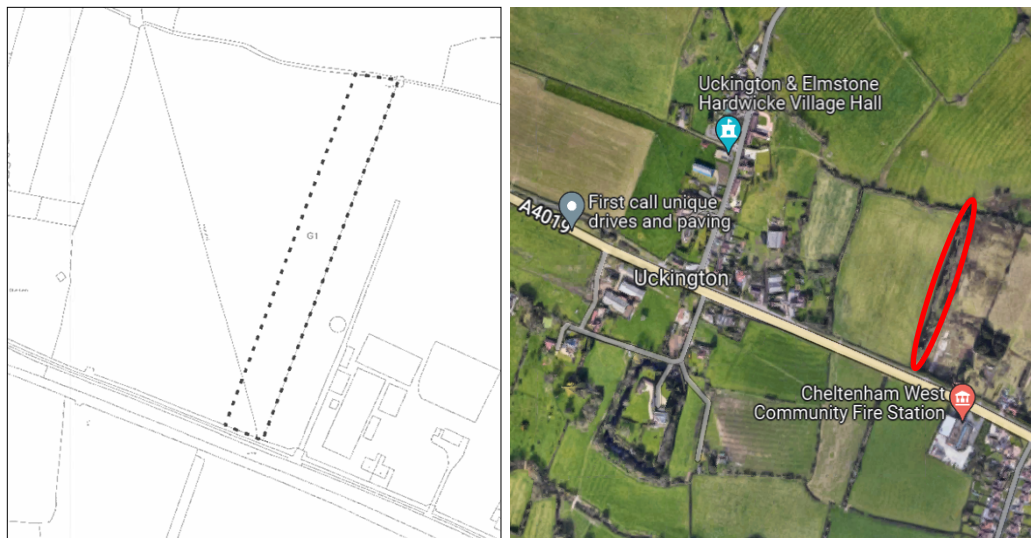


Figure 3-5 – TBC TPO reference G1 from TPO325. Exert from TPO citation and exert from Google aerial

3.2.7. TPO reference W1 from TPO400 Land adjoining The Sewage Works, Hayden Lane and is located to the south of the B4634 and falls outside of the DCO boundary. Description mixed species group (Oak, Ash, Field Maple, Hawthorn, Blackthorn, Hazel, Elder, Spindle, Wayfaring) made in September 2020.



Figure 3-6 – TBC TPO reference W1 from TPO400. Exert from TPO citation and exert from Google aerial

- 3.2.8. Trees may also be protected as part of a Conservation Area designation. No Conservation Areas were recorded within the DCO boundary.

3.3. Veteran tree

- 3.3.1. The Woodland Trust Ancient Tree Inventory online mapping (<https://ati.woodlandtrust.org.uk/tree-search>) was checked in August 2022 for the presence of recorded veteran or ancient trees within or immediately adjacent to the Site. No trees were identified on the mapping.
- 3.3.2. The survey identified one veteran tree in line with the methodology detailed in section 2 of this report. The tree is a common ash specimen reference G249-C, that forms part of sporadic line of trees growing along a field boundary adjacent to Withybridge Lane. Table 3.2 contains details of the tree.
- 3.3.3. A review of available online mapping resources indicate that this tree was potentially present at the time of the 1882 survey along this field boundary, the red outline enclosing the veteran tree and the adjoining specimens believed to be part of G249. The remaining trees within G249 have been classified as locally notable given their stem sizes and saprophytic features.
- 3.3.4. Figure 3-7 is an extract from the 1882 ordnance survey map.

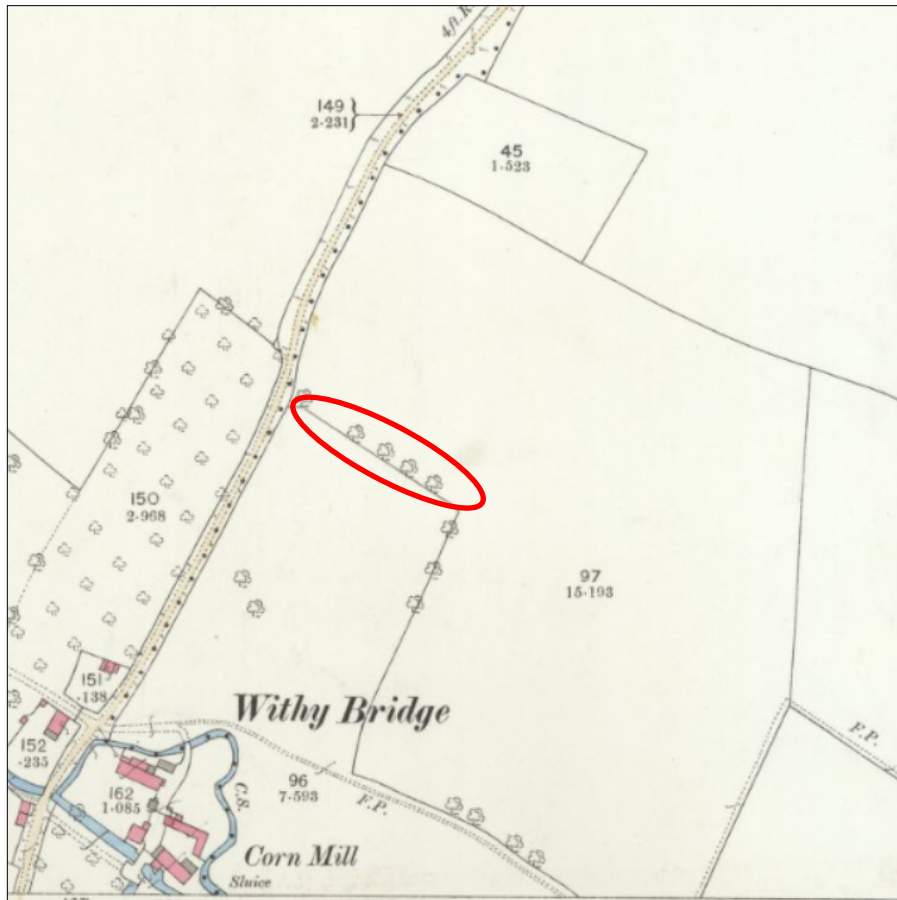



Figure 3-7 – extract from 1882 ordnance survey mapping (taken from old maps online) potentially showing tree group G249 and the veteran tree G249-C

Table 3-2 – Veteran tree table

Tree no.	Species	Location	Summary of value	Tree photographs
G249-C	Common Ash	Land to east of Withybridge Lane Easting: 39061901 Northing: 22484973	<p>Size: Large stem girth in comparison to other trees in locality.</p> <p>Condition: Extensive decay features present including hollow main stem with heartwood decay.</p> <p>Dead branches and old storm damage recorded in crown with desiccated white rot present.</p> <p>Crown break at approximately 3m. Live crown mainly regenerated branches from 3m.</p> <p>Biodiversity value: Decayed heartwood rot and white rot providing habitat for saproxylic invertebrates.</p> <p>Cultural and heritage value: Tree forms part of old field boundary.</p> <p>Age: Its diameter of 1530mm means it has a girth of 4.8m and means it is included within the ‘veteran/notable’ criterion of girth in relation to age as shown in Figure 1.3 of ‘Ancient and Other Veteran Trees: Further Guidance on Management’ (Lonsdale, 2013).</p>	

4. Arboricultural Impacts

4.1. General

- 4.1.1. This report determines the impact of the Scheme on the recorded tree stock. It provides details on the recorded trees including their condition and in some cases suitability for retention.
- 4.1.2. The report is supplemented by the TPPs (Appendix C of this AIA) that illustrate the Scheme, the DCO boundary, the recorded trees and trees that would require removal to facilitate the Scheme.
- 4.1.3. The Works Plans and DCO Schedule 1: Work Plan Schedule (application documents TR010063 – APP 2.4 and TR010063 – APP 3.1) explain the works required to deliver the Scheme.
- 4.1.4. The TPPs cover the outline of the Scheme. This means a ‘worst-case scenario’ is currently having to be presented in terms of tree removals as, during further progression of the design, bespoke engineering options could be explored to retain trees where possible and in consultation with the arboriculturist. However, in view of the scale of the earthworks, the ability to retain trees safely will be a significant challenge, and one which may not be possible in a lot of cases.
- 4.1.5. Confirmation on tree removals will be undertaken prior to construction and detailed within a final Arboricultural Method Statement (AMS), that shall also confirm protection measures for the retained trees. Section 5 contains an Outline AMS. The appointed Principal Contractor for the Scheme, as defined under the Construction (Design and Management) Regulations 2015 (CDM 2015)³ will develop this Outline AMS into a final version during the Detailed Design and Construction stages of the Scheme as part of the 2nd iteration of the Environmental Management Plan (EMP) (application document TR010063-APP 7.3) and the Register of Environmental Actions and Commitments (REAC) (application document TR010063-APP 7.4), secured through Requirement 3(1) of the DCO.
- 4.1.6. The tree survey schedules within Appendix B of this AIA cover all the trees recorded as part of this assessment in line with the BS5837:2012 guidance. Columns have been included to indicate the impact of the works, including area of removal, length of removal and number of individual tree removals.
- 4.1.7. Entries in the impact column include removal highlighted as red; part removal and highlighted as light red; and retained, highlighted as green. Where the trees fall outside the DCO boundary, the default entry is retained.

4.2. Root protection areas

- 4.2.1. The root protection area (RPA), as defined in the BS5837:2012, is the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree’s viability, and where the protection of the roots and soil structure is treated as a priority. This area should be protected from disturbance “in order to avoid unacceptable damage to the tree as a result of severance or asphyxiation of the root system.”
- 4.2.2. The recommended minimum area (m²) to avoid potentially harmful disturbance has been calculated and entered into the tree schedules (see Appendix B of this AIA) for all trees. The RPA for each individual tree has been illustrated on the TPPs as a circle centred on the tree’s stem, while the RPAs of the tree groups and woodlands have been illustrated as an offset from canopy extents, unless trees have specifically been recorded within the groups.

³ <https://www.hse.gov.uk/construction/cdm/2015/index.htm>

- 4.2.3. The use of RPAs will become more prevalent during the detailed design process: the infringement into these areas should be reduced where possible through sympathetic engineering approaches. The current TPPs are to be used to inform the continued progression of the scheme, similarly, the survey schedules which contain RPA details for the groups recorded.
- 4.2.4. In addition to the RPAs of trees where individually recorded specimens are impacted upon by the proposals then the actual root zones of the trees could be mapped using sonic-tomography to determine extent of any root loss that could occur, and to reduce or remove works in these locations.

4.3. Arboricultural impacts

- 4.3.1. The impacts of the Scheme have been assessed, and Table 4.1 below reflects the **tree totals** for the surveyed trees that require removal to facilitate the works. This includes numbers of trees to be removed and also areas to be removed where tree groups were recorded as an outline.

Table 4-1 – Arboricultural impact table

Arboricultural Features	BS Category Reference			
	Category A	Category B	Category C	Category U
Individual Tree (T) (no.)	3	18	31	0
Groups (G) (m ²)	0	48,419	42,451	0
Individually referenced trees within groups (no.)	3	23	21	1
Woodlands (W) (m ²)	0	15,419	0	0
Hedgerows (H) (m)	0	1,270	2,293	0

- 4.3.2. These trees are currently within or closely adjacent to the footprint of the proposals. Where trees have over 20% of their RPAs severed by the works the trees have been identified for potential or actual removal depending on feasibility of re-designing certain areas or structures. The 20% figure being specifically referenced within BS5837:2012 for what is deemed potentially acceptable in terms of RPA infringement.
- 4.3.3. Tree removals shall continue to be scrutinised. Trees could be retained through detailed design, and confirmation on their removal should be undertaken prior to construction and detailed within a final AMS.
- 4.3.4. The compensation planting is covered within the Environmental Masterplan (application document TR010063 – APP 2.13).

4.4. Arboricultural Impacts – TPO trees

- 4.4.1. TPO trees have been identified for removal and in some cases their RPAs extend into the works areas. Therefore, specific working measures adjacent to the trees would need to be confirmed in order to ensure the protection of the trees during construction. Any specific working measure would need to be confirmed within a final AMS.

Table 4-2 – Arboricultural impact table – TPO trees

TPO reference	Type of tree(s)	Works required as part of the scheme
TPO675 T1-T5	T1 to T5 Oak	No impact. Outside of DCO boundary
TPO294 A1	Oak, Willow	No impact. Outside of DCO boundary
TPO294 A11	Orchard trees, Ash	No impact. Outside of DCO boundary
TPO325 G1	Poplar (<i>Populus nigra 'Italica'</i>)	Part of group to be felled to permit construction of Scheme, reference G003 as part of tree survey. Remaining trees are to be protected using temporary barriers to define a construction exclusions zone
TPO400 W1	Mixed species group (Oak, Ash, Field Maple, Hawthorn, Blackthorn, Hazel, Elder, Spindle, Wayfaring)	No impact. Outside of DCO boundary

4.4.2. The impacts to TPOs are covered within the Draft Development Consent Orders (application document TR010063 – APP 3.1).

4.5. Arboricultural impacts veteran tree

4.5.1. No direct impact on the veteran tree G249-C. RPA and crown extents will require protection measures to prevent indirect impacts, including the provision of barriers to define a construction exclusion zone for the tree.

4.6. Preliminary management recommendations

4.6.1. The tree survey schedules (see Appendix B) show management recommendations for those trees which at the time of the survey were identified as requiring management intervention. Any works recorded for retained trees will be confirmed prior to construction and included within a final AMS.

4.7. Mitigation

4.7.1. Mitigation measures and compensation for habitat loss and landscape effects is outlined in the relevant EA chapters (Chapter 7 Biodiversity and Chapter 9 Landscape and Visual) and will be further developed during detailed design of the Scheme and approved prior to commencement of construction.

4.7.2. A 1st iteration EMP has been developed and will progress to 2nd iteration EMP during the construction stage for the consented project, in advance of construction. This document will include measures to protect retained trees. Measures regarding the protection of retained trees and actions to be taken to limit the adverse impacts of construction are also provided as environmental commitments in the REAC which include the following:

- The location of access tracks, haul roads, site compounds and material storage areas will be positioned away from retained trees, specifically the veteran specimen.
- Protection of retained trees following standard practice (i.e. BS5837:2012 guidance).
- Protection of retained veteran tree from pollution during all clearance and construction works by adherence to the Pollution Prevention Guidelines (PPGs), the Construction Industry Research and Information Association (CIRIA)

guidance on the control of water pollution from construction sites, and mitigation measures set out in the 1st Iteration of the EMP.

- An Environmental Clerk of Works and arboricultural specialist will be consulted, as required, to advise on the above measures during construction.

4.7.3. Extensive compensation planting shall be undertaken as part of the Scheme, see the Landscape Chapter for further details. The maintenance and management of any new planting or habitat creation are included as commitments within the REAC (application document TR010063 – APP 7.4).

5. Outline Arboricultural Method Statement

5.1. General

- 5.1.1. The purpose of this Outline Arboricultural Method Statement (Outline AMS) section is to outline the tree protection measures likely to be required during the implementation of the Scheme in line with guidance from the British Standard BS 5837:2012 *'Trees in Relation to Design, Demolition and Construction – Recommendations'*.
- 5.1.2. As stated previously, the appointed Principal Contractor will develop this Outline AMS into a final version during the detailed design and construction stages of the Scheme as part of the 2nd iteration of the EMP and the Register of REAC (application document TR010063 – APP 7.4), secured through Requirement 3(1) of the DCO.
- 5.1.3. An AMS is included as an environmental control/management plan within Annex C of the EMP (1st iteration) (application document TR010063 – APP 7.3).
- 5.1.4. This section describes the tree protection measures likely to be required during the detailed design and construction stages. It sets out the following information.
- Requirements and information for pre-commencement briefings.
 - The roles and responsibilities associated with the delivery of the protection measures, control and communication.
 - Mitigation measures to be recorded and implemented.
 - Review and monitoring mechanisms.
- 5.1.5. The appointed Principal Contractor is to review the trees impacted by the Scheme as part of the detailed design stage of the Scheme and will update the final AMS to support the EMP, it being one of a number of plans that must be included in the EMP under Requirement 3(1) of DCO.
- 5.1.6. The production of the final AMS is to be undertaken by an experienced arboriculturist with a minimum of a level 4 qualification in arboriculture and who is a professional member of the Arboricultural Association. A suitably qualified arboricultural specialist, appointed by the Principal Contractor, will ensure appropriate mitigation measures are implemented during the construction works and confirm protection measures and trees for retention.

5.2. Pre-commencement operations and site briefings

- 5.2.1. In line with details in the REAC (application document TR010063 – APP 7.4), the appointed Principal Contractor is to appoint an Environmental Clerk of Works (ECoW) and a suitably qualified arboricultural specialist to support the detail design and construction stages of the Scheme. The arboriculturist is to produce the final AMS and consult with the relevant stakeholders during its production, notably the Local Authority Tree Officers.
- 5.2.2. The appointed Principal Contractor is to review the trees impacted upon by the Scheme as part of the detailed design stages for the development of the final AMS to support the EMP. The impact column in the survey schedules in Appendix B and the red hatched areas and red crosses as illustrated on the TPPs are to be updated accordingly, where required.
- 5.2.3. Where trees previously identified for retention are required to be removed as part of detailed design stages, then this information shall form part of the consultation process with the relevant stakeholders. The appointed Principal Contractor would need to ensure

that such changes do not give rise to any materially new or materially different environmental effects in comparison with those reported in the ES and the Outline AMS.

5.3. Work package plans and task briefings sheets

- 5.3.1. The requirements for tree protection measures shall be included within Work Package Plans (WPPs) and Task Briefing Sheets (TBS) produced by the appointed Principal Contractor as part of the planning of construction activities. All pre-commencement briefings shall make sure all members of staff working or visiting the area of site being worked upon are aware of the individual responsibilities regarding trees and the tree protection measures required to be in place to continue construction.
- 5.3.2. In the approval of WPPs and TBSs the reviewer shall make sure any protection of trees has been considered within the area and seek confirmation with either the supervising arboriculturist or ECoW if further clarification is required.
- 5.3.3. There are key areas that require pre-commencement site briefings with the supervising arboriculturist or ECoW. These currently include, but are not limited to the following areas, further areas may be added to where deemed appropriate.
- Land adjacent to Withybridge Lane adjacent to the veteran tree and locally notable specimens.
 - Land to north of A4019 where TPO325 G1 is impacted upon.
- 5.3.4. These pre-commencement site briefings shall be attended by the construction manager or suitable delegate. They shall raise awareness with the relevant parties of the trees within the working extents, and confirm the requirements for tree related information to be included within induction material and daily briefings to members of staff working or visiting that area of the Scheme.
- 5.3.5. The briefings shall also confirm the following:
- The location of tree protective barriers.
 - Tree works to facilitate that phase of the Scheme.
 - Site specific mitigation measures.
 - Where/when arboricultural supervision will be required.

5.4. Contact details

- 5.4.1. Overseeing management of the Scheme will be directed by the Applicant. The Applicant may delegate some site supervision roles and procure specialist consultants to supervise, monitor or check the appointed Principal Contractors procedures for sensitive activities where required.
- 5.4.2. The final AMS that will be produced by the appointed Principal Contractor shall confirm key roles and site contacts. The contacts list should include an arboriculturist to support the construction phase of the Scheme.

5.5. Site supervision

- 5.5.1. The supervisory role shall be performed by a suitably qualified arboriculturist. The frequency of these visits should align with key milestones identified in Table 5-1 below and shall be undertaken as required during the progression of the Scheme to enable an auditable succession of monitoring events for a review of the protection measures implemented for the trees.

Table 5-1 – Arboricultural supervisory visits

Programme	Arboriculturist or delegate	Supervision
Pre-commencement site meeting	Arboriculturist	<ul style="list-style-type: none"> a) Confirm location and specification of tree protective barriers b) Confirm tree works to be undertaken c) Confirm requirements for tree protection information to be included in induction details for the site d) Confirm requirements for reporting any tree related incidents e) Confirm ongoing arboricultural monitoring and contact details.
Setting out of protective barriers	Arboriculturist	<ul style="list-style-type: none"> a) Review location and specification of tree protective barriers b) Confirm any additional tree protection measure requirements c) Submit site monitoring pro forma to the Project Manager.
During operation as minimum every 8 weeks.	Arboriculturist	<ul style="list-style-type: none"> a) Review location and specification of tree protective barriers b) Assess condition of retained trees, specifically for any construction related damage c) Confirm any additional tree protection measure requirements d) Submit site monitoring pro forma to the Project Manager.
Post-construction	Arboriculturist	<ul style="list-style-type: none"> a) Inspect all retained trees to make sure they have not been damaged during the construction operations b) To instruct any remedial works that may be required should a tree defect be identified as a result of the construction operations.

- 5.5.2. On completion of each site visit a report or site note should be completed by the arboricultural specialist.
- 5.5.3. Where emergency matters arise regarding trees, e.g. unexpected access required within construction exclusion zones or damage to retained trees, then an arboriculturist is to co-ordinate a visit to the site in person or delegate their powers to a suitably qualified person.
- 5.5.4. Any variations or incidents related to trees shall be reported in writing to the Applicant, or the Project Management Consultant appointed by the Applicant. Details of the variation(s) or incident(s) shall incorporate photographic evidence and site note(s) as appropriate. Suitable remedial measures, including potentially the provision of new planting where deemed appropriate.

5.6. Construction exclusion zone (CEZ)

- 5.6.1. The CEZs can be defined as all the soft surfaces within the RPAs of retained trees outside of the works areas and the areas behind the tree protection fencing or site hoarding.
- 5.6.2. Site operations will not be permitted in the CEZs without consultation with an arboriculturist, including storage of plant, equipment or materials, vehicular or plant access, washing down of vehicles or machinery, handling, discharge or spillage of any substances, including cement washings, and actions likely to cause localised water-logging. No mechanical digging, scraping or excavation shall be permitted in the CEZ, nor earthworks or changes in the finished ground levels other than those agreed by an arboriculturist.

5.7. Tree protection plans (TPPs)

- 5.7.1. The tree protection plans (TPPs) (Appendix C) include the locations of tree protection fencing likely to be required during the construction stage. These are not exhaustive at this stage and further fencing and confirmation on their positioning would need to be confirmed by the appointed Principal Contractor as part of the final AMS.
- 5.7.2. The protected areas once installed shall not be moved or altered without approval by the arboriculturist and, where necessary following consultation with the local planning authority.

5.8. Tree protective barriers

- 5.8.1. The locations of temporary protective fencing are to be finalised as part of the final AMS. Where there is existing boundary fencing which is deemed adequate by an arboriculturist to protect the retained trees, no additional fencing shall be provided. Similarly, where retained trees are positioned in areas of no planned construction activity then these shall not be identified for protective fencing. These areas shall be kept under review by the supervising engineers and if works are required, including any potential access route, then the arboriculturist is to agree the location of any additional protective fencing.
- 5.8.2. Where site hoarding fencing is planned, this is permitted to form part of the tree protective barriers where deemed appropriate by the arboriculturist.
- 5.8.3. Where existing vegetation scheduled for removal prevents the installation of the protective fencing for adjacent retained trees, then this is permitted for removal prior to the erection of the fencing. Any plant involved in the removal of vegetation shall be positioned outside of the RPAs of the retained trees as confirmed with the arboriculturist.
- 5.8.4. The default specification for the protective barriers could comprise 2m tall welded mesh panels on rubber or concrete feet or other similar protection measures. The panels would be joined together using a minimum of two anti-tamper couplers, installed so they can only be removed from inside the fence. The distance between the fence couplers is to be at least 1m and is to be uniform throughout the fence; the panels are to be supported by inner side stabiliser struts attached to a base plate secured on a block tray. See figure 5-1 below.
- 5.8.5. For any tree or areas deemed to be of high risk to adjacent trees for extensive construction activity, the use of rigid fencing shall be considered in accordance with default specification set out in BS5837:2012, with the stabiliser strut to be fixed to a post that is set in concrete. Any excavation for supporting post is to be undertaken by hand and surrounded by an impermeable geotextile as curing cement is toxic to tree roots.

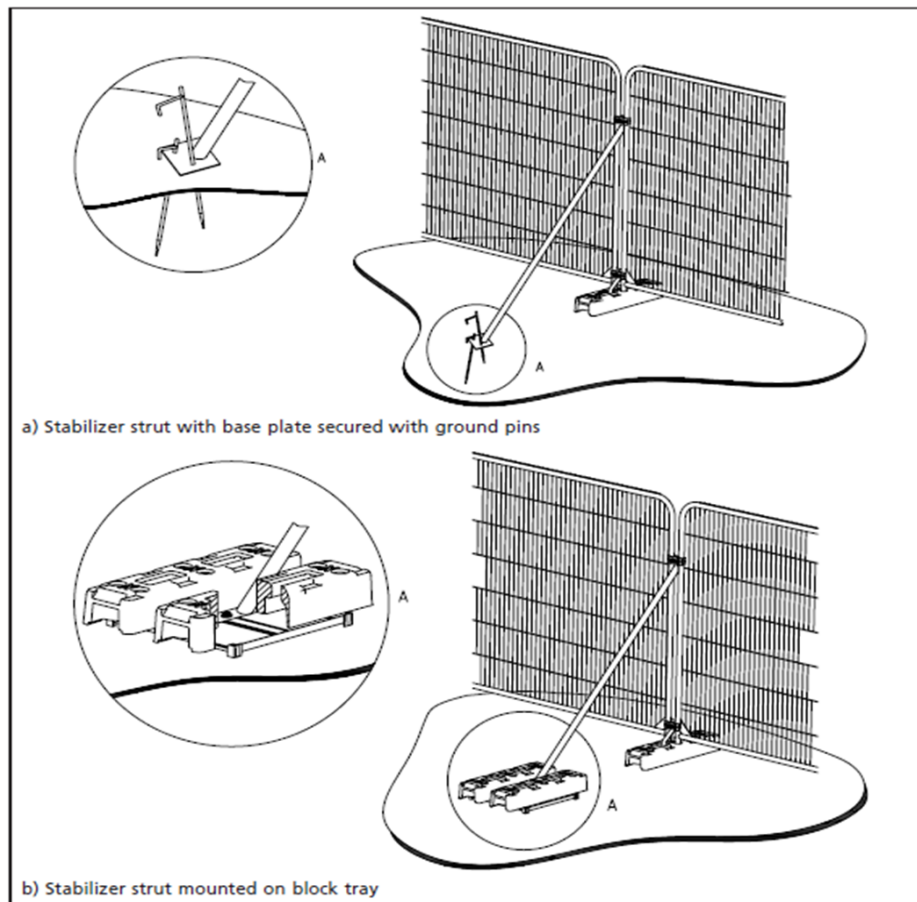


Figure 5-1 – illustrative tree protection barriers

5.9. Ground protection matting

- 5.9.1. The locations for ground protection matting shall be specified as required by the arboriculturist.
- 5.9.2. If ground protection matting is required to protect tree roots and to minimise ground compaction within RPAs, then an example of a proprietary matting product is Ground-Guards (<http://www.ground-guards.co.uk/solutions/tree-root-protection/>). A double layer of Ground-Guards panels with a 150mm layer of wood chips sandwiched in-between will create a suitably cushioned base to facilitate access within RPAs where absolutely necessary.

5.10. Compound areas

- 5.10.1. The locations of site accommodation, temporary buildings and areas used for storage of materials are to be located outside of the CEZ' of retained trees as defined within the TPPs.

5.11. Hand excavations within RPAs

- 5.11.1. Hand excavations within the RPAs of trees shall be specified as a last resort and following a review of the works in the location to make certain there are no other design solutions to avoid the RPA of retained trees.
- 5.11.2. If hand excavations are specified, then they shall accord with the following:

- The area to receive excavations is to be clearly marked out on site and agreed with the arboriculturist.
 - Hand tools are to be used, with all spoil to be positioned outside of the RPA of the tree.
 - Vacuum excavation is permitted where deemed appropriate by the arboriculturist.
 - Small plant may also be permitted in consultation with the arboriculturist.
 - The use of an air-spade rig to loosen the sub-base material can be instructed by supervising arboriculturist if required to loosen clay based material or similar.
- 5.11.3. Once excavated if tree roots are located, these are to be moved if sufficiently pliable or pruned on the advice of the arboriculturist.

5.12. No-dig construction

- 5.12.1. Where no-dig construction is specified this is due to works having to be undertaken within the RPAs of trees, and to limit their impact on the underlying tree roots. The exact locations for this approach would need to be confirmed within the AMS and prior to construction.
- 5.12.2. A no-dig construction approach uses a product such as Cellweb TRP® as supplied by Geosynthetics Limited⁴. This cellular confinement system will laterally confine the sub-base material into three-dimensional interconnected honeycomb cells, reducing compaction and maintaining the soil bulk density at levels suitable for tree root growth. It also prevents direct tree root severance by building on top of existing ground levels. The product can be laid in multiple sections to account for level changes.
- 5.12.3. The installation method shall accord with the following:
- The area to receive the no-dig approach is to be clearly marked out on site and agreed with the arboriculturist.
 - The existing turf or vegetative layer within the works area is to be treated with a glyphosate-based herbicide as per the manufacturer's guidelines or removed using a turf cutter or strimmer. This is to prevent any scraping of the turf layer and potential damage to underlying tree roots.
 - The cellweb product is then to be laid as per the manufacture's guidelines and the cells are to be filled with clean angular stone of sufficient type to maintain porosity and the surface course is to be a permeable tarmac.

5.13. Root pruning

- 5.13.1. All tree works are to be undertaken in line with current recommendations in accordance with BS3998:2010 Tree Work – Recommendations and comply with the current Arboriculture and Forestry Advisory Group (AFAG) or applicable Forestry Industry Safety Accord (FISA) advice published by the Health and Safety Executive (HSE) or FISA.
- 5.13.2. Tree works are to be planned to ensure protection of people, property and wildlife. Mitigation commitments in regard to protected species, including bats and nesting birds are included in the REAC (TR010034/APP/7.3). If the works are to be undertaken during the bird nesting season, then advice is to be sought from the ECoW prior to undertaking tree works.
- 5.13.3. The trees to be removed or worked upon for facilitation, such as pruning, shall be clearly marked by the supervising arboriculturist prior to any tree works commencing on site.

⁴ <http://www.geosyn.co.uk/>

These works are to be agreed with the supervising arboriculturist, and ECoW where required. The method of removal shall be informed by the site and ecological constraints.

- 5.13.4. The tree works contractor shall provide access routes and loading bay locations for approval by the main contractor. These shall take into account the retention of trees and following existing access tracks or hard surfaces to try and reduce tree removals. The tree works contractor will have to submit a risk assessment and method statement for review by the Appointed Principal Contractor or arboriculturist prior to commencing works on site.

5.14. Tree works schedule

- 5.14.1. All current trees and areas of trees for removal are illustrated on the TPPs and detailed within the survey schedule. These are to be reviewed as part of the detailed design phase of the Scheme and updated to support the EMP that will be produced by the appointed Principal Contractor.
- 5.14.2. The method of removal shall be informed by the site constraints.
- 5.14.3. The requirements for facilitation pruning operations are to be confirmed prior to construction and covered within the pre-commencement site meetings for each phase of the works.
- 5.14.4. The ability to retain further trees shall be kept under review as part of construction planning.

Appendices



Appendix A. Tree survey key and method for measurements and categorisation criteria

A.1. Survey key

Tree No: Sequential reference number given to the tree or group of trees as shown on the tree survey drawings.

Species: This is the common name given to the tree. The botanical name is sometimes given.

Height (Ht): Tree height from the base of the tree to its full stem height, measured in metres (m). Measurements are taken to the nearest half metre.

Stem diameter (mm): Measured in accordance with figure A1 below. Measurements are rounded to the nearest 10mm.

Branch spread (m): Measurement of crown spread to the four cardinal points; if the crown is balanced a single measurement is given. Crown spread plotted on the tree survey drawings. Measurements are taken to the nearest half metre.

1st significant branch and direction of growth (m): Measurement of the height of the first significant branch above ground level, given in metres and direction of growth e.g. 2.4-N.

Canopy height (m): Height of the canopy above ground level. Measurements are taken to the nearest half metre.

Life stage: The following abbreviations are used:

Y = Young trees <1/5 life expectancy

SM = Semi-Mature trees 1/5 – 2/5 life expectancy

EM = Early Mature trees 2/5 – 3/5 life expectancy

M = Mature trees 3/5 – 4/5 life expectancy

OM= Over-Mature trees >4/5 life expectancy

Vitality: Good, fair, poor or dead

Good – a tree with little or no obvious physiological defects; leaf density and colour is typical for the species, bud, flower and fruit production are good and there are no signs of dieback at any point throughout the crown.

Fair – a tree with moderate physiological defects; leaf density is less than typical for the species, leaf cover is chlorotic, bud, flower or fruit production are deficient, there are signs of minor dieback within the crown, there is a moderate degree of deadwood within the crown.

Poor – a tree with major or multiple physiological defects; evidence of extensive crown thinning, bud, flower or fruit production is poor or missing, there are signs of advanced dieback throughout the crown, there is extensive or major deadwood throughout the crown.

Dead – a tree that has died due to either old age, drought, disease, pest infestation, physical damage to the main stem or rooting system, or a combination of these factors.

General observations, particularly of structural and/or physiological condition: e.g. observations of any decay and physical defect.

Preliminary management recommendations: any identified preliminary management to rectify defects recorded in general observations. These may include the need for further detailed inspection, or works to address immediate hazard to life or property.

Estimated remaining contribution, in years:

<10

10+

20+

40+

Category grading: As per BS5837:2012 chart in accordance with figure A2 below.

A – Illustrated as light green (RGB code 000-255-000)

B – Illustrated as mid blue (RGB code 000-000-255)

C – Illustrated as grey (RGB code 091-091-091)

U – Illustrated as dark red (RGB code 127-000-000)

Root Protection Area (m): Plotted around each of the category A, B and C trees on relevant drawings, illustrating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability. The protection of the roots and soil structure is treated as of paramount importance.

Impact:

Remove – abbreviated as REM in red highlighted box

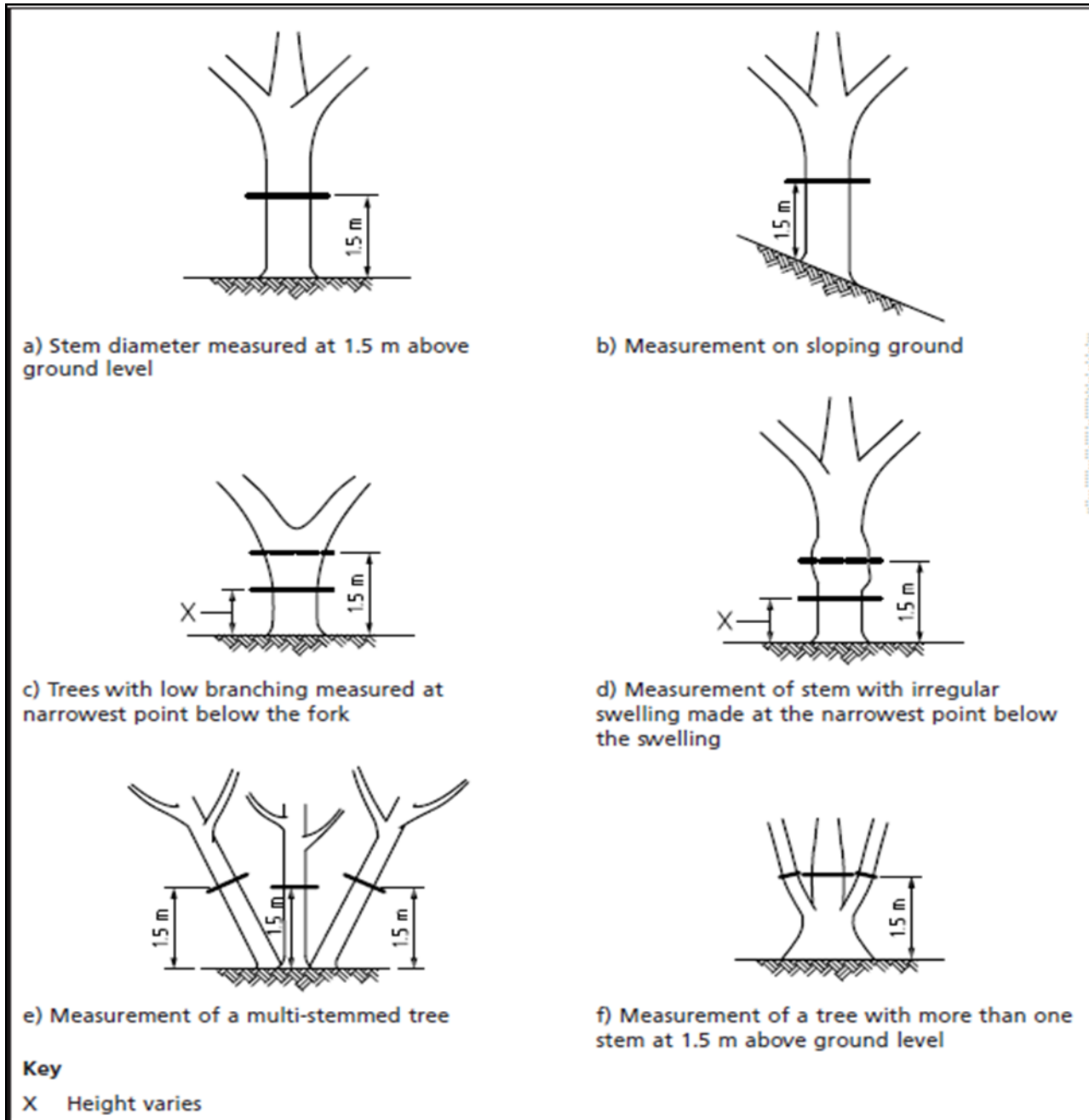
Part remove – abbreviated as PRG in orange highlighted box

Potential remove – abbreviated as POT REM in blue highlighted box

Retain – abbreviated as RET in a green highlighted box

A.2. Measuring table

A.2.1. Measurement of tree stems dependant on tree form



Insert 5-2: BS5837:2012 measurement of tree stems dependant on tree form methods

A.3. BS5837:2012 Cascade chart

A.3.1. Cascade chart for tree quality assessment from BS5837:2012

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention (see Note)			
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>		
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
Trees to be considered for retention			
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Insert 5-3: BS5837:2012 cascade chart for tree quality assessment

Appendix B. Tree survey schedule

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
H001	A Hedgerow	2.5	80	1.0	1	1	1	0	0	M	Good	Managed hawthorn hedge along boundary fence, slightly gappy at base	No works required at time of survey	20+	C2	1.0	Part removal		251	
G002	Leyland Cypress	14 ave.	300 ave.	4.5	4.5	4.5	4.5	0	0	EM	Good	Row of third party trees planted at front of former nursery premises, at 1m spacings; crowns cut back from footpath for first 3m	No works required at time of survey	20+	C2	3.6	Remove	442		
G003	Lombardy Poplar	23 ave.	500 ave.	5.0	5	5	5	1.5	2	EM	Good	Trees at southern end of row, spaced 1m apart, growing on boundary within grounds of former plant nursery; minor dieback; co-dominant first fork on 3rd tree from end; height reducing towards end of row	No works required at time of survey	20+	C2	6.0	Remove	245		
H004	A Hedgerow	2	70	1.0	1	1	1	0	0	M	Good	Managed field boundary hedge with occasional gaps; hawthorn, blackthorn, occasional elder, wayfaring tree; bramble and old man's beard; extends to become more patchy hedge at front of residential property at west end	No works required at time of survey	20+	C2	0.8	Part removal		117	
T005	Norway Maple	7	170 at 1000mm	2.5	2.5	1	2.5	2	2	SM	Good	Hedgerow tree forking at 1200mm, smothered in <i>Clematis vitalba</i>	No works required at time of survey	10+	C2	2.0	Remove			1
G006	A Group	15 ave.	450 ave.	5.0	5	5	5	1.5	1.5	M	Good to fair	No access to bases; mixed group of UK native with some ornamental trees forming screening belt at front corner of residential property, characterized by general untidiness and mutual crown suppression; field maple, lime, sweet chestnut along eastern edge; upright Scots pine to rear; dead cherry leaning at 45 degree angle; also ash, robinia; dead ivy on most stems; large deadwood on pine, mostly smaller elsewhere	Remove dead cherry; remove larger deadwood if closely adjacent to planned works	20+	B2	5.4	Retain			
T007	Ash	15	400 + 350	4.0	6	8	7	1.5-S	1	M	Good	Possibly two trees; no access to base, at front of group, good vitality crown seeking space to south, overhanging footpath; possible enveloping of metal fencing at base; branches crossing, established ivy into mid-crown, minor deadwood only	No works required at time of survey	20+	B2	6.5	Retain			
G008-A	Horse Chestnut	18	1200	8.0	8	10	5	2	1	M	Good	4no third party trees - no access to bases; G008-A is dominant tree of group; 3no principal stems rising from crown break at 1500mm - compression forks here; other trees in group leaning away, towards available space, displaying some light dieback and occasional small diameter deadwood	No works required at time of survey	40+	A2	14.4	Retain			
G008-B	Horse Chestnut	17	300 + 200 + 180	7.0	7	2	6	2	1	M	Good	Part of group.	No works required at time of survey	20+	C2	4.9	Retain			
G008-C	Horse Chestnut	15	700	9.0	5	9	6	2-S	1	M	Fair	Leading stem to north removed; deadwood to 70mm diameter throughout tree; pockets of	Remove larger deadwood if adjacent to planned works	10+	B2	8.4	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												established decay where lower branches removed								
G008-D	Horse Chestnut	14	450	8.0	0	9	8	1.5-S	1	M	Fair	Pronounced lean and crown growth to west	No works required at time of survey	20+	B2	5.4	Retain			
T009	Ash	7	210	3.5	3.5	3.5	3.5	2	2	SM	Good	Young tree with standard form, crown lifted, ivy on stem	No works required at time of survey	20+	C2	2.5	Retain			
H010	Leyland Cypress	2	70	1.0	1	1	1	0	0	EM	Good	Short run of tidily maintained hedge at front of residential property	No works required at time of survey	20+	C2	0.8	Retain			
H011	Leyland Cypress	5	80	1.0	1	1	1	0	0	EM	Good	Managed hedge at front of residential property	No works required at time of survey	20+	C2	1.0	Retain			
H012	A Hedgerow	2	70	1.5	1.5	1.5	1.5	0	0	EM	Good	Garden boundary hedges of variable character: clipped western red cedar to east, highly ornamental hedge of mixed shrubs to west	No works required at time of survey	10+	C2	0.8	Remove		68	
G013	A Group	to 5	to 250	3.5	3.5	3.5	3.5	2	2	SM-EM	Good	Third party trees, no view of bases; compact garden trees behind boundary fence - cherry and apple	No works required at time of survey	10+	C2	3.0	Retain			
H014	Leyland Cypress	4	80	1.0	1	1	1	0	0	EM	Good	Dense, managed hedges	No works required at time of survey	20+	C2	1.0	Retain			
T015	Norway Maple	7	110	2.5	2.5	2.5	2.5	2	3	SM	Good	Growing close behind timber boundary fence, standard form	No works required at time of survey	10+	C2	1.3	Remove			1
T016	Sycamore	10	300 + 100 + 100	4.5	4.5	4.5	4.5	0	0.5	EM	Good	Multi-stemmed from ground level, in hedgerow; dense ivy coverage; lower branches flailed back on road side	No works required at time of survey	20+	C2	4.1	Remove			1
H017	A Hedgerow	4	150	2.0	2	3	2	0	0	M	Fair	Lapsed hawthorn hedge, flail-managed on road side, but not managed for height; occasional crown dieback; dense ivy, bramble; occasional elder	No works required at time of survey	10+	C2	1.8	Remove		108	
H018	A Hedgerow	1.5	70	1.0	1	1	1	0	0	M	Good	Long field boundary hawthorn hedge, coherent though occasionally gappy at base; in unmanaged section at east end, overwhelmed by bramble, with blackthorn and hop	No works required at time of survey	10+	C2	0.8	Remove		672	
T019	Lime	13	520	4.0	5.5	4	4	2	2	EM	Good	Shapely tree on road side of boundary fence line; crown lifting on road side; frequent compression forks from crown break upwards; telecommunications cable passes through centre of crown	No works required at time of survey	20+	B2	6.2	Remove			1
T020	Common Walnut	6	120	3.0	3	3	3	1.5	1.5	SM	Good	Standard tree on broad roadside verge, lower part overwhelmed by bramble	Remove bramble	10+	C2	1.4	Remove			1
H021	A Hedgerow	2.5	80	1.5	1.5	1.5	1.5	0	0	M	Good	Managed hawthorn field boundary hedge	No works required at time of survey	10+	C2	1.0	Remove		150	
T022	Field Maple	9	300 #	4.5	4.5	4.5	4.5	1.5	1.5	EM	Good	No view of stem and lower crown - concealed by bramble; telecommunications cable passes through rounded crown	Remove bramble	20+	C2	3.6	Remove			1
T023	Goat Willow	9	100 x 12	7.0	7	7	7	0	0.5	EM	Good	On roadside verge at edge of disused section of road; highly characteristic form - numerous stems radiating from central bole to give rounded crown; telecommunications cable passes through top of crown; some branches cut back on disused road side	No works required at time of survey	20+	B2	4.2	Remove			1

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G024	Hawthorn / Ash	5	100	2.0	2	2	2	0.5	0.5	SM	Good	Intermittent self-set young trees, hawthorn or ash, on grass verge at road side	No works required at time of survey	10+	C2	1.2	Remove	190		
G025	A Group	to 17	to 450	5.0	5	5	5	2	2	EM	Good	Small stand of approximately 9no trees at road junction; mostly lime, some ash with slightly drawn form, field maple; typical spacing 3m; compression forks on limes; slender hawthorn hedge at front; vitality good	No works required at time of survey	20+	B2	5.4	Part removal	100		
G026	A Group	3	80	1.0	1	1	1	0	0	EM	Good	Grouping of tidily maintained hedge at front of residential property: small-leaved elm, hawthorn, beech; lilac and laurel shrubbery at west end; includes 1no small damson tree behind hedge at east end	No works required at time of survey	20+	B2	1.0	Retain			
G027	A Hedgerow	4	180	1.5	1.5	1.5	1.5	0	0	EM	Fair	Topped row of elder, cypress, damson stems with bramble, on south bank of watery ditch	No works required at time of survey	10+	C2	2.2	Retain			
G028	A Group	10	300	4.0	4	4	4	2	1.5	SM-EM	Good	Attractive pair of young ornamental trees in garden - liquidambar and birch	No works required at time of survey	20+	B2	3.6	Retain			
G029	A Group	8 ave.	120 + 120 + 120 ave.	3.0	3	3	3	2	2	EM	Poor	Intermittent linear group, along field boundaries and to south of lay-by; mostly dead or dying elm and low-vitality goat willow; mostly multi-stemmed; occasional collapsed or part-fallen stems; ivy and bramble frequently dense at base and on stems; occasional crack willow, elder; blackthorn increasing towards west end	Remove dead and dying trees and larger deadwood if adjacent to planned works	<10	C2	2.5	Part removal	194		
G030A, G030B, G030C	Cherry	7 ave.	250 ave.	3.5	3.5	3.5	3.5	2	2	SM-EM	Good	Occasional cherry trees, growing either individually or in small stands of tightly packed stems within hawthorn hedgerow; lower branches flailed back on road side; pockets of decay at old crown lifting wounds; ivy covering some lower stems	No works required at time of survey	10+	C2	3.0	Remove			3
G031A, G031B	Rowan	5	250	2.5	2.5	2.5	2.5	0	1	EM	Good	Compact multi-stemmed trees on island of vegetation between lay-by and road	No works required at time of survey	10+	C2	3.0	Remove			2
G032	Ash	15	300 + 250	7.0	7	7	7	2	3	M	Fair	No view of bases; 2-3no trees to south of watery ditch beside lay-by; lower part flailed on road side; frequent light dieback at crown extents; infrequent 50mm diameter deadwood; ivy living and dead, dense in places	Remove larger deadwood if adjacent to planned works	10+	C2	4.8	Retain			
G033	A Group	10	290	4.0	4	4	4	1.5	1.5	EM	Fair	Ash plantation on bank descending from road to field boundary; mutual crown suppression and occasional drawn form; small diameter deadwood; light dieback, but no symptoms of ash dieback observed; hawthorn hedge H035 along field boundary to rear; intermittent hawthorn along road front also; 1no apple tree (G033-A)	Remove larger deadwood if adjacent to planned works	10+	C2	3.5	Remove	974		
G033-A	Apple	8	100 + 100 + 100 + 100	2.0	5	3.2	2.5	1.5	2	EM	Good	Growth suppressed by neighbouring ash	No works required at time of survey	10+	C2	2.4	Remove			1

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G034	A Group	12 ave.	380 ave.	5.5	5.5	5.5	5.5	1.5	1.5	EM-M	Good to fair	Mostly continuous row of ash and willows by ditch at foot of roadside bank; typically multi-stemmed, with mutual crown suppression; no recent management except for flail-management on road side; ivy frequently dense, occasionally into upper crowns; occasional small to medium deadwood; occasional collapsed stems of willow; occasional low vitality among ash	Remove collapsed stems and larger deadwood if adjacent to planned works	10+	C2	4.6	Remove	667		
G034-A	Crack Willow	15	400 + 400	5.0	7	9	7	0	0.5	M	Fair	Dense ivy restricts assessment; unknown number of stems - possibly some collapsed; hazard beams, branch tears; occasional medium-sized deadwood; more prominent trees recorded separately	Remove ivy to enable fuller assessment	10+	C2	6.8	Remove			1
G034-B	Crack Willow	20	550 + 480	10.0	10	10	10	3.5-NE	3	M	Good	Twinstem on north bank of ditch; rounded crown; failed branch on road side at 7m part-fallen and now resting on neighbouring branch; crown lifted above road; occasional small diameter deadwood	No works required at time of survey	20+	B2	8.8	Remove			1
G034-C	Crack Willow	7	850	2.0	10	2	0	1	0.5	OM	Poor	Bole extensively decayed, multiple fruiting bodies of <i>Inonotus dryadeus</i> ; stem collapsed at 2.5m and fallen parallel to ditch, resting on neighbours	Remove collapsed stem if adjacent to planned works	<10	U	10.2	Remove			1
G034-D	Ash	20	300 + 300 + 300 + 250 + 200	8.0	8	8	8	2	2	M	Good	Multiple stems rising from open bole, result of former cutting to ground level; tree supports part-fallen willow G034-C - no major impact wounds observed	No works required at time of survey	20+	B2	7.4	Remove			1
H035	A Hedgerow	3	80	2.0	2	2	2	0	0	M	Good	Dense hawthorn hedge at foot of roadside bank, in earlier times managed at 2m height, but now taller	No works required at time of survey	20+	B2	1.0	Remove		196	
H036	A Hedgerow	4	80	1.5	1.5	1.5	1.5	0	0	M	Good to fair	Lapsed field boundary hedge of hawthorn and blackthorn, flail-managed where close to road; intermittent: dense ivy, elder, small self-set ash, gaps	No works required at time of survey	10+	C2	1.0	Remove		152	
T037	Sycamore	11	370	5.0	5	5	5	2	2.5	EM	Good to fair	On grass verge, rounded form, light dieback at crown extents, noticeably small leaves; basal growth; ivy encroachment into mid-crown	No works required at time of survey	20+	B2	4.4	Remove			1
T038	Cherry	8	380	6.0	6	6	5	3	4	M	Fair to poor	Established reaction wood growth around old impact wound low on stem, road side - brown rot decay; basal decay extending beyond this wound; pockets of decay at crown lifting wounds; deadwood branches in lower crown; frequent dieback in sparse crown	Remove larger deadwood if adjacent to planned works	10+	C2	4.6	Remove			1
T039	Sycamore	17	640	8.0	7	7.5	8	2	4	M	Good	Superior specimen with goblet shape; crown lifted above bus stop; ivy encroaching into lower crown	No works required at time of survey	40+	B2	7.7	Remove			1
G040	Hawthorn, Elm, cherry, pear, ash	8	250	4.0	4	4	4	0	0	EM	Good	Narrow plantation between two roads, small watercourse along north side; lined with hawthorn and some shrubby elm along both sides;	No works presently required	20+	B2	3.0	Remove	1011		

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												frequent trees of mostly compact form - cherry, pear, ash; larger trees recorded as separate group								
G041-A	Sycamore	13	340	5.0	5	5	5	2	2	EM	Good	A Dominant tree in small plantation; branches cut back from roads; variable ivy coverage, occasionally dense; small diameter deadwood only	No works presently required	20+	B2	4.1	Remove			1
G041-B	Sycamore	13	340	5.0	5	5	5	2	2	EM	Good	A Dominant tree in small plantation; branches cut back from roads; variable ivy coverage, occasionally dense; small diameter deadwood only	No works presently required	20+	B2	4.1	Remove			1
G041-C	Sycamore	13	340	5.0	5	5	5	2	2	EM	Good	A Dominant tree in small plantation; branches cut back from roads; variable ivy coverage, occasionally dense; small diameter deadwood only	No works presently required	20+	B2	4.1	Remove			1
G041-D	Sycamore	13	340	5.0	5	5	5	2	2	EM	Good	A Dominant tree in small plantation; branches cut back from roads; variable ivy coverage, occasionally dense; small diameter deadwood only	No works presently required	20+	B2	4.1	Remove			1
G041-E	Sycamore	13	340	5.0	5	5	5	2	2	EM	Good	A Dominant tree in small plantation; branches cut back from roads; variable ivy coverage, occasionally dense; small diameter deadwood only	No works presently required	20+	B2	4.1	Remove			1
T042	Sycamore	14	400;300	4.5	5.5	4.5	5	2	2	M	Good	Pronounced compression fork 0-1500mm; minor natural bracing in crown - occlusive growth of crossing branches; utilities covers hard at base to north-west; crown lifted above road	No works presently required	10+	C2	6.0	Remove			1
H043	Blackthorn, Field Maple	2	100	1.5	1.5	1.5	1.5	N/A	0	EM	Good	Dense flail-managed field boundary hedge; blackthorn and field maple	No works presently required	20+	B2	1.2	Part removal		137	
G044	Blackthorn, elm, ash	4	100	1.5	1.5	1.5	1.5	0	0	EM	Fair	Unmanaged linear group at property boundary; blackthorn, elm, ash saplings; coherent screen	No works presently required	10+	C2	1.2	Remove	249		
H046	Leyland Cypress	2	100	1.5	1.5	1.5	1.5	N/A	0	EM	Good	Tidily maintained pub car park hedge; golden form	No works presently required	10+	C2	1.2	Retain			
G047	Elm	6	150	1.5	1.5	1.5	1.5	N/A	0	SM to EM	Fair, dead	Hedge of two halves: western half unmanaged, largely dead adolescent elms; eastern half a managed 2m hedge in front of Elm Cottage; ivy a constant	Remove dead and dying plants if adjacent to planned works C/ U	10+	C2	1.8	Retain			
H048	Elm, ash, willow, crab apple	2.5	100	1.5	1.5	1.5	1.5	N/A	0	EM	Good	Dense, mostly unmanaged field boundary thorn hedge with elm, saplings of ash, willow, crab apple; brambles and hops widespread; privet at east end	No works presently required	10+	C2	1.2	Retain			
H049	Blackthorn, hawthorn, privet	2	100	1.5	1.5	1.5	1.5	N/A	0	EM	Good	Dense field boundary hedge of blackthorn, hawthorn, privet; occasional saplings or re-growth of sawn-off ash; abundant hops, bramble in parts	No works presently required	20+	B2	1.2	Part removal		317	
T050	Crack Willow	6	800	5.0	4	3	6	2-N	1	M	Fair	Growing within wet ditch. Dense ivy encroachment on main stem. Old pollard. Multi stems recorded from approximately 2m. Evidence of previous storm damage. Frayed wounds and collapsed branches.	Re-pollard	10+	C2	9.6	Remove			1

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)	
T051	Ash	18	300;300;300;300	8.0	8	8	8	4-N	2	M	Good	Base not accessible. Growing north side of wet ditch. Multi stems. Suggesting past coppice.	No works presently required	20+	B2	7.2	Retain				
T052	White Willow	10	1200	10.0	10	8	8	1-N	0	OM	Fair	Old pollard. Collapsed stems. Large basal cavity in main stem, revealing hollowing. High risk of further stem and branch collapse. Dense ivy encroachment on main stem and into crown.	Re-pollard.	10+	C3	14.4	Remove			1	
T053	Ash	12	200;200;150;200	6.0	6	6	6	3-W	3	EM	Fair	Old coppice. Growing directly within dry ditch. Abrupt angles on some stems. Dense ivy encroachment. Slight crown thinning.	No works presently required	10+	C2	4.5	Remove			1	
T054	Ash	14	300;200;200	5.0	5	5	5	3-NE	3	EM	Fair	Base not accessible. Measurements estimated. Drawn stems. Co-dominant west stem, developed basal stem to north east. Occasional small diameter dead wood in lower and middle crown.	No works presently required	20+	B2	4.5	Remove			1	
G055	A Group	5	180	3.0	3	3	3	N/A	0	EM	Good	Shrubby vegetation on wedge-shaped bank to east of motorway, between A4103 and residential cul-de-sac; retaining wall at base of bank for most of length, taller to west; primarily hawthorn, with mix of native - hazel, dog rose, holly, privet, spindle - and ornamental - cotoneaster, laburnum, pyracantha; saplings of ash, cherry, walnut; occasional willows near top of bank with occasional deadwood stems; more intermittent to east	Remove deadwood if adjacent to planned works	10+	C2	2.2	Part removal	1211			
G056-A	Scots Pine	8	220	4.0	4	4	4	0.5	0.5	SM	Good	Young specimens with upright pyramidal form on bank descending from carriageway	No works presently required	10+	C2	2.6	Remove			1	
G056-B	Scots Pine	8	220	4.0	4	4	4	0.5	0.5	SM	Good	Young specimens with upright pyramidal form on bank descending from carriageway	No works presently required	10+	C2	2.6	Remove			1	
G056-C	Scots Pine	8	220	4.0	4	4	4	0.5	0.5	SM	Good	Young specimens with upright pyramidal form on bank descending from carriageway	No works presently required	10+	C2	2.6	Remove			1	
G056-D	Scots Pine	8	220	4.0	4	4	4	0.5	0.5	SM	Good	Young specimens with upright pyramidal form on bank descending from carriageway	No works presently required	10+	C2	2.6	Remove			1	
G056-E	Scots Pine	8	220	4.0	4	4	4	0.5	0.5	SM	Good	Young specimens with upright pyramidal form on bank descending from carriageway	No works presently required	10+	C2	2.6	Remove			1	
T057	Robinia	10	300	4.0	4	4	4	2-N	1	SM	Good	Growing within third party garden. No access to base. Main stem trifurcates at approximately 1.8m. Compression forks with slight bark inclusion at unions.	No works presently required	10+	C1	3.6	Remove			1	
T058	Magnolia	4	100;100;80;80	3.0	3	3	3	N/A	0	SM	Good	Third party garden tree. Base not accessible. Multi stem form.	No works presently required	10+	C2	2.2	Remove			1	
G059	Ash, Scots pine, oak, hawthorn	15	300	5.0	5	5	5	N/A	0	SM to EM	Good	Mixed planted highway plot. Mutually suppressed crowns. Bases not accessible.	No works presently required	20+	B2	3.6	Part removal	7837			
T060	Apple	4	180;150;120	4.5	4.5	4.5	4.5	1.5	1.5	EM- M	Good	Third party tree at entrance to private property	No works presently required	20+	B2	3.2	Retain				

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
T061	Sycamore	14	310;250;220;220;220	7.0	7	7	5	0.5	1	EM	Good	Multistem from near ground level; atop shallow roadside bank; natural bracing in form of occlusive growth where stems and branches cross in crown; small diameter deadwood	Remove deadwood if adjacent to planned works	20+	B2	6.6	Retain			
G062	Hawthorn, blackthorn, elder	4	200	4.0	4	4	4	0	0	M	Fair	Thicket of hawthorn, blackthorn, elder, remnants of hedge along former ditch line; occasional dead plants, frequent leaning stems; widespread ivy encroachment; increasing self-set ash at road side to east, cut back from road side by flail	Remove dead stems and deadwood if adjacent to planned works	10+	C2	2.4	Retain			
T063	Ash	12	310	4.5	4.5	2.5	4.5	2.5	2.5	SM to EM	Good	At foot of roadside bank, leaning towards road, dense ivy to upper crown; lower branches flailed on road side	No works presently required	10+	C2	3.7	Retain			
T064	Apple	6	280	4.0	4	4	4	0.5	1	EM	Fair	Compact tree with ivy and bramble coverage, colonised by mistletoe	No works presently required	10+	C2	3.4	Remove			1
T065	Horse Chestnut	8	280	4.5	4.5	4.5	4.5	1.5	2	SM to EM	Good	Hedgerow tree with good form, crown break at 1500mm; beneath and between double row of overhead power lines	No works presently required	20+	C2	3.4	Remove			1
T066	Norway Maple	8	280	4.0	4	4	3	3-NE	2	SM	Good	Third party garden tree. Base not accessible. Compression fork with included bark junction at approximately 1.6m.	No works presently required	10+	C2	3.4	Remove			1
T067	Honey locust	10	280	3.0	3	3	3	2.5-N	1.5	SM	Good	Third party garden tree. Base not accessible. Pronounced surface roots around basal flare. Stone wall between tree and adjacent pavement. Potential root barrier to growth.	No works presently required	10+	C2	3.4	Remove			1
T068	Silver Birch	9	200	3.0	3	3	3	3-N	2	SM	Good	Third party garden tree. Base not accessible. Stone wall between tree and adjacent pavement, potential root barrier to growth. Kinked main stem.	No works presently required	10+	C2	2.4	Remove			1
T069	Walnut	7	200	4.0	4	4	4	1.2-N	1.2	SM	Good	Third party garden tree. No access to base. Open crown.	No works presently required	10+	C2	2.4	Remove			1
T070	Silver Birch	15	300	7.0	5	5	5	N/A	2	M	Good	Third party garden tree. No access to base. Balanced crown.	No works presently required	20+	B2	3.6	Remove			1
G071	Ash, Scots pine, oak	18	340	5.0	5	5	5	2	2	SM to EM	Good	Highways plantation in slip road island; ash, Scots pine, oak; occasional drawn form, mutual crown suppression; limited post-planting management; understorey of hawthorn; bramble dense in places; gorse; amenity and habitat value	No works presently required	20+	B2	4.1	Part removal	11095		
G072	Crack Willow	14	400	5.0	5	5	5	4	3	EM	Good	Pollarded trees in line at foot of bank beside motorway; ivy encroachment; infrequent small diameter deadwood	Remove larger deadwood if adjacent to planned works	10+	C2	4.8	Remove	594		
T073	Sycamore	6	110	2.0	2	2	2	2	3	SM	Good	Upright form, on roadside verge	No works presently required	10+	C2	1.3	Retain			
074-079												<i>References 074-079 not included in survey</i>								
H080	A Hedgerow	2	80	1.5	1.5	1.5	1.5	N/A	0	M	Fair	Highly intermittent field boundary hawthorn hedge	No works presently required	10+	C2	1.0	Part removal		68	

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G081	Crack Willow	19	800	10.0	10	10	10	N/A	2	M-OM	Fair	Group: dimensions average; linear group of willow, with highly intermittent remnants of hawthorn hedge, growing along damp field boundary; some former pollards; frequent torn out limbs propped on ground and still alive; an assortment of branch tears, hanging branches, sub-80mm diameter deadwood common. This tree: two large limb tear-outs, frequent shear crack branches; frequent sub-75mm diameter deadwood; mutual crown suppression at east end of group	Pollarding of tree recommended if adjacent to planned works	20+	C2/3	9.6	Part removal	615		
G081-A	Crack Willow	19	800	10.0	10	10	10	N/A	2	M-OM	Fair	Two large limb tear-outs, frequent shear crack branches; frequent sub-75mm diameter deadwood; mutual crown suppression at east end of group	Pollarding of tree recommended if adjacent to planned works	20+	C2/3	9.6	Retain			
G081-B	Crack Willow	19	1000	9.0	5	9	9	1	0	M to OM	Fair	Hollow bole, two principal remaining limbs extending to north; collapsed stem propped on east side; collapsed stem of neighbouring tree propped in crown; large hanging branches General: mistletoe	Pollard if adjacent to planned works. As minimum, remove hanging branches and deadwood.	10+	C2/3	12.0	Remove			1
G081-C	Crack Willow	2	800	5.0	10	5	10	0	0	OM	Poor	A self-pollarding tree; collapsed stems lying to north-east and to west, still alive; small fruiting body of Ganoderma fungus on shattered bole	Remove collapsed limbs if adjacent to planned works	10+	C2/3	9.7	Remove			1
G081-D	Crack Willow	14	1000	9.0	5	9	5	1	1	M to OM	Fair	Formerly pollarded; collapsed limbs and remaining deadwood limbs; highly fragmented bole with historic decay	Pollard if adjacent to planned works	10+	C2/3	12.0	Retain			
G081-E	Crack Willow	15	900	11.0	5	11	5	1	1	M to OM	Fair	Formerly pollarded; collapsed limbs and remaining deadwood limbs; highly fragmented bole with historic decay	Pollard	10+	C2/3	10.8	Remove			1
G081-F	Crack Willow	14	1100	11.0	10	11	8	1	1	M to OM	Fair	Stems extending in all directions from highly fragmented bole, tangling with neighbouring crown to west	Pollard	10+	C2/3	13.2	Remove			1
G081-G	Crack Willow	15	800	12.0	9	12	12	1	1	M to OM	Fair	Most limbs collapsed on ground or propped in neighbouring trees	Pollard	10+	C2/3	9.6	Retain			
G081-H	Crack Willow	15	800	9.0	5	7	5	1	1.5	M to OM	Fair	Bole open to north-east; supporting collapsed limbs of neighbouring trees, but no collapsed limbs itself	Coppice if others U, this remains C	10+	C2/3	9.6	Retain			
H082	Elder, hawthorn, field maple, willow.	2.5	100	0.5	0.5	0.5	0.5	N/A	0	M	Fair to good	Historically laid hedgerow. Top and sides failed. Pockets of bramble established. Lower crowns browsed.	No works presently required	20+	B2	1.2	Part removal		127	
T083	Crack Willow	16	500;500	9.0	7	7	7	3-E	2	M	Fair to good	Co-dominant stems from ground level. Further multiple stems from approximately 2m. Potential former pollard point. Broad open crown. Evidence of storm damage recorded with frayed wounds in crown. Not extensive at present.	No works presently required	20+	B2	15.0	Remove			1
H084	Elder, hawthorn, field maple, willow.	3	100	0.5	0.5	0.5	0.5	N/A	0	M	Fair to good	Historically laid hedgerow. Top and sides failed. Pockets of bramble established. Lower crowns browsed.	No works presently required	20+	B2	1.2	Remove		84	

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G085A	Elder	3	80;80;80;80;80	2.0	2	2	2	N/A	0	EM	Good	Growing on river bank. Multi stem form. Suggesting past felling at ground level and regeneration.	No works presently required	10+	C2	2.1	Retain			
G085B	Hawthorn	4.5	100;100	3.0	3	3	3	N/A	0	EM	Fair	Growing on river bank. Co-dominant stems from ground level. Remnants of hedgerow. Mistle toe in crown.	No works presently required	10+	C2	15	Retain			
G086A	Crack Willow	8	150;200	6.0	4	2	2	1-N	0.5	SM	Good	Growing directly on waters edge. Base not accessible. Measurements estimated. Crown dominant to north. Self sown specimen.	No works presently required	10+	C2	15.0	Retain			
G086B	Crack Willow	4	100;100	2.5	2.5	2.5	2.5	N/A	0	Y	Fair	Growing directly on waters edge.	No works presently required	10+	C2	15.0	Retain			
T087	Crack Willow	15	1200	10.0	8	6	9	1.5	0	M	Good	Large pollarded specimen with multiple stems; no decay of bole observed; infrequent small diameter deadwood	No works presently required	20+	B2/3	14.4	Retain			
T088	Cherry Plum	6	230;230;230	5.0	5	2	3	2-E	1	EM	Fair	Multi stems recorded from approximately 500mm. Decay cavity in main stem with developing heartwood decay. Crown suppression to west.	No works presently required	10+	C2	1.7	Retain			
T089	Ash	16	450;420	8.0	7	7	7	3-SE	3	M	Good	Growing on river bank. Co-dominant stems from approximately 500mm. Compression fork with slight bark inclusion at union. Broad open crown. Occasional moderate diameter dead wood in middle crown.	No works presently required	20+	B2	7.4	Retain			
G090-A	Crack Willow	15	700	6.0	6	6	6	1	1	M	Fair	Diameter at 300 part of group of 3no pollarded trees on bank descending to river; some decay at pollard wounds, especially on east tree; lower crowns flailed on field side	No works presently required	10+	C2/3	8.4	Retain			
G090-B	Crack Willow	15	700	6.0	6	6	6	1	1	M	Fair	Diameter at 300 part of group of 3no pollarded trees on bank descending to river; some decay at pollard wounds, especially on east tree; lower crowns flailed on field side	No works presently required	10+	C2/4	8.4	Retain			
G090-C	Crack Willow	15	700	6.0	6	6	6	1	1	M	Fair	Diameter at 300 part of group of 3no pollarded trees on bank descending to river; some decay at pollard wounds, especially on east tree; lower crowns flailed on field side	No works presently required	10+	C2/5	8.4	Retain			
H091	Hawthorn, blackthorn, elder	2	80	0.5	0.5	0.5	0.5	N/A	0	EM	Good	Flail managed field boundary hedgerow.	No works presently required	10+	C2	1.0	Part removal		48	
H092	Hawthorn, elder, blackthorn	2.5	80;80;80	0.5	0.5	0.5	0.5	N/A	0	M	Good	Historically laid hedgerow. Now flail managed.	No works	20+	B2	1.7	Part removal		44	
H093	Hawthorn	4	100	0.5	0.5	0.5	0.5	N/A	0	M	Fair	Sporadic hedgerow. Intermittent willow in place. Dense bramble scrub in places. Sides flailed.	No works presently required	10+	C2	1.2	Retain			
G094A	Crack Willow	6	300;300;300	5.0	3	3	3	N/A	0	EM	Fair	Intermittent multi stem trees. Growing within drainage ditch. Wet at time of survey, hinder inspection of basal areas. Crowns topped for overhead utility clearance. Stubs of dead wood at topping points. Moderate diameter dead wood within middle crowns.	No works	10+	C2	1.7	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G094B	Crack Willow	6	300;300;300	5.0	3	3	3	N/A	0	EM	Fair	Intermittent multi stem trees. Growing within drainage ditch. Wet at time of survey, hinder inspection of basal areas. Crowns topped for overhead utility clearance. Stubs of dead wood at topping points. Moderate diameter dead wood within middle crowns.	No works	10+	C2	6.2	Retain			
G094C	Crack Willow	6	300;300;300	5.0	3	3	3	N/A	0	EM	Fair	Intermittent multi stem trees. Growing within drainage ditch. Wet at time of survey, hinder inspection of basal areas. Crowns topped for overhead utility clearance. Stubs of dead wood at topping points. Moderate diameter dead wood within middle crowns.	No works	10+	C2	6.2	Retain			
G094D	Crack Willow	6	300;300;300	5.0	3	3	3	N/A	0	EM	Fair	Intermittent multi stem trees. Growing within drainage ditch. Wet at time of survey, hinder inspection of basal areas. Crowns topped for overhead utility clearance. Stubs of dead wood at topping points. Moderate diameter dead wood within middle crowns.	No works	10+	C2	6.2	Retain			
H095	Hawthorn	3	100	1.5	1.5	1.5	1.5	N/A	0	EM	Good	Managed hawthorn field boundary hedge straddling wet ditch; occasional trees grown taller on north side; ivy and bramble	No works presently required	20+	C2	1.2	Part removal		5	
T096	Crack Willow	7	400	7.0	5	5	5	3-N	3	EM	Fair	Growing within field boundary hedgerow. Wet drainage ditch to east. Multi stems recorded from approximately 1m. Potential former pollard point. Dense ivy encroachment on main stem and into crown.	No works presently required	10+	C2	4.8	Retain			
097 - 101												<i>References 097-101 not included in survey</i>								
G102-A	Horse Chestnut	9	400	4.5	4.5	4.5	4.5	1.5	1.5	EM	Good	Garden trees behind hedgerow and dry ditch; no issues observed	No works presently required	20+	B2	4.8	Retain			
G102-B	Ash	15	450	4.5	4.5	4.5	4.5	3	3	M	Good	Garden trees behind hedgerow and dry ditch; no issues observed	No works presently required	20+	B2	5.4	Retain			
G102-C	Horse Chestnut	16	900	9.0	9	10	8	2	2	M	Good	Garden trees behind hedgerow and dry ditch; no issues observed	No works presently required	40+	A2	10.8	Retain			
H103	A Hedgerow	2	100	0.8	0.75	0.75	0.75	0	0	EM	Good	Coherent thorn hedge with snowberry, managed at 2m height, dry ditch on west side	No works presently required	20+	C2	1.2	Retain			
W104	Alder, ash, oak, Scots pine, cherry, field maple, hornbeam	16	300	4.0	4	4	4	N/A	0.5	SM to EM	Good	Planted group. Average spacing 3m. Crowns previously lifted. Flush cuts, onset of decay visible in some wounds. Limited understory. Drawn stems.	No works presently required	20+	B2	3.6	Retain			
G105	Ash, Leyland cypress	18	430	5.0	5	5	5	N/A	1	EM	Good	Planted line of trees growing along boundary with motorway verge. Offset from boundary fence by approximately 1.5m. Wet drainage ditch at toe of motorway embankment. Potential root barrier to growth. Occasional moderate diameter dead wood in lower crowns.	No works presently required	20+	B2	5.2	Part removal	763		

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G106	Linear group	12	300	4.5	4.5	4.5	4.5	1	0.5	SM	Fair	Intermittent Highways-planted trees on embankment descending steeply from carriageway, wet ditch at base: ash both occasional larger specimens with fair form and tall slender trees with drawn form; frequent branch tears, hanging branches, pockets of decay at branch failure points; cherry plum clustering, twisted stems, spreading through suckering; elm clusters, frequent multistems, vitality mostly good; occasional hawthorn; groups of multi-stemmed trees to south suggesting previous coppicing	Remove deadwood and hanging branches if adjacent to planned works	10+	C2	3.6	Part removal	2188		
W107	Ash, alder, oak, Scots pine, lime, hornbeam, cherry, field maple, horse chestnut, Leyland cypress	15	400	4.0	4	4	4	N/A	0	SM to EM	Good	Planted woodland group. Screen function. Average spacing 3m. Crowns previously lifted. Flush cuts. Onset of decay visible at some wounds. Limited understory. Pockets of bramble.	No works presently required	20+	B2	4.8	Retain			
W108	ash, oak, lime, Norway maple, cherry, field maple, spruce, pine	16	300	4.5	4.5	4.5	4.5	3	2	SM	Good	Mixed plantation of ash, oak, lime, Norway maple, cherry, field maple, spruce, pine; trees at 4m average spacing, some thinning; occasional tall slender-stemmed trees with drawn form and meagre crowns; frequent co-dominant forks in lime, maple, ash; occasional storm damage - stem tear-outs, branch tears; frequent deadwood, branches hanging or suspended in neighbouring trees; frequent pockets of established decay at wounds where twin stems removed low on tree	Remove all deadwood, hanging or suspended branches, torn-out trees	20+	B2	3.6	Part removal	12986		
G109	Sycamore, ash, hawthorn	16	420	4.0	4	4	4	N/A	1	SM to EM	Good	Planted group. Average spacing 3m. Occasional standing dead tree, typically sycamore. Newly planted trees in gaps. Occasional hawthorn. But limited understory. Pockets of dense bramble. Occasional self sown tree. Average offset from motorway fence is 1m.	No works presently required	20+	B2	5.0	Part removal	546		
G110	Ash, crack willow, field maple, elm, hawthorn	10	300	3.5	3.5	3.5	3.5	N/A	0	SM	Fair	Sporadic trees and shrubs growing on motorway embankment. Single and multi stems recorded. Suggesting some trees previously felled and regenerated. Dense pockets of bramble. Occasional dead elm. Gaps in group. Not continuous vegetation.	No works presently required	10+	C2	3.6	Part removal	6404		
H111	Blackthorn, hawthorn	3	80	0.5	0.5	0.5	0.5	N/A	0	EM	Good	Flail managed field boundary hedgerow. Bramble established in places. Wet drainage ditch to south.	No works presently required	10+	C2	1.0	Retain			

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T112	Crack Willow	14	400;400	7.0	7	3	7	3-N	0	M	Fair	Growing on edge of river. Base not accessible. Measurements estimated. East stem previously pollarded at approximately 3m. Multi stem regeneration. West stem previously coppiced. Some regrowth present. Decay visible at stool. Broad open crown. Low over extended regenerated growth.	Re-pollard east stem. Re coppice west stem.	10+	C2	6.8	Retain			
H113	Blackthorn, sycamore	2.5	80	0.5	0.5	0.5	0.5	N/A	0	SM	Good	Flail managed field boundary hedgerow. Wet drainage ditch to north.	No works presently required	10+	C2	1.0	Part removal		9	
T114	Ash	17	800	7.0	7	7	7	5-N	3	M	Fair	Field boundary tree. Deep wet drainage ditch to north. Root barrier to growth to north. Dense suckering growth around base. Basal flare not accessible due to dense scrub vegetation. Co-dominant stems from approximately 4m. Union appears sound, but decay cavity visible in failed north stem. Further storm damage recorded within crown. Frayed wounds. Wood decay fungi inonotus hispidus present At old wounds and sections of dysfunctional wood.	Create exclusion zone between tree and works.	20+	B3	9.6	Retain			
T115	Ash	14	300	5.0	2	5	5	4-N	2	SM	Good	Wet ditch to north. Root barrier to growth to north. Crown suppressed to east. Growing within hedgerow. Co-dominant stems from approximately 2.5m union appears sound.	No works presently required	10+	C2	3.6	Retain			
T116	Ash	15	300;100;120	6.0	3	5	4	3-S	4	SM	Good	Three stems from approximately 200mm. Suggesting past felling and regeneration. Growing on south bank of wet drainage ditch. Root barrier to growth to north. West stem pruned. Crossing and rubbing branches.	No works presently required	10+	C2	4.1	Remove			1
G117	Hybrid black poplar, oak, field maple	20	650	8.0	8	8	8	N/A	2	SM to M	Fair	Planted line of trees growing along highway boundary fence. Unbalanced crowns. Mutually suppressed crowns. Hard core and excavator damage around bases. Visible fibrous root damage.	No works presently required	10+	C2	7.8	Remove	12545		
T118	Ash	14	330;300;350;300	7.0	7	7	7	4-SE	3	M	Good	Multi stems recorded from ground level. Suggesting past felling at ground level and regeneration. Broad crown. Occasional frayed wound from past storm damage.	No works presently required	20+	B2	7.5	Retain			
G119	A group	8	250	4.0	4	4	4	2	2	SM	Good	Young standard ash and maple planted at regular intervals along field boundary hedge; diameters averaged - group includes 1no larger ash	No works presently required	10+	C2	3.0	Retain			
T120	Ash	17	500;500;280	11.0	9	7	9	3-E	2	M	Good	On south bank of stream; extending limb over garden to north; frequent 75mm diameter deadwood in southern crown; established decay in bole where former stems previously removed, and at old branch tear wounds; light ivy coverage of lower stems	Remove larger deadwood if adjacent to planned works	40+	B2	9.1	Remove			1

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T121	Oak	21	1000	12.0	12	12	12	3-E	3	M	Good	Garden tree - no access or view of base - dimensions ESTIMATED; rounded specimen, crown sparser above Highways boundary to west; infrequent sub-100mm diameter deadwood branches	Remove larger deadwood if adjacent to planned works	40+	A2	12.0	Remove			1
T122	Oak	14	700	7.5	5	7.5	7.5	4	4	M	Good	Compact ivy-clad tree on boundary between gardens - no access to base; occasional branch tears, deadwood branches; crown comparatively limited to east, possibly previously suppressed by failed limb on adjacent willow	Larger deadwood	40+	A2	8.4	Remove			1
T123	Ash	16	500;400;300	10.0	5	10	9	3	3	M	Fair	Stems rising from large stool on garden boundary, on north bank of stream; south stem ivy-clad; no access to base DIMS ESTIMATED pockets of decay at branch failure points; dead limb on east side, decayed at base; small diameter deadwood elsewhere	Remove decayed limb and larger deadwood	20+	B2	8.8	Remove			1
G124	A Group	12	300	4.0	4	4	4	0.5	0.5	SM to EM	Good	Linear group of trees on garden boundary - Leyland cypress, 2no small broadleaves, 1no larger cypress growing as specimen tree; crowns cut back near ground level	No works presently required	20+	C2	3.6	Part removal	286		
G125	A Group	17	300	4.5	4.5	4.5	4.5	0	0	SM to EM	Good	Linear group of trees on garden boundary, primarily Leyland cypress, forming dense screen; crowns lifted	No works presently required	20+	C2	3.6	Part removal	172		
G126-A	Cypress	14	350	4.5	4.5	4.5	4.5	2	2	EM	Good	Part of group of 2no specimen conifers (cypress, incense cedar), crowns lifted, timber garden boundary fence 590mm to east; no access to bases, no issues observed	No works presently required	20+	B2	4.2	Retain			
G126-B	Cedar	14	350	4.5	4.5	4.5	4.5	2	2	EM	Good	Part of group of 2no specimen conifers (cypress, incense cedar), crowns lifted, timber garden boundary fence 590mm to east; no access to bases, no issues observed	No works presently required	20+	B2	4.2	Retain			
G127	A group	20	400	6.0	6	6	6	2	2	EM	Good	Substantial linear group along garden boundary, including tall ash interplanted with cypress, and poplar, to provide visual screen; group includes pair of 500mm ash stems growing side by side.	Remove large diameter deadwood	20+	B2	4.8	Remove	1045		
T128	Norway Maple	16	650	6.0	6	6	6	2	2	EM	Good	Diameter at 300mm, all dims estimated No access to base Low-breaking specimen with rounded crown; no issues observed	No works presently required	20+	B2	7.8	Remove			1
G129-A	Weeping Willow	17	800	4.0	7	12	11	3	2	M	Good	No access; co-dominant fork at 1500mm; western limb leaning to south-west, eastern limb topped	No works presently required	20+	B2	9.6	Remove			1
G129-B	Weeping Willow	24	800	10.0	8	12	15	2	2	M	Good	No access; leading stem leaning to west, also long lateral limb extending to west	No works presently required	20+	B2	9.6	Remove			1
G130	Ash, elm, sycamore	16	350	4.0	4	4	4	N/A	0	Y to SM	Fair to good	Occasional dead standing and collapsed elm. Drawn stems. Dense ivy encroachment on some stems. Pockets of bramble.	No works presently required	20+	B2	4.2	Part removal	202		

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G131	Ash, elm, sycamore	16	350	4.0	4	4	4	N/A	0	Y to SM	Fair to good	Occasional dead standing and collapsed elm. Drawn stems. Dense ivy encroachment on some stems. Pockets of bramble.	No works presently required	20+	B2	4.2	Part removal	2427		
G132	Scots pine, ash, sycamore, beech, field maple. Blackthorn, hawthorn	18	350	3.5	3.5	3.5	3.5	N/A	0	SM	Fair to good	Planted and self sown trees. Growing on steep sloped embankment. Dense ivy encroachment on some stems. Tall drawn stems. No active management recorded. Wet drainage ditch at toe of embankment. Self sown vegetation growing within ditch.	No works presently required	20+	B2	4.2	Part removal	6186		
G133	Lombardy poplar	18	500	4.0	4	4	4	N/A	0	EM	Fair	Barn Farm Cottage. 5no. Lombardy poplar growing along boundary fence line. Crowns topped. Dense regrowth present. Stubs of dead wood present where cut stems have failed.	Cut back regenerated growth.	10+	C2	6.0	Remove	194		
T134	Atlas Cedar	18	800	8.0	8	8	8	6-SE	5	M	Good	Tree topped. Crown lifted and thinned. Basal area not accessible or visible. Moderate ivy encroachment on main stem.	No works presently required	20+	B2	9.6	Remove			1
G135	Lawson's cypress, silver birch, Leyland cypress, sycamore, ash, cherry, field maple	17	400	5.0	5	5	5	N/A	2	SM to M	Fair to good	Sporadic informal group of trees growing within garden. Boundary hedgerow around garden. Privet dominant. Crowns previously lifted. Bases not accessible. Individual trees within group not plotted.	No works presently required	20+	B2	4.8	Part removal	1925		
G136A	Beech	17	800	8.0	8	8	8	3-SE	3	M	Good	Balanced and broad crown. Utility cable passes through group. Crown previously lifted.	No works presently required	40+	A2	9.6	Remove			1
G136B	Beech		1100	9.0	9	9	9	5-S	3	M	Good	Base not accessible. Measurements estimated. Co-dominant stems recorded from approximately 4m. Union appears sound. Drainage ditch between tree and access road.	No works presently required	40+	A2	13.2	Remove			1
G136C	Beech		800	9.0	9	9	9	N/A	1.5	M	Fair	Wet drainage ditch to south. Ivy encroachment on main stem. Crown break at approximately 4m. Hawthorn and privet boundary hedgerow.	No works presently required	40+	A2	9.6	Remove			1
G137	Silver birch, maple, elm	10	250	4.0	4	4	4	N/A	0	SM	Good to EM	Informal group within garden. Bases not accessible. Individual trees not plotted. Boundary hedgerow present, including privet and elm.	No works presently required	10+	C2	3.0	Remove	243		
T138	Atlas Cedar	17	530	5.0	5	5	5	2-SE	1.5	EM	Good	Balanced crown. Lifted over road.	No works presently required	20+	B2	6.4	Remove			1
T139	Common Beech	17	490	7.0	7	7	7	5-SW	2	EM	Good	Balanced crown. Co-dominant stems from approximately 3m. Relatively tight union. Fused stems in upper crown.	No works presently required	20+	B2	5.9	Retain			
G140A	Norway Maple	14	500	6.0	6	6	6	N/A	1	M	Good	Planted line of trees. Wet drainage ditch to north. Ivy encroachment on stems.	No works presently required	20+	B2	6.0	Retain			
G140B	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140C	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Crown topped	No works presently required	20+	B2	4.0	Retain			
G140D	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			

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G140E	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140F	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140G	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140H	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140I	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140J	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140K	Norway Maple		330	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	4.0	Retain			
G140L	Norway Maple		440	5.0	5	5	5	N/A	1	M	Good	Part of group of planted trees.	No works presently required	20+	B2	5.3	Retain			
H141	Elm, ash	1.5	80	0.5	0.5	0.5	0.5	N/A	0	EM	Good	Flail managed field boundary hedgerow.	No works presently required	20+	B2	1.0	Retain			
G142	Leyland Cypress	6	150	2.0	2	2	2	N/A	0	SM	Fair	Planted boundary hedgerow. Chlorotic foliage. Potential salt spray damage.	No works presently required	10+	C2	1.8	Remove	146		
G143	Leyland Cypress	18	400	5.0	5	5	4	4	4	EM	Good	Short line of trees inside garden boundary fence, crowns lifted high and cut back on motorway side	No works presently required	20+	C2	4.8	Remove	147		
T144	Cedar	18	500	8.0	8	8	8	3	2	EM	Good	Imposing specimen on west side of garden boundary fence, crown limited. Limited view, no access, estimated	No works presently required	20+	B2	6.0	Remove			1
T145	Ash	10	100;100;100;100;100	2.0	4	4	4	2-S	1.5	EM	Good	Multi stems recorded from ground level. Suggesting past felling to ground level and regeneration. Mutually suppressed crowns.	No works presently required	10+	C2	2.7	Remove			1
H146	Blackthorn	2	80	1.0	1	1	1	N/A	0	EM	Good	Blackthorn field boundary hedge, flailed near track at south end; height management recently relaxed; bramble	No works presently required	10+	C2	1.0	Part removal		19	
T147	Oak	18	1170	10.0	10	10	10	1.5-SE	1.5	M	Good	High-quality open-grown specimen with rounded crown, flared buttress, minor storm damage	No works presently required	40+	A2	14.0	Retain			
T148	Apple	6	350	4.0	4	4	4	0-SW	0	OM	Fair	Irregular field specimen; limb torn to south-west and propped on ground; established decay at branch tear to east, with fruiting body of Inonotus hispidus fungus; extensive stem decay with exposed heartwood; mistletoe	Remove propped limb if adjacent to planned works	10+	C2	4.2	Retain			
G149-A	Crack Willow	12	1400	7.0	10	5	6	1	2	OM	Fair	Old pollard at north end of row; large bole leans at 60 degree angle to east, extensively decayed; surface roots to west providing guy rope function; old pockets of decay where pollard limbs formerly removed; small diameter deadwood	(Option to remove weight from east end of crown)	10+	C2	15.0	Retain			
G149-B	Crack Willow	8	600	7.0	4	4	8	2	2	OM	Fair	Former pollard suppressed by larger neighbour to south; bole extensively decayed; torn branch on main limb to east suspended in crown	Cut back to original pollard points if adjacent to planned works	10+	C2	7.2	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G149-D	Crack Willow	14	1400	8.0	8	3	1	1.5	1.5	OM	Fair	Vast bole entirely hollow; deadwood including limb to 150mm diameter. Diameter at 600	Cut back to original pollard points if adjacent to planned works	10+	C2	16.8	Retain			
G149-C	Crack Willow	14	800;700	8.0	12	5	7	2	2	OM	Fair	Lapsed pollard, twin stems extensively decayed, eastern with 45° lean to east; deadwood stems to 140mm diameter; hanging branches, branch tears	Cut back to original pollard points if adjacent to planned works	10+	C2	12.8	Retain			
G149-E	Crack Willow	12	1000	0.0	8	6	4	2-E	1.5	OM	Fair	Hollow bole, open to south; deadwood and hanging branches	Remove deadwood and hanging branches; alternatively, cut back pollard	10+	C2	12.0	Retain			
T150	Crack Willow	13	550;450	10.0	2	9	11	0	1.5	M	Fair	On south bank of stream, no access to base; crown lifted above fields both sides; stems leaning/growing to north-west; 3rd stem removed, east side; no previous height management works; decay at branch failure points	No works presently required	10+	C2	8.5	Retain			
G151	Willow, hawthorn, elder	6	120	3.5	3.5	3.5	3.5	0.5	0.5	EM	Fair	Shrubby vegetation on both sides of stream; willow, hawthorn, elder; extensive bramble	No works presently required	10+	C2	1.4	Part removal	40		
T152	Oak	18	900	9.0	9	9	9	3	2.5	M	Good	No access to base, no view of south side; growing in field boundary hedge; light dieback at top of slightly straggling crown	No works presently required	40+	A2	10.8	Remove			1
H153	Hawthorn	3	80	1.0	1	1	1	N/A	0	M	Good	Hawthorn hedge with gap around large oak, slightly gappy at base	No works presently required	10+	C2	1.0	Part removal		30	
G154	A Group	12	300	5.5	5.5	5.5	5.5	1.5	1	SM	Good	Intermittent mostly small trees on bank descending from motorway; predominantly ash, occasional cherry, hazel, elder, hawthorn; widespread dense bramble	No works presently required	10+	C2	3.6	Remove	6021		
G155	A Group	1.5	70	0.5	0.5	0.5	0.5	0	0	EM	Fair	Small clumps of thorn hedge with bramble along boundary fence line; 60% gap, 40% hedge	No works presently required	10+	C2	0.8	Retain			
G156	A Group	15	300	4.5	4.5	4.5	4.5	0.5	0.5	SM	Good	Planted ash, Norway maple and low-breaking field maple at side of carriageway; 2-3m typical spacing; mutual crown suppression; frequent compression forks, occasional natural bracing - rubbing and crossing of stems and branches	No works presently required	20+	B2	3.6	Part removal	1146		
H157	A Hedgerow	2	80	1.5	1.5	1.5	1.5	0	0	EM	Fair	Intermittent, flail-managed thorn hedge at field boundary; bramble dense in places	No works presently required	10+	C2	1.0	Retain			
G158	Mixed broadleaf	8	250	4.0	4	4	4	0.5	0.5	SM-EM	Fair	Trees growing on bank between carriageway and boundary fence; ash, hawthorn, elm, occasional field maple; intermittent at south end, becoming more continuous towards north; dense bramble - limited recent management	No works presently required	10+	C2	3.0	Part removal	2277		
G159	Boundary trees and hedging	8	250	4.0	4	4	4	0	0	SM-EM	Good	Continuous row of hawthorn and blackthorn at side of road verge, in parts managed as formal hedge; along the length intermittent young standard trees - ash, horse chestnut,	No works presently required	20+	B2	3.0	Part removal	62		

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												field maple; 1 no multi-stemmed willow, stems reduced beneath overhead cables								
G160	Monterey pine, Scots pine, hornbeam, oak, holly, silver birch, Holm oak, Redwood	12	400	5.0	5	5	5	N/A	0	Y to EM	Good	Mixed informal group. Planted. Drawn stems. Screen function.	No works presently required	20+	B2	4.8	Part removal	820		
T161	Crack Willow	7	700	4.5	3	3	3	3-S	2.5	M	Fair	Access restricted. Measurements estimated. Growing in grazing pasture. Ground compaction around base. Old pollard at approximately 3m. Dense multi stem regeneration. Large decay cavities at old pruning wounds. Dense ivy within pollard bole.	No works presently required	10+	C2	8.4	Retain			
T162	Ash	10	300;350	3.0	3.5	4.5	3	3.5-SW	3	EM	Fair to good	Access restricted. Measurements estimated. Co-dominant stems from approximately 1m. Union appears sound. Growing within grazing pasture. Ground compaction around base. Occasional small to moderate diameter dead wood in middle crown.	No works presently required.	20+	B2	5.5	Retain			
T163	Crack Willow	6.5	750	4.0				2-S	2	OM	Fair	Access restricted. Measurements estimated. Old pollard. Multi stems from approximately 3m. Hollow main stem. Ground compaction around base. Dense ivy encroachment at pollard bole.	No works presently required	10+	C3	9.0	Remove			1
T164	Ash	17	900	8.0	8	8	7	3-NW	3	M	Good	Growing along edge of group. Dead ivy around main stem. Co-dominant stems from approximately 3m. Slight compression fork with included bark. Potential cavity at centre of union. Occasional moderate diameter dead wood in lower crown.	No works presently required	20+	B1	10.8	Retain			
T165	Crack Willow	10	1250	1.0	5	5	4	2-SW	2	OM	Fair	Old pollard. Main stem hollow. Extensive decayed wood visible. Desiccated in appearance. Extensive storm damage. Frayed wounds. Fallen branches.	No works presently required	10+	C3	15.0	Retain			
G166	Crack Willow, ash, hawthorn, elder, field maple	14	450	5.0	5	5	5	N/A	0	SM to M	Fair to good	Lapsed field boundary hedgerow. Sides flailed. Tops unmanaged. Sporadic trees. Occasional collapsed branch or stem. Storm damage.	No works presently required	20+	B2	5.4	Retain			
T167	Ash	15	750	6.0	9	6	6	5-E	4	M	Fair	Growing within lapsed field boundary hedgerow. Area of sunken bark on main stem to east. Column of decay. Large diameter dead wood in lower e. Decay cavities at old branch wounds. Remnants of wood decay fungal bracket Inonotus hispidus at base. Fallen from wounds in middle crown. Multi stem from approximately 4m.	No works presently required	20+	B3	9.0	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
H168	Hedgerow	1.5	80	1.0	1	1	1	0	0	EM	Good	Managed field boundary hedge of hawthorn and blackthorn	No works presently required	10+	C3	1.0	Part removal		32	
H169	Hawthorn, elder, blackthorn	3	150	0.5	0.5	0.5	0.5	N/A	0	SM	Fair	Lapsed hedgerow. Sporadic sections remain. Tops and sides flailed in places. Dense bramble present in sections.	No works presently required	10+	C2	1.8	Retain			
G170	Common Oak	8	270	5.0	5	5	5	2-E	1.5	SM	Good	Part of a group of planted trees. Crown break at approximately 3m. Balanced crown.	No works presently required	20+	B2	3.2	Retain			
G170-B	Common Oak	8	230	3.5	3.5	3	1	2-E	0.5	Y	Fair	Part of a group of planted trees. Crown break at approximately 3m. Balanced crown. Crown lifted to west. Compacted aggregate track way.	No works presently required	20+	B2	2.8	Retain			
G170-C	Common Oak	8	310	5.0	5	5	5	2-E	1.5	Y	Fair	Part of a group of planted trees. Crown break at approximately 3m. Balanced crown. Light ivy encroachment on main stem.	No works presently required	20+	B2	3.7	Retain			
G170-D	Common Oak	8	210	3.5	3.5	3.5	3	2-E	1.5	Y	Fair	Part of a group of planted trees. Crown break at approximately 3m. Balanced crown.	No works presently required	20+	B2	2.5	Retain			
T171	Ash	16	300;300;300;300	6.0	6	7	3	3-SE	3	M	Fair	Growing to west of compacted aggregate track. Multi stems from ground level. Suggesting past felling and regeneration. Unions not fully visible. Base not accessible. Moderate ivy encroachment on stems. Drainage ditch to west.	No works presently required	20+	B2	7.2	Retain			
G172-A/B	Field Maple	10 ave.	500 ave.	4.5	4.5	4.5	4.5	1	1	M	Good	Individual specimens growing along field boundary hedgerow, re-growth from coppice, typically multi-stemmed; established pockets of decay where lower branches formerly removed; mistletoe colonisation of A	No requirement for works identified at time of survey	20+	B2	6.0	Retain			
T173	Common Oak	15	450	4.0	1	6	6	3-S	2.5	EM	Good	Measurements estimated. Base not accessible. Crown suppressed to east. Co-dominant stems from approximately 3m. Union appears sound.	No works presently required	20+	B2	5.4	Retain			
G174	A Group	16	350	4.5	4.5	4.5	4.5	N/A	0	SM to EM	Fair	Mixed group. Lawson's cypress. Over grown section of hedgerow to south. Bases not accessible.	No works presently required	20+	B2	4.2	Retain			
G175	Hawthorn, blackthorn, crack willow	6	300	3.5	3.5	3.5	3.5	N/A	0	EM	Fair	Lapsed boundary hedgerow. Drainage ditch at centre. Sections flailed. Top and sides. Section left unmanaged. Collapsed stems in places. Dense ivy encroachment on stems.	No works presently required	10+	C2	3.6	Retain			
T176	Crack Willow	6	1100	5.0	3	3	3	N/A	2	OM	Fair	Growing west side of wet drainage ditch. Hollow main stem. Extensive decayed wood visible. Desiccated in appearance. Old pollard at approximately 3m. Multi stem regeneration.	No works presently required	10+	C3	13.2	Retain			
T177	Ash	11	700 at 700mm	7.0	7	7	7	1	1	M	Fair	Bole hollow, desiccated central stem possible decay origin; infrequent small deadwood in airy crown	No requirement for works identified at time of survey	20+	B2	8.4	Retain			
H178	Thorn hedge	2	70	1.5	1.5	1.5	1.5	0	0	EM	Fair	Intermittent blackthorn and hawthorn hedge with frequent bramble dense in	No requirement for works identified at time of survey	20+	C2	0.8	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												places; occasional saplings of ash, horse chestnut								
G179	Hybrid Black Poplar	25	1200	12.0	12	12	12	N/A	3	M to OM	Fair	4no. Trees. Vast crowns on central pair. Extensive storm damage recorded. Mutual crown suppression. Slight leans. Over extended branches. Large diameter frayed wounds. Suckering young growth around bases. Managed hedgerow to south.	Create exclusion zone given storm damage recorded.	10+	C2	14.4	Retain			
H180	Blackthorn	2	80	0.5	0.5	0.5	0.5	N/A	0	SM	Fair	Managed blackthorn hedgerow. Top and sides flailed.	No works presently required	10+	B2	1.0	Retain			
T181	Crack Willow	8	1100	6.0	6	6	6	2-W	0	OM	Fair	Extensive hollow main stem. Storm damage recorded. Collapsed branches. Old Pollard.	No works presently required	10+	C3	13.2	Retain			
T182	Common Lime	10	460	5.5	5.5	5.5	5.5	2-SW	1.8	SM	Good	Balanced crown. Growing immediately adjacent to timber fence posts. Crown flailed to south.	No works presently required	20+	B2	5.5	Retain			
H183	Elm, hawthorn, blackthorn	3	100	0.5	0.5	0.5	0.5	N/A	0	EM	Good	Managed field boundary hedgerow. Top and sides flailed.	No works presently required	20+	B2	1.2	Retain			
T184	Ash	8	400;280	6.0	6	6	6	2-SW	1.5	EM	Good	Co-dominant stems from approximately 1m. Union appears sound. Balanced broad crown. Hanging broken branch to south.	No works presently required	20+	B2	5.9	Retain			
T185	Field Maple	8.5	520	4.0	5	6	4	2-S	2	M	Good	Main stem trifurcates at approximately 1.2m. Crown flailed back to west.	No works presently required	20+	B2	6.2	Retain			
T186	Ash	12	400	7.5	7.5	7.5	7.5	1	1	M	Good	Hedgerow specimen; occasional storm damage, and established decay at limb and branch tears	Remove deadwood if adjacent to planned works	10+	C2	4.8	Retain			
T187	Ash	13	780	8.0	8	8	8	3	4	M	Poor	Extensive crown deadwood, including large branches; woodpecker holes; storm damage, and established decay at limb and branch tears	Pollarding recommended due to overall crown condition and vitality; as minimum, remove larger deadwood	10+	C2	9.4	Retain			
T188	Horse Chestnut	9	650 at 600mm	5.5	5.5	5.5	5.5	1	1	M	Good	Low-breaking, compact form; minor deadwood, crown-lifting	No requirement for works identified at time of survey	20+	B2	7.8	Retain			
G189	A Group	10 ave.	450 ave.	4.5	4.5	4.5	4.5	0.5	1.5	M	Good / Fair	Ash and field maple mix along hedgerow, formerly coppiced multistems; maple vitality generally good, ash generally poor, with extensive deadwood, occasional collapsed stems, pockets of decay at branch failure and crown-lifting points, colonisation by Inonotus hispidus and Daldinia concentrica fungi; mutual crown suppression; includes 1no elm	Remove deadwood if adjacent to planned works	20+	B2	5.4	Retain			
T190	Ash	10	400 + 350 + 290	8.0	6	6	6	2	2	M	Fair	Formerly coppiced; established decay at and extending vertically from removal of low limbs and branch tear wounds; occasional sub-100mm diameter deadwood limbs	Remove deadwood if adjacent to planned works	10+	C2	7.3	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
T191	Horse Chestnut	9	550 at 500mm	6.0	4	5	5.5	1.5	1	M	Poor	Historic failure of basal limb to south at bark-included union; vitality notably low; widespread small diameter deadwood; budding direct from branches; established decay at pruning and branch tear wounds	Removal recommended due to poor condition and limited prospects	<10	U	6.6	Retain			
G192-A	Norway Maple	15	490	6.0	7	5	7	4	4	EM	Good	Selection of trees in garden of nurseryman, including several ornamentals; typically c.2m+ to east of concrete driveway kerb; mostly crown-lifted, some with light ivy encroachment	No requirement for works identified at time of survey	20+	B2	5.9	Retain			
G192-B	Snakebark maple	7	170 + 170 + 170	4.5	4.5	4.5	4.5	2	2	EM	Fair	Pollarded multistem	No requirement for works identified at time of survey	20+	B2	3.6	Retain			
G192-C	Common Lime	14	690	5.0	5	5	5	2	1.5	M	Good	Pollarded tree; full occlusion of old crown-lifting wounds	No requirement for works identified at time of survey	20+	B2	8.3	Retain			
G192-D	Beech	12	450	5.0	5	7	6	2	2	EM	Good	Cut-leaved form; small pockets of decay at crown-lifting wounds; light ivy	No requirement for works identified at time of survey	20+	B2	5.4	Retain			
G192-E	Horse Chestnut	11	490	2.0	6	6	6	3	3	EM	Good	Crown to north cut back from telecommunications cables, and slightly suppressed by larger neighbour; possibly ornamental form	No requirement for works identified at time of survey	20+	B2	5.9	Remove			1
G192-F	Norway Maple	15	590	8.0	7	8	6	2	4	M	Good	Locally dominant; small diameter deadwood; old mower wounds on exposed surface roots	Remove deadwood if adjacent to planned works	20+	B2	7.1	Remove			1
G192-G	Beech	13	400 at 600mm	5.5	5.5	5.5	5.5	1	1	EM	Good	Crown growth to south suppressed by larger neighbour; stems rubbing and crossing above crown break - sub-60mm diameter deadwood here	Remove deadwood if adjacent to planned works	20+	B2	4.8	Remove			1
G193-A	Scots Pine	11	380	3.0	6	4	3	6	4	EM	Fair	Pair of pines in grassed area; concrete driveway hard to south of A, service covers to north-east of B; both formerly suppressed by tree in middle of pair, now removed; this tree: living crown limited to top third of stem, which terminates abruptly as if topped; deadwood branch stubs	Remove larger deadwood if adjacent to planned works	20+	C2	4.6	Retain			
G193-B	Pine sp.	13	420	3.0	2	3	4	3	3	EM	Good	Bird box affixed	No requirement for works identified at time of survey	20+	B2	5.0	Retain			
T194	Weeping Willow	10	860	8.0	7	7	8	2.5	1.5	M	Good	Imposing pollarded specimen; established decay at pruning wounds; established mistletoe colonisation; infrequent deadwood; ivy-clad	No requirement for works identified at time of survey	20+	B2	10.3	Retain			
T195	Cornelian Cherry	7	400	4.0	4	4	4	0	0	M	Good	Compact multistem, ivy-clad	No requirement for works identified at time of survey	20+	B2	4.8	Retain			
G196	A Group	6 ave.	250 ave.	3.5	3.5	3.5	3.5	1	1	SM	Good	Mixed group of young and semi-mature trees dotted around grassed area and edging residential property; laburnum, metasequoia, pine, frequent holly; most crowns lifted; group also includes garden trees and shrubs, including hollies, diligently	No requirement for works identified at time of survey	20+	B2	3.0	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												pruned, and birch; broad selection of species								
G197	Pine	18	480	7.0	7	7	7	2	2	EM	Good	Larger pine trees of assorted species, including Monterey, grouped at edge of more formal garden area; characterized by curving stems, leans, mutual crown suppression; frequent ivy; group includes 1no poplar	No requirement for works identified at time of survey	20+	B2	5.8	Retain			
T198	Ash	14	480 + 350	6.0	6	8	7	2.5	3	M	Fair to poor	In hedgerow, south side of dry ditch; pockets of established decay at old crown-lifting wounds; frequent branch tears and sub-75mm diameter deadwood in open crown; bird box affixed north side	Remove deadwood if adjacent to planned works	10+	C2	7.2	Retain			
T199	Oak	14	500	7.0	7	7	7	2	2.5	M	Good	In hedgerow, south side of dry ditch; crown-lifted, rounded crown; bird box affixed north side	No requirement for works identified at time of survey	40+	B2	6.0	Retain			
H200	A Hedgerow	2	140	1.5	1.5	1.5	1.5	0	0	EM	Good	Managed hawthorn hedge on two sides of field; formerly laid; infrequent gaps	No requirement for works identified at time of survey	20+	B2	1.7	Retain			
T201	Crack Willow	5	1200	4.0	4	4	4	1.5	1.5	OM	Fair	Large bole extensively hollow; flush of fresh pollard re-growth; CCTV camera attached	No requirement for works identified at time of survey	10+	C3	14.4	Retain			
G202	Willow group	to 16	to 1000	8.0	8	8	15	0.5	0.5	M	Fair	Unmanaged group of willow and thorny shrub; 6no willow trees on east side of watery ditch; A and B the largest, collapsed stems above extensively decayed and partly hollowed boles; stems leaning towards road; frequent small diameter deadwood; others younger versions of same; blackthorn, some hawthorn and elder at base; frequent bramble	Recommended to pollard all willows to enable safe retention, especially A and B	20+	C2/3	12.0	Retain			
T203	Ash	11	410	7.0	7	7	7	2	2.5	M	Fair	Hedgerow tree, stem ivy-clad to mid-crown; irregular crown has branch tears, deadwood stubs, woodpecker holes at decayed stub	Larger deadwood	20+	B2	4.9	Retain			
H204	A Hedgerow	2	120	1.5	1.5	1.5	1.5	0	0	EM	Good	Flail-managed hawthorn field boundary hedge; trees allowed to grow tall at north end	No requirement for works identified at time of survey	10+	C2	1.4	Retain			
T205	Ash	16	650 + 100 + 100 + 100	8.5	8	5.5	7	2.5	2	M	Good	More tall and slender than average ash; smaller stems rising from base; occasional storm damage and sub-50mm diameter deadwood; full occlusion where lower branches historically lost; mistletoe in upper crown	Remove deadwood if adjacent to planned works	20+	B2	8.2	Retain			
T206	Ash	17	900 + 300 + 300 + 250 + 250	12.0	14	8.5	9	2	2	M	Good	Large central stem at centre of cluster of smaller stems occluding against each other and against main stem; occasional storm damage, sub-75mm diameter deadwood branches and stubs, hanging branches; pockets of decay at older branch failure points;	Remove deadwood and hanging branches if adjacent to planned works	20+	B2	12.7	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												fruiting body of <i>Inonotus hispidus</i> fungus at base; frequent natural bracing								
G207	A Group	2 ave.	70 ave.	1.0	1	1	1	0.5	0.5	M	Good to fair	Highly intermittent remnants of old hawthorn hedge, mostly flail-managed; including 2no larger trees	No requirement for works identified at time of survey	10+	C2	0.8	Retain			
G207-A	Hawthorn	6	300	3.5	3.5	3.5	3.5	0.5	0.5	M	Fair	Larger specimen within group G524	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
G207-B	Hawthorn	6	300	3.5	3.5	3.5	3.5	0.5	0.5	M	Fair	Larger specimen within group G524	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
T208	Crack Willow	14	1240	8.0	8	8	8	2	1	M	Fair	Large pollard on steep bank descending to river; established decay around bolling wounds, with partial collapse on east side; flush of fresh pollard re-growth; bole densely ivy-clad; arching buttress roots on river side providing accommodation for fox at time of survey	Re-pollarding advised; also sever and remove ivy to enable fuller assessment	10+	C3	14.9	Retain			
G209	Ash/Alder	14	300 + 300 + 300 + 300	14.0	8	6	8	1.5	1.5	EM-OM	Fair	Multi-stemmed clump comprising several stems of an over-mature alder and a single-stemmed early mature ash; the latter leaning to north, with stem growing horizontal above field; one alder stem hollow, torn out at 2m, old <i>Ganoderma</i> colonisation; dense ivy on alder	Remove deadwood if adjacent to planned works	10+	C2	7.2	Retain			
T210	Crack Willow	14	1240	8.0	8	8	8	2	1	OM	Fair	On steep bank descending to river; established decay of bole and around bolling points; bole densely ivy-clad	Re-pollarding advised; also sever and remove ivy to enable fuller assessment	10+	C3	14.9	Retain			
T211	Hybrid Black Poplar	20	1500	16.0	16	17	10	4.5-SW	1	M	Good	On steep bank descending to river; stem lean to north-east; ivy covers lower stem; occasional storm damage in vast crown; no previous size management, but extensive crown-lifting, especially to east; limbs cut back above river; only small diameter deadwood, hanging branches observed	No requirement for works identified at time of survey	20+	B2	15.0	Retain			
T212	Crack Willow	14	1190	14.0	12	14	8	2	0	M	Fair	On bank close to river; no ivy; established decay of bole and around bolling points; partial collapse on east side	Re-pollarding advised	10+	C3	14.3	Retain			
G213	A Group	4 ave.	250 ave.	3.0	3	3	3	0	0	M	Fair	Small hawthorns on bank, entirely covered in ivy	No requirement for works identified at time of survey	10+	C2	3.0	Retain			
G214	A Group	4 ave.	120 ave.	2.5	2.5	2.5	2.5	0	0	EM	Good	Linear group growing along dry channel, flail-managed on both sides, comprising cherry plum, hawthorn, blackthorn, elder, occasional young self-set ash; abundant bramble; stems twisting; frequent co-dominant	No requirement for works identified at time of survey	20+	C2	1.4	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												forks; where channel ends, row extends north as managed field hedge								
H215	Hawthorn hedge	2	100	1.0	1	1	1	0	0	M	Good	Flail-managed hawthorn hedge, intermittent	No requirement for works identified at time of survey	10+	C2	1.2	Retain			
G216	A Group	4 ave.	120 ave.	2.5	2.5	2.5	2.5	0	0	EM	Good	Linear group growing along dry channel, flail-managed on both sides, comprising cherry plum, hawthorn, blackthorn, elder; 1 no goat willow; occasional young self-set ash; abundant bramble; stems twisting; frequent co-dominant forks; occasional collapsed stems, mammal burrowing	No requirement for works identified at time of survey	20+	C2	1.4	Retain			
G217	A Group	13 ave.	400 ave.	4.5	4.5	4.5	4.5	0	0	EM-M	Fair	Linear group on bank at side of lane, paddock to west; c.5no multi-stemmed goat willow, pollarded at 2m (not recently), in line of unkempt hawthorn, bramble, ivy; occasional small diameter deadwood; flail-managed by lane; occasional standing dead stems of semi-mature elm	Remove dead stems and any larger deadwood	10+	C2	4.8	Retain			
G218	Ash	9	200 + 200 + 200	4.5	4.5	4.5	4.5	1	1	EM	Good	3-4no formerly coppiced ash, multi-stemmed, at foot of bank at side of lane, above narrow watery ditch, densely ivy-clad; flail-managed by lane - pockets of decay on stems at flail wounds; bits and bobs of hawthorn	No requirement for works identified at time of survey	10+	C2	4.2	Retain			
G219	A Group	9 ave.	280 ave.	2.5	2.5	2.5	2.5	1.5	1.5	SM-EM	Good	Small group of third-party garden trees, on raised earth corner by driveway entrance (no retaining wall), growing hard by house wall; includes evergreen magnolia, upright ornamental maple, dense ivy clump, young self-set sycamore	No requirement for works identified at time of survey	10+	C2	3.4	Retain			
H220	A Hedgerow	2	100	1.0	1	1	1	0	0	EM	Fair	Managed field hedge of hawthorn with elder; bramble widespread; gappy in parts	No requirement for works identified at time of survey	10+	C2	1.2	Retain			
H221	Garden hedge	2	70	0.8	0.75	0.75	0.75	0	0	EM	Good	Tidy garden hedge (Lonicera)	No requirement for works identified at time of survey	10+	C2	0.8	Retain			
G222	A Group	5 ave.	250 ave.	4.0	4	4	4	1	1.5	SM	Good	Pair of trees - oak and white-stemmed birch growing at corner of garden, at top of laneside bank	No requirement for works identified at time of survey	10+	C2	3.0	Retain			
G223	A Group	8 ave.	300 ave.	4.0	4	4	4	1	1	EM	Good / Fair	Mixed unmanaged group of small trees and shrubs on narrow bank between field boundary and watery ditch; widening to form small triangle at west end; includes hawthorn, goat willow, elder, self-set ash and sycamore; dense bramble in places; occasional stems collapsing under	Remove deadwood and collapsed stems if adjacent to planned works	10+	C2	3.6	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												weight of ivy; larger specimens recorded individually								
G223-A	Sycamore	12	280 + 150	3.5	3.5	3.5	3.5	1	1.5	EM	Good	1m behind fence, upright form, co-dominant unions around crown break; branches cut back above field / telecommunications cables to north	No requirement for works identified at time of survey	10+	C2	3.8	Retain			
G223-B	Ash	13	400	4.0	4	7	8	1.5-NW	2	SM-EM	Good	1m behind fence; minor crown-lifting and cutting back from telecommunications cables	No requirement for works identified at time of survey	20+	B2	4.8	Retain			
G223-C	Ash	16	400	7.0	7	2	5	1	2	SM-EM	Good	1m behind fence, leaning towards north-east, away from very large oak recently pollarded	No requirement for works identified at time of survey	20+	B2	4.8	Retain			
T224	Lawson Cypress	14	300 #	2.5	2.5	2.5	2.5	0	0	EM	Good	(No view of base, diameter estimated) Garden tree growing to south of watery ditch, leaning to north, into airspace above field; ivy throughout tree	Survey of basal area advised to enable fuller assessment	10+	C2	3.6	Retain			
T225	Hybrid Black Poplar	24	1900 #	15.0	12	12	4	2	2	M	Good	Very large tree on soft bank at side of pond, mammal burrowing in RPA; no view of base, diameter estimated; crown growth to west suppressed by very large oak, recently pollarded; long limbs extending from possible former pollard boll; crown slightly irregular, occasional small diameter deadwood; ivy-clad to mid-crown	Inspection of basal area advised to enable fuller assessment, and possible recommendation to reduce or re-pollard crown; remove deadwood if adjacent to planned works	20+	B2	15.0	Retain			
G226	A Group	6 ave.	250 ave.	3.5	3.5	3.5	3.5	0.5	0.5	M-OM	Fair	Intermittent shrubby trees, elder and hawthorn, on shallow bank descending to pond, crowns overhanging field; ivy and bramble locally dense; occasional collapsed limbs or dead monoliths of elder; ground at base soft, with mammal burrowing in RPAs; larger specimens recorded individually; at east end, pair of semi-mature aspen stems	Remove collapsed stems if adjacent to planned works	10+	C2	3.0	Retain			
G226-A	Cherry	5	300	8.0	2	0	4	1.5	2	EM	Good	4m beyond boundary fence, stem lean and crown growth all to north, over field; small diameter deadwood branch stubs	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
G226-B	Crack Willow	6	480 + 380 + 350 + 340 + 320	2.0	2	2	2	2-N	3	M	Fair	8m beyond boundary fence; group of upright willow stems or twin stems, recently pollarded	No requirement for works identified at time of survey	10+	C2	10.2	Retain			
G226-C	Birch	16	380	7.5	5	3	2	3-N	2	EM	Good	4m beyond boundary fence, upright ornamental form; crown growth suppressed to south and west	No requirement for works identified at time of survey	20+	B2	4.6	Retain			
G226-D	Aspen	16	340	7.0	7	5	2	2	1.5	EM	Fair	3m beyond boundary fence, largest of c.5no aspen stems; slight lean to north-east - crown growth suppressed to south-west; bacterial staining and bark peeling at 2m, east side of stem;	No requirement for works identified at time of survey	10+	C2	4.1	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
												ad hoc cutting back of small branches above field								
T227	Hawthorn	8	400 + 220	4.0	5	4	3	1.5	2	M	Good	Characterful specimen by stile, beneath telecommunications cables - branches cut back; slight lean; mistletoe colonisation; ivy-clad into upper crown	No requirement for works identified at time of survey	20+	B2	5.5	Retain			
T228	Birch	5	420	5.0	5	5	5	1.5	1	M	Good	Weeping form; on broad grass verge; burred stem	No requirement for works identified at time of survey	20+	B2	5.0	Retain			
H229	A Hedgerow	2	70	1.0	1	1	1	0	0	EM	Good	Flail-managed hawthorn field boundary hedge	No requirement for works identified at time of survey	10+	C2	0.8	Retain			
H230	A Hedgerow	2	80	1.0	1	1	1	0	0	EM	Good	Flail-managed hawthorn hedge, gappy at base; infrequent elder; frequent ivy	No requirement for works identified at time of survey	10+	C2	1.0	Retain			
H231	A Hedgerow	2.5	140	1.0	1	1	1	0	0	M	Good	Hawthorn hedge, flail-managed, height variable	No requirement for works identified at time of survey	10+	C2	1.7	Retain			
T232	Weeping Willow	15	1300	9.0	10	9	8	4	2	OM	Poor	Third-party tree on bank at side of moat; no access to base - diameter estimated; major limb tears - partial self-pollarding; established decay at wounds; extensive large diameter deadwood; longtime mistletoe colonisation	The owner may be reminded of their duty of care with regard to this tree; pollarding may be an option to consider in view of the life stage and condition of the tree; deadwood should be removed if adjacent to the planned works	<10	C2	15.0	Retain			
T233	Hybrid Black Poplar	17	1400	14.0	14	12	9	6	5	OM	Poor	Third-party tree on bank at side of moat; no access to base - diameter estimated; leaning to east, over moat; sparse crown recently reduced; more vigorous growth on low branches, as if retrenching; spots of mistletoe; no deadwood observed	The owner may be reminded of their duty of care with regard to this tree; pollarding may be an option to consider in view of the life stage and condition of the tree; deadwood should be removed if adjacent to the planned works	10+	C2	15.0	Retain			
G234	Alder	15 ave.	300 ave.	4.0	4	4	4	2	2.5	EM	Good	Growing intermittently in laurel hedge, with characteristic excurrent form of species; variably ivy-clad; cluster of semi-mature sycamore stems to south of easternmost tree	No requirement for works identified at time of survey	20+	C2	3.6	Retain			
H235	Laurel	2.5	100	1.5	1.5	1.5	1.5	0	0	EM	Good	Managed hedge providing effective screening	No requirement for works identified at time of survey	10+	C2	1.2	Retain			
T236	Crack Willow	10	360	5.0	5	5	5	2	2	M	Fair	Pollarded tree at end of row on field boundary; one stem tear-out	No requirement for works identified at time of survey	10+	C2	4.3	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G237	Hawthorn	7 ave.	300 ave.	3.5	3.5	3.5	3.5	1	2	M	Good	Ivy-clad hawthorn trees at boundary, likely remnants of former hedge	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
G238	Sycamore	11 ave.	300 ave.	4.5	4.5	4.5	4.5	2	3	SM-EM	Good	Sycamores, mostly multi-stemmed, on boundary line; densely ivy-clad; crown-lifting above lane	No requirement for works identified at time of survey	20+	C2	3.6	Retain			
T239	Sycamore	16	440	5.0	6	6	5	1.5-E	2	EM	Good	In hedge line at front of property; pockets of decay at crown-lifting wounds; marks of embedded wires in lower stem	No requirement for works identified at time of survey	20+	B2	5.3	Retain			
T240	Sycamore	16	680	8.0	8	6	8	3	2	M	Fair to poor	On grass verge at front of Moat House; dieback at top of crown - deadwood branches, tear-outs, stubs, hanging branch to 120mm diameter; pockets of established decay at wounds around crown break	Remove deadwood if adjacent to planned works	10+	C2	8.2	Retain			
T241	Sycamore	8	300 + 250 + 180	3.0	4	5	5	2	2	M	Good	Growing hard against end wall of brick barn; occluding around wall and metal object; crown suppressed to north, mostly growing over barn to south; ivy-clad to upper crown; branches cut back from barnyard entrance way; exposed roots extending along soft strip parallel to wall	No requirement for works identified at time of survey	10+	C2	5.2	Remove			1
T242	Leyland Cypress	16	500 at 300	4.5	4.5	4.5	4.5	1	2	M	Good	Crown breaking at 1m; telecommunications cables passing through crown; flailed to 3m on lane side	No requirement for works identified at time of survey	20+	C2	6.0	Remove			1
H243	A Hedgerow	2	70	1.0	1	1	1	0	0	EM	Fair	Low-quality hawthorn hedge with dense bramble reinforcement	No requirement for works identified at time of survey	10+	C2	0.8	Remove		14	
H244	Garden hedge	3	80	2.0	2	2	2	0	0	EM	Good	Dense pyracantha garden hedge with tidily maintained organic, lumpy form	No requirement for works identified at time of survey	10+	C2	1.0	Retain			
T245	Sycamore	8	200 + 200 + 200	4.5	4.5	4.5	4.5	0.5	1.5	EM	Good	Beneath telecommunications cables - leading stems formerly cut; low-breaking, compact, rounded form	No requirement for works identified at time of survey	20+	C2	4.2	Retain			
H246	Mixed species hedgerow	3	150	1.5	1.5	1.5	1.5	0	0	EM	Fair	Field boundary hedgerow	No requirement for works identified at time of survey	10+	C2		Part removal		44	
G246-A	Crack Willow	18	400 + 400 + 400	8.0	8	8	8	0.5	0.5	M	Fair	3no multi-stemmed trees at field boundary; C bigger than the other two, with vast stems splaying open from base; occasional collapsed stems, often resting on ground with limbs rising vertically from them; occasional storm damage - branch tears, deadwood branches, stubs; occasional extending limbs	Remove collapsed stems, hanging branches and deadwood if adjacent to planned works	10+	C2	8.4	Remove			1
G246-B	Crack Willow	15	400 + 400 + 400	8.0	8	8	8	0.5	0.5	M	Fair	See G562-A	As G562-A	10+	C2	8.4	Remove			1
G246-C	Crack Willow	22	1100 + 900 + 900	15.0	15	15	15	0.5	0.5	OM	Fair	See G562-A	As G562-A	10+	C3	15.0	Retain			
T247	Crack Willow	16	340 + 320	8.0	8	8	8	2	1.5	EM	Good	Growing through and occluding around timber boundary fence on hedge line; lower crown flailed on field side; small hanging branch	Remove hanging branch if adjacent to planned works	20+	C2	5.6	Retain			

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G248	A Group	12 ave.	300 + 300 ave.	5.0	5	5	5	2	2	EM	Fair	Intermittent small to medium-sized trees along watery ditch at road side; ash, sycamore, goat willow; typically multi-stemmed; frequently ivy-clad; crown-lifted above road; occasional collapsed stems, medium sized deadwood, hanging branches	Remove collapsed stems, hanging branches and deadwood if adjacent to planned works	10+	C2	5.2	Remove	727		
G249-A	Ash	14	990	5.0	7	9	4.5	2	2	OM	Fair	Group of old ash pollards, open at pollard boll, and stems entirely hollow from boll downwards; pollard wounds likely (but not only) point of origin of decay; limbs above boles continuing to display fair vitality and occasional or frequent sub-100mm diameter deadwood; this tree: bole opening to north, 3no limbs, bole has large horizontal crack opening on west side - likely future failure point	Recommended to re-pollard as close as possible to top of bole, as safety measure if planned works within 1.5 x falling distance of tree	10+	C3	11.9	Retain			
G249-B	Ash	13	940	5.0	3	8	7	2	2	OM	Fair	Cavities opening to east; fruiting bodies of <i>Daldinia concentrica</i> and fruiting body of <i>Ganoderma</i> sp.; 5no limbs above bole	Recommended to re-pollard as close as possible to top of bole, as safety measure if planned works within 1.5 x falling distance of tree	10+	C3	11.3	Retain			
G249-C	Ash - VETERAN TREE	14	1530	2.0	10	10	10	2	2	VET	Fair	Bole and west part of crown torn-out and resting on ground apart from tree; 2no limbs above bole, and 1no stem rising from base	Recommended to re-pollard as close as possible to top of bole, as safety measure if planned works within 1.5 x falling distance of tree	10+	A3	18.4	Retain			
G249-D	Ash	14	970	5.0	5	5	2	2	2	OM	Fair to poor	2no limbs above bole, of which one dead - more substantial deadwood also on live limb; boll cavity opening to west; fruiting bodies of <i>Daldinia concentrica</i>	Recommended to re-pollard as close as possible to top of bole, as safety measure if planned works within 1.5 x falling distance of tree; as minimum, remove dead limb	10+	C3	11.6	Retain			
H250	Hawthorn hedge	5	200	2.5	2.5	2.5	2.5	0	0	M	Fair	Remnants of field boundary hawthorn hedge, not recently managed except for relaxed flailing, now forming intermittent screen; multi-stemmed, no former laying observed	No requirement for works identified at time of survey	10+	C2	2.4	Retain			
T251	Oak	17	800	10.0	10	10	10	2.5-W	1.5	M	Good	No access to base - viewed from land to north of stream; on field boundary, slight stem lean to west; crown growth to north possibly slightly suppressed by neighbour, now dead; crown appears dense, with limited storm damage	No requirement for works identified at time of survey	40+	A1	9.6	Retain			
T252	Ash	15	590	5.0	5	5	5	4-NE	3	M	Dead	No access to base - viewed from land to north of stream; dead tree retaining several limbs; frequent cavities and decay points throughout tree	Recommended to monolith tree if adjacent to planned works	<10	U	7.1	Retain			

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
T253	Ash	13	350	4.0	4	2	3	3	3	M	Fair	No access to base - viewed from land to north of stream; dense bramble conceals lower part of tree; modest crown has old limb tear-out wound and occasional sub-50mm diameter deadwood	Remove deadwood if adjacent to planned works	10+	C2	4.2	Retain			
G254-A	Crack Willow	12	200 x 10	8.0	8	8	8	0.5	0.5	M	Good	No access to base - viewed from land to north of stream; close to water on steep bank; multiple stems, mostly slender, all basal unions appearing sound	No requirement for works identified at time of survey	20+	C2	7.7	Retain			
G254-B	Crack Willow	10	300	5.0	5	5	5	0.5	0.5	SM	Good	One of two smaller multistems on north bank	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
G254-C	Crack Willow	10	300	5.0	5	5	5	0.5	0.5	SM	Good	One of two smaller multistems on north bank	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
T255	Birch	11	300	4.0	4	4	4	1.5-S	1	EM	Fair	Modest tree on shelf of stream bank; crown slightly sparse	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
H256	A hedgerow	2	80	1.5	1.5	1.5	1.5	0	0	EM	Good	Roadside field hedge, for much of length in dry ditch; at different points elm or hawthorn; occasional blackthorn, elder, ivy, bramble; managed at top and sides; continuous - few gaps	No requirement for works identified at time of survey	20+	B2	1.0	Part removal		10	
H257	A hedgerow	2	80	1.5	1.5	1.5	1.5	0	0	EM	Good	Hawthorn field boundary hedge; managed at top and sides; continuous - few gaps; occasional ivy	No requirement for works identified at time of survey	20+	B2	1.0	Retain			
H258	A hedgerow	2	80	1.0	1	1	1	0	0	EM	Good	Hawthorn field boundary hedge in two sections; managed; slightly gappy at base	No requirement for works identified at time of survey	10+	C2	1.0	Part removal		65	
G259	A group	3.5	100	2.5	2.5	2.5	2.5	0	0	EM	Fair	Small group of unmanaged hawthorn with some elder at field corner; the whole swamped by bramble	No requirement for works identified at time of survey	10+	C2	1.2	Retain			
G260	Ash, Scots pine, elm	18	340	5.0	5	5	5	2	2	SM-EM	Good	Highways plantation at junction; ash, Scots pine, elm; occasional drawn form, mutual crown suppression; limited post-planting management; understorey of hazel, hawthorn, gorse; ivy locally dense; amenity and habitat value	No requirement for works identified at time of survey	20+	B2	4.1	Part removal	9837		
G261	Garden trees	13 ave.	350 ave.	4.0	4	4	4	2	2	Y-M	Good	No access to view trees - TPP shows National Tree Mapping data; mixed garden trees of varying age, size and species; conifers and broadleaf; ornamental trees and orchard trees; occasional willows along southern boundary; managed garden hedges between properties; the whole a patchwork with significant amenity and biodiversity value	No requirement for works identified at time of survey	20+	B2	4.2	Part removal	89		
G262	A group	to 13	to 300	4.0	4	4	4	0.5	0.5	SM-EM	Good	Highways verge planting, hawthorn at front, multi-stemmed willow to rear, with ash/oak further north; little post-planting management - occasional collapse willow stems; bramble and ivy locally dense	No requirement for works identified at time of survey	10+	C2	3.6	Remove	2724		

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G263	Apple	7	250	3.5	3.5	3.5	3.5	2	1.5	EM	Good	Pair of apple trees in grass enclosure	No requirement for works identified at time of survey	10+	C2	3.0	Remove			2
H264	Hedgerow	1.5	70	1.0	1	1	1	0	0	EM	Good	Low hawthorn hedge at rear of lay-by; dense bramble towards west end	No requirement for works identified at time of survey	10+	C2	1.0	Remove		25	
G265	Leyland Cypress	3	80	2.5	2.5	2.5	2.5	0	0	EM	Good	Cypress hedge, extending from but lower than trees to west	No requirement for works identified at time of survey	20+	C2	1.0	Remove	71		
H266	Privet	2	70	2.0	2	2	2	0	0	EM	Good	Garden hedge at front of property, no longer managed	No requirement for works identified at time of survey	10+	C2	0.8	Remove		11	
H267	Hawthorn	3	120	3.0	3	3	3	0	0	EM	Good	Dense single species hedge at front of former commercial premises	No requirement for works identified at time of survey	20+	B2	1.4	Remove		49	
G268	Leyland Cypress	4.5	160	1.5	1.5	1.5	1.5	1	1	SM	Fair	Golden form, trees hard behind timber boundary fence; 3no trees to west of driveway, 1no tree to east; browning of lower foliage	No requirement for works identified at time of survey	10+	C2	1.9	Remove	34		
H269	Privet	2	80	1.5	1.5	1.5	1.5			EM	Good	Garden hedge at front of property, no longer managed; ivy colonisation	No requirement for works identified at time of survey	10+	C2	1.0	Remove		13	
G270	Leyland Cypress	11	200	3.0	3	3	3	0.5	0.5	EM	Good	No previous height management; overhanging and cut back from pavement	No requirement for works identified at time of survey	10+	C2	2.4	Remove	175		
G271	Crab apple	7	250	3.5	3.5	3.5	3.5	1	1	EM	Good	4no crab Apple trees of different varieties, planted at side of driveway of former horticultural premises	No requirement for works identified at time of survey	20+	B2	3.0	Remove			4
H272	Hawthorn	3	120	1.5	1.5	1.5	1.5	0	0	EM	Good	Hawthorn hedge; occasional dense patches of ivy, bramble, self-set sycamore saplings	No requirement for works identified at time of survey	10+	C2	1.4	Remove		77	
G273	Swedish Whitebeam	6	300 #	3.5	3.5	3.5	3.5	1.5	1.5	EM	Good	3no trees close behind boundary hedge - no view of base - diameters estimated	No requirement for works identified at time of survey	20+	B2	3.6	Remove			3
T274	Leyland Cypress	12	450 #	4.5	4.5	4.5	4.5	1.5	1.5	EM	Good	No view of base - diameter estimated; apparently a single specimen; no previous height management	No requirement for works identified at time of survey	20+	B2	5.4	Remove			1
T275	Cherry plum		300 #	3.5	3.5	3.5	3.5	1.5	1.5	EM	Good	Purple form, close behind boundary hedge - no view of base - diameters estimated	No requirement for works identified at time of survey	10+	C2	3.6	Remove			1
H276	Hawthorn	2.5	120	1.5	1.5	1.5	1.5	0	0	EM	Good	Continuous hedge, with occasional elder and privet; overhung by trees recorded separately	No requirement for works identified at time of survey	10+	C2	1.4	Remove		84	
G277	Leyland Cypress	12	500 #	4.5	4.5	4.5	4.5			EM-M	Good	Hard behind hedge - no view of base - diameters estimated; no previous height management	No requirement for works identified at time of survey	20+	B2	6.0	Remove			3
T278	Cherry	6	200	3.5	3.5	3.5	3.5	0.5	0.5	EM	Fair	Close behind boundary hedge; pockets of decay where upper branches removed beneath telecommunications cable; ivy-clad	No requirement for works identified at time of survey	10+	C2	2.4	Remove			1
G278	Laurel	2.5	120	2.0	2	2	2	0	0	EM	Good	Continuous boundary hedge	No requirement for works identified at time of survey	10+	C2	1.4	Remove	102		

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G279	Lombardy Poplar	20 ave.	600 ave.	3.5	3.5	3.5	3.5	1	1	EM-M	Fair	Row of 5no trees, mixed size - no access to bases; ivy-clad stems to mid-crown; established decay at occasional branch tear wounds; occasional deadwood to 150mm diameter in lower crown; mutual crown suppression	Remove deadwood if adjacent to planned works	20+	C2	7.2	Remove	120		
G280	Leyland Cypress	17 ave.	350 ave.	4.5	4.5	4.5	4.5	2	2	EM	Good	Crown-lifted row of c.20 trees, short spacings, includes twinstems; no previous height management observed; no access to bases, limited view	No requirement for works identified at time of survey	20+	C2	4.2	Remove	164		
G281	Hedge	2	80	1.0	1	1	1	0	0	SM	Fair	Patchy low hedge of low quality at front of houses; laurel to west, privet and ivy to east	No requirement for works identified at time of survey	10+	C2	1.0	Remove	49		
T282	Leyland Cypress	17	800;700	6.0	6	6	6	3	3	M	Good	Crown-lifted twinstem in former front garden	No requirement for works identified at time of survey	20+	B2	12.8	Remove			1
G283	Leyland Cypress	13	350	4.5	4.5	4.5	4.5	1	1	SM-EM	Good	Boundary planting along residential property boundary; closely spaced, crown-lifted; occasional branch tears	Remove deadwood if adjacent to planned works	10+	C2	4.2	Remove	160		
H284	Privet	2	80	1.0	1	1	1	0	0	EM	Good	Garden boundary hedge	No requirement for works identified at time of survey	10+	C2	1.0	Remove		19	
G285	Leyland Cypress	13	350	4.5	4.5	4.5	4.5	1	1	SM-EM	Good	Mirror of G283, at opposite side of property	Remove deadwood if adjacent to planned works	10+	C2	4.2	Remove	160		
T286	Cherry plum	6	350	4.0	4	4	4	1.5	1.5	M	Good	Purple-leaved form	No requirement for works identified at time of survey	10+	C2	4.2	Remove			1
H287	A Group	2	100	1.0	1	1	1	0	0	EM	Good	Long linear group at front boundary of nursery; hawthorn hedge at front; intermittent rows of laurel and low-vitality rosemary-leaved willow behind	No requirement for works identified at time of survey	10+	C2	1.2	Remove		181	
G288	Leyland Cypress	12	300	3.0	3	3	3	0.5	0.5	SM	Good	Row of trees close behind hedge at 1.5m spacings; no previous height management, except where cut short beneath power lines at west end	No requirement for works identified at time of survey	20+	C2	3.6	Remove	244		
T299	Goat Willow	6	300 #	4.5	4.5	4.5	4.5	0.5	0.5	EM	Good	No view of base - dimensions estimated - possibly more than one tree	No requirement for works identified at time of survey	10+	C2	3.6	Remove			1
H300	Hawthorn	2.5	120	2.5	2.5	2.5	2.5	0	0	EM	Good	Long single species boundary hedge; occasional bramble	No requirement for works identified at time of survey	20+	B2	1.4	Remove		89	
G301	A Group	to 14	to 300	3.5	3.5	3.5	3.5	1	1	EM	Good	Mixed plantation providing greening and screening along earth bund facing road junction; black pine, birch, Italian alder, cotoneaster, cherry, lime, multi-stemmed hazel, cherry plum; minimal post-planting management observed; dense bramble ground cover; most stems ivy-clad; but few collapsed stems, infrequent deadwood; 1no dying alder at north end	Remove dying alder	20+	B2	3.6	Part removal	114		

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
G302	A Group	to 14	to 300	3.5	3.5	3.5	3.5	1	1	EM	Good	Group of comparable composition and condition to G301 behind roadside bund, with birch and cherry prominent; widespread ivy and bramble	No requirement for works identified at time of survey	20+	B2	3.6	Retain			
G303	A Group	9	300	3.0	3	3	3	1.5	1.5	EM	Good	L-shaped planting of mostly field maple providing greening and screening at corner of supermarket; patchy shrubs at base; cut back from pavement on road side; less formal/managed on west side; also ash (no dieback observed), self-set sycamore; ivy-clad stems	No requirement for works identified at time of survey	20+	B2	3.6	Part removal	116		
G304-A	Oak	14	850	7.0	7	7	7	1.5	1.5	M	Fair	On third party boundary, timber closeboard fencing; dense ivy high in crown, limb tears to east and west; large hanging branch above pavement	No requirement for works identified at time of survey	20+	B2	10.2	Retain			
G304-B	Sycamore	9	300	4.5	4.5	4.5	4.5	1.5	1.5	EM	Good	Hard behind timber closeboard fence	No requirement for works identified at time of survey	10+	C2	1.2	Retain			
G304-C	Lime	13	500	7.0	7	7	7	N/A	1	EM	Good	Large multistem 250 x 10	No requirement for works identified at time of survey	20+	B2	9.6	Retain			
G304-D	Lime	15	300	4.0	4	4	4	N/A	1	EM	Good	1.5m from G304-C	No requirement for works identified at time of survey	20+	B2	4.8	Retain			
G304E	Silver maple	13	300;300;300;300	8.0	8	8	8	N/A	1	EM	Good	Co-dominant basal unions	No requirement for works identified at time of survey	20+	B2	7.2	Retain			
G304-F	Hornbeam	8	280	2.8	2.8	2.8	2.8	N/A	1	SM	Good	Good structural form	No requirement for works identified at time of survey	10+	C2	3.4	Retain			
G304-G	Field maple	9	280	2.8	2.8	2.8	2.8	N/A	1	SM	Good	Good structural form	No requirement for works identified at time of survey	10+	C2	3.4	Retain			
G304-H	Birch	14	300	2.8	2.8	2.8	2.8	N/A	1	SM-EM	Good	Second birch 2.5 m to east	No requirement for works identified at time of survey	10+	C2	3.6	Retain			
G305	A Group	16	360	4.0	4	4	4	1.5	1.5	EM	Good	Linear group of Italian alder, ash, field maple	No requirement for works identified at time of survey	20+	B2	4.3	Remove	466		

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread N (m)	Branch spread E (m)	Branch spread S (m)	Branch spread W (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	RPA Radius (m)	Impact: Remove / Part Remove / Retain (REM, PRG, RET)	Area of removal (m2)	Length of removal (m)	No. of individual tree removal (no.)
T306	Apple	6	300	4.0	4	4	4			EM	Fair	Good form. Minor pruning wounds. No major defects			C	3.6	Remove			1
T307	Austrian Pine	7	250	2.5	2.5	2.5	2.5			SM	Fair	No major defects			C	3.0	Remove			1
T308	Common Walnut	10	550	6.0	6	6	6			M	Fair	Pruning wounds in lower crown. Occasional minor dead wood. Broken branches			B	6.6	Retain			
G309	Leyland Cypress, Elder, Apple	4	200	3.0	3	3	3			SM/EM	Fair	Ivy cover, dense in places			C	2.4	Part removal	169		

Appendix C. Tree Protection Plans

C.1. Schedule of figures included in this appendix




Figure reference	Document title	Document number	Revision
Tree protection plan - Key plan	Tree protection plan	GCCM5J10-ATK-ELS-ZZ-DR-LL-000101	0
Tree protection plan Sheet 1 of 16	Tree protection plan	GCCM5J10-ATK-ELS-ZZ-DR-LL-000102	0
Tree protection plan Sheet 2 of 16	Tree protection plan	GCCM5J10-ATK-ELS-ZZ-DR-LL-000103	0
Tree protection plan Sheet 3 of 16	Tree protection plan	GCCM5J10-ATK-ELS-ZZ-DR-LL-000104	0
Tree protection plan Sheet 4 of 16	Tree protection plan	GCCM5J10-ATK-ELS-ZZ-DR-LL-000105	0
Tree protection plan Sheet 5 of 16	Tree protection plan	GCCM5J10-ATK-ELS-ZZ-DR-LL-000106	0



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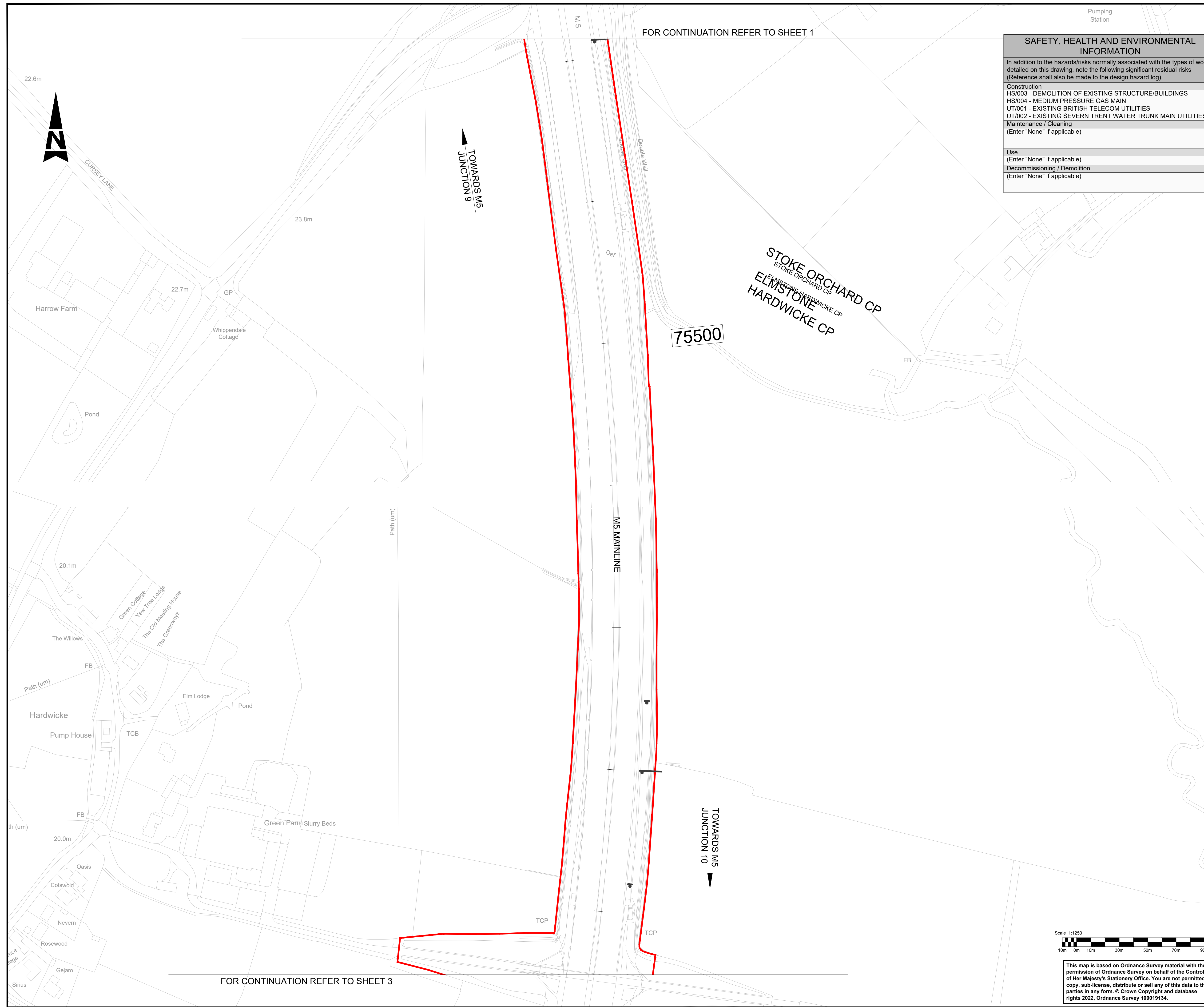
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2. THE WORKS PLANS SHOULD BE READ IN CONJUNCTION WITH THE DEVELOPMENT CONSENT ORDER.

KEY:

-  SHEET USED AS PART OF THIS DRAWING SERIES.
-  EXISTING ORDNANCE SURVEY DATA
-  DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY

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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Design Fix 3 - Final						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
A1	C01	DK	TD	CDC	BM	23/06/23
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
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Project Title						
M5 Junction 10 Improvements Scheme						
Drawing Title						
TREE PROTECTION PLAN KEY PLAN						
Drawing Number						
GCCM5J10		ATK	ELS	ZZ DR LL 000101		
Original Size:	A1	Scale:	AS SHOWN	Project Ref. No.:	5197035	Sheet: 1 of 1 Rev: P02.1



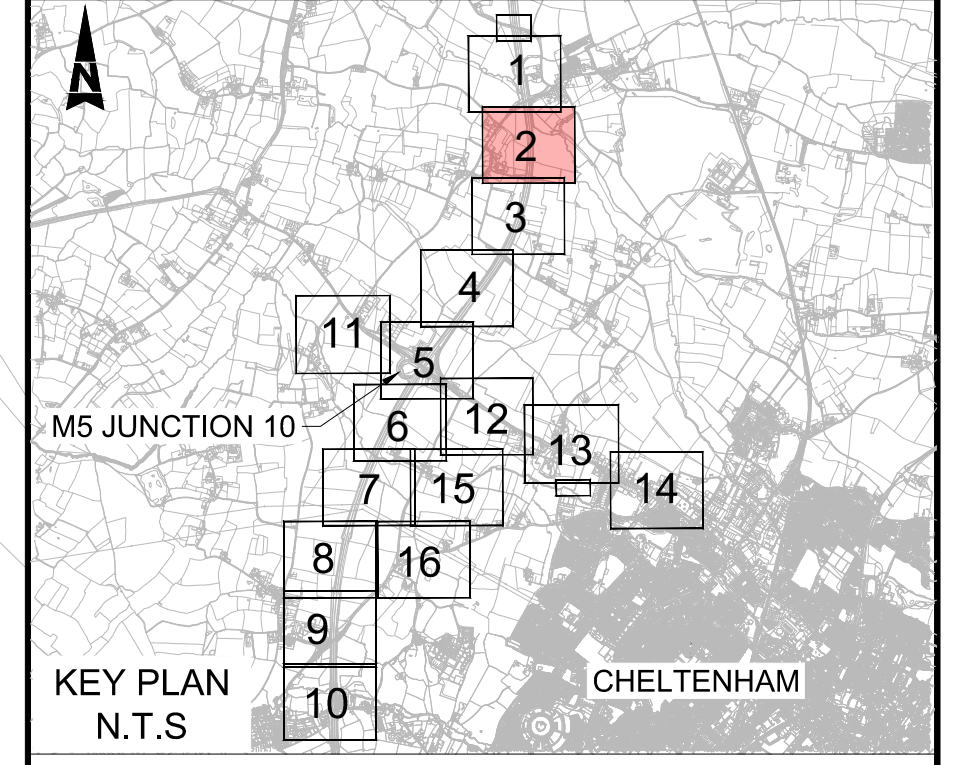
FOR CONTINUATION REFER TO SHEET 1

FOR CONTINUATION REFER TO SHEET 3

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
HS/003 - DEMOLITION OF EXISTING STRUCTURE/BUILDINGS	
HS/004 - MEDIUM PRESSURE GAS MAIN	
UT/001 - EXISTING BRITISH TELECOM UTILITIES	
UT/002 - EXISTING SEVERN TRENT WATER TRUNK MAIN UTILITIES	
Maintenance / Cleaning	
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Use	
(Enter "None" if applicable)	
Decommissioning / Demolition	
(Enter "None" if applicable)	

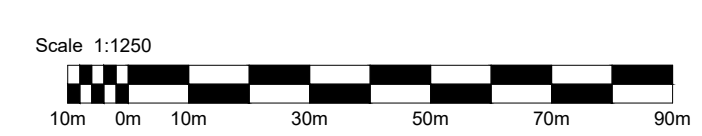
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 - SCHEME WORKS WITHIN THE MOTORWAY CORRIDOR TO THE NORTH AND SOUTH OF THE NEW SLIP ROADS WILL BE LIMITED TO MINOR WORKS AT DISCRETE LOCATIONS FOR THE INSTALLATION OF NEW SIGNAGE, SPECIFIC LOCATIONS, AND SUBSEQUENT IMPACTS TO TREES, WILL BE IDENTIFIED AT DETAILED DESIGN STAGE

- KEY:**
- CATEGORY A TREE / GROUP / WOODLAND / HEDGEROW.
 - CATEGORY B TREE / GROUP / WOODLAND / HEDGEROW.
 - CATEGORY C TREE / GROUP / WOODLAND / HEDGEROW.
 - CATEGORY U TREE / GROUP / WOODLAND / HEDGEROW.
 - T000 / G000 / W000 / H000 REFERENCE NUMBER: INDIVIDUAL TREE / TREE GROUP / WOODLAND / HEDGEROW
 - ROOT PROTECTION AREA
 - TREE TO BE REMOVED AS PART OF WORKS
 - TREE TO BE POTENTIALLY REMOVED SUBJECT TO FINAL ROAD ALIGNMENT
 - EXTENT OF TREE GROUP TO BE REMOVED AS PART OF WORKS
 - PROTECTIVE FENCING (INDICATIVE LOCATION FOR REFERENCE ONLY)
 - PROPOSED SCHEME
 - VETERAN TREE
 - ORDER LIMITS

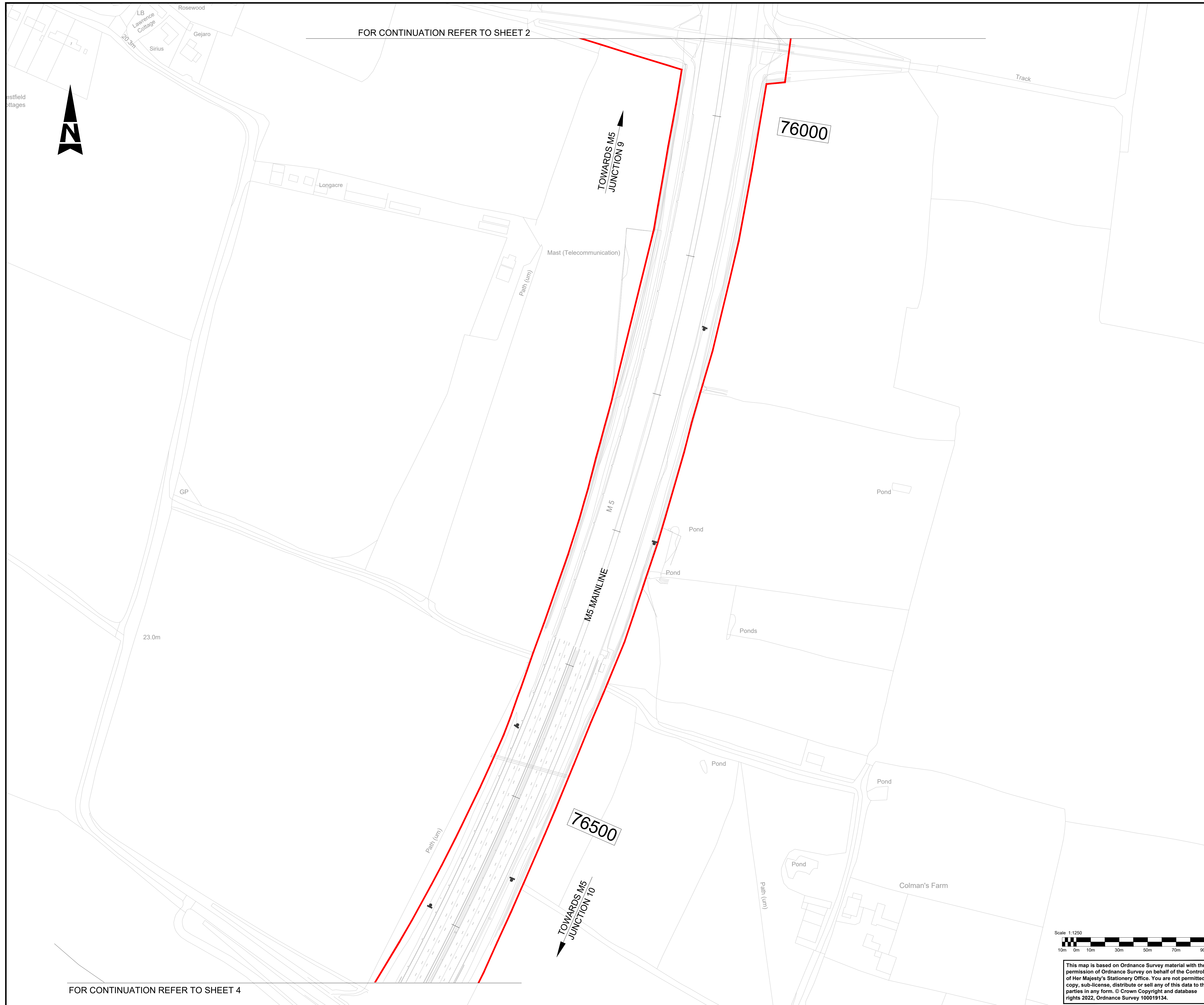


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Drawing Suitability							Status
WORK IN PROGRESS							S0

Project Title			
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Drawing Title			
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Drawing Number			
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Original Size: A1	Scale: AS SHOWN	Project Ref. No: 5197035	Sheet: 2 of 16 Rev: P02.1



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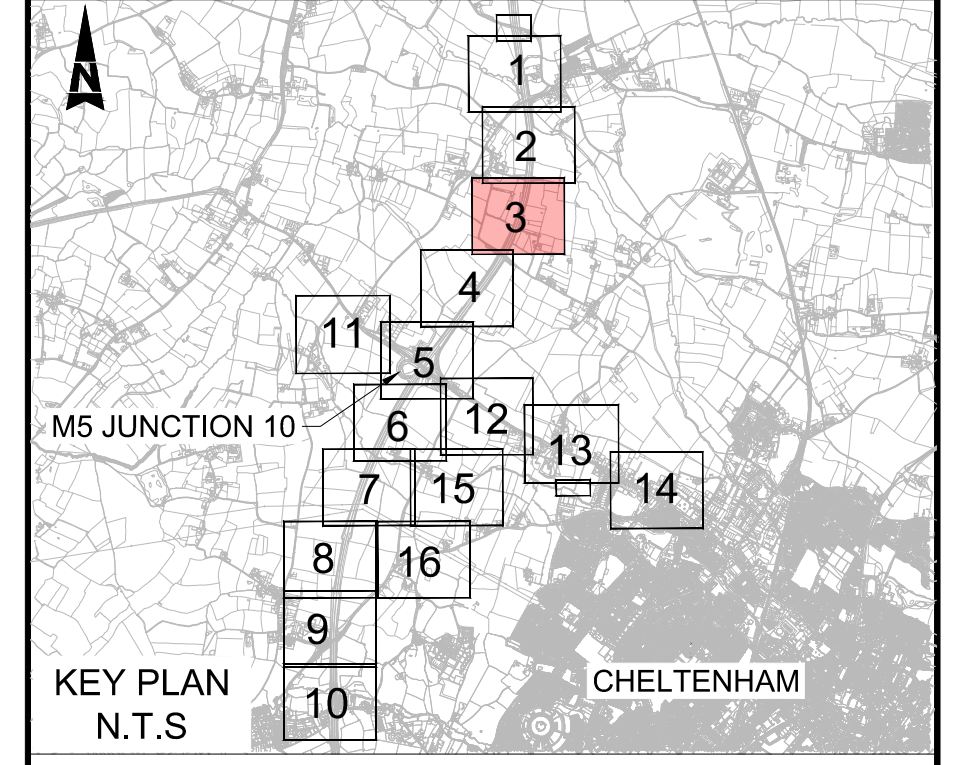


FOR CONTINUATION REFER TO SHEET 2

FOR CONTINUATION REFER TO SHEET 4

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 - EXTENT OF TREE GROUP TO BE REMOVED AS PART OF WORKS
 - PROTECTIVE FENCING (INDICATIVE LOCATION FOR REFERENCE ONLY)
 - PROPOSED SCHEME
 - VETERAN TREE
 - ORDER LIMITS



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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
Description							
Design Fix 3 - Final							
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
A1	C01	DK	TD	CDC	BM	23/06/23	
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S0	P02.1	---	---	---	---	---	
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WORK IN PROGRESS						S0	

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Drawing Title			
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TOWARDS M5 JUNCTION 9

M5 MAINLINE

Barn Farm

77000

TOWARDS M5 JUNCTION 10

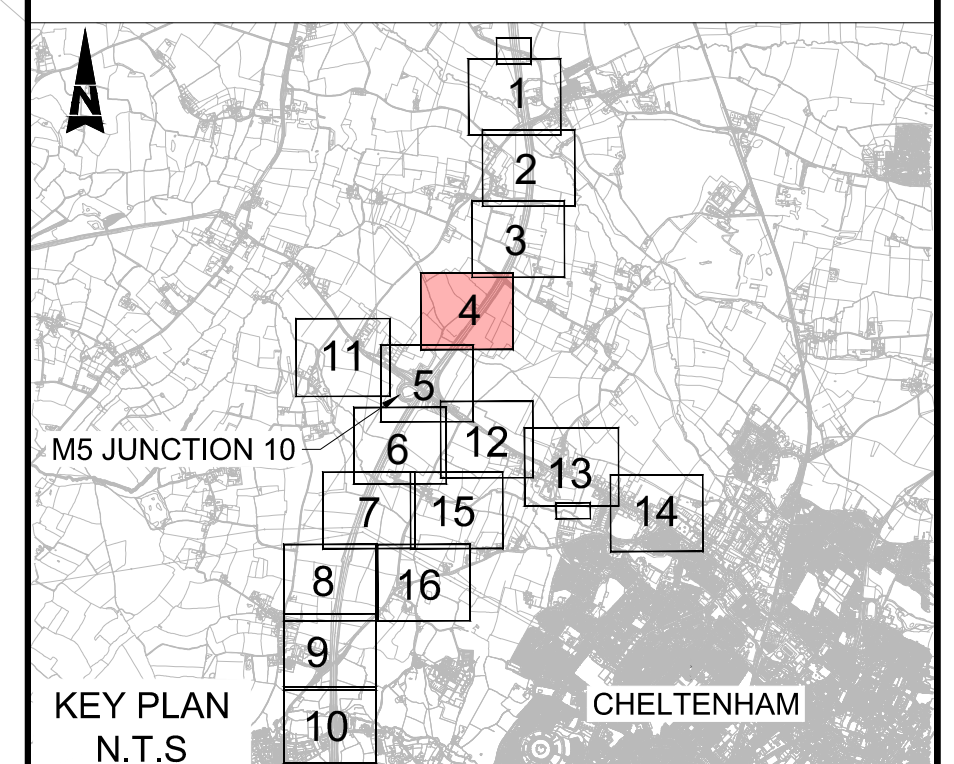
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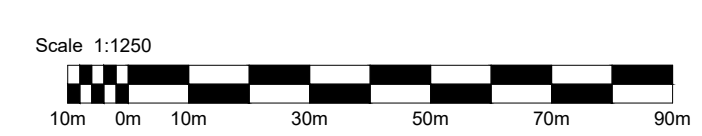
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- CATEGORY B TREE / GROUP / WOODLAND / HEDGEROW.
- CATEGORY C TREE / GROUP / WOODLAND / HEDGEROW.
- CATEGORY U TREE / GROUP / WOODLAND / HEDGEROW.
- REFERENCE NUMBER: INDIVIDUAL TREE / TREE GROUP / WOODLAND / HEDGEROW
- ROOT PROTECTION AREA
- TREE TO BE REMOVED AS PART OF WORKS
- TREE TO BE POTENTIALLY REMOVED SUBJECT TO FINAL ROAD ALIGNMENT
- EXTENT OF TREE GROUP TO BE REMOVED AS PART OF WORKS
- PROTECTIVE FENCING (INDICATIVE LOCATION FOR REFERENCE ONLY)
- PROPOSED SCHEME
- VETERAN TREE
- ORDER LIMIT

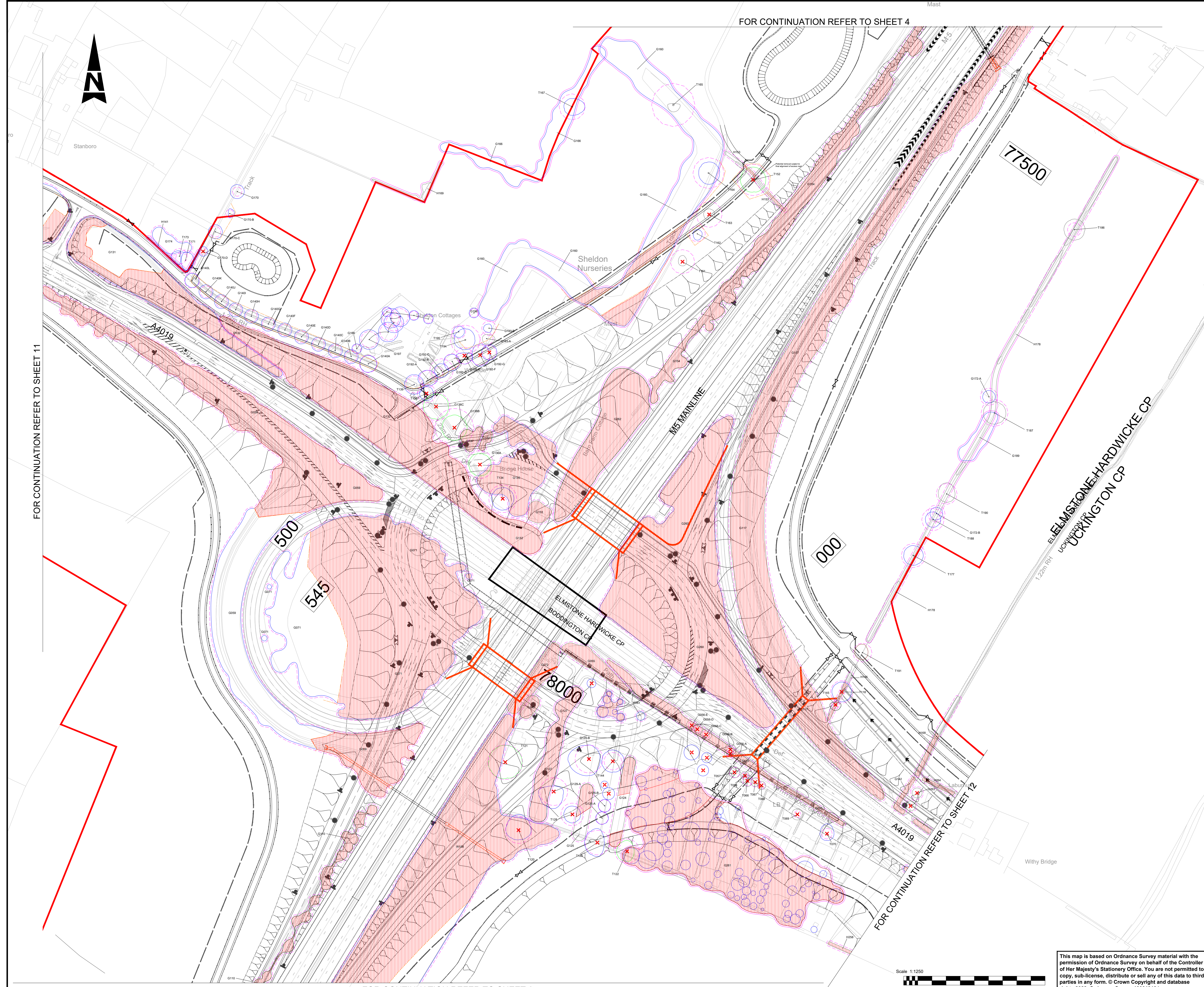


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Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description						
Design Fix 3 - Final						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
A1	C01	DK	TD	CDC	BM	23/06/23
Description						
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
S0	P02.1	---	---	---	---	---
Drawing Suitability						Status
WORK IN PROGRESS						S0

Project Title		
M5 Junction 10 Improvements Scheme		
Drawing Title		
TREE PROTECTION PLAN SHEET 04 OF 16		
Drawing Number		
GCCM5J10	ATK	ELS
ZZ	DR	LL 000105
Original Size: A1	Scale: AS SHOWN	Project Ref. No: 5197035
Sheet: 4 of 16	Rev: P02.1	



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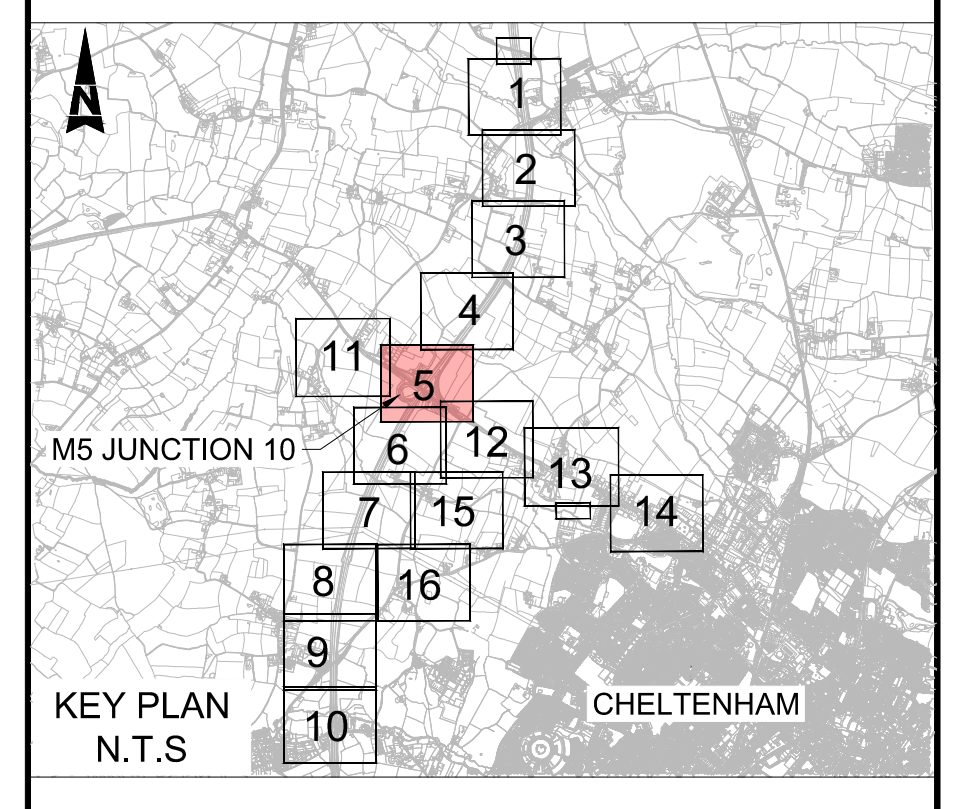
FOR CONTINUATION REFER TO SHEET 4

FOR CONTINUATION REFER TO SHEET 11

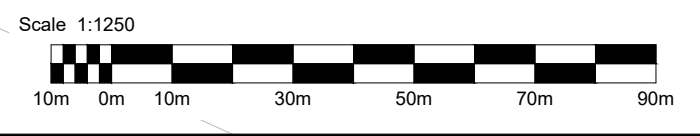
FOR CONTINUATION REFER TO SHEET 12

FOR CONTINUATION REFER TO SHEET 6

- NOTES:**
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
 - THE WORKS PLANS SHOULD BE READ IN CONJUNCTION WITH THE DEVELOPMENT CONSENT ORDER.
- KEY:**
- CATEGORY A TREE / GROUP / WOODLAND / HEDGEROW.
 - CATEGORY B TREE / GROUP / WOODLAND / HEDGEROW.
 - CATEGORY C TREE / GROUP / WOODLAND / HEDGEROW.
 - CATEGORY U TREE / GROUP / WOODLAND / HEDGEROW.
 - T000 / G000 / W000 / H000 REFERENCE NUMBER: INDIVIDUAL TREE / TREE GROUP / WOODLAND / HEDGEROW
 - ROOT PROTECTION AREA
 - ✕ TREE TO BE REMOVED AS PART OF WORKS
 - ✕ TREE TO BE POTENTIALLY REMOVED SUBJECT TO FINAL ROAD ALIGNMENT
 - ▨ EXTENT OF TREE GROUP TO BE REMOVED AS PART OF WORKS
 - PROTECTIVE FENCING (INDICATIVE LOCATION FOR REFERENCE ONLY)
 - ▭ PROPOSED SCHEME
 - VETERAN TREE
 - - - ORDER LIMIT



Description							
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
Description							
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
Description							
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
Description							
Design Fix 3 - Final							
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
A1	C01	DK	TD	CDC	BM	23/06/23	
Description							
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
S0	P02.1	---	---	---	---	---	
Drawing Suitability							Status
WORK IN PROGRESS							S0
Project Title							
M5 Junction 10 Improvements Scheme							
Drawing Title							
TREE PROTECTION PLAN SHEET 05 OF 16							
Drawing Number							
GCCM5J10		ATK		ELS		ZZ DR LL 000106	
Original Size: A1 Scale: AS SHOWN Project Ref. No.: 5197035 Sheet: 5 of 16 Rev: P02.1							



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