

Himley Village Outline Application

Tree Survey Report

January 2015

Himley Village, Bicester

Tree Survey Report

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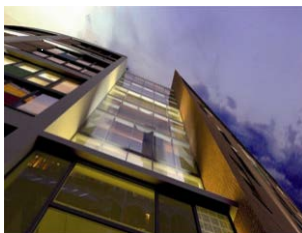
Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2008, BS EN ISO 14001: 2004 and BS OHSAS 18001:2007).

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Comments

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Himley Village, Bicester

Tree Survey Report



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1. Introduction

- 1.1. Waterman Energy, Environment & Design Ltd (Waterman) was instructed by P3Eco to undertake an arboricultural survey of existing trees hedgerows and woodland blocks on a site at Himley Village, Bicester, hereafter referred to as the 'Site'.
- 1.2. The development will provide up to 1,700 residential dwellings (Class C3), a retirement village (Class C2), flexible commercial floorspace (Classes A1, A2, A3, A4, A5, B1 and C1), social and community facilities (Class D1), land to accommodate one energy centre and land to accommodate one new primary school (up to 2FE) (Class D1). Such development to include provision of strategic landscape, provision of new vehicular, cycle and pedestrian access routes, infrastructure and other operations (including demolition of farm buildings on Middleton Stoney Road)".
- 1.3. The survey and the accompanying notes provide guidance as to the nature and quality of the existing tree stock both on and immediately adjacent to the survey area. The above and below ground constraints and opportunities posed by the canopy shape and rooting area of the surveyed trees are described, including the implications of any known planned construction works in the vicinity of these trees, and best practice for retention of trees in this context.

Tree Survey Methodology

- 1.4. The tree survey was based upon existing Ordnance Survey mapping information relating to the site, and was otherwise conducted in accordance with the principles outlined within BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations¹ (BS5837). The locations of all arboreal features has been estimated using a combination of digital aerial imaging and site based fieldwork and are subject to verification by full topographical survey.
- 1.5. Fieldwork was undertaken on the 18th and 22nd December 2014 during which dimensional data and observational information were collected. A Diameter at Breast Height (DBH) tape measure and Leica Disto™ laser distance meter were used in the collection of this, which now form the basis of this report.
- 1.6. Features comprising multiple trees, scrub or other arboreal features were recorded with a G suffix for groups, W suffix for woodlands and H suffix for hedgerows. Where sufficiently consistent, these been categorised including information relating to species composition, age and condition ranges as appropriate etc. to best describe each feature. Within these, principal trees may have also have been identified.

Height

- 1.7. Unless otherwise stated, tree heights are approximate and estimated in metres.

Stem Diameter

- 1.8. The survey included collecting the following information on trees and woody vegetation with a stem diameter over 75mm. The stem diameter of single stemmed trees is measured at 1.5m above ground level and given in millimetres. The diameter measurement of multi-stemmed trees is taken as a combined measurement of all the major stems. Where stems fork or swell the measurement is taken at the narrowest point below the fork or swelling. Where access to the trunk of a tree is not available, an estimation of the stem diameter is made and identified by "*" or 'est' on the accompanying schedule of existing trees.

¹ BS5837:2012 Trees in relation to design, demolition and construction – Recommendations, 2012, British Standards Institution.

Crown Spread

- 1.9. Radial crown spread is measured in metres. These are recorded for each of the four cardinal points as Site access restrictions allow. Where access is not available, the spread is estimated and identified by ‘*’ on the accompanying schedule of existing trees. The canopy shape for surveyed trees depicted on the accompanying plans is representative of the canopy spread as measured on Site.

Height of Crown Clearance and Canopy

- 1.10. The height of crown clearance is the height above ground in metres of the first significant branch and the direction of growth. The height of canopy is the height above ground in metres of the main canopy.

Age Class

- 1.11. The age of each tree is defined as follows:

- Young (Y): Within the first 1/4 of useful life expectancy.
- Semi-mature (SM): Within the second 1/4 of useful life expectancy.
- Early Mature (EM): Within the third 1/4 of useful life expectancy.
- Mature (M): Within the fourth 1/4 of useful life expectancy.
- Over Mature (OM): Exceeded normal useful life expectancy.
- Veteran (V): Significantly exceeded normal life expectancy and/or displays characteristics associated with a veteran tree.

Physiological and Structural Condition

- 1.12. The fieldwork informing this report has comprised a non-intrusive, visual survey undertaken from ground level. The physiological and structural condition of each tree or tree group is summarised, highlighting features relevant to the assessment process. This includes cultural conditions e.g. context and growing environment which may also be of relevance. Where further specialist inspection is deemed appropriate to ascertain the condition of the tree or other arboreal features, this is highlighted within the report.
- 1.13. Unless otherwise stated, trees were found to be displaying ‘normal’ characteristics for their age, species and context. The physiological condition for each tree is described as Good (G), Fair (F) or Poor (P) or may comprise a range where this relates to grouped features. Where appropriate, notes on the structural integrity are provided on form, taper, forking habit, storm damage, decay, fungi, pests, etc. No invasive investigations or climbing inspections were carried out to confirm visual or audible signs of defect or debility and no tissue or soil samples were taken for laboratory analysis. Where identified, external signs of substantial defects or debility have been recorded. Where access to a tree was restricted, this is qualified and, an estimation of physiological and structural condition may have been made.

Estimated Remaining Contribution (ERC) in Years

- 1.14. The Estimated Remaining Contribution (ERC) for each tree is based on species, context and existing physiological and structural condition of the tree. The ERC may affect proposed development layout because the longer the tree is likely to live, the greater the contribution it will make and the greater the need for retention.

Category Grading

- 1.15. Each individual tree was given a Category Grading in accordance with BS5837: 2012 to reflect the overall arboricultural value and retention category. Where sufficiently consistent, grouped features have also been graded. However, grouped features which include a range of potential Category Gradings may be recorded as uncategorised features to avoid provision of misleading tree grades. The Category Gradings are defined according to the following criteria, which are further divided into sub-categories based on arboriculture, landscape and/or historic value, as defined within BS5837:2012, contained at **Appendix A**:
- **Category Grading A:** Trees of high quality and value, (with a suggested remaining life expectancy exceeding 40 years).
 - **Category Grading B:** Trees of moderate quality and value, (with a suggested remaining life expectancy of at least 20 years).
 - **Category Grading C:** Trees of low quality and value, (with a suggested remaining life expectancy exceeding 10 years or young/immature trees which may have the potential to attract a higher Grade as they mature).
 - **Category Grading U:** Trees which are in such a condition that they are unsuitable for retention in the context of the current land use for longer than 10 years.

Preliminary Management Recommendations

- 1.16. Any recommendations made for management of the existing tree stock, (for example, tree surgery) are not a 'specification' for tree work. These recommendations are instead intended as a preliminary guide to inform future management of tree stock in the current context which should be formalised as a separate management plan. References to habitat value should be taken as comparative observations compared with a baseline situation with no tree present.
- 1.17. Proposed tree surgery or inspection works should be undertaken by a qualified arboricultural contractor, such as those listed in the Arboricultural Association's Approved Contractors Directory (Ref. www.trees.org.uk). Any work undertaken by the contractor should be in accordance with best practice, such as the European Tree Pruning Guide², or required by BS3998: 2010 Tree work - recommendations³.

Limitations

- 1.18. All trees were visually inspected from ground level with no climbing, boring or sampling undertaken. All measurements are metric and where qualified, approximate. The comments made are based on the conditions observable factors present at the time of inspection, including weather, seasonality and access. It must be stressed that this survey and report are not a tree risk assessment.
- 1.19. This report is intended to assist with the planning and management of construction and/or demolition operations under current best practice. The precise locations of all arboreal features should be verified by topographical survey prior to the start of any detailed design work.
- 1.20. The fieldwork and information contained within this report is seasonally constrained. Where survey work is undertaken during the dormant season (November – March) some arboreal species may not be readily identifiable at the time of survey. No exclusive reliance upon the information contained within this report with respect of species listings, (which may not be conclusive), e.g. in calculation of foundation systems to any proposed built structures on or adjacent to the site.

² European Tree Pruning Guide, 2001, Arboricultural Association

³ BS3998:2010 'Treework - Recommendations', 2010, BSI

Similarly access to some trees or features was locally hampered by dense hedgerow vegetation and may have occasionally limited the collection of survey data. This is further qualified within the report.

- 1.21. This report is not intended to confirm the safety, (or otherwise) of surveyed trees or tree groups. References to defects or potential safety issues are not exhaustive intended as a guide only to inform the provision of further resources/more detailed investigations. The person(s) responsible for the management of the trees surveyed within this report are recommended to commission a separate tree condition survey by a suitably qualified and experienced person in order to manage the Health and Safety aspects of trees under their control, and discharge their reasonable Duty of Care under the 'Duty of Care' owed under the Occupiers' Liability Act 1984⁴.

Un-assessable Risks

- 1.22. Owing to the changing nature of trees as living, dynamic features and other Site circumstances, this report and any recommendations made remain valid for a period of 18 months from first issue.
- 1.23. Unless otherwise stated, trees should be re-inspected regularly to satisfy the 'Duty of Care' owed under the Occupiers' Liability Act 1984⁵, or directly proceeding heavy storms (i.e. force 6-7 and above on the Beaufort scale). It is recommended that advice from an ecologist is sought prior to carrying out any works to trees, in order to ensure these are carried out in accordance with, (in particular) the protection afforded to wild birds and bats under The Wildlife and Countryside Act⁶ and The Conservation of Habitats and Species Regulations⁷.

Root Protection Area

- 1.24. The RPA defines the approximate underground area occupied by the tree roots based on a calculation relating to the girth of the tree, point above ground at which the trunk begins to branch out and the number of stems. BS5837 outlines the calculation of RPA as follows:

$$\text{RPA(m}^2\text{)} = \left(\frac{\text{stem diameter (mm) @ 1.5 m} \times 12}{1\ 000} \right)^2 \times \pi \text{ (3.142)}$$

Trees with more than one stem below 1.5m height are given an aggregate stem diameter using either of the following two calculations as outlined in BS5837. This diameter is then used in the above calculation to estimate RPA:

- a) For trees with two to five stems:

$$\sqrt{(\text{stem diameter 1})^2 + (\text{stem diameter 2})^2 \dots + (\text{stem diameter 5})^2}$$

- b) For trees with more than five stems:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

- 1.25. The RPA of existing tree stock is an important material consideration when considering site constraints and planning development activities.

⁴ Occupiers' Liability Acts 1957 and 1984. HMSO

⁵ Occupiers' Liability Acts 1957 and 1984. HMSO

⁶ The Wildlife and Countryside Act 1981 (as amended), OPSI

⁷ The Conservation of Habitats and Species Regulations 2010, OPSI

- 1.26. Construction operations, materials storage or changes in level should generally be avoided within the RPA of a tree to be retained on a developed site. This is because these operations have the potential to damage or kill the tree, the safe retention of which may be a condition of planning permission. This is significant when considering construction in close proximity to off-site / third party land. Special construction techniques, i.e. no-dig construction / permeable surfacing may be considered for light loadings, e.g. pedestrian footpaths etc., within the RPA.
- 1.27. It should be noted that the RPA often varies in size to the physical area occupied by the canopy spread (due to particular tree species or management practices to artificially alter the canopy size). This is of particular importance when integrating new development in close proximity of existing trees. Similarly, the canopy heights (as identified in the Schedule of Existing Trees) should be considered as the usable space below a low branching tree will be severely restricted without specific arboricultural works to raise the canopy (which may not always be appropriate).
- 1.28. It should also be noted that BS5837 states that although RPAs should be plotted as a circle centred on the base of the stem, pre-existing site conditions or other factors may indicate that rooting has occurred asymmetrically and so RPAs may instead be represented as a polygon of equivalent area.

2. Fieldwork Observations

- 2.1. The tree survey data is presented on Tree Survey drawing Nos. **EED14995-100-AA-77-100 to EED14995-100-AA-77-117** and Schedule of Existing Trees within Appendix B.
- 2.2. The tree survey included 48No. trees, 14No. tree groups and 27No. hedgerows mostly bounding arable fields to the west of Bicester. The majority of arboreal species recorded were of native origin, as might be expected within an agricultural context. Most trees appeared to be in generally fair to good condition with few showing significant external symptoms of stress or decline.
- 2.3. A large proportion of hedgerows included historic evidence of coppice management (Photograph 1) and hedge laying (Photograph 2). Many trees and sections of woody hedgerow vegetation were evidently out-grown forms of previously managed features, with 'standard' field or boundary trees being relatively uncommon. The resulting features are of habitat and arboreal interest with coppice management in particular having the potential to extend the longevity of many woody plant species. This has however made selecting the age classification for individual features difficult on this site.
- 2.4. Most of the hedgerows were characterised by a relatively large number of woody plant species within each, (although due to seasonal constraints, it is likely that other species may also be present). Such hedgerows and associated trees are of value as wildlife corridors and may be of considerable age, although this should be verified by separate research.



Photograph 1



Photograph 2

2.5. There was some variability in hedgerow management with some hedges becoming gappy/out-grown through neglect, (Photograph 3) others faced up by means of mechanical flail cutting (Photograph 4) or stunted and heavily managed, again by flail cutting, (Photograph 5). There was no evidence of recent coppice management or hedge laying. The boundaries between what distinguishes a hedgerow from a tree group, (for example comprising a linear belt of trees and woody vegetation) was also blurred. Plough margins were common in association with many hedgerow boundaries and may have caused some historic root severance and possible decline (Photograph 6).



Photograph 3



Photograph 4



Photograph 5



Photograph 6

- 2.6. Common Ash, Elm and Field Maple were commonly encountered within hedgerows both as hedging plants and identifiable trees. Dutch Elm Disease (DED) was clearly in evidence with clear cycles of semi-mature trees succumbing to DED, (Photograph 7) remaining as standing/fallen dead wood and regeneration of new trees through root suckering. It is unclear what impact Ash Dieback (*Chalara fraxinea*) may have upon the long term survival of Ash trees on this site, but given the large numbers of trees recorded, close monitoring is recommended to enable informed management decisions to be made.
- 2.7. Linear tree groups G25, G44 and G45 included areas of relatively recent plantation (Photograph 8). These comprised primarily native tree species but also included Walnut and Sweet Chestnut. Some of the planted native species also included those that might not be indigenous to the immediate area e.g. Beech, Holly, Birch and Lime.



Photograph 7



Photograph 8

3. Tree Protection

- 3.1. The retention of existing trees, tree groups and hedgerows would be highly desirable as part of any development of the site. Retention of such features would help preserve the screening, habitat and amenity value that these features collectively provide. These features also provide examples of traditional coppice management and hedge laying which could potentially be resumed as part of wider site management.
- 3.2. Tree retention in association with the proposed development of the site is shown on Waterman Tree Protection and Removals drawing Nos. **EED14995-100-AA-77-120 to EED14995-100-AA-77-127**.
- 3.3. Where existing trees are retained in proximity to construction works, tree protection will be required in order to manage and minimise demolition and construction impacts upon the existing trees to be retained. This includes both above and below ground impacts and extends to the working area required for demolition and construction works.
- 3.4. Tree protection should generally accord with the recommendations contained within BS5837. Ideally the area occupied by the canopy spread or RPA, (whichever is the greater) should be secured as a **Construction Exclusion Zone**, (CEZ) where no unauthorised access or construction operations are permitted. Examples of suitable tree protection fencing and signage are illustrated in Appendix C, D and E. However, within an urban context this may prove impractical due to site access constraints etc. In this instance a CEZ can be used in combination with a **Construction Working Area** where limited/controlled access and some construction activities may be permitted within the protected area. This will be managed with a method statement that will be bespoke to the project and activities concerned.
- 3.5. The potential exists for the development of asymmetrical RPA's which may locally extend beyond the circular RPA stated on the Tree Survey drawings. Where root material is encountered in this manner, the extent of the controlled **Construction Working Area** should be extended to incorporate additional rooting areas as necessary.
- 3.6. Detailed tree protection proposals will be developed once detailed development proposals become available.

4. Summary

- 4.1. The tree survey included 48No. trees, 14No. tree groups and 27No. hedgerows mostly bounding arable fields to the west of Bicester. The locations of all arboreal features identified within this report should be verified by means of full topographical survey.
- 4.2. The majority of arboreal species recorded were of native origin, as might be expected within an agricultural context. Most trees appeared to be in generally fair to good condition with few showing significant external symptoms of stress or decline.
- 4.3. A large proportion of hedgerows were species-rich and included historic evidence of coppice management and hedge laying. Many trees and sections of woody hedgerow vegetation were evidently out-grown forms of previously managed features and were of habitat and arboreal interest. Coppice management in particular has the potential to extend the longevity of many woody plant species. Such hedgerows and associated trees are of value as wildlife corridors and may be of considerable age, although this should be verified by separate research.
- 4.4. There was some variability in hedgerow management with some hedges becoming gappy/out-grown through neglect, others faced up by means of mechanical flail cutting or stunted and heavily managed, again by flail cutting. Plough margins were common in association with many hedgerow boundaries and may have caused some historic root severance and possible decline.
- 4.5. Linear tree groups G25, G44 and G45 included areas of relatively recent plantation.
- 4.6. Common Ash, Elm and Field Maple were commonly encountered within hedgerows both as hedging plants and identifiable trees. Dutch Elm Disease (DED) was clearly in evidence with clear cycles of semi-mature trees succumbing to DED, and regeneration of new trees through root suckering. It is unclear what impact Ash Dieback (*Chalara fraxinea*) may have upon the long term survival of Ash trees on this site, but given the large numbers of trees recorded, close monitoring is recommended to enable informed management decisions to be made.

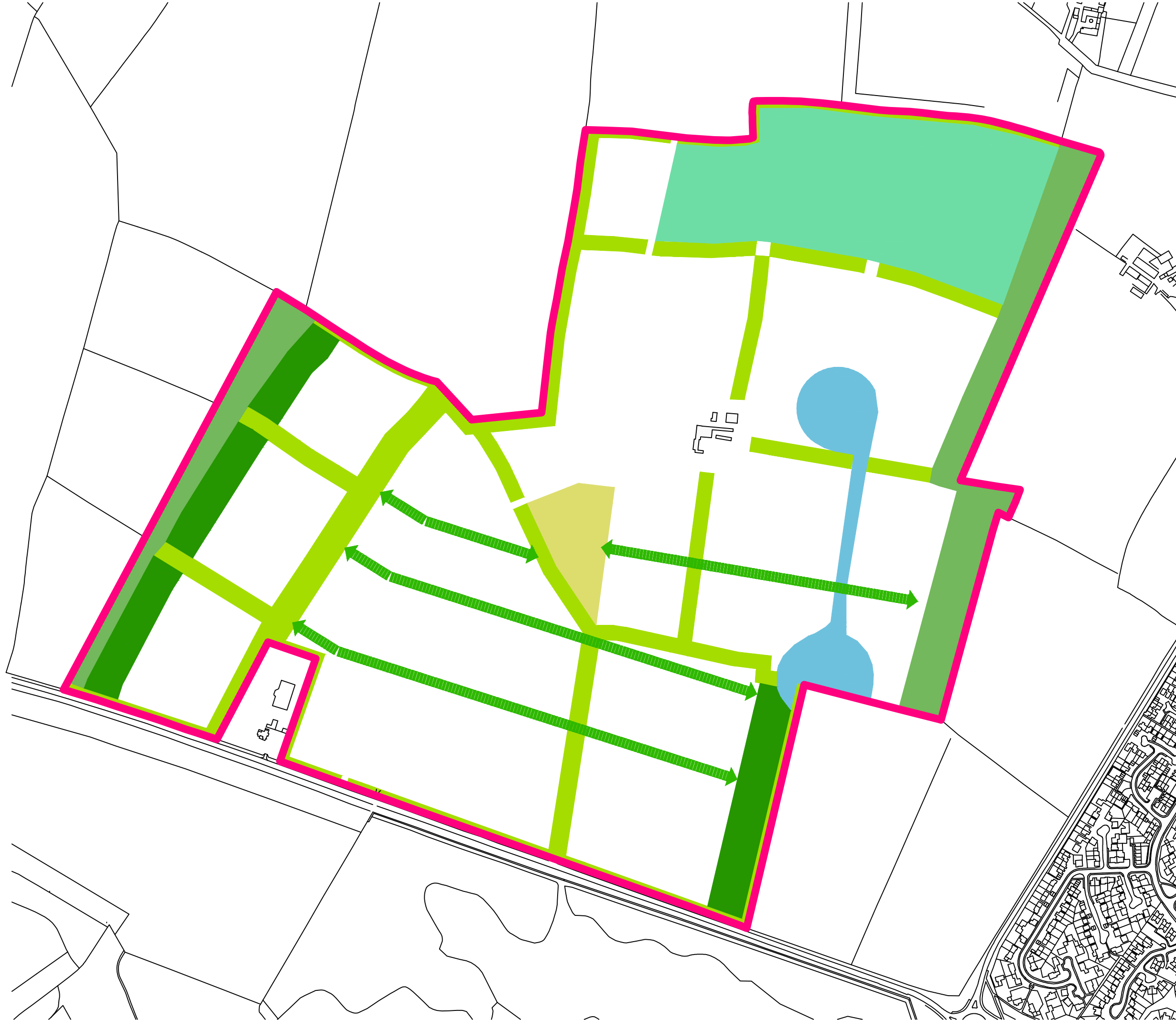


Drawings

Drawings 1: EED14995-100-AA-77-100 to EED14995-100-AA-77-117 Tree Survey



Drawings 2: Himley Village Landscape Parameter Plan 3



- KEY
- Hedgerow corridor
 - Playing fields
 - Existing woodland
 - Village Green
 - Newt Corridor
 - Housing in woodland setting
 - Residential parkland/corridor
(refer to Appendix 4.06 Landscape Requirements)



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Drawings 3: EED14995-100-AA-77-120 to EED14995-100-AA-77-137 Tree Protection & Removal



APPENDICES

A. Cascade Chart for Tree Quality Assessment (extract from BS5837:2012)

TREES FOR REMOVAL				
Category and Definition	Criteria			Identification on Plan
<p>Category U</p> <p>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</p>	<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 trees (i.e. 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; and 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>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve.</p>			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	Criteria - Subcategories			Identification on Plan
	1 Mainly Arboricultural Values	2 Mainly Landscape Values	3 Mainly Cultural Values, including Conservation	
<p>Category A</p> <p>Trees of high quality with an estimated remaining life expectancy minimum of at least 40 years</p>	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of 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)	LIGHT GREEN
<p>Category B</p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	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 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	MID BLUE
<p>Category C</p> <p>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm</p>	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	GREY

B. Schedule of Existing Trees

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G1	Hybrid Poplar (<i>Populus spp.</i>) with occasional Hawthorn (<i>Crataegus monogyna</i>), Elderberry (<i>Sambucus nigra</i>) & Elm (<i>Ulmus Spp.</i>)	2.0 – 15.0+	410-110		5.8-4.0	5.2-3.3		0.7	-	Fair – Fair/ Good	Y - EM	Linear belt of trees with some understorey vegetation growing in competition. Sides faced up by flail cutting. Some dead Elm visible.	Of general habitat/screening value.	20+	C2/3
T2	Field Maple (<i>Acer campestre</i>)	12.0	100, 130, 180, 210, 180, 110	2.9	4.0	2.9	2.9	-	-	Fair	OM	Out-grown coppice stool growing in hedgerow.	Of habitat value. Consider re-coppicing.	40+	B3
T3	Field Maple (<i>Acer campestre</i>)	9.0	80, 90, 100, 40	4.0	4.0	2.9	3.2	-	-	Fair	OM	Out-grown coppice stool growing in hedgerow.	Of habitat value. Consider re-coppicing.	40+	B3
T4	Field Maple (<i>Acer campestre</i>)	6.0	100	Average 1.5				0.5	-	Fair/ Poor	SM	Out-grown coppice stool growing in hedgerow. Deadwood and dieback within thin canopy.	Of habitat value. Consider re-coppicing.	10+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T5	Common Ash (<i>Fraxinus excelsior</i>)	6.0	60	Average 1.5				-	-	Fair/Good	Y - SM	Possibly out-grown coppice stool growing in hedgerow. Base hidden by Ivy growth.	Of general habitat value. Consider re-coppicing.	20+	C3
H6	Field Maple (<i>Acer campestre</i>) Hawthorn (<i>Crataegus monogyna</i>), Poplar (<i>Populus Spp.</i>), Elderberry (<i>Sambucus nigra</i>), Blackthorn (<i>Prunus spinosa</i>), Guelder Rose (<i>Viburnum opulus</i>).	3.0 – 4.0	-	-	-	-	-	-	-	Fair/Good	-	Locally gappy field hedge adjacent to ditch course, laid previously. Some new plantings visible. Western portion of generally younger age.	Of general habitat and screening value. Consider re-laying	40+	B3
T7	Hawthorn (<i>Crataegus monogyna</i>)	5.0	80 - 90*	1.5	1.5	2.5	2.5	-	-	Fair/Good	M	Out-grown coppice stool growing in hedgerow adjacent to ditch course.	Of general habitat and screening value. Consider re-pollarding.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T8	Common Ash (<i>Fraxinus excelsior</i>)	7.0	240	3.5	3.3	2.6	2.5	2.5 east	2.6	Fair/Good	Y	Young tree growing in hedgerow.		40+	C3
T9	Plum (<i>Prunus spp.</i>)	4.5	90, 110	Average 2.0				1.5 east	500	Fair	EM	Out-grown coppice stool growing in hedgerow adjacent to ditch course with Ivy becoming established.	Of general habitat and screening value. Consider re-pollarding.	20+	C3
T10	Field Maple (<i>Acer campestre</i>)	6.0	50 – 150*	3.5	3.6	3.7	3.3	1.5 west	-	Fair/Good	EM	Out-grown coppice stool growing in hedgerow adjacent to ditch course.	Of general habitat and screening value. Consider re-pollarding.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H11	Elm (<i>Ulmus spp.</i>), Common Ash (<i>Fraxinus excelsior</i>), Hawthorn (<i>Crataegus monogyna</i>), Plum (<i>Prunus Spp.</i>), Dog rose (<i>Rosa canina</i>), Wild Privet (<i>Ligustrum vulgare</i>) & Field Maple (<i>Acer campestre</i>)	3.0 – 5.0	-	-				-	-	Fair/ Good	-	Locally gappy field hedge adjacent to ditch course, laid previously. Some new plantings visible. Includes some out-grown coppice stools.	Of general habitat and screening value. Consider re-laying/coppicing.	40+	B3
T12	Crab Apple (<i>Malus sylvestris</i>)	5.0	100	Average 1.5*				2.0 south	700	Fair	M	Out-grown coppice stool growing in hedgerow adjacent to ditch course.	Of general habitat value. Consider re-pollarding.	20+	C3
T13	Crab Apple (<i>Malus sylvestris</i>)	5.0	100	Average 1.5*				2.0 east	500	Fair	M	Out-grown coppice stool growing in hedgerow adjacent to ditch course.	Of general habitat value. Consider re-pollarding.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T14	Crab Apple (<i>Malus sylvestris</i>)	5.0	100	Average 1.5*				2.3 southwest	-	Fair/Good	EM	Out-grown coppice stool growing in hedgerow adjacent to ditch course.	Of general habitat value. Consider re-pollarding.	20+	C3
T15	Field Maple (<i>Acer campestre</i>)	8.0	150	2.9	2	3.9	3.9	1.5 southwest-northeast	1.6	Fair/Good	EM	Out-grown coppice stool growing in hedgerow adjacent to ditch course.	Of general habitat and screening value. Consider re-pollarding.	40+	C3
T16	Field Maple (<i>Acer campestre</i>)	9.0	130	Average 2.5				0.9 northeast	0.7	Fair/Good	EM	Growing in hedgerow.		40+	C2/3
T17	Crab Apple (<i>Malus sylvestris</i>)	7.0	160	Average 2.5				2.5 southwest	-	Fair/Good	EM	Young tree growing in hedgerow with Ivy covering main trunk/branches.	Of general habitat value.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H18	Elm (<i>Ulmus spp.</i>) Spindle (<i>Euonymus europaeus</i>), Elderberry (<i>Sambucus nigra</i>), Hawthorn (<i>Crataegus monogyna</i>), Blackthorn (<i>Prunus spinosa</i>), Sycamore (<i>Acer pseudoplatanus</i>), Common Ash (<i>Fraxinus excelsior</i>), Dog rose (<i>Rosa canina</i>), Ivy (<i>Hedera helix</i>) & Oregon grape (<i>Mahonia aquifolium</i>)	2.0 - 3.5	-					-	-	Fair		Linear belt of trees and woody vegetation growing on boundary adjacent to road with some Ivy becoming established. Top lopped/cut by flail.	Of nominal habitat/screening value.	20+	C2/3
T19	Oak (<i>Quercus robur</i>)	15+	650	7.9	9.6	9.6	6.0	4.0 northeast - southwest	2.0	Fair/ Good	M	Growing on field boundary. Occasional deadwood and torn branch stubs visible. Ivy growth to main trunk limits further inspection.	Of screening and habitat value. Sever Ivy at base, remove from lower 1.0m of trunk and re-inspect.	40+	B2

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H20	Wild Privet (<i>Ligustrum ovalifolium</i>), Elm (<i>Ulmus spp.</i>), Hawthorn (<i>Crataegus monogyna</i>), Elderberry (<i>Sambucus nigra</i>), Ivy (<i>Hedera helix</i>) Dog rose (<i>Rosa canina</i>), Sycamore (<i>Acer pseudoplatanus</i>) & Oregon grape (<i>Mahonia aquifolium</i>).	2.5 - 3.0	-					-		Poor – Fair/ Good		Out-grown section of hedgerow vegetation including young trees and some dead Elm visible. Sides faced up by flail cutting.	Of general habitat and screening value. Consider laying/coppice management.	20+	C3
T21	Common Ash (<i>Fraxinus excelsior</i>)	11.0	80, 80, 200, 160, 150, 100	5.5	4.1	4.5	4.5	0.7 north	4.0	Fair/ Good	M	Out-grown coppice stool/laid hedging plant growing in hedgerow adjacent to ditch course.	Of general habitat and screening value. Consider re-pollarding.	40+	B2/3
T22	Oak (<i>Quercus robur</i>)	14.0	910	6.6	4.8	5.0	5.0	1.7 west	0.5	Poor	M	Growing in hedgerow boundary with heavy dieback within canopy. Appears to be in general decline. Ivy growth severed previously at base of trunk.	Of general habitat value whilst in decline.	10+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G23	Poplar (<i>Populus spp.</i>), Elm (<i>Ulmus spp.</i>), Elderberry (<i>Sambucus nigra</i>), Willow (<i>Salix spp.</i>), Blackthorn (<i>Prunus spinosa</i>), Elderberry (<i>Sambucus nigra</i>), Dog rose (<i>Rosa canina</i>), Common Ash (<i>Fraxinus excelsior</i>), Field Maple (<i>Acer campestre</i>), Birch (<i>Betula Sp.</i>), Dogwood (<i>Cornus sanguinea</i>) & Buddleja	2.5 – 6.0*	40 - 50	Average 2.5				-	-	Fair	Y - M	Informal stand of trees and woody understorey vegetation growing on bank and adjacent to pond. Locally beginning to compete. Some natural regeneration also noted.	Of general habitat value/potential.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H24	Common Ash (<i>Fraxinus excelsior</i>), Elm (<i>Ulmus Spp.</i>), Elderberry (<i>Sambucus nigra</i>), Blackthorn (<i>Prunus spinosa</i>), Dogwood (<i>Cornus sanguinea</i>), Dog rose (<i>Rosa canina</i>), Wild Privet (<i>Ligustrum vulgare</i>), Crab Apple (<i>Malus sylvestris</i>) & Field Maple (<i>Acer campestre</i>)	3.5 – 4.0	-		-			-	-	Poor – Fair/ Good	Y - EM	Locally gappy field hedge adjacent to ditch course, laid previously. Some dead Elm trees visible. Includes some out-grown coppice stools.	Of general habitat and screening value. Consider re-laying/coppicing.	20+	C3
G25	Willow (<i>Salix Spp.</i>), Blackthorn (<i>Prunus spinosa</i>), Holly (<i>Ilex aquifolium</i>), Birch (<i>Betula Spp.</i>),	8.0 – 12.0	-		-			-	-	Poor – Good	Y - M	Trees and woody boundary vegetation growing adjacent to ditch course including previously laid hedgerow remnants. Internal area comprises new/younger tree planting with some redundant tree guards/stages still visible.	Of general habitat and screening value. Consider re-laying/coppicing boundary vegetation. Remove redundant tree stakes/guards from new tree planting and consider long term thinning/coppice	40+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G25 (Cont)	Blackthorn (<i>Prunus spinosa</i>), Wild Cherry (<i>Prunus avium</i>), Field Maple (<i>Acer campestre</i>), Hawthorn (<i>Crataegus monogyna</i>), Oak (<i>Quercus robur</i>), Walnut (<i>Juglans Spp.</i>), Chinese Honeysuckle (<i>Lonicera nitida</i>), Beech (<i>Fagus sylvatica</i>), Hazel (<i>Corylus avellana</i>), Field Maple (<i>Acer campestre</i>), Elm (<i>Ulmus Spp.</i>), Elderberry (<i>Sambucus nigra</i>), Ivy (<i>Hedera helix</i>) &											management.			

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G25 (Cont)	Common Ash (<i>Fraxinus excelsior</i>)														
H26	Hawthorn (<i>Crataegus monogyna</i>) & Elm (<i>Ulmus Spp.</i>)	2.5 - 3.0	-		-			-	-	Fair		Locally gappy field hedge adjacent to ditch course, laid previously. Includes some out-grown coppice stools.	Of general habitat and screening value. Consider re-laying/coppicing.	20+	C2/3
T27	Common Ash (<i>Fraxinus excelsior</i>)	11.0	250*	3.5	2.5	4.5	3.5	1.0 southeast	1.0	Fair	EM	Growing within hedgerow boundary. Ivy growth limits detailed inspection.	Of general habitat/screening value.	20+	C3
T28	Oak (<i>Quercus robur</i>)	9.0	400*	4	4	5	4.5	1.5 south	0.4	Fair/Good	EM	Of spreading form growing within paddock area. Rootzone appears to be protected from livestock access. (No direct access).	Of habitat and landscape value/potential.	40+	C2/3
T29	Oak (<i>Quercus robur</i>)	10.0	400*	4	4	4	4.5	1.5 west	400	Fair/Good	EM	Of spreading form growing within paddock area. Rootzone appears to be protected from livestock access. (No direct access).	Of habitat and landscape value/potential.	40+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T30	Common Ash (<i>Fraxinus excelsior</i>)	10.0	110, 150, 100	4.7	5.4	5.3	5.5	0.3 north	300	Fair	EM	Growing within hedgerow boundary. Ivy growth limits detailed inspection.	Of general habitat/screening value.	20+	C2/3
T31	Dead	9.0	-	-				-	-	-	-	-	Temporary deadwood habitat value.	<10	C3
T32	Dead	9	-	-				-	-	-	-	-	Temporary deadwood habitat value.	<10	C3
T33	Common Ash (<i>Fraxinus excelsior</i>)	9.0	220, 80, 80	4.0	5.0	4.5	5.2	1.0 northeast	0.3	Fair/ Good	EM	Multi-stemmed tree growing within boundary hedgerow with occasional deadwood visible and Ivy becoming established.	Of general screening and habitat value.	20+	C2/3
T34	Common Ash (<i>Fraxinus excelsior</i>)	8.0	80, 80, 80, 220, 90	Average 4.5				0.7 northeast	0.4	Fair/ Good	M	Growing in hedgerow boundary with occasional deadwood visible. (Limited access).	Of general screening and habitat value.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T35	Common Ash (<i>Fraxinus excelsior</i>)	9.0	110, 80, 150, 50, 130, 50, 140	Average 3.5				2.0 east	1	Fair/Good	M	Out-grown coppice stool/laid hedging plant growing in hedgerow adjacent to ditch course.	Of general habitat and screening value. Consider re-pollarding.	40+	B2/3
T36	Common Ash (<i>Fraxinus excelsior</i>)	9.0	220, 200	4.5	6.0	2.5	4.5	1.0 north	-	Fair	EM	Out-grown coppice stool/laid hedging plant growing in hedgerow adjacent to ditch course.	Of general habitat and screening value. Consider re-pollarding.	40+	C2/3
H37	Crab Apple (<i>Malus sylvestris</i>), Elder, Hawthorn (<i>Crataegus monogyna</i>), Field Maple (<i>Acer campestre</i>), Hazel (<i>Corylus avellana</i>), Elm (<i>Ulmus Spp.</i>), Dog rose (<i>Rosa canina</i>) & Ivy (<i>Hedera helix</i>)	3.0 - 3.5	-	-				-	-	Fair		Gappy hedgerow vegetation.	Of nominal habitat value.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T38	Common Ash (<i>Fraxinus excelsior</i>)	12.0	50, 280	4.0	5.5	5.1	4.5	1.0 north	50	Fair/Good	EM	Feathered tree growing within hedgerow boundary.	Of general screening/habitat value.	40+	C2/3
T39	Crab Apple (<i>Malus sylvestris</i>)	5.5	150, 150	2.7	1.5	2.0	2.0	1.6 northwest	-	Fair	M	Growing within hedgerow boundary and suppressed by adjacent tree T38. Ivy growth to main trunk limits further inspection.	Of general screening/habitat value.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H40	Elderberry (<i>Sambucus nigra</i>), Hawthorn (<i>Crataegus monogyna</i>), Willow (<i>Salix Spp.</i>), Elm (<i>Ulmus Spp.</i>), Blackthorn (<i>Prunus spinosa</i>), Field Maple (<i>Acer campestre</i>), Common Ash (<i>Fraxinus excelsior</i>), Wild Privet (<i>Ligustrum vulgare</i>) & Ivy (<i>Hedera helix</i>)	2.5 - 5.5	-	-	-	-	-	-	Fair		Gappy, unmanaged hedgerow vegetation including some out-grown coppice stools.	Of nominal habitat value.	20+	C3	
T41	Field Maple (<i>Acer campestre</i>)	9.0	120, 140, 50, 200	Average 2.5				0.1 south	-	Fair/ Good	M	Out-grown coppice stool/laid hedging plant growing in hedgerow adjacent to ditch course.	Of general habitat and screening value. Consider re-pollarding.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T42	Common Ash (<i>Fraxinus excelsior</i>)	11.0	200, 110, 100*	3.0	2.5	4.5	2.5	2.0 east	1.0	Fair	M	Out-grown coppice stool/laid hedgerow adjacent to ditch course. Ivy growth limits further inspection.	Of general habitat and screening value. Consider re-pollarding.	20+	C2/3
T43	Field Maple (<i>Acer campestre</i>)	8.0	50, 90, 50, 250, 20	Average 2.0				0.5 southwest	0.2	Fair/Poor	M	Out-grown coppice stool/laid hedgerow adjacent to ditch course. Dieback and deadwood within canopy. Ivy growth limits further inspection.	Of general habitat and screening value. Consider re-pollarding.	10+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G44	Crab Apple (<i>Malus sylvestris</i>), Hazel (<i>Corylus avellana</i>), Dogwood (<i>Cornus sanguinea</i>), Lime (<i>Tilia Spp.</i>), Hawthorn (<i>Crataegus monogyna</i>), Holly (<i>Ilex aquifolium</i>), Wild Privet (<i>Ligustrum vulgare</i>), Crab Apple (<i>Malus sylvestris</i>), Oak (<i>Quercus robur</i>), Willow (<i>Salix Spp.</i>), Field Maple (<i>Acer campestre</i>), Beech (<i>Fagus sylvatica</i>), Blackthorn (<i>Prunus sinosa</i>) & Wild Cherry (<i>Prunus avium</i>)	2.5 - 8.0	-	-	-	-	-	-	-	Fair - Good	Y - SM	New/younger tree planting growing in mutual competition with some redundant tree guards/stages still visible.	Of general habitat and screening potential. Remove redundant tree stakes/guards and consider long term thinning/coppice management.	40+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G45	Crab Apple (<i>Malus sylvestris</i>), Hazel (<i>Corylus avellana</i>), Dogwood (<i>Cornus sanguinea</i>), Lime (<i>Tilia Spp.</i>), Hawthorn (<i>Crataegus monogyna</i>), Holly (<i>Ilex aquifolium</i>), Wild Privet (<i>Ligustrum vulgare</i>), Crab Apple (<i>Malus sylvestris</i>), Oak (<i>Quercus robur</i>), Willow (<i>Salix Spp.</i>), Field Maple (<i>Acer campestre</i>), Beech (<i>Fagus sylvatica</i>), Blackthorn (<i>Prunus spinosa</i>),	2.0 - 8.5	-	-	-	-	-	-	-		Y - SM	New/younger tree planting growing in mutual competition with some redundant tree guards/stages still visible.	Of general habitat and screening potential. Remove redundant tree stakes/guards and consider long term thinning/coppice management.	40+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G45 (Cont)	Wild Cherry (<i>Prunus avium</i>), Lime (<i>Tilia Spp.</i>) & Walnut (<i>Juglans Spp.</i>)														
H46	Elm (<i>Ulmus Spp.</i>), Common Ash (<i>Fraxinus excelsior</i>), Oak (<i>Quercus robur</i>), Blackthorn (<i>Prunus spinosa</i>), Crab Apple (<i>Malus sylvestris</i>), Field Maple (<i>Acer campestre</i>), Dog rose (<i>Rosa canina</i>), Oak (<i>Quercus robur</i>) & Ivy (<i>Hedera helix</i>)	2.0 – 7.0	-	-	-	-	-	-	-	Fair/ Good	Out-grown section of hedgerow vegetation including young trees and some dead Elm visible. Sides faced up by flail cutting. Includes some out-grown coppice stools.	Of general habitat and screening value. Consider laying/coppice management.	20+	C2/3	

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H47	Field Maple (<i>Acer campestre</i>), Hawthorn (<i>Crataegus monogyna</i>), Elm (<i>Ulmus Spp.</i>), Wild Privet (<i>Ligustrum vulgare</i>), Common Ash (<i>Fraxinus excelsior</i>), Blackthorn (<i>Prunus spinosa</i>), Elderberry (<i>Sambucus nigra</i>), Dogwood (<i>Cornus sanguinea</i>) & Ivy (<i>Hedera helix</i>)	2.0 - 5.5	-	-	-	-	-	-	-	Fair		Hedgerow with some evidence of historic coppice management and laying, now out-grown.	Of general habitat value. Consider re-introduction of coppicing/laying management.	20+	C3
T48	Sycamore (<i>Acer pseudoplatanus</i>)	8.0*	50, 50, 90, 50, 50, 50, 100, 50, 60, 50, 80	Average 2.5				0.5 east	0.4	Fair	OM	Out-grown coppice stool growing on field boundary adjacent to ditch course. Some deadwood visible.	Of general habitat value. Consider re-introduction of coppicing management	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T49	Common Ash (<i>Fraxinus excelsior</i>)	7.5	50 - 120	3.8	3.0	3.0	3.0	-	0.6	Fair	OM	Out-grown coppice stool growing on field boundary adjacent to ditch course. Some deadwood visible.	Of general habitat value. Consider re-introduction of coppicing management	20+	B1/3
H50	Elm (<i>Ulmus Spp.</i>), Common Ash (<i>Fraxinus excelsior</i>), Oak (<i>Quercus robur</i>), Blackthorn (<i>Prunus spinosa</i>), Crab Apple (<i>Malus sylvestris</i>), Field Maple (<i>Acer campestre</i>), Dog rose (<i>Rosa canina</i>), Oak (<i>Quercus robur</i>) & Ivy (<i>Hedera helix</i>)	3.5 – 6.0	-	-	-	-	-	-	-	Fair/ Good		Out-grown section of hedgerow vegetation including young trees and some dead Elm visible. Sides faced up by flail cutting. Includes some out-grown coppice stools.	Of general habitat and screening value. Consider laying/coppice management.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H51	Field Maple (<i>Acer campestre</i>), Blackthorn (<i>Prunus spinosa</i>), Common Ash (<i>Fraxinus excelsior</i>), Hawthorn (<i>Crataegus monogyna</i>), Crab Apple (<i>Malus sylvestris</i>), Elder (<i>Sambucus nigra</i>), Hazel (<i>Corylus avellana</i>), Dog rose (<i>Rosa canina</i>) & Elm (<i>Ulmus Spp.</i>)	1.2 Average	-	-	-	-	-	-	-	Fair/ Poor		Locally gappy hedgerow managed by heavy flail cutting but with further regeneration on unmanaged field margins within site.	Of general habitat value. Consider more sensitive management systems.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G52	Common Ash (<i>Fraxinus excelsior</i>) with occasional Crab Apple (<i>Malus sylvestris</i>) & Hawthorn (<i>Crataegus monogyna</i>)	8 - 10	-	-	-	-	-	-	-	Fair	SM	Line of similar aged trees growing within boundary hedgerow and beginning to compete. Ivy becoming established on some trees.	Of general screening and habitat value/potential.	20+	C2/3
H53	Field Maple (<i>Acer campestre</i>), Blackthorn (<i>Prunus spinosa</i>), Dog rose (<i>Rosa canina</i>), Common Ash (<i>Fraxinus excelsior</i>) & Elm (<i>Ulmus Spp.</i>)	3.0 – 6.0	-	-	-	-	-	-	-	Fair		Gappy, unmanaged hedgerow with some out-grown coppice stools visible.	Of general habitat and screening value. Consider laying/coppice management.	20+	C3
G54	Common Ash (<i>Fraxinus excelsior</i>)	6.0 – 13.0	-	-	-	-	-	-	-	Fair	M	Out-grown coppice stools growing within boundary hedgerow adjacent to ditch course with occasional deadwood visible.	Of general habitat and screening value. Consider laying/coppice management.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G55	Common Ash (<i>Fraxinus excelsior</i>)	6.0 – 12.0	-	-	-	-	-	-	Fair	M	Out-grown coppice stools growing within boundary hedgerow adjacent to ditch course with occasional deadwood visible. Ivy becoming established on some trees.	Of general habitat and screening value. Consider laying/coppice management.	20+	C2/3	

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H56	Crab Apple (<i>Malus sylvestris</i>), Hazel (<i>Corylus avellana</i>), Elm (<i>Ulmus Spp.</i>), Field Maple (<i>Acer campestre</i>), Plum (<i>Prunus Spp.</i>) Blackthorn (<i>Prunus spinosa</i>), Hawthorn (<i>Crataegus monogyna</i>), Field Maple (<i>Acer campestre</i>), Rose (<i>Rosa Spp.</i>), Wild Privet (<i>Ligustrum vulgare</i>) with occasional Ivy (<i>Hedera helix</i>) & Common Ash (<i>Fraxinus excelsior</i>)	3.0 - 7.0	-	-	-	-	-	-	-	Fair/ Good		Locally gappy hedgerow with some out-grown coppice stools visible.	Of general habitat and screening value. Consider laying/coppice management.	20+	B2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T57	Dead	3.5 – 4.0	-	-	-	-	-	-	-			Of temporary deadwood habitat value.	<10	C3	
T58	Dead	3.5 – 4.0	-	-	-	-	-	-	-			Of temporary deadwood habitat value.		C3	
G59	Common Ash (<i>Fraxinus excelsior</i>) & Field Maple (<i>Acer campestre</i>)	8.0 – 12.0	-	-	-	-	-	-	-	Fair	EM - M	Out-grown coppice stools growing within boundary hedgerow adjacent to ditch course with occasional deadwood visible.	Of general habitat and screening value. Consider laying/coppice management.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H60	Common Ash (<i>Fraxinus excelsior</i>), Elm (<i>Ulmus Spp.</i>), Hawthorn (<i>Crataegus monogyna</i>), Walnut (<i>Juglans Spp.</i>), Rose (<i>Rosa Spp.</i>) with occasional Ivy (<i>Hedera helix</i>)	2.0 - 7.0	-	-	-	-	-	-	-	Fair		Out-grown, locally gappy hedgerow with sides cut by flail.	Of general habitat and screening value. Consider laying/coppice management.	20+	C3
H61	Field Maple (<i>Acer campestre</i>), Dog rose (<i>Rosa canina</i>), Common Ash (<i>Fraxinus excelsior</i>), Blackthorn (<i>Prunus spinosa</i>), Elderberry (<i>Sambucus nigra</i>) & Elm (<i>Ulmus Spp.</i>)	2.5 Average	-	-	-	-	-	-	-	Fair		Out-grown, locally gappy hedgerow with sides cut by flail.	Of general habitat and screening value. Consider laying/coppice management.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H62	Hawthorn (<i>Crataegus monogyna</i>), Elm (<i>Ulmus Spp.</i>), Dogwood (<i>Cornus sanguinea</i>), Elderberry (<i>Sambucus nigra</i>), Field Maple (<i>Acer campestre</i>), Dog rose (<i>Rosa canina</i>), Spindle (<i>Euonymus europeus</i>) & Ivy (<i>Hedera helix</i>)	2.5 - 5.5	-	-	-	-	-	-	-	Fair		Apparently unmanaged, gappy hedgerow vegetation with occasional out-grown coppice stool visible.	Of general habitat value. Consider re-coppicing and/or laying.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H63	Hawthorn (<i>Crataegus monogyna</i>), Common Ash (<i>Fraxinus excelsior</i>), Sycamore (<i>Acer pseudoplatanus</i>), Blackthorn (<i>Prunus spinosa</i>), Crab Apple (<i>Malus sylvestris</i>), Elm (<i>Ulmus Spp.</i>), Elderberry (<i>Sambucus nigra</i>), Field Maple (<i>Acer campestre</i>) & Ivy (<i>Hedera helix</i>)	4.0 – 6.0	-	-	-	-	-	-	Fair		Unmanaged hedgerow boundary adjacent to road.	Of general screening and habitat value on site boundary.	20+	B2/3	
G64	Common Ash (<i>Fraxinus excelsior</i>)	12.0 Average	-	-	-	-	-	-	Fair/Good	EM	Growing within boundary hedgerow with some Ivy becoming established.	Of general screening and habitat value.	20+	C2/3	

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
G65	Leylandii & Norway Maple (<i>Acer platanoides</i>)	3.0 – 5.0	-	-	-	-	-	-	-	Fair/ Poor - Fair	SM - EM	Line of trees including lopped Norway Maples with some regeneration and conifers at S end of row.	Of nominal screening value.	10+	C2
G66	Norway Maple (<i>Acer platanoides</i>) Beech (<i>Fagus sylvatica</i>), Wild Cherry (<i>Prunus avium</i>), Lime (<i>Tilia Spp.</i>) & Red Oak (<i>Quercus rubra</i>)	9.0 – 12.0	-	-	-	-	-	-	-	Fair – Fair/ Good	SM - EM	Planted belt of trees growing adjacent to domestic garden area. Growing in mutual competition.	Of general screening value and potential.	20+	C2
T67	Common Ash (<i>Fraxinus excelsior</i>)	12.0	300	5.1	5.4	4.6	5.5	1.5 southeast	1.0	Fair/ Good	SM	Growing within hedgerow adjacent to ditch course with occasional deadwood within canopy.	Of general habitat and screening value.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H68	Clematis, Hawthorn (<i>Crataegus monogyna</i>), Elderberry (<i>Sambucus nigra</i>), Rose (<i>Rosa Spp.</i>), Field Maple (<i>Acer campestre</i>), with occasional Common Ash (<i>Fraxinus excelsior</i>) & Elm (<i>Ulmus Spp.</i>)	3.0 - 6.5	-	-	-	-	-	-	-	Fair		Hedgerow growing on field boundary including some out-grown coppice stools and evidence of historic laying.	Of general habitat and screening value. Consider re-coppicing or hedge laying management.	20+	C3
T69	Common Ash (<i>Fraxinus excelsior</i>)	13.0	60, 90, 60, 120, 60, 300	Average 3.5				1.0 west	0.5	Fair/ Good	M	Out-grown coppice stools growing on hedgerow boundary bounding garden area.	Of general screening and habitat value on boundary.	20+	C2/3
T70	Common Ash (<i>Fraxinus excelsior</i>)	14.0	150 200*	6.0	5.5	3.5	3.5	2.0 south	1.0	Fair/ Good	M	Out-grown coppice stools growing on hedgerow boundary bounding garden area.	Of general screening and habitat value on boundary.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T71	4No. Leylandii	12.0	-	-	-	-	-	-	-	Fair	EM	Growing in competition on garden boundary.	Of general screening value.	10+	C2
T72	Common Ash (<i>Fraxinus excelsior</i>)	11.0	150, 140, 250, 130	6.2	7.8	4.0	4.8	1.0 north	-	Fair/Good	EM	Out-grown coppice stools growing on hedgerow boundary bounding garden area.	Of general screening and habitat value on boundary.	20+	C2/3
H73	Crab Apple, Elm (<i>Ulmus Spp.</i>), Blackthorn (<i>Prunus spinosa</i>) & Hawthorn (<i>Crataegus monogyna</i>)	4.0 - 3.5	-	-	-	-	-	--	-	Fair		Hedgerow growing on field boundary including some out-grown coppice stools and evidence of historic laying.	Of general habitat and screening value. Consider re-coppicing or hedge laying management.	20+	C2/3
G74	Common Ash (<i>Fraxinus excelsior</i>)	13.0	-	-	-	-	-	-	-	Fair/Good	M	Large, out-grown coppice stool growing within boundary hedgerow adjacent to road. Approx 17No. stems rising up with some Ivy becoming established.	Of arboricultural interest and habitat/screening value on site boundary with road.	20+	B2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T75	Crab Apple (<i>Malus sylvestris</i>)	7.5	250	Average 4.0				1.5 fork east - west	1.0	Fair/ Good	M	Generally balanced tree growing within hedgerow boundary.	Of arboricultural and habitat value.	20+	B2/3
H76	Blackthorn (<i>Prunus spinosa</i>), Hawthorn (<i>Crataegus monogyna</i>), Field Maple (<i>Acer campestre</i>), Elm (<i>Ulmus Spp.</i>) & Wild Privet (<i>Ligustrum vulgare</i>)	4.0 – 8.0	-	-	-	-	-	-	-	Fair		Field hedgerow including some out-grown coppice stools.	Of general habitat value. Consider for re-coppicing/laying.	20+	C3
T77	Common Ash (<i>Fraxinus excelsior</i>)	11.0	220*	Average 2.5				3.5 east	1.8	Fair/ Good	SM	Out-grown coppice stool growing within hedgerow boundary.	Of screening and habitat value. Consider for coppice management.	20+	C2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T78	Common Ash (<i>Fraxinus excelsior</i>)	12.0	90, 300*	Average 4.5 – 5.0				1.2 south	0.2	Fair/Good	EM	Out-grown coppice stool growing within hedgerow boundary.	Of screening and habitat value. Consider for coppice management.	20+	C2/3
T79	Common Ash (<i>Fraxinus excelsior</i>)	8.0	40, 80, 30, 150, 50, 50, 100	Average 4.5				1.8 west	0.5	Fair	M	Out-grown coppice stool growing within hedgerow boundary.	Of screening and habitat value. Consider for coppice management.	20+	C2/3
T80	Crab Apple (<i>Malus sylvestris</i>)	8.0	300	4.7	5.3	6.0	4.8	0.5 north	1.0	Fair/Good	M	Generally balanced tree growing within boundary hedgerow.	Of arboricultural and habitat value.	20+	B3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H81	Blackthorn (<i>Prunus spinosa</i>), Common Ash (<i>Fraxinus excelsior</i>), Crab Apple (<i>Malus sylvestris</i>), Elm (<i>Ulmus Spp.</i>), Hawthorn (<i>Crataegus monogyna</i>), Field Maple (<i>Acer campestre</i>), Elderberry (<i>Sambucus nigra</i>) & Rose (<i>Rosa Spp.</i>)	3.0 – 9.0	-	-	-	-	-	-	-	Fair/ Good		Locally gappy hedgerow on field boundary. Some out-grown coppice stools visible.	Of general habitat value. Consider laying/coppice management.	20+	B2/3
T82	Elm (<i>Ulmus Spp.</i>)	12.0	350, 60, 150, 50, 150	4.0	4.8	4.0	4.6	-	-	Fair	EM	End tree in line of woody hedgerow vegetation. Possible out-grown coppice stool. Some deadwood visible within canopy. May be infected with Dutch Elm Disease (DED).	Of temporary screening/habitat value. Monitor for DED.	10+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H83	Hawthorn (<i>Crataegus monogyna</i>), Elm (<i>Ulmus Spp.</i>), Blackthorn (<i>Prunus spinosa</i>), Rose (<i>Rosa Spp.</i>)	2.5 – 6.0	-	-	-	-	-	-	-	Fair		Hedgerow on field boundary. Some out-grown coppice stools visible. (Limited access).	Of general habitat value. Consider laying/coppice management.	20+	C3
G84	Elm (<i>Ulmus Spp.</i>)	8.0 – 12.0	-	-	-	-	-	-	-	Fair	SM	Belt of suckering Elm trees along field boundary with some Ivy becoming established.	Of general screening and habitat value. Consider for laying/coppice management.	10+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H85	Hawthorn (<i>Crataegus monogyna</i>), Elder (<i>Sambucus nigra</i>), Elm (<i>Ulmus Spp.</i>), Common Ash (<i>Fraxinus excelsior</i>), Crab Apple (<i>Malus sylvestris</i>), Field Maple (<i>Acer campestre</i>) & Elm (<i>Ulmus Spp.</i>)	7.0 – 11.0	-	-	-	-	-	-	-	Fair/Good		Boundary hedgerow including some locally large, out-grown coppice stools. Evidence of historic laying.	Of general habitat and screening value. Consider laying/coppice management.	40+	B2/3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H86	Common Ash (<i>Fraxinus excelsior</i>), Hazel (<i>Corylus avellana</i>), Blackthorn (<i>Prunus spinosa</i>), Hawthorn (<i>Crataegus monogyna</i>), Field Maple (<i>Acer campestre</i>), Dogwood (<i>Cornus sanguinea</i>)	1.5 Average	-	-	-	-	-	-	-			Locally gappy hedgerow heavily managed by flail cutting but with some natural regeneration within unmanaged margins of adjacent field within site.	Of nominal habitat value. Consider more sensitive hedgerow management options.	20+	C3

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H87	Blackthorn (<i>Prunus spinosa</i>), Wild Privet (<i>Ligustrum vulgare</i>), Crab Apple (<i>Malus sylvestris</i>), Hawthorn (<i>Crataegus monogyna</i>), Common Ash (<i>Fraxinus excelsior</i>) & Field Maple (<i>Acer campestre</i>)	3.5 – 7.0	-	-	-	-	-	-	-	Fair		Boundary hedgerow including some out-grown coppice stools. Evidence of historic laying.	Of general habitat and screening value. Consider laying/coppice management.	20+	C3

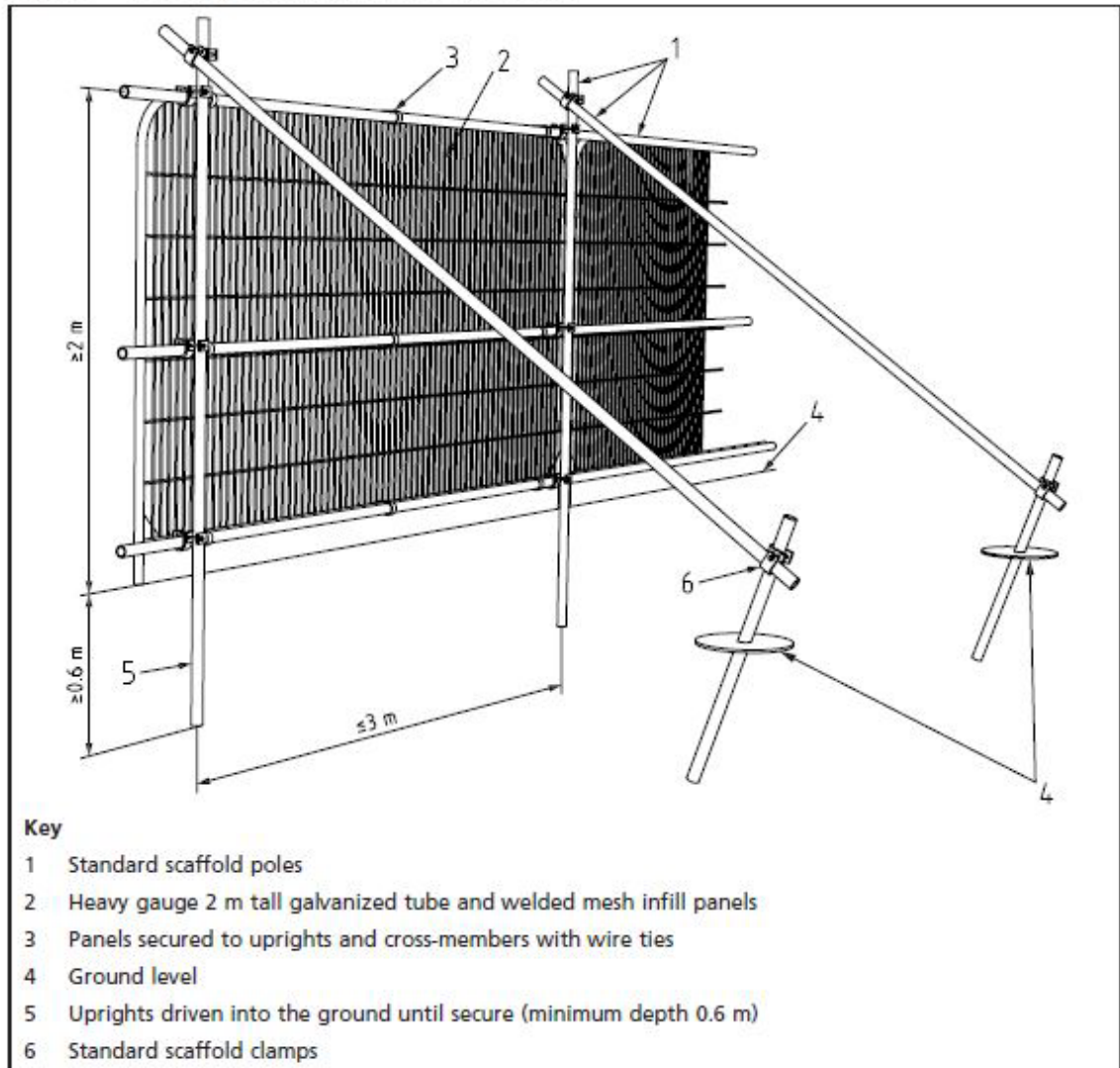
Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				First significant branch (m)	Canopy Clearance (m)	Physiological Condition	Age	Observations and Conditions	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
H88	Hawthorn (<i>Crataegus monogyna</i>), Crab Apple (<i>Malus sylvestris</i>), Wild Privet (<i>Ligustrum vulgare</i>), Blackthorn (<i>Prunus spinosa</i>), Common Ash (<i>Fraxinus excelsior</i>) & Common Ash (<i>Fraxinus excelsior</i>)	2.5 – 4.0	-	-	-	-	-	-	-	Fair		Dense, apparently un-managed section of hedgerow growing adjacent to track and ditch course.	Of general habitat and screening value. Consider laying/coppice management.	20+	C2/3
T89	Oak (<i>Quercus robur</i>)	5.0	110	Average 1.5				1.3 northeast - southwest	1.2	Good	Y	Clear stemmed tree planted within grass verge area adjacent to track. Minor pruning wounds visible with some wound wood development.	Of habitat and landscape potential.	40+	C2/3



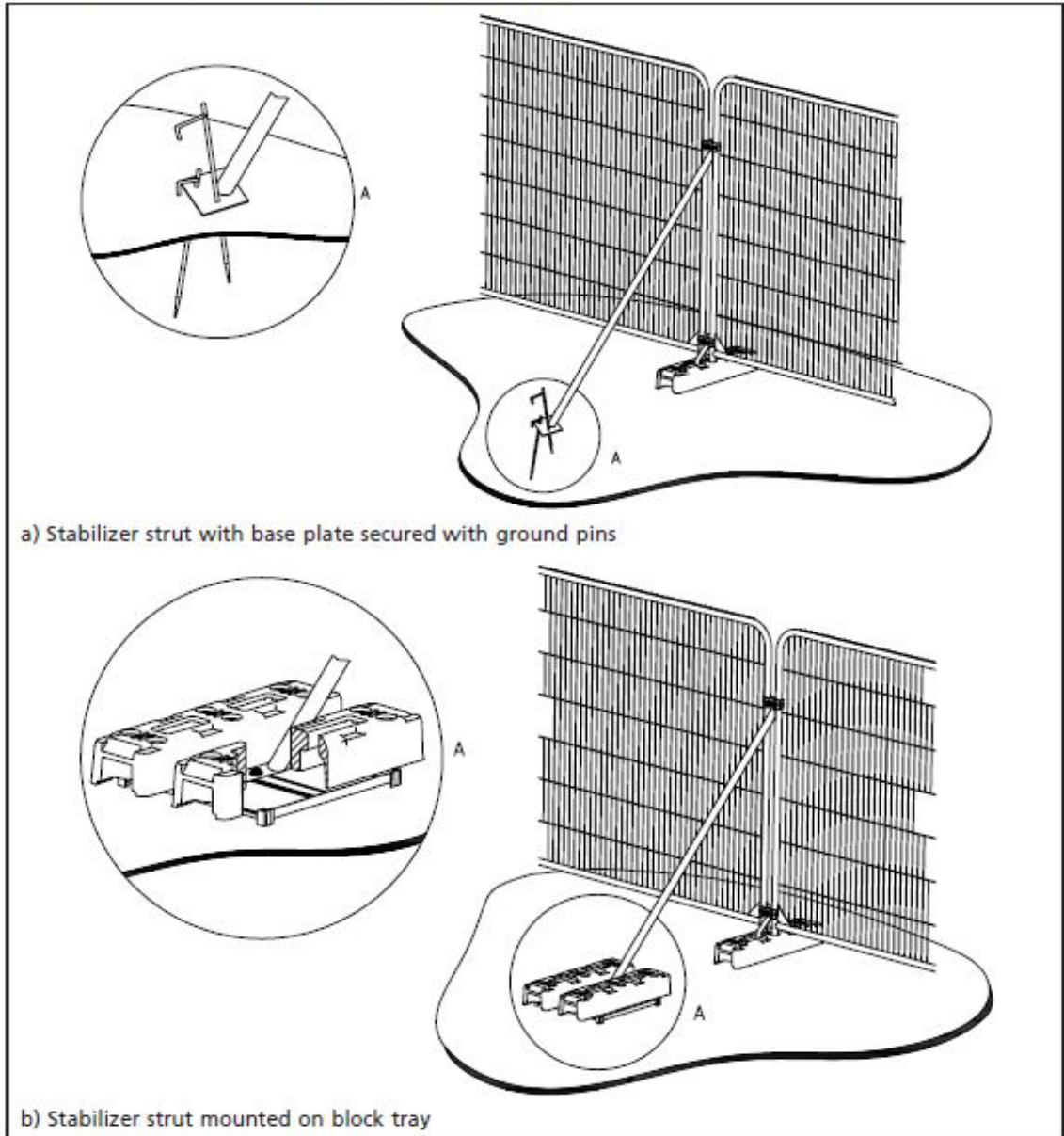
Notes

- All trees and hedgerows subject to full arboricultural inspection for safety, with respect of both existing and proposed site uses/users (targets).
- Any management recommendations in this report subject to protection status of trees (e.g. TPO or Conservation Area etc.) and LPA approval.
- Any management recommendations in this report subject to presence of nesting birds or protected species (e.g. Dormice, Bats)
- Any tree surgery recommendations contained within this report to be undertaken in accordance with BS3998(2010) Tree work – Recommendations (BS3998)
- Fieldwork survey information subject to seasonal/access constraints.
- N/A - Measurement not accessible.
- ‘*’ or ‘Est’ - Indicates estimated position of tree (not indicated on topographical survey) or value based upon average of remaining measurements or visual estimate.
- This schedule should be read in conjunction with Waterman Tree Survey drawing No.s: EED14995-100-AA-77-100 to EED14995-100-AA-77-117

C. Extract from BS5837:2012 – Default specification for protective barrier



D. Extract from BS5837:2012 – Examples of above-ground stabilizing systems



E. Tree Protection Signage (Example)



UK and Ireland Office Locations

