



**Land West of Bloxham
Road, Banbury**

**Arboricultural Impact
Assessment
(Incorporating Tree
Protection Measures)**

Prepared by:
**The Environmental Dimension
Partnership Ltd**

On behalf of:
**Barwood Development
Securities Ltd**

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Contents

Section 1	Introduction	4
Section 2	Arboricultural Impact Assessment.....	6
Section 3	Conclusions.....	8

APPENDICES

Appendix EDP 1	Arboricultural Baseline Note (edp7153_r004)	
Appendix EDP 2	Parameters Plan Drawing Number 3931-03 Rev A	
Appendix EDP 3	Tree Protection Barrier on Scaffold 2.0m High (Extract from BS 5837:2012, Figure 2 'Protective Barrier')	

PLANS

Plan EDP 1: Tree Protection Plan (edp7153_d016a 19 December 2022 SWa/DGa)	
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Section 1

Introduction

- 1.1 This Arboricultural Impact Assessment (AIA) has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Barwood Development Securities Ltd ('the Applicant'), in relation to the proposed development of Land West of Bloxham Road, Banbury (hereafter referred to as 'the Site').
- 1.2 It sets out the nature and extent of tree losses and provides mitigation and protection measures to ensure the viable long-term retention of retained trees, in the context of the development proposals.

SITE CONTEXT

- 1.3 The Site is located to the west of Bloxham Road, to the south of Banbury and comprises a single grassland field parcel bounded by trees/hedgerow.
- 1.4 The Site lies within the administrative boundary of Cherwell District Council (CDC).

Development Proposals

- 1.5 An Outline planning application is to be submitted to CDC for the development of up to 65 dwellings, including open space provision, parking, landscaping, drainage and associated works, with all matters reserved (appearance, landscaping, layout and scale) except for access.
- 1.6 This AIA has been prepared using EDP's arboricultural constraints information, contained within the Arboricultural Baseline Note at **Appendix EDP 1**.
- 1.7 This baseline survey data was originally collected by EDP in November 2022. The survey data is provided within **Appendix EDP 1**, with the Tree Constraints Plan included.

AIMS AND OBJECTIVES

- 1.8 The purpose of this AIA is to assess the impacts upon the tree stock from the proposed development and demonstrate which trees can be retained and which will require removal. In addition, it will provide mitigation measures, such as protective fencing, to ensure the safe, long-term retention of any retained tree, should the development be permitted.

RELEVANT BASELINE DOCUMENTS

- 1.9 EDP's Arboricultural Baseline Note is relevant to the provisions of this AIA and this AIA should be read in conjunction with it where applicable.
- 1.10 The following best practice guidance and informative standards are relevant to the provisions of the AIA and should be read in conjunction with the AIA where applicable:

- BS 5837: 2012 *Trees in Relation to Design, Demolition and Construction - Recommendations*. BSI 2012; and
- BS 3998:2010 *Tree Work - Recommendations*. BSI 2010.

Section 2 Arboricultural Impact Assessment

- 2.1 This Arboricultural Impact Assessment (AIA) has been prepared following Site-based observations, a desktop study of the baseline survey data and consideration of the Parameters Plan (**Appendix EDP 2**). In particular, it relates to the Tree Constraints Plan (contained within **Appendix EDP 1**), which is overlaid onto the proposed Parameters Plan. The resulting drawing, a Tree Protection Plan (**Plan EDP 1**).
- 2.2 This AIA recognises that construction activities pose a threat to subject trees if treated inappropriately, assesses the likely impacts of the proposals on the tree stock and, where appropriate, provides mitigation with the view of achieving a harmonious relationship between the trees and the built form.
- 2.3 Assessment of the impact of the proposals has been determined following consideration of the constraints each surveyed item poses by virtue of its position, branch spread and designated root protection area (RPA).
- 2.4 Consideration should be given to retaining all trees where possible. However, ultimately the removal of any tree is dependent on its proximity to the footprint of any proposal and associated landscaping.

ITEMS IMPACTED BY DEVELOPMENT PROPOSALS

- 2.5 Assessment of the Proposed Site Plan (**Appendix EDP 2**) determines that one item is impacted by the development proposals; The item is detailed within **Table EDP 2.1**. The item is category B, of moderate quality.

Table EDP 2.1: Items Impacted by Development Proposals

Ref. Number	Species	Impact	Category Grading
W6	Ash sp. (<i>Fraxinus</i> sp.), Aspen (<i>Populus tremula</i>), Birch sp. (<i>Betula</i> sp.), Bird cherry (<i>Prunus padus</i>), Blackthorn (<i>Prunus spinosa</i>), Common hawthorn (<i>Crataegus monogyna</i>), Common hazel (<i>Corylus avellana</i>), Common ivy (<i>Hedera helix</i>), English oak (<i>Quercus robur</i>)	Partial removal	B

SUMMARY OF TREE LOSSES AND RETENTION

- 2.6 A summary of the tree losses and retention, based upon the Parameters Plan (**Appendix EDP 2**), is provided within **Table EDP 2.2**. In this context, the term ‘affected’ means encroachment into the RPA of a retained item.

Table EDP 2.2: Summary of Tree Losses and Retention

	Existing	Trees, Groups and Hedgerows Lost Due to Proposals	Trees, Groups and Hedgerows Affected by Proposals	Trees, Groups and Hedgerows Unaffected by Proposals
Category A	0	0	0	0
Category B	3	0	1	2
Category C	3	0	0	3
Totals	6	0	1	5

DAMAGE TO ROOTING ENVIRONMENT DURING CONSTRUCTION ACTIVITIES

- 2.7 The required RPA for each item is described in the Tree Survey Schedule and depicted on the Tree Constraints Plan, both found within **Appendix EDP 1**. To ensure appropriate protection is afforded to the roots, the extent of the RPA shall be defined by means of the installation of protective barriers in accordance with the recommendations given in Section 6.2 of BS 5837:2012, the specification for which is enclosed as **Appendix EDP 3**.

MITIGATION

- 2.8 Existing trees identified for retention on the appended Tree Protection Plan (**Plan EDP 1**) will continue to be managed in accordance with BS 5837:2012. Critically, this requires arboricultural review of any future emerging detailed design and the implementation of physical protection measures to safeguard the retained trees, including robust protection in the form of a barrier to BS 5837:2012 (**Appendix EDP 3**), during the construction phases. The importance of such matters cannot be overlooked if a successful outcome is to be ensured.
- 2.9 Should any trees be affected by the proposed development at the detailed design stage, these will be sensitively worked around to minimise any adverse effects. This can be achieved with the use of ground protection, no-dig technologies, hand digging and access facilitation pruning, where applicable. This level of detail will be assessed during the detailed design stage.

Section 3

Conclusions

- 3.1 Masterplanning of the development has been informed by arboricultural recommendations throughout. To ensure succession to the existing tree stock, new planting is recommended. The new planting has potential for longevity within the landscape and will enhance the species diversity for the Site, whilst also contributing to the green infrastructure for the area.
- 3.2 Existing trees identified for retention on the appended Tree Protection Plan (**Plan EDP 1**) will continue to be managed in accordance with BS 5837:2012. Critically, this requires arboricultural review of any alteration to the development layout and the implementation of physical protection measures to safeguard the retained trees, including robust protection in the form of a barrier to BS 5837:2012, during the demolition and construction phases. The importance of such matters cannot be overlooked if a successful outcome is to be ensured.
- 3.3 A suitably worded condition can secure any mitigation measures which would be required to minimise harm and ensure safe, long-term retention to trees.

Appendix EDP 1
Arboricultural Baseline Note (edp7153_r004)

Land West of Bloxham Road, Banbury

Arboriculture Baseline Note

edp7153_r004a

1. Introduction

- 1.1 The Environmental Dimension Partnership Ltd (EDP) has been commissioned by Barwood Development Securities Ltd ('the Applicant') to undertake a BS 5837:2012 *Trees in Relation to Design, Demolition and Construction* compliant survey of trees in relation to the proposed development of Land West of Bloxham Road, Banbury (hereafter referred to as 'the Study Area').
- 1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cardiff and Cheltenham. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk).
- 1.3 The Study Area is located to the west of Bloxham Road to the south of Banbury, which is located within the Local Planning Authority of Cherwell District Council. It currently comprises a single field parcel.

2. Methodology and Limitations

- 2.1 The methodology adopted for this survey is based on guidelines set out in BS 5837:2012 *Trees in Relation to Design, Demolition and Construction*, especially Section 4.4, 'Tree Survey'. Site trees and other significant vegetation are as noted on the Tree Constraints Plan (**Annex EDP 1**) and this data has been derived from the Topographical survey. All surveyed items are detailed in **Annex EDP 2**. No other trees are covered by this survey.
- 2.2 All trees have been visually inspected from ground level unless otherwise stated, with no climbing or further detailed investigative tests being undertaken. The comments on their condition are based on observable factors present at the time of inspection. All measurements are metric and have been recorded in accordance with the measurement conventions set out in Section 4.4.2.6 of BS 5837:2012.
- 2.3 Any recommendations given regarding longer-term management are made on the basis of optimising the life expectancy of site trees, given their current situation and any effects that may result from the development proposals.



2.4 The schedule in **Annex EDP 2** provides information about the following factors in accordance with Section 4.4.2.5 of BS 5837:2012:

- Sequential reference number (recorded on **Annex EDP 1**);
- Species;
- Height;
- Stem diameter;
- Branch spread;
- Canopy clearance above ground level;
- Life stage;
- Physiological condition;
- Structural condition;
- Comments/notes;
- Recommendations (and tree work priority);
- Estimated remaining contribution;
- Category grading; and
- Root protection radius.

2.5 Due to the changing nature of trees and other site circumstances, this report and any recommendations made are limited to a 24-month period from the survey date. Any alterations to the Study Area could change the current circumstances and may invalidate this report and any recommendations made.

2.6 Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer damage under average conditions. Regular inspections can help to identify potential problems before they become acute.

2.7 A lack of recommended work does not imply that a tree is safe and likewise, it should not be implied that a tree will be made safe following the completion of any recommended work.

2.8 The subject trees have not been tagged for identification purposes.



3. Aims and Objectives

3.1 The purpose of this Baseline Note is to:

- Identify principal trees suitable for retention; and
- Identify the constraints associated with retained trees to inform the design and layout of any forthcoming proposals and, in turn, inform an Arboricultural Impact Assessment.

4. Summary of Tree Stock

- 4.1 The survey has identified three groups of trees, two hedgerows and one woodland, totalling six items. Of these six items, three have been categorised as B, of moderate quality; and three have been categorised as C and are of low quality.
- 4.2 All surveyed items are as noted on **Annex EDP 1** and detailed in the schedule at **Annex EDP 2**.
- 4.3 An illustrative summary of the species diversity, age distribution and grading categorisation for the Study Area is provided in **Annex EDP 3**.
- 4.4 Overall, the items identified across the Study Area are primarily of moderate value. These category B items are located either outside of the Study Area or around the periphery of it, and therefore do not adversely constrain the main body of the Study Area

5. National and Local Planning Policy

National Planning Policy Framework (NPPF)

5.1 Paragraph 131 of the NPPF states;

“Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined⁵⁰, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.”

The Cherwell Local Plan 2011-2031, Adopted 20 July 2015 (Incorporating Policy Bicester 13 Re-adopted on 19 December 2016)

Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment

“Protection and enhancement of biodiversity and the natural environment will be achieved by the following:

In considering proposals for development, a net gain in biodiversity will be sought by protecting, managing, enhancing and extending existing resources, and by creating new resources

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

Policy ESD 13: Local Landscape Protection and Enhancement

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

Development will be expected to respect and enhance local landscape character, securing appropriate mitigation where damage to local landscape character cannot be avoided.”

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

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

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

5.2 The Cherwell Local Plan 2011-2031 makes use of Supplementary Planning Documents (SPD’s). To add additional guidance on planning related to trees. The SPD’s that specifically mention trees are:

- Cherwell Residential Design Guide Supplementary Planning Document Masterplanning and architectural design guidance, adopted 16 July 2018;

- Developer Contributions Supplementary Planning Document (SPD), February 2018; and
- Banbury Vision and Masterplan Supplementary Planning Document (SPD), December 2016.

6. Statutory Protection

Tree Preservation Orders (TPO's) and Conservation Areas

- 6.1 Consultation with the LPA's interactive mapping system has identified that 0 trees are protected under TPO. However, a small area of woodland to the west of the Study Area and adjacent to Bloxham road is covered by TPO Ref: 001A/1954.
- 6.2 The Study Area is not within a designated conservation area.

7. Protected Wildlife and Trees

Bats

- 7.1 All species of British bat comprise European Protected Species (EPS) and are afforded it protection under the *Conservation of Habitats and Species Regulations 2017* (as amended). Further information is provided in **Annex EDP 4**.

Nesting Birds

- 7.2 All wild birds, their nests and eggs are protected under Section 1 of the *Wildlife and Countryside Act 1981* (as amended). Harm to wild birds can mostly be avoided by timing works to avoid the main bird breeding season, considered to run between March and August inclusive. Further information on their protection is provided in **Annex EDP 4**.

8. Site-specific Constraints

- 8.1 As shown by **Annex EDP 1**, the surveyed items located across the Study Area are primarily trees of moderate arboricultural value.
- 8.2 Several items are located outside, but adjacent to the Study Area, and therefore these items are not under the control of the Applicant. Items outside of the Applicant's control require consideration when designing forthcoming proposals, so as to avoid interference with the tree canopies or root protection areas (RPA).
- 8.3 Further information on above- and below-ground arboricultural constraints is provided in **Annex EDP 5**.



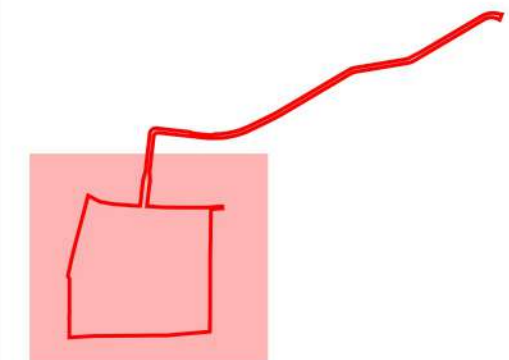
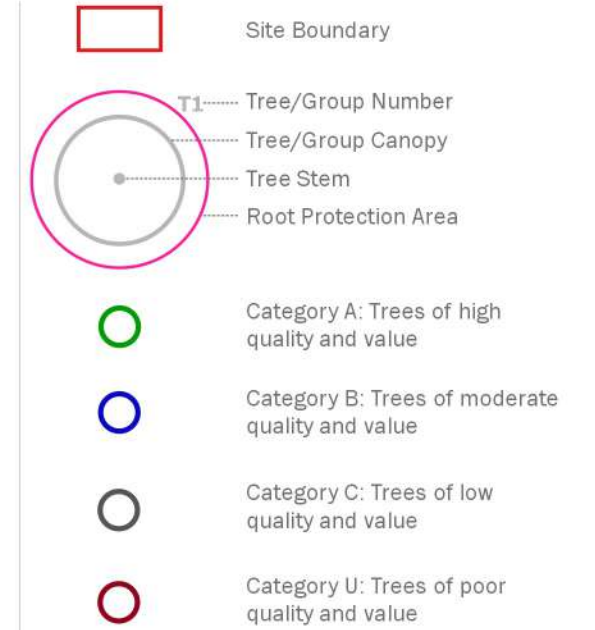
9. Conclusion

- 9.1 Of the items surveyed, three have been categorised as B, of moderate quality. These items should be prioritised for retention, where practicable. These items are primarily outside or around the perimeter of the Study Area and therefore do not adversely constrain development.
- 9.2 The default position when designing any forthcoming scheme should be the retention of all items, as so far as is practicable, regardless of category grading. All trees provide positive environmental and ecological contributions, irrespective of current condition.
- 9.3 The arboricultural constraints information provided within this Baseline Note will feed into the detailed design and layout of the scheme and, in turn, will be used to undertake an Arboricultural Impact Assessment, to be submitted as part of the planning application.



Annex EDP 1
Tree Constraints Plan
(edp7153_d001a 19 December 2022 VMS/GSn)

To conform to BS 5837:2012 and planning validation requirements, this plan should be reconciled with topographical survey data once it is available.



client
Barwood Development Securities Ltd

project title
Land West of Bloxham Road, Banbury

drawing title
Tree Constraints Plan

date	19 DECEMBER 2022	drawn by	VMS
drawing number	edp7153_d001a	checked	GSn
scale	1:1,000 @ A3	QA	RBa



Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk



Annex EDP 2
Tree Survey Key and Schedule EDP 1

Sequential Reference Number	T - Individual specimen; G - Group of trees that form cohesive arboricultural features either aerodynamically, visually or culturally; H - Linear group of specimens that form a hedge or boundary; and W - A larger group or area of trees that should be regarded as a single woodland unit.
Species	Scientific names and common English names provide, the latter are used wherever possible for simplicity.
Height	An approximation of height (in metres) is provided for the highest point of the tree.
Stem Diameter	This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS 5837:2012 (# is used if estimated).
Branch Spread	This is taken at four cardinal points, with a stated value in metres to enable an accurate representation of the crown, as shown on Schedule EDP 1 .
Canopy Clearance Above Ground Level	An approximation of height (in metres) of crown clearance above adjacent ground level.
Life Stage	There are five classes to which trees are assigned: Young; Early Mature; Mature; Over Mature; and Veteran.
Physiological Condition	An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy density: It should be taken that, unless otherwise stated with each individual entry, the canopy density of the trees is typical of the species; and Leaf size and colouration: It should be taken that, unless otherwise stated with each individual entry, leaf size and colouration is typical of the species.
Structural Condition	An indication of the tree's structural condition is represented and classed as good, fair, poor or dead. This is informed by "the presence of any decay and physical defect ¹ ".

¹ BS 5837:2012 Section 4.4.2.5



Comments/Notes	Observations on structural or physiological condition, historic pruning, any Site-specific constraints etc. noted at the time the survey is undertaken.
Recommendations (and Tree Work Priority)	<p>These are made on the basis of optimising the life expectancy of site trees, given their current situation and that which may result from the development proposals. The survey process pays particular attention to implications for life and/or property; defects recorded under the structural condition have the necessary mitigation measures proposed within this section of the schedule.</p> <p>Priority codes from 1 to 3 have been given for trees requiring work. The definition of the codes used is as follows:</p> <p>Priority 1: Work that should be undertaken urgently due to the identification of a potential hazard;</p> <p>Priority 2: Work that should be undertaken prior to any demolition or construction works commencing on Site; and</p> <p>Priority 3: Work that should be undertaken following the completion of the development.</p>
Estimated Remaining Contribution	<p>The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity:</p> <p>Less than 10;</p> <p>10+;</p> <p>20+; and</p> <p>40+.</p>
Category Grading	Trees have been assigned either U or category grading A to C in accordance with the cascade chart given in BS 5837:2012.
Root Protection Radius	Measurement (in m) based on the stem diameter and calculated in accordance with BS 5837:2012.

Client:	Barwood Development Securities Ltd	Site:	Additional land at Crouch Farm west of Bloxham Road, Banbury
Date of Survey:	09/11/2022	Consultant:	Graham Snuggs
Tagged:	N/A	Weather:	Overcast with periods of light rain

Sequential Reference No.	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m)				Canopy Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments / Notes	Management Recommendations (Priority)	Estimated Remaining Contribution (Years)	Category Grading	Root Protection Radius (m)
				North	East	South	West									
G1	Ash sp. (Fraxinus sp.), Blackthorn (Prunus spinosa), Bramble sp. (Rubus sp.), Common ash (Fraxinus excelsior), Common Dogwood (Swida sanguinea), Common hawthorn (Crataegus monogyna), Common hazel (Corylus avellana), Common ivy (Hedera helix), F	8	# 200	3	3	3	3	N/A	Early Mature	Fair	Fair	Access to inspect base - Not possible Ivy or climbing plant, Base / stems obscured - Vegetation Ash Dieback Suspected Off-site tree, all readings estimated Group of trees behind fencing on neighbouring property. Group acts as a visual screen.	No Work Recommended	20+	B1,2	2.4
H2	Common hawthorn (Crataegus monogyna), Common ivy (Hedera helix), Bramble sp. (Rubus sp.), Blackthorn (Prunus spinosa), Ash sp. (Fraxinus sp.)	3	# 50	1	1	1	1	N/A	Over Mature	Fair	Poor	Regularly flailed field edge hedgerow as yet not cut this year.	No Work Recommended	10+	C1, 3	0.6
G3	Ash sp. (Fraxinus sp.), Bramble sp. (Rubus sp.), Birch sp. (Betula sp.), Bird cherry (Prunus padus), Blackthorn (Prunus spinosa), Common hawthorn (Crataegus monogyna), Common ivy (Hedera helix), Elm sp. (Ulmus sp.), English oak (Quercus robur)	8	# 250	3	3	3	3	N/A	Early Mature	Fair	Fair	Access to inspect base - Restricted / obscured Ivy or climbing plant, Multiple stems from base, Bark wound - Minor, Base / stems obscured - Vegetation Ash Dieback Suspected Field edge group behind post and rail fencing, historical flailing but been left for some time and now establishing as trees.	No Work Recommended	10+	C1,2	3
G4	Bird cherry (Prunus padus), Blackthorn (Prunus spinosa), Bramble sp. (Rubus sp.), Common ash (Fraxinus excelsior), Common ivy (Hedera helix), Elm sp. (Ulmus sp.)	10	# 300	4	4	4	4	N/A	Early Mature	Fair	Fair	Access to inspect base - Restricted / obscured Bark wound - Minor, Base / stems obscured - Vegetation, Decay - Open cavity / cavities Arboricultural work - Historic Trees growing on lower part of slope on the southern boundary of neighbouring field. Group acts as a visual screen.	No Work Recommended	20+	B1,2	3.6
H5	Common hazel (Corylus avellana)	2	# 50	N/A	N/A	N/A	N/A	N/A	Early Mature	Fair	Fair	Small patch of hedge on boundary edge of study area.	No Work Recommended	10+	C1, 3	0.6
W6	Ash sp. (Fraxinus sp.), Aspen (Populus tremula), Birch sp. (Betula sp.), Bird cherry (Prunus padus), Blackthorn (Prunus spinosa), Common hawthorn (Crataegus monogyna), Common hazel (Corylus avellana), Common ivy (Hedera helix), English oak (Quercus robur)	11	# 350	3	4	5	4	N/A	Early Mature	Good	Fair	Multiple stems from base, Ivy or climbing plant, Weak fork / branch union with included bark, Base / stems obscured - Vegetation, Decay - Minor, Pruning wounds - Historic Ash Dieback Suspected Woodland that is a mix of planted trees and natural regeneration within the planting structure. Woodland acts as a visual screen to against the construction site to the north of the study area. Southern face of Woodland flailed a part of a maintenance program.	No Work Recommended	20+	B1,2,	4.2

Sequential Reference Number - T - Individual specimen; G - Group. Trees that form cohesive arboricultural features either aerodynamically, visually or culturally. H - Linear group of specimens that form a hedge or boundary; W - A larger group or area of trees that should be regarded as a single woodland unit.
Species - Common English names are used wherever possible for simplicity.
Height - An approximation of height (in metres) is provided for the highest point of the tree.
Stem Diameter - This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS5837:2012.
Branch Spread - This is taken at four cardinal points, with a stated value in metres to enable an accurate representation of the crown, as shown on Plan EDP 1.
Canopy Clearance - An approximation of height (in metres) of crown clearance above adjacent ground level.
Life Stage - There are five classes to which trees are assigned: Young; Early Mature; Mature; Over Mature; Ancient; Dead.

Physiological Condition - An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy Density. It should be taken that, unless otherwise stated with each individual entry, the canopy density of the trees is typical of the species; and Leaf Size and Colouration: It should be taken that, unless otherwise stated with each individual entry, leaf size and colouration is typical of the species.
Structural Condition - Additional notes are provided giving details of the tree's structural condition. This is informed by "the presence of any decay and physical defect".
Management Recommendations - These are made on the basis of optimising the life expectancy of site trees, given their current situation and that which may result from the development proposals. The survey process pays particular attention to implications for life and/or property; defects recorded under the structural condition have the necessary mitigation measures proposed within this section of the schedule.

Tree Works Priority Codes - Priority codes from 1 to 3 have been given for trees requiring work. The definition of the codes used is as follows. Priority 1: Work that should be undertaken urgently due to the identification of a potential hazard; Priority 2: Work that should be undertaken prior to any works commencing on site; and Priority 3: Work that should be undertaken following the completion of the development.
Estimated Remaining Contribution - The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity: Less than 10; 10+; 20+; and 40+.
Category Grading - Trees have been assigned 'U' or Category Grading 'A' to 'C' in accordance with the Cascade Chart given in BS5837:2012.
Root Protection Radius - The root protection radius from the stem of the tree calculated in line with the recommendations set out in BS5837:2012.

Annex EDP 3
Illustrative Summary of Survey Data

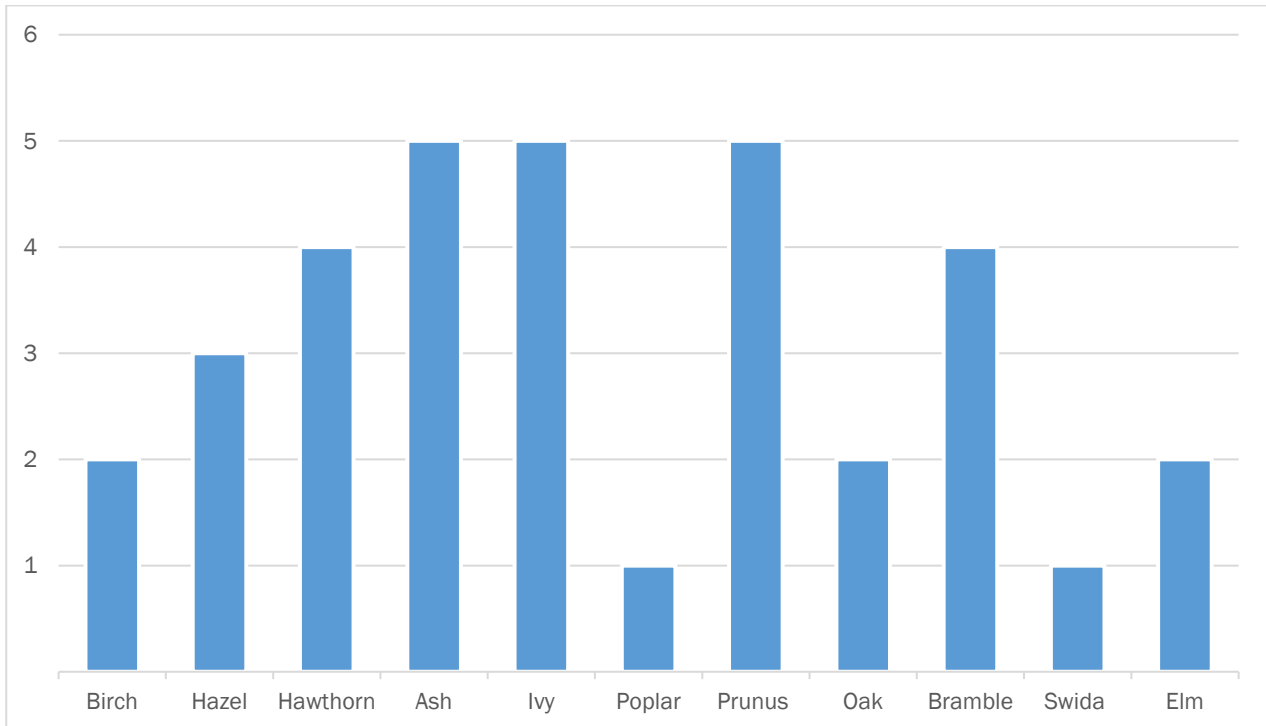


Figure EDP A3.1: Species Diversity.

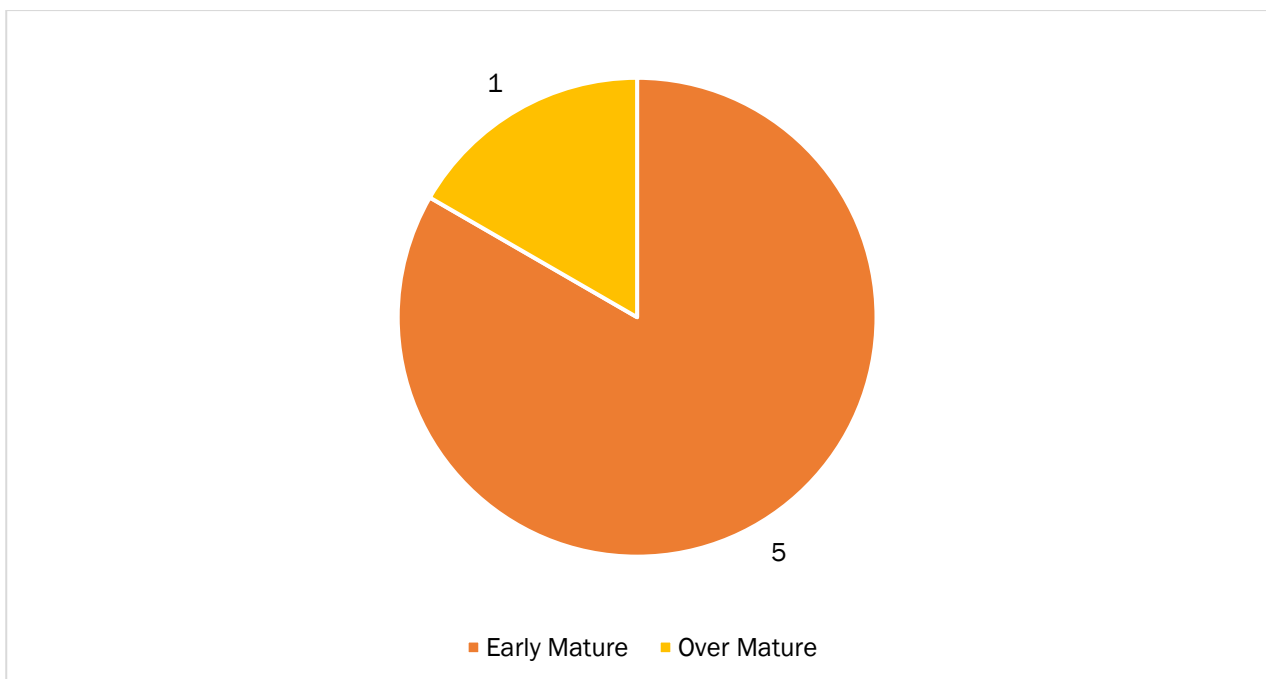


Figure EDP A3.2: Age Distribution of Live Trees.

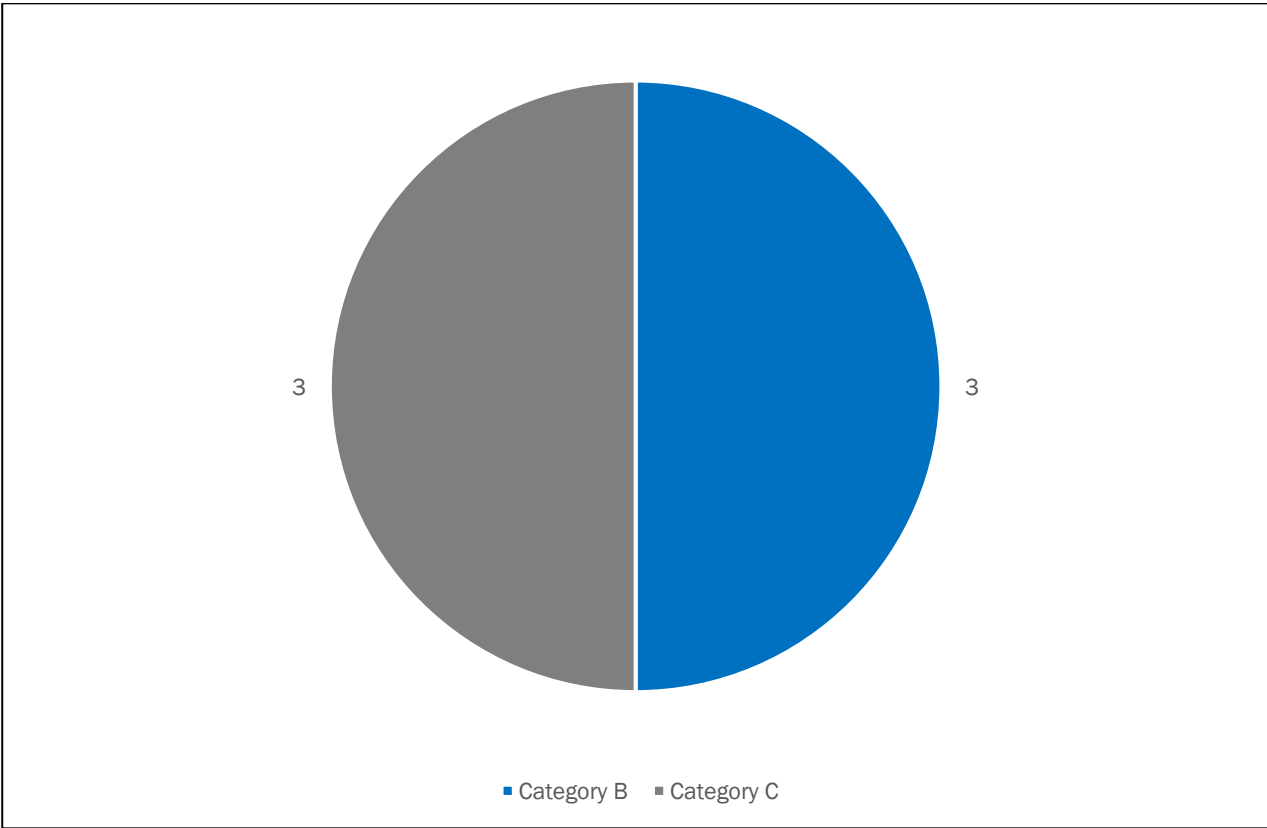


Figure EDP A3.3: Category Grading.

Annex EDP 4 Protected Species

Bats

- A4.1 All species of British bat comprise European Protected Species (EPS) and are afforded it protection under the *Conservation of Habitats and Species Regulations 2017* (as amended), making it an offence to :
- Deliberately capture, injure or kill a wild individual of an EPS;
 - Deliberately disturb wild animals of an EPS wherever they are occurring, in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, to affect significantly the local distribution or abundance of the species to which they belong, or in the case of hibernating or migratory species, to hibernate or migrate; or
 - Damage or destroy a breeding site or resting place of a wild individual of an EPS.
- A4.2 Additional protection for bats is also afforded under the *Wildlife and Countryside Act 1981* (as amended), making it an offence to intentionally or recklessly disturb bats whilst they are occupying a structure or place that is used for shelter or protection, or to obstruct access to this structure or place. As bats tend to re-use the same roosts, legal opinion is that roosts are protected, whether or not bats are currently occupying these resting places/ places of shelter.
- A4.3 Prior to undertaking any tree works or tree removal, further advice should be sought from a suitably qualified ecologist.

Nesting Birds

- A4.4 All wild birds, their nests and eggs are protected under Section 1 of the *Wildlife and Countryside Act 1981* (as amended). This makes it an offence to:
- (i) intentionally kill, injure or take any wild bird;
 - (ii) take, damage or destroy the nest of any wild bird while it is in use or being built;
 - (iii) take, damage or destroy the egg of any wild bird; or
 - (iv) to have in one's possession or control any wild bird (dead or alive), or egg or any part of a wild bird or egg.

A4.5 In addition, further protection is afforded to those wild bird species listed on Schedule 1 of the Act, prohibiting any intentional or reckless disturbance to these species while it is nest building, or at a nest containing eggs or young, or to recklessly disturb the dependent young of such a bird.

Annex EDP 5

Consideration of Trees within the Design Process

A5.1 Construction activities pose a threat to the successful retention of trees if handled inappropriately. It is important to consider the relationship between development and trees during the design process.

Below-ground Constraints – Root Protection Area

A5.2 The below-ground constraints are defined as the likely spread and distribution of the root system and are depicted on **Plan EDP 1** with pink outlined areas, representing root protection area (RPA) around each surveyed item.

A5.3 The RPA is defined as the minimum area (in m²) around the tree that is deemed to contain sufficient roots and rooting volume to maintain the tree's viability.

A5.4 Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, the shape of the RPA may be modified, but not reduced in area, and its shape should reflect a soundly based assessment of the likely root distribution.

A5.5 Any deviation in the RPA from the original circular plot should take account of the following factors, whilst still providing adequate protection for the root system:

- The morphology and disposition of the roots, when known to be influenced by past or existing site conditions (e.g. the presence of roads, structures and underground services);
- Topography and drainage;
- The soil type and structure; and
- The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age and condition and presence of other trees.

Above-ground Constraints – Proximity of Trees to Structures

A5.6 The above-ground parts of a tree, whilst being more visible and easily protected, are a potential constraint to development and consideration should be given to the current and ultimate height and spread of the trees.

A5.7 Where the current and/or ultimate height of category B or C trees will cause an unreasonable obstruction to the proposed development, this must be considered as a constraint. This is usually considered in terms of issues relating to shade and light.

A5.8 The above-ground constraints can be a combination of factors such as:

- Shading of buildings and open space – a detailed daylight study may be necessary if any proposed buildings are in the immediate vicinity of retained trees;
- Direct damage to structures;
- Future pressure for removal;
- Seasonal nuisance (e.g. leaf fall blocking gutters, fruit fall creating slippery patches and honey dew dripping on vehicles and surfaces);
- Whether the tree is deciduous or evergreen; and
- Density of foliage.

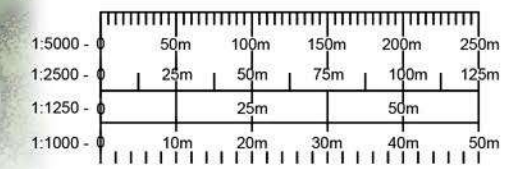
Appendix EDP 2
Parameters Plan Drawing Number 3931-03 Rev A

Legend:

-  Application site boundary
-  Proposed site access point
-  Link to farmers field
-  Access to foul pumping station
-  Potential pedestrian access
-  Principle Vehicular Routes
-  Existing Prow
-  Buildings up to 2.5 storey
-  Net Developable Area 1.76ha (17,600m²) Providing up to 60 units at 34 DPH. Scale up to two storey
-  GI (Green infrastructure) 1.34 ha (13,400m²)
-  100sq.m LAP (Local area of play) and 400sq.m buffer zone
-  SUDS
-  Foul pumping station
-  Existing trees and hedgerows



FOR GUIDANCE ONLY






A	Amended Red Line	15/12/22	NRJ
REV	DETAILS	DATE	CHECKED


brownhill hayward brown
 chartered architects

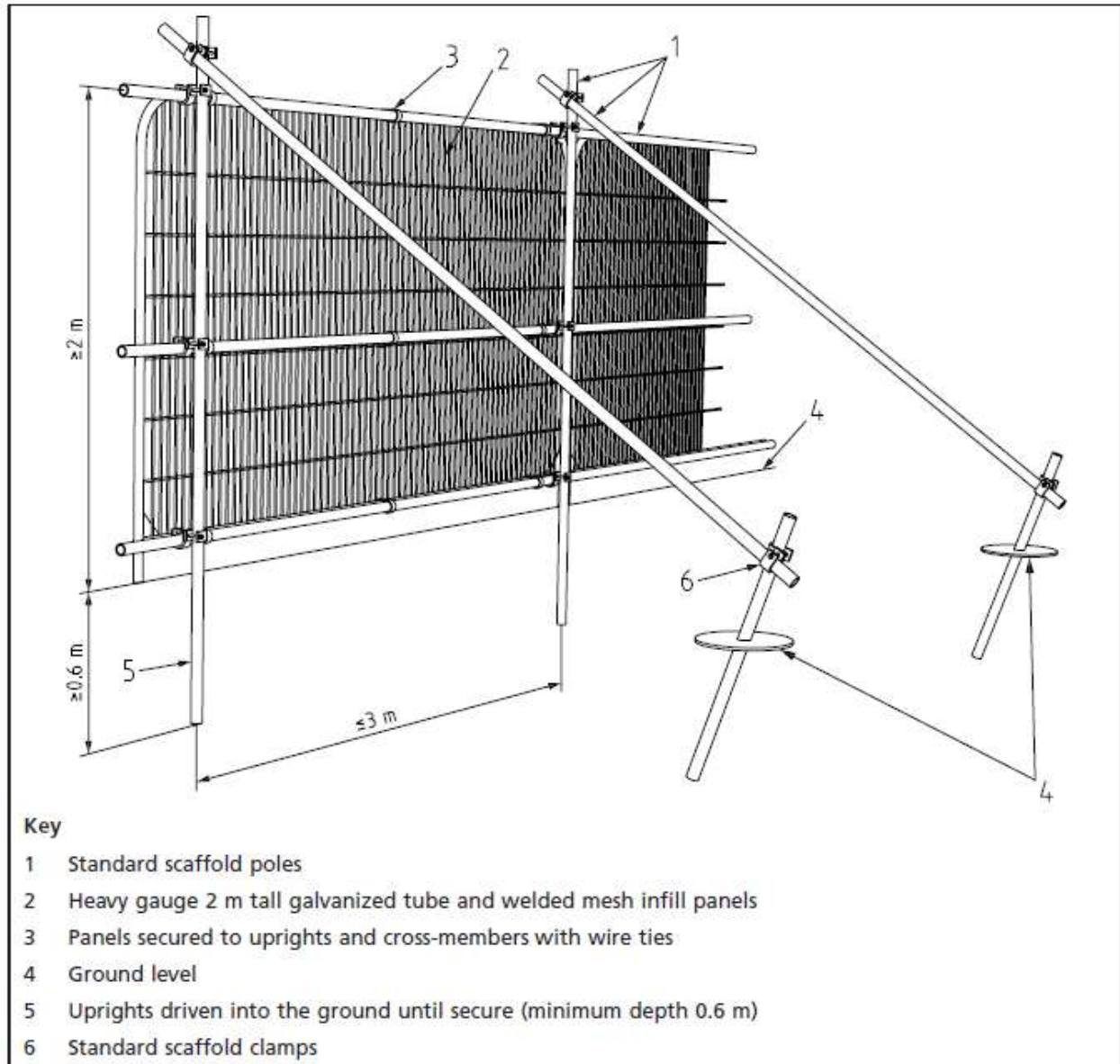
01543 254357 - mail@bhbarchitects.co.uk

Land West of Bloxham Road, Banbury		DRAWING NO.	
Parameters Plan		3931 - 03	
REV	DATE	REV	DATE
A	Nov '22	A	Nov '22

PLANNING	DRAWN	CHECKED	SCALE
	BL	MW	1:2500 @ A3

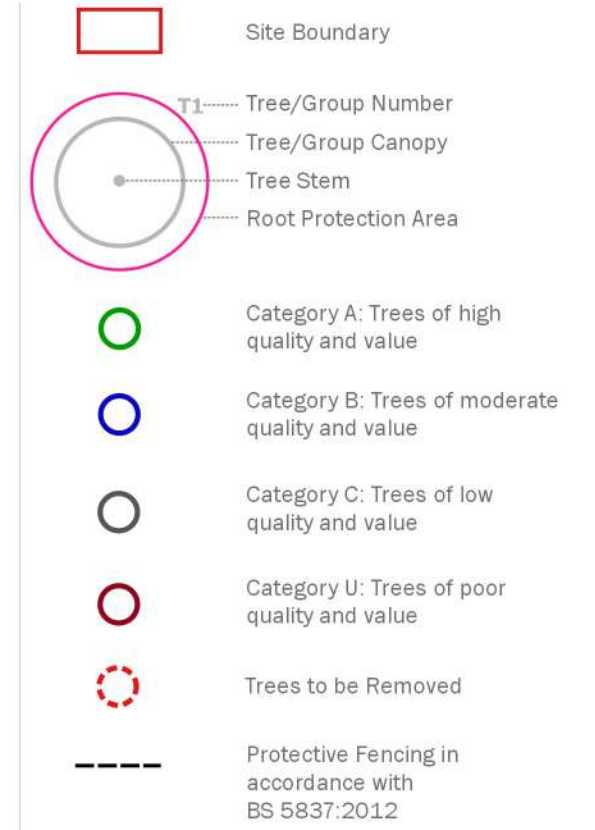
 ISO 9001 REGISTERED FIRM	 ISO 14001 REGISTERED FIRM	The copyright of this drawing and design is vested in the Architect and must not be copied or reproduced without written consent. All dimensions given are to be verified on site by the responsible contractor.	 PART OF bhb architects
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Appendix EDP 3 Tree Protection Barrier on Scaffold 2.0m High (Extract from BS 5837:2012, Figure 2 'Protective Barrier')



Plans

Plan EDP 1: Tree Protection Plan
(edp7153_d016a 19 December 2022 SWa/DGa)



purpose of issue **PLANNING**

a	Fence and woodland removal amended. H5 reinstated.QA	19/12/2022	VMS
-	Original	05/12/2022	SWa
rev	description	date	by

client

Barwood Development Securities Ltd

project title

Land West of Bloxham Road, Banbury

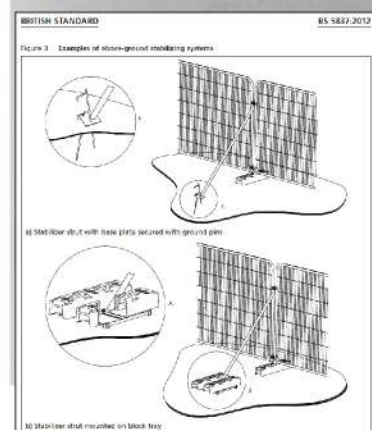
drawing title

Tree Protection Plan

date	19 DECEMBER 2022	drawn by	SWa
drawing number	edp7153_d016a	checked	DGa
scale	1:1,000 @ A3	QA	RBa



Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk





the environmental
dimension partnership

CARDIFF
02921 671900

CHELtenham
01242 903110

CIRENCESTER
01285 740427

info@edp-uk.co.uk
www.edp-uk.co.uk

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