Arboricultural Impact Assessment
Arboricultural Method Statement
Tree Protection Plan

Le Brace
Pond Lane
Emborough
Radstock
BA3 4SE

For Dave and Charly Kimber

August 2021

alltree

Ref: 21441AIAv01

Record Sheet

Report title	Arboricultural Impact Assessment Arboricultural Method Statement Tree Protection Plan
Site address	Le Brace Pond Lane Emborough Radstock BA3 4SE
Project	Kennels building and associated works
Clients	Dave and Charly Kimber
Agent	Ink Architecture
Author	Jim Walker *MICFor MArborA*
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Executive Summary

1. The development proposal involves replacement of existing disused outbuildings with a new kennels building, realignment of existing drive, new parking and turning area, plus installation of a 1.8m mesh fence around the field perimeter.
2. Removal of five minor low quality trees and shrubs, plus three beech stems is required to facilitate the new drive access and parking area. In addition, the removal of eight poor quality trees is recommended as part of routine arboricultural management.
3. The impact on screening, visual amenity or biodiversity from tree loss will be negligible and adequately mitigated in the short term by replacement planting as part of a soft landscape scheme.
4. The impact of the development on the health and amenity of retained trees both on and off the site should be insignificant provided that the recommended tree protection measures are implemented for the duration of the demolition and construction phases.

1. Introduction

1.1. Brief

1.1.1 This report is prepared for Dave and Charly Kimber to provide arboricultural information in relation to a planning application for proposed development at Le Brace, Pond Lane, Emborough, BA3 4SE.

1.1.2 The report is undertaken in accordance with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. It demonstrates that the implications of the proposal on the trees located on and adjacent to the site have been fully considered.

1.1.3 The information within this report is supplied in order to:

- Identify and assess the quality and value of the trees on and adjacent to the site that may be affected by the proposed development.
- Identify canopy spreads and root protection areas (RPAs) for retained trees and present the information on a Tree Protection Plan (TPP).
- Evaluate the likely effects of development activities on retained trees, as well as the impact of any tree removal. Provide recommendations to mitigate any adverse impact.
- Provide a Tree Protection Plan (TPP) showing trees for removal/retention, location of protective fencing and areas requiring additional protective measures.
- Provide an Arboricultural Method Statement (AMS) detailing specific measures to protect retained trees during the development works.

1.2. Documents provided to Alltree

Document Name	Prepared by	Reference no.
0265 Planning Set	Ink Architecture	0265 PL01 to PL06

1.3. Limitations and inspection notes

1.3.1 A site visit was carried out by Jim Walker on 19th August 2021.

1.3.2 The trees were visually inspected from ground level with the aid of binoculars, mallet and metal probe. No internal decay detection devices were used in assessing stem condition.

1.3.3 It should be noted that this survey is not a tree safety inspection and comprehensive long-term management recommendations are not provided. Trees are dynamic, living organisms that may shed branches or fail as part of their natural processes. It is therefore recommended that a detailed health and safety assessment is undertaken upon completion of the project.

1.3.4 The findings and recommendations within the report relate to conditions found at the time of inspection and are valid for a period of one year only. Any significant alteration to the site that may affect tree condition (such as excavations, changes in soil levels or drainage patterns) will necessitate a reassessment of the trees and the site.

1.3.5 No assessment has been carried out regarding any impact that the existing trees may have on buildings and structures.

1.4. Data collection

1.4.1 Survey findings are presented in the Tree Schedule (Appendix A) and include:-

- Designated tree/hedge number
- Tree species
- Height in metres
- Stem diameter in millimetres
- Root protection area (as a radius from tree stem in metres)
- Branch spread (to N, S, E and W) in metres
- Crown clearance (height of periphery of crown spread above ground level) in metres
- Height in metres of first significant branch and direction of growth
- Life stage - Young (Y), Semi-mature (SM), Early Mature (EM), Mature (M), Over mature (OM), Veteran (V)
- Physiological condition - Good (G), Fair (F), Poor (P), Dead (D)
- Tree structural condition - Good (G), Fair (F), Poor (P)
- Condition and site notes where this has a bearing on the health or structural condition of the tree
- Management recommendations and/or work in light of proposed development
- Estimated remaining contribution in years - (<10, 10+, 20+, 40+)
- Retention category as set down in the cascade chart for tree quality assessment (Section 4.5 and Table 1 of BS 5837:2012)

1.4.2 Tree height has been measured with a clinometer and rounded to the nearest half metre. Stem diameter has been measured according to BS 5837:2012 Annex C and rounded to the nearest 10mm.

1.4.3 A retention value has been given to each tree based on its condition, quality and future contribution to the site in accordance with BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations (see Appendix A, Table 1).

1.4.4 Trees falling within categories A, B, or C should be a material consideration within the development process and are given a numbered subcategory (1-3) to reflect their arboricultural, landscape or conservation/cultural value respectively. Category A and B trees represent those trees most worthy of retention and any design should reflect this. Category C trees are of less importance and would generally be retained only where they would not pose a significant constraint on the development. Category U trees are those that would normally be removed in the short term as part of routine arboricultural management and therefore may be excluded from the design/planning process.

1.4.5 A nominal RPA for each category A to C tree has been calculated and plotted on the TPP in accordance with Section 4.6 and Annex C and D of BS 5837:2012. This is a notional indication of the extent of root activity. Actual root distribution is unlikely to be symmetrical, being influenced by soil type and depth, the proximity of structures, watercourses and hard surfaces, as well as topography, drainage and ground compaction.

1.4.6 The TPP also shows a representation of the crown spread of each tree measured in four cardinal directions.

2. Site Location and Description

2.1 The site is approximately 0.4 ha and comprises the house and garden of Le Brace, plus an adjoining field with derelict outbuildings.

2.3 The property is bounded to the north, south and west by agricultural land. To the east is Pond Lane and a small woodland.

2.4 The site is accessed via a narrow tarmac drive between two stone retaining walls. The entrance is dominated by a large ash tree (T1) located immediately outside the site boundary. The tree was not inspected in detail but has early symptoms of ash dieback disease.

2.5 The northern boundary comprises overgrown hedgerow remnants of beech and sycamore. The sycamore (G6 and G7) are growing beneath overhead electricity wires and are in very poor condition, having been heavily topped and also damaged by grey squirrels.

2.6 A small ornamental thuja (G4), two rhododendrons (G5) and an apple (T8) are growing between the drive and northern boundary. At the western end of the drive are low quality copper beech, Leyland cypress and two decayed sycamore pollards (T9 - T13).

2.7 Trees in the southeast corner of the garden are generally low to poor quality and include cherries (T14, T17), ash-leaf maple (T15), overmature cherry laurel (G16), plus Leyland cypress, apple, hazel, rowan, birch and damson (G18 - T23).

2.8 A close grown, linear group of approximately twenty beech stems screens the field from the drive (G25). This was presumably planted as a hedge, but has since been neglected and is now up to 13 metres in height.

2.9 The boundary between the field and adjacent woodland is defined by post and wire fencing, overgrown by understorey hazel, thorn, holly and ivy. Trees within the woodland are predominantly ash, with occasional alder (T30 - T33).

3. Arboricultural Impact Assessment

3.1. Development proposal

The development proposal involves replacement of existing disused outbuildings with a new kennels building, realignment of existing drive, new parking and turning area, plus installation of a 1.8m mesh fence around the field perimeter.

3.2. Tree removal

Ref. no.	Species	Stem dia. (mm)	B.S. Cat.	Reason for removal	Impact on visual amenity None/Low/ Moderate/High
Tree removal to facilitate development					
T4	Thuja 'Zebrina'	75	C2	Drive realignment	None
G5	Rhododendron	75	C2	Drive realignment	None
T8	Apple	170	C2	Drive realignment	None
T24	Bay laurel	150	C2	New access for parking area	None
Part G25 (3 x stems)	Beech	300	B2	New access for parking area	Low
Trees recommended for removal as part of routine estate management					
G6 (x2)	Sycamore	100	U	Very poor. Extensive squirrel damage	None
G7 (x2)	Sycamore	350	U	Very poor. Extensive squirrel damage	None
T14	Cherry	180	U	Moribund	None
T17	Cherry	200	U	Tree in decline	Low
T18	Apple	200	U	Very poor	Low
T26	Ash	T26	U	Ash dieback disease	Low

3.2.1 Removal of four minor trees and shrubs (T4, G5, T8) is necessary for the new drive access. This will have no impact on visual amenity or screening of the site.

3.2.2 A bay laurel (T24) and a maximum of three beech stems from G25 will be removed to facilitate the car parking area. This work will have a low impact on visual amenity and screening which should be adequately mitigated by replacement tree and shrub planting as part of a soft landscape scheme.

3.2.3 Removal of the poor quality sycamore along the northern boundary will provide opportunities for replacement planting to improve long-term screening of the site.

3.2.4 Removal of two poor quality cherries (T14, T17) and one apple (T18) is recommended as part of routine management due to their poor condition.

3.2.5 The large ash tree (T1) immediately outside the site is infected with ash dieback disease. It has a short life expectancy and is likely to require removal within five years. It has therefore been disregarded from this impact assessment. One ash tree growing within the hedgeline (T26) has advanced ash dieback disease and should be removed as part of routine arboricultural management.

3.3. Potential damage to retained trees below ground

3.3.1 Excavation for realignment of the driveway has potential to impact the RPAs of G3, T9, T10 and T11. Actual root morphology on this aspect is likely to be restricted by the existing retaining wall and the percentage of RPAs affected is estimated to be between 5% and 15%. Provided that excavation within the RPAs is undertaken manually under supervision of an arboriculturist, no long-term impact on the health or viability of these trees is anticipated.

3.3.2 All other retained trees on site should remain unaffected by the development provided that temporary tree protection fencing is installed and maintained as specified in the Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP).

3.3.3 Installation for a new boundary fence should not have a negative impact on tree health provided that holes are excavated manually and a dry mix used for securing the posts.

3.3.4 The location and route of any new underground services has not been confirmed. These should be designed to avoid the RPAs of retained trees.

3.3.5 If encroachment into RPAs is unavoidable, alternative methods of excavation/ installation may be required, such as hand digging or thrust boring. Advice should be sought from the project arboriculturist and approval by the Local Planning Authority (LPA) may be necessary (refer to NJUG Vol 4 2007 Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees).

3.4. Potential damage to aerial parts during construction work

3.4.1 Minor crown lifting work will be required to ensure adequate clearance over the new building and access drive.

3.4.2 Pruning of understorey shrubs will be necessary along the field boundary to facilitate installation of a new fence.

3.4.3 The level of pruning is not considered significant. No adverse impact on health or amenity value is anticipated provided that the specified pruning work is carried out in accordance with BS 3998:2010 Treework - Recommendations and prior to commencement of any other site operations.

3.5. Future pressure for pruning/removal after the development

3.5.1 Retained trees are at sufficient distance from the proposed building that no long-term pressure for pruning or removal is anticipated.

3.5.2 Seasonal leaf litter may create a minor problem on surfaces that should be addressed as part of routine property maintenance.

3.6. Contamination of soil from building materials

3.6.1 Materials such as concrete, cement, oil, fuel, bitumen and vehicle washings are toxic to tree roots and may have serious implications for tree health if allowed to leach into the soil.

3.6.2 Wherever possible, materials must not be stored or discharged within RPAs or 10m of a tree stem (whichever is greater). Where there is a risk of contamination of RPAs suitable precautionary and pollution control measures must be put in place. This includes use of impermeable membranes, bunds and spill kits at appropriate locations to effectively control and clear up accidental spillage or pollution incidents.

4. Tree Protection

4.1 The majority of tree roots generally occur in the top metre of soil and may extend well beyond the canopy spread. The principal causes of damage to trees during development works are from root severance during excavation work, soil compaction from site vehicles and ground level changes. It is therefore essential that suitable tree protection is installed before any equipment, machinery or materials are brought onto the site and maintained for the duration of the development.

4.2 The tree protection fencing should be erected at the locations identified on the tree protection plan (Appendix B) and in accordance with BS 5837:2012 paragraph 6.2.2.3 and Fig 3. This is defined as “heras panels”, supported by stabiliser struts, attached to a base plate and secured with ground pins.

4.3 Once erected, the barriers and construction exclusion zone (CEZ) within should be regarded as sacrosanct and should not be removed or altered without consent from the LPA or project arboriculturist.

4.4 The protective fencing should remain in place until all excavation and hard landscaping works have been completed and equipment, machinery and surplus materials have been removed from the site. The fencing can then be removed with agreement of the arboricultural consultant to enable completion of any soft landscaping works.

5. Legal Constraints and Planning Policy

5.1 It is understood that the property is not within a conservation area and there are no tree preservation orders on the site. Confirmation should be obtained from the LPA prior to carrying out any tree works not approved as part of a planning application.

5.2 All tree work should be undertaken by a suitably qualified and experienced arboricultural contractor in accordance with BS 3998:2010 Treework – Recommendations.

5.3 Attention is drawn to the Wildlife and Countryside Act 1981 (as amended), Countryside and Rights of Way Act 2000, and The Conservation of Habitats and Species Regulations 2017. These acts and regulations provide statutory protection for listed species of flora and fauna. Of particular relevance to tree work is the comprehensive protection afforded to birds and bats. This has implications for timing of works, as well as the requirement for surveys and licences in certain cases.

5.4 National and local planning policies relevant to this report include:

- National Planning Policy Framework Feb 2019: 15. Conserving and enhancing the natural environment
- Mendip District Council Local Plan Part I: Strategy and Policies (December 2014)
  DP1: Local Identity and Distinctiveness

6. Arboricultural Method Statement

6.1. Scope

6.1.1 This Method Statement outlines measures for protection of retained trees during the course of the development. It is intended to be a standalone document for use during the implementation of the proposed works.

6.1.2 Copies of the Arboricultural Method Statement document will be available for inspection on site and will form the basis of the management of all works relating to the trees on the site following commencement of the project.

6.2. Site location

Le Brace
Pond Lane
Emborough
Radstock
BA3 4SE

6.3. Contact details

6.3.1 Applicants
Dave and Charly Kimber

6.3.2 Agent
Simon Hill – Ink Architecture
6 Fair Close, Norton St Philip, Bath, BA2 7LD
Email: simon@ink-architecture.co.uk Tel: 07795 035725

6.3.3 Main contractor
To be confirmed

6.3.4 Arboricultural consultant
Alltree
Cutlers Green, Chewton Mendip, Somerset, BA3 4NE
Email: info@alltree.co.uk Tel: 01761 241871

6.3.5 Local planning authority
Mendip District Council
Cannards Grave Road, Shepton Mallet, BA4 5BT
Email: bo.walsh@mendip.gov.uk Tel: 0300 303 8588

6.4. Works programme

Order of works requiring arboricultural supervision or advice	
1	Pre-commencement site meeting (sec. 6.5)
2	Arboricultural works (sec. 6.6)
3	Installation of tree protection fencing (sec. 6.7) in accordance with tree protection plan (TPP) drawing no. 21441-LB-TPP-SK01
4	Excavation for realignment of driveway within Root Protection Areas (RPAs) (sec. 6.9)
5	Removal of tree protection barriers (sec. 6.7)
6	Soft landscaping (sec. 6.10)
7	Site inspection and sign off (sec. 6.5)

6.5. Supervision and monitoring

6.5.1 The appointed arboricultural consultant will be responsible for the supervision and monitoring of all operations relating to protection of the trees on site.

6.5.2 A pre-commencement meeting will be arranged with the project team to agree site logistics and ensure that all tree protection measures are understood. The site manager will be responsible for ensuring that these are implemented and adhered to for the duration of the development.

6.5.3 A record of site visits will be completed by the arboricultural consultant using a standard proforma. Copies of each site visit report will be forwarded to the site agent, client and Local Planning Authority (LPA) if required.

6.5.4 N.B. It is the responsibility of the main contractor to give the appointed arboriculturist reasonable notice of activities requiring advice or site supervision.

6.6. Arboricultural works

6.6.1 The schedule of works in Appendix A sets out recommended felling and remedial work.

6.6.2 All tree work will be carried out before commencement of any other site operations including the erection of protective barriers.

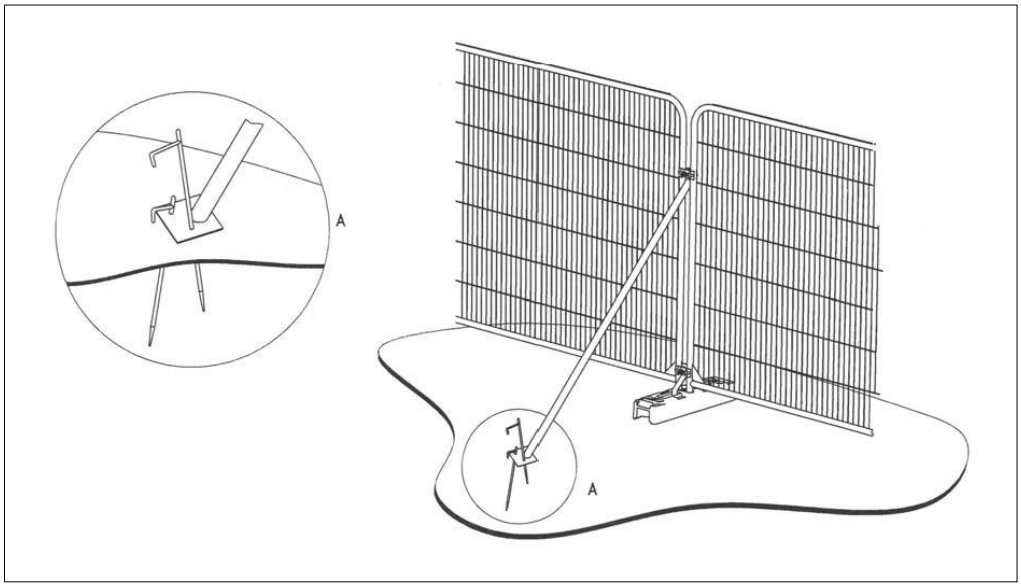
6.6.3 All works will be carried out in accordance with BS 3998:2010 ‘Tree work - Recommendations’.

6.6.4 All tree work will be undertaken with due regard to the Wildlife and Countryside Act 1981 (as amended), Countryside and Rights of Way Act 2000 and The Conservation of Habitats and Species Regulations 2017.

6.7. Protective fencing

6.7.1 Before any equipment or materials are brought onto the site, protective barriers will be erected in locations identified on the TPP (Appendix B).

6.7.2 The protective barriers will be erected in accordance with BS 5837:2012 Paragraph 6.2.2.3 and Fig 3 (see below). This will comprise "heras panels", supported by stabiliser struts, attached to a base plate and secured with ground pins.



Specification for protective barrier taken from Fig 3 a) BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations

6.7.3 All-weather exclusion site notices will be fixed to the fencing panels (see Appendix C).

6.7.4 Once the fencing is in place the arboricultural consultant will undertake a site inspection and produce a site report as outlined in section 6.5.3.

6.7.5 With the exception of works detailed in this method statement and/or approved by the LPA, no excavation, construction or storage of materials will take place within the exclusion zone (as defined by the protective fencing) for the duration of the development works.

6.7.6 Once the protective barriers have been erected, no panels shall be temporarily removed without prior consent from the LPA tree officer and supervision of the arboricultural consultant.

6.7.7 The protective fencing will remain in place until all construction works have been completed and equipment and surplus materials have been removed from the site. The fencing will be then removed with agreement of the arboricultural consultant to enable completion of any soft landscaping works.

6.8. Site access, plant and machinery, site compound

6.8.1 Access for vehicles will be via the existing site access on Pond Lane.

6.8.2 Storage of materials, parking and welfare facilities will be located on existing hardstanding outside the RPAs of trees and hedges.

6.9. Excavation for realignment of driveway within RPAs

6.9.1 All excavation within RPAs will be carried out under supervision of the project arboriculturist.

6.9.2 The inner line of the excavation for the drive realignment will be set out and marked with hi-viz paint.

6.9.3 Excavation will be undertaken using hand tools or air spades only. If ground conditions are suitable, air spades are the most effective tool for removing soil around roots with minimal damage. Where this is not possible hand forks and trowels will be used close to roots. Great care will be taken to avoid bark damage to retained roots.

6.9.4 Roots under 25mm will be pruned back to the face of the excavation using clean pruning saws or secateurs. Should roots be encountered over this diameter, the arboriculturist will determine whether they may be pruned or retained. The exposed roots will be covered with damp hessian and protected from direct sunlight to avoid desiccation.

6.9.5 When the arboriculturist is satisfied that there is no further root activity, excavation may proceed using a using a lightweight excavator and toothless bucket.

6.9.6 A pollution control geotextile membrane will be laid over the excavated face to prevent contamination of soil and roots from cement.

6.10. Underground services

All new underground services, including soakaways, will be connected to existing or located outside RPAs of retained trees.

6.11. Soft landscaping, tree planting and maintenance

6.11.1 All soft landscaping will be undertaken after completion of the main construction phase.

6.11.2 All topsoil, seeding and/or turfing work within RPAs will be undertaken manually. No vehicles or plant shall enter RPAs.

6.11.3 New trees will be planted during the first available planting season after completion of the construction phase.

6.11.4 Trees will be planted and maintained in accordance with BS 8545:2014 Trees: from nursery to independence in the landscape – Recommendations and Section 10.2 of the National Plant Specification - 'Handling and Establishing Landscape Plants' (HTA).

6.11.5 Tree pits and planting areas will be prepared manually and protected from soil compaction.

6.11.6 Tree pits will be square with minimum diameter 25% greater than that of the root ball and 100mm deeper. Pit base and sides will be manually broken up if glazed.

6.11.7 Rootballs will be watered to saturation prior to planting and the trees positioned with the top of the root ball at existing soil level.

6.11.8 Trees will be secured with double stakes and flexible strapping.

6.11.9 New hedging will be 60-80cm (ht), planted in a double staggered row at a minimum of four plants per metre, with canes and spiral rabbit guards.

6.11.10 Trees and hedging will be mulched to a depth of 75mm in order to maintain a one metre radius weed-free zone and to conserve moisture.

6.11.11 Trees and hedging will be inspected regularly to ensure that a one metre radius weed-free area is maintained and the trees are securely anchored for a period of two years. Stakes/ties shall be removed as appropriate when deemed to be no longer necessary.

6.11.12 During the first two growing seasons, trees and hedging will be irrigated to field capacity every week in periods of dry weather. Should any tree fail, it will be replaced with a similar size and species in the first available planting season.

6.12. General precautions

6.12.1 Protective fencing must not be removed or altered without prior consultation with either the LPA or the project arboriculturist.

6.12.2 Other than supervised works specified in this Arboricultural Method Statement no unauthorised access or excavation will take place within RPAs.

6.12.3 Materials such as concrete, cement, oil, fuel, bitumen and vehicle washings are toxic to tree roots and may have serious implications for tree health if allowed to leach into the soil. Wherever possible they must not be stored or discharged close to trees. Where there is a risk of contamination of RPAs suitable precautionary and pollution control measures must be put in place. This includes use of impermeable membranes, bunds and spill kits at appropriate locations to effectively control and clear up accidental spillage or pollution incidents.

6.12.4 Builder's sand, which contains salt, is toxic to tree roots and must not be used to backfill excavations close to trees. Sharp sand should be used.

6.12.5 No notice boards, cables or other services will be attached to any tree.

6.12.6 Cranes, tippers and truck-mounted loaders must be positioned away from tree canopies to avoid damage to aerial parts.

6.12.7 No fires will be lit on site of any kind.

6.12.8 No tree pruning may be undertaken by anyone other than a suitably qualified and experienced tree contractor. All work must be approved in writing by the LPA.

6.12.9 Any physical damage caused to a tree must be reported to the site agent immediately.

6.12.10 Damage to protective fencing must be reported to the site agent immediately to ensure prompt repair.

6.13. Contingency plans

6.13.1 In the event of any incidents occurring that may adversely affect tree health, the site agent shall inform the arboricultural consultant at the earliest opportunity and not more than one working day following the incident.

6.13.2 The arboricultural consultant will visit the site to inspect and assess the circumstances and make any appropriate recommendations. The LPA tree officer will be informed and any remedial action will be submitted for approval.

6.13.3 Incidents that may merit such contingency plans include:

- Accidental/unauthorised damage to the limbs, roots or trunk of trees
- The discharge/spillage of toxins/waste within or adjacent to a Root Protection Area
- Unauthorised breaching of a tree protective barrier or Construction Exclusion Zone

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Appendix A

Tree schedule and schedule of works

Table 1 Cascade Chart for tree quality assessment taken from BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations.

Tree / group number	Species	Height (m)	Stem diameter (mm)	RPA radius (m)	Branch spread radius (m)				Canopy Height (m)	First significant branch height (m) & direction	Life stage	Physiological condition	Structural condition	Condition and site notes	Management recommendations & *Schedule of works in light of proposed development*	Estimated remaining contribution (Yrs.)	Retention category
					N	S	E	W									
1	Common ash	16.0	900 est.	10.8	8.0	10.0	7.0	9.0	5.0	7.0 S	OM	P	F	Off site. No access to inspect. Ivy. Early ash dieback disease (AHC1). Shed primary branch	-	<10	U
2	Common beech	13.0	350 m/s calc.	4.2	7.0	6.0	6.0	4.0	1.5	2.0 S	SM	G	F	Multi-stem hedge remnant. Squirrel damage	*Crown lift to 4m on south aspect*	10+	C2
G3	Common beech	12.0	300	3.6	6.0	6.0	4.0	7.0	1.0	2.5 S	SM	G	F	Two trees. Multi-stem hedge remnants. Ivy. Squirrel damage	*Crown lift to 4m on south aspect*	10+	C2
4	Western red cedar 'Zebrina'	3.0	75	0.9	2.0	2.0	2.0	2.0	0.0	-	SM	G	F	-	*Remove to facilitate drive realignment*	10+	C2
G5	Rhododendron	4.0	75	0.9	2.0	1.0	2.0	2.0	0.0	-	SM	G	F	Two ornamental shrubs	*Remove to facilitate drive realignment*	10+	C2
G6	Sycamore	4.5	100	-	2.0	3.0	3.0	3.0	1.0	1.0 S	SM	P	P	Three trees topped at 3m due to extensive squirrel damage	Remove and replant boundary with native hedge and trees	<10	U
G7	Sycamore	6.0	350	-	3.0	5.0	3.0	3.0	1.0	1.0 S	SM	P	P	Two tree topped at 3m due to utility wires. Extensive squirrel damage. Broken suspended limbs. Very poor condition	Remove and replant boundary with native hedge and trees	<10	U

Tree / group number	Species	Height (m)	Stem diameter (mm)	RPA radius (m)	Branch spread radius (m)				Canopy Height (m)	First significant branch height (m) & direction	Life stage	Physiological condition	Structural condition	Condition and site notes	Management recommendations & *Schedule of works in light of proposed development*	Estimated remaining contribution (Yrs.)	Retention category
					N	S	E	W									
8	Apple	10.0	170 m/s calc.	2.0	3.0	3.0	3.0	2.0	1.5	1.0 E	EM	F	F	Multi-stem	*Remove to facilitate drive realignment*	10+	C2
9	Copper beech	11.0	400	4.8	5.0	6.0	7.0	3.0	1.5	1.0 S	SM	F	F	Extensive squirrel damage. Tree house	*Crown lift to 5m over drive*	10+	C2
10	Copper beech	12.0	450	5.4	5.0	5.0	3.0	2.0	1.0	1.5 S	SM	F	F	Ivy. Squirrel damage	*Crown lift to 5m over drive*	10+	C2
11	Leyland cypress	14.0	450	5.4	3.0	4.0	3.0	2.0	0.0	-	EM	F	F	Exposed roots on south aspect. Ivy	*Crown lift to 5m over drive*	10+	C2
12	Sycamore	7.0	750	-	3.0	3.0	3.0	3.0	2.0	2.0 S	OM	P	P	Decayed/hollow monolith topped at 4m. Squirrel damage. Habitat value	Remove all soft growth back to stem	<10	U
13	Sycamore	6.0	600	-	2.0	2.0	1.0	3.0	2.0	2.5 W	OM	P	P	Decayed ivy clad stem topped at 4m. No access to inspect in detail. Squirrel damage. Broken suspended limbs	-	<10	U
14	Cherry	4.0	180	-	2.0	3.0	2.0	2.0	1.5	1.0 N	SM	P	P	Moribund	Fell	<10	U
15	Ash-leaved maple	11.0	300	3.6	6.0	5.0	5.0	5.0	1.8	1.2 W	EM	F	F	-	*Crown lift to 3m*	10+	C1

Tree / group number	Species	Height (m)	Stem diameter (mm)	RPA radius (m)	Branch spread radius (m)				Canopy Height (m)	First significant branch height (m) & direction	Life stage	Physiological condition	Structural condition	Condition and site notes	Management recommendations & *Schedule of works in light of proposed development*	Estimated remaining contribution (Yrs.)	Retention category
					N	S	E	W									
G16	Cherry laurel	10.0	200 av.	2.4	6.0	6.0	6.0	5.0	0.0	-	M	G	F	Two multi-stem groups overhanging site. Potential screening	Coppice and manage regrowth at approximately 2m-3m height	10+	C2
17	Kanzan cherry	8.0	300	-	6.0	4.0	3.0	4.0	2.0	2.5 N	OM	P	P	Crown dieback. Major dead wood. Tree in decline	Fell	<10	U
18	Apple	8.0	200	-	2.0	2.0	2.0	2.0	2.0	1.5 N	M	P	P	Poor condition	Fell	<10	U
G19	Leyland cypress	13.0	450	5.4	5.0	5.0	5.0	4.0	3.0	1.0 E	M	F	F	Two trees topped at 8m	-	10+	C2
G20	Rowan Hazel	8.0	200	2.4	1.0	3.0	4.0	3.0	0.0	-	EM	F	F	Suppressed by G16. Overhanging site to east	*Prune back and crown lift to 5m over site*	10+	C2
21	Silver birch	10.0	280	3.4	2.0	3.0	3.0	3.0	1.0	1.0 S	SM	F	G	-	-	10+	C1
22	Cherry	10.0	300	3.6	2.0	4.0	3.0	4.0	1.5	1.2 E	SM	G	G	Minor dead wood	-	10+	C1
23	Damson	8.0	180	2.2	2.0	3.0	3.0	3.0	1.0	1.0 E	SM	F	F	*Phelinus sp.* fruit bodies	-	10+	C1

Tree / group number	Species	Height (m)	Stem diameter (mm)	RPA radius (m)	Branch spread radius (m)				Canopy Height (m)	First significant branch height (m) & direction	Life stage	Physiological condition	Structural condition	Condition and site notes	Management recommendations & *Schedule of works in light of proposed development*	Estimated remaining contribution (Yrs.)	Retention category
					N	S	E	W									
24	Bay laurel	5.0	150 m/s calc.	1.8	1.0	3.0	2.0	3.0	0.0	-	EM	G	F	Multi-stem	*Remove to facilitate development*	10+	C2
G25	Common beech	13.0	300 av.	3.6	6.0	8.0	6.0	6.0	1.0	1.5 N	SM	G	F	Linear group of approx. 20 stems. Overgrown/unmanaged hedgerow	*Remove three stems at western end of group to facilitate development* *Crown lift to 4m over drive*	20+	B2
G26	Common ash	15.0	350	-	5.0	5.0	5.0	5.0	5.0	5.0 N	SM	P	F	Two stems. Ash dieback disease (AHC2)	Fell	<10	U
27	Common beech	10.0	200 m/s calc.	2.4	4.0	2.0	3.0	3.0	1.0	1.0 N	SM	F	F	Multi-stem	-	10+	C2
28	Common holly	6.0	350	4.2	2.0	4.0	2.0	3.0	0.0	-	EM	P	P	Dense ivy	-	10+	C2
G29	Hawthorn Hazel Holly Blackthorn	10.0	250	3.0	3.0	3.0	3.0	3.0	0.0	-	M	F	F	Dense ivy	*Prune back to boundary fence*	10+	C2
30	Common ash	17.0	550 est.	-	7.0	2.0	6.0	3.0	2.5	5.0 N	EM	P	P	Off site. No access to inspect. Ash dieback disease (AHC3)	-	<10	U

Tree / group number	Species	Height (m)	Stem diameter (mm)	RPA radius (m)	Branch spread radius (m)				Canopy Height (m)	First significant branch height (m) & direction	Life stage	Physiological condition	Structural condition	Condition and site notes	Management recommendations & *Schedule of works in light of proposed development*	Estimated remaining contribution (Yrs.)	Retention category
					N	S	E	W									
31	Common alder	18.0	500 est.	6.0	4.0	3.0	3.0	3.0	5.0	5.0 N	EM	G	G	Off site. No access to inspect	-	10+	C2
32	Common ash	17.0	500 est.	-	4.0	4.0	4.0	4.0	4.0	4.0 N	EM	F	F	Off site. No access to inspect. Early ash dieback disease (AHC1)	-	<10	U
33	Common ash	17.0	600 est.	-	5.0	5.0	4.0	5.0	1.0	2.0 N	EM	F	F	Off site. No access to inspect. Early ash dieback disease (AHC1)	*Crown lift to 3m over site*	<10	U

Key to Schedule

Height (m)		Height in metres measured with a clinometer	
Stem Diameter (mm)		Stem diameter (mm) measured at 1.5 metres or immediately above root flare for multi stem trees and rounded to nearest 10mm.	
m/s calc.		Trees with more than one stem are given a calculated combined stem diameter (mm) to determine the RPA in accordance with BS 5827:2012 sec. 4.6.1	
est.		Estimated dimension for inaccessible/off site trees	
RPA Radius (m)		Root Protection Area as a radius from tree stem in metres	
Branch Spread Radius m)		Branch spread in metres as radius from stem taken at the four cardinal points (N, S, E, W)	
Canopy Height (m)		Existing height of tree canopy above ground level measured in metres	
First Significant Branch Height & direction		Existing height of first significant branch above ground level and direction of growth	
Life Stage	Y	Young	Newly planted tree 0-10yrs
	SM	Semi-mature	Tree in first third of normal life expectancy for species
	EM	Early Mature	Tree in second third of normal life expectancy for species
	M	Mature	Tree in final third of normal life expectancy for species
	OM	Over mature	Tree beyond normal life expectancy for species
	V	Veteran	Tree that is of interest biologically, aesthetically or culturally because of its age, size or condition
Physiological Condition		Good	Fully functioning biological system with normal extension growth, leaf/bud size, crown density, incremental growth for species
		Fair	Fully functioning biological system but displaying below average extension growth, leaf/bud size, crown density, incremental growth for species.
		Poor	Biological system with low functionality symptoms include: - poor extension growth, small and/or chlorotic leaves, small buds, limited incremental growth, sparse crown and/or die back.
Structural Condition		Good	Tree without any significant structural defects
		Fair	Tree with minor defects that may be remedied with appropriate management.
		Poor	Tree with significant defects that cannot be remedied
Ash Health Class (AHC)		Ash Health Class (AHC) 1. 100% - 75% remaining canopy	Ash Health Class (AHC) 2. 75%-50% remaining canopy
		Ash Health Class (AHC) 3. 50%-25% remaining canopy	Ash Health Class (AHC) 4. 25%-0% remaining canopy
Retention Category		Trees categorised in accordance with BS 5837: 2012 Trees in relation to design, demolition and construction - Recommendations Table 1 Cascade chart for tree quality assessment	

BS 5837: 2012 Trees in relation to design, demolition and construction - Recommendations Table 1 Cascade chart for tree quality assessment

Category and Definition	**Criteria (including subcategories where appropriate)**			**Identification on Plan**
Trees unsuitable for retention (see note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• 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 U category trees (e.g.. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve;			**DARK RED**
Trees to be considered for retention				
	1 Mainly arboricultural values	**2 Mainly landscape values**	**3 Mainly cultural values, including conservation**	
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	**LIGHT GREEN**
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and storm damage) such that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	**MID BLUE**
Category C **Tree of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	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 landscape value, and/or trees offering low or only temporary/transient landscape benefits	Trees with no conservation or other cultural value	**GREY**

Appendix B

Tree Protection Plan - Drawing no. 21441-LB-TPP-SK01

Symbol Guide

- Root protection area
- Canopy spread
- Tree position (colour represents retention category)
- Tree number
- Tree To Be Removed

BS 5837:2012 - Tree Category

- Category A Trees — High quality
- Category B Trees — Moderate quality
- Category C Trees — Low quality
- Category U Trees — Poor quality/remove

Tree Protection Fencing

Young Sycamore <75mm

Precautionary area - Works within root protection areas to be supervised by arboriculturist

New boundary planting: Mixed native hedging @ 4 plants per metre with specimen trees @ 5m centres

Precautionary area - Works within root protection areas to be supervised by arboriculturist

Blackthorn, Sycamore <150mm

Shrubs

Trees to be removed

Understorey shrubs to be pruned back to boundary to facilitate fence installation

Proposed Parking & Turning finished in loose gravel

Existing parking and turning for dwelling

Proposed Single Storey Kennels Building

Existing FW drainage and Treatment

1.8m High green mesh fencing to perimeter of exercise field

T1 T2 G3 G4 G5 G6 G7 T8 T9 T10 T11 T12 T13 T14 T15 G16 T17 T18 G19 G20 T21 T22 T23 T24 G25 T26 T27 T28 G29 T30 T31 T32 T33

0 10 20m

NOTE
ALL TREE POSITIONS ARE APPROXIMATE

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Client :
Dave and Charly Kimber

Agent:
Ink Architecture

Site:
Le Brace
Pond Lane, Emborough
Radstock BA3 4SE

Drawing Title :
TREE PROTECTION PLAN

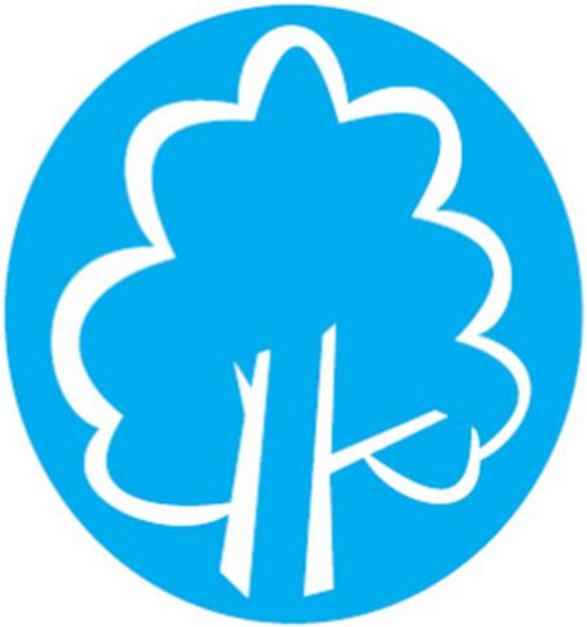
Scale 1:250 @ A3

Date August 2021

Drawing No.
21441-LB-TPP-SK01

Appendix C

All weather construction exclusion zone site notice example



PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

TREE PROTECTION AREA

KEEP OUT !

(TOWN & COUNTRY PLANNING ACT 1990)

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.

CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY