TREE SURVEY

Site – Land at Deerfields Farm, Canal Lane, Bodicote, Banbury OX15 4AD

Key to Survey

Height	Estimated or measured with clinometer where considered critical
Crown spread (at cardinal points)	In metres
Remaining Contribution	Estimated number of years the tree may contribute in a safe condition
Main Stem Diameter	Measured at 1.5 metres above ground or in accordance BS5837: 2012 Annex C and D.
Condition	Good = No visible defects seen Reasonable = Some defects seen but none that contribute significantly to the overall health and safety of the tree Poor = Defects or health issues that contribute significantly to the overall health and safety of the tree
Age Class	Y = Young (Less than 1/3 of normal expected life) SM = Semi-mature (1/3 - 2/3 of normal expected life) M = Mature OM = Over-mature or in decline V = Veteran
RPA (Radius)	Distance in metres from centre of tree to achieve a circular Root Protection Area
RPA (Area)	Root Protection Area in square metres.

Grading Categories:

U	Trees in poor condition; value lost within 10 years; serious defects, dead, in irreversible decline, infected with pathogens significant to health of other trees nearby
A1	Trees of high quality and value; offering at least 40 years' contribution; particularly good example of species
A2	Trees of high quality and value; offering at least 40 years' contribution; screening or softening effect
A3	Trees of high quality and value; offering at least 40 years' contribution; conservation, historical or other value
B1	Trees of moderate value; offering at least 20 years' contribution; slightly impaired condition but remediable
B2	Trees of moderate value; offering at least 20 years' contribution; distinct landscape feature as a group or woodland.
B3	Trees of moderate value; offering at least 20 years' contribution; trees with clearly identifiable conservation or other cultural benefits.
C1	Trees of low quality and value; at least 10 years' contribution; trees not qualifying in higher categories
C2	Trees of low quality and value; at least 10 years' contribution; groups or woodlands without significant landscape value, trees of low or temporary landscape value
C3	Trees of low quality and value; at least 10 years' contribution; trees with limited conservation or other value

Recommendation: Recommended course of action made irrespective of proposed site layout.

The root systems of the trees were not inspected

ref.	Species	Age Class	Ø m/s	Height	Lower crown height	Grade	Crown Spread N	Crown Spread S	Crown Spread E	Crown Spread W	RPA radius	RPA (m2)	Remaining Contribution	Condition	Comments	Recommendations made at time of survey, irrespective of any layout
Group A	Leyland Cypress	Y	50	3	0	C2	0.6	0.6	0.6	0.6	0.6	1.1	40+	Good	Young hedge planted inside fence boundary.	No work required
Group B	Various	M	500	11	0	B2	5	5	5	5	6	113.1	40+	Reasonable	Partially lapsed hedge, trimmed to side only up to 4m. Species include Field Maple, Blackthorn, Hawthorn, Plum, Hazel, Ash and Ivy. Evidence of historical laying. Provides screening of adjacent development.	Consider managing larger tree species such as Ash
3898	Common Oak	M	740	18	4.5	B1	7	8	7	7	8.88	247.7	40+	Good	Pruned to lift crown high over adjacent development. Very small amount of dead wood but otherwise no visible defects seen.	Retain with space. No work required.
Group C	Various	M	400	4	0	B2	2	0.5	1	1	4.8	72.4	40+	Reasonable	Similar composition to Group B but managed in height and spread over neighbouring property.	No work required
Group D	Various	M	500	10	0	B2	6	6	6	6	6	113.1	40+	Reasonable	Lapsed hedge comprising Hawthorn, Field Maple, Ash and Ivy. Historically laid and partially coppiced in places. Good screen for adjacent development. Note future growth potential of Ash.	Consider controlling height of Ash

ref.	Species	Age Class	Ø m/s	Height	Lower crown height	Grade	Crown Spread N	Crown Spread S	Crown Spread E	Crown Spread W	RPA radius	RPA (m2)	Remaining Contribution	Condition	Comments	Recommendations made at time of survey, irrespective of any layout
Group E	Various	M	400	10	0	B2	5	5	5	5	4.8	72.4	40+	Reasonable	Partially lapsed hedge comprising Sycamore, Ash, Hawthorn and Field Maple. Historically cut at 1.5m. Historically laid.	No work required but could be cut as a hedge.
3899	Goat Willow	SM	180	8	0	C1	3	3	3	3	2.16	14.7	20+	Reasonable	Natural generation. Unlikely to be suitable for retention.	Fell and replace
Group F	Cherry Laurel	Y	150	2	0	C2	0.7	0.7	0.7	0.7	1.8	10.2	40+	Good	Regularly maintained as hedge at present dimensions.	No work required

NOTES: Based on survey drawing R-16325_201-202_issue01

KEY

- Grade A Trees
- Grade B Trees
- Grade C Trees
- Grade U Trees
- Extent of Root Protection Area
- Extent of Canopy
- Extent of Canopy - Groups
- Trees to be Removed
- Potential Extent of Canopy
- Shade Footprint
- Suggested Build Limit

Arboricultural Constraints

Root Protection Area

The Root Protection Area (RPA) is illustrated as a magenta circle or polygon around each tree or group of trees. This is the area where if the trees are retained, ideally no excavation should take place; the soil level should not be raised or lowered; no materials should be stacked; there must be no contamination and no services should be routed.

However, trees may be tolerant of some disturbance and recent advances in construction techniques can avoid causing significant damage to roots. This will depend on a number of factors including tree species and site conditions along with the type of construction methods available to the developer.

Shade or Light-Loss

The shade footprint that may be cast by trees identified for retention at an expected maximum height (given their individual circumstances) has been shown on the drawing as a hatched quadrant or general area where the quadrants merge. The shade area is based on a solar inclination of 45 deg, in line with the median suggested by BS5837. Building within the shade area can be acceptable where internal layout, fenestration or proposed use of buildings means they are not adversely affected by a lack of daylight received. Some shading may be welcomed in the summer when solar gain can make room temperatures uncomfortable.

Above Ground Constraints

The height of the lower crown above ground is shown in the survey. Lifting (or raising) the crown to a set height above ground in order to install fences, achieve clearance over the driveway or allow access for plant and machinery would be an acceptable arboricultural practice. Crown spread may in its self be a constraint where it is greater than the RPA radius. Reference must be made to the Tree Constraints Plan in Appendix 'B' or the data in the tree survey schedule in Appendix 'A'.

Trees on Neighbouring Land

Trees on neighbouring ground must be taken into consideration.

Future Growth

Where future radial growth is possible, this has been illustrated as a broken green line. The potential future height has been illustrated in the shade patterns drawn.

Suitability for Retention

In general, Grade 'A' and 'B' trees should be retained, especially if they offer a visual amenity to the wider community. It may be desirable to retain Grade 'C' trees where they can continue to offer a presence until they are replaced but they should not generally prevent an otherwise satisfactory layout from being achieved.

Statutory Protection

None of the trees surveyed are included in a TPO.

The site is not within a Conservation Area.

Design Objectives

Design a layout that takes account of the root protection areas of retained trees, with an aim to leave at least 5m beyond the radial extent of the RPA to make the practical execution of development feasible, (subject to other constraints) .

Design a layout that takes the shading and above ground constraints into account. Shady areas beyond the crown spreads of trees would be best for car parking. Gardens must receive direct sunlight over a reasonable proportion of the area (25% is suggested) to be satisfactory.

Service routes must be located outside of the RPAs of retained trees.

Implement a tree protection scheme before development (including demolition) starts on site.

Make provision for replacement planting within the landscape proposals.

Rev	Description	Date
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Purpose of Issue
Information Only

Andrew Belson
Arboricultural Consultant
29b High Street East
Uppingham
Oakham
LE15 9PY
t: 01572 823637
e: andrewmbelson@aol.com

Client
Royal HaskoningDHV

Project
Deerfields Farm, Canal Lane, Bodicote

Drawing Title
Tree Constraints and Masterplan Assessment

Drawn	Checked	Reviewed	Date
AMB	--	--	29/03/2018
Job No.	Scale	Sheet Size	Revision
3406	1:500	A1	

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