



# **West Winch Housing Access Road, Arboricultural Impact Assessment. Appendix A: Arboricultural Impact Assessment**

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## Contents

1	Introduction .....	3
1.1	Method of Baseline Data Collection .....	3
1.2	Desk Study .....	3
1.3	Walkover Survey .....	4
1.4	Quality Assessment.....	5
1.5	Notes and Limitations .....	9

## Tables

Table 1-1	– Category A sub-categories for arboricultural features with an estimated remaining contribution greater than 40 years .....	7
Table 1-2	– Category B sub-categories for arboricultural features with an estimated remaining contribution greater than 20 years .....	7
Table 1-3	– Category C sub-categories for arboricultural features with an estimated remaining contribution greater than 10 years .....	8
Table 1-4	–Category U arboricultural features of very low quality with an estimated remaining contribution less than 10 years .....	8



# 1 Introduction

## 1.1 Method of Baseline Data Collection

1.1.1 Baseline data collection has been undertaken with reference to BS 5837 and has been informed by the following data sources:

- An arboricultural desk study, and;
- A walkover survey of all arboricultural features within the Study Area.

## 1.2 Desk Study

1.2.1 The desk study for the Proposed Scheme was undertaken on 9 October 2023. The desk study reviewed existing arboricultural information available in the public domain. The desk-study has considered the following sources:

TPOs and conservation areas

1.2.2 Borough Council of King's Lynn and West Norfolk is responsible for implementing any legal controls imposed through TPOs and conservation areas within the Study Area. The location of TPOs and conservation areas is information publicly accessible on the Borough Council of King's Lynn and West Norfolk website (**Ref. 16** – refer to Section 4.9 of **4.04.00**).

Ancient woodland

1.2.3 The potential presence of ancient woodland within the Study Area was checked using the web based Multi Agency Geographic Information for the Countryside (MAGIC) database (**Ref. 17** – refer to Section 4.9 of **04.04.00**).

Ancient and veteran trees

1.2.4 The potential presence of ancient and veteran trees within the Study Area was checked on using the Woodland Trust's Ancient Tree Inventory (**Ref. 18** – refer to Section 4.9 of **4.04.00**) and site-verified by a qualified arboriculturist.



### 1.3 Walkover Survey

- 1.3.1 A walkover survey was undertaken on 8 to 10 August 2023 following initial surveys undertaken in August 2021. 89 individual tree stem locations have been plotted to topographical survey information. These are T6-T9, T12-T13, T15-T17, T20, T22-T23, T26, T29-T31, T32-T33, T35-T37, T41, T43, T45-T51, T53, T58-T67, T69-T70, T79, T86, T90, T94, T96, T100, T105, T107-T117, T123, T125, T134, T138, T140-T142, T146, T150, T153-T154, T161-T163, T179-T185, T187-T190, T192, T194 and T196. In instances where topographical data is unavailable then features have been positioned using aerial imagery and Ordnance Survey base mapping. In these instances, locations should be considered as approximate only and will have an assumed accuracy of up to five metres.
- 1.3.2 Where walkover access to vegetation was restricted, stem diameters have been estimated as indicated by the 'e' suffix in the Arboricultural Survey Schedule of **Appendix B**.
- 1.3.3 Land access was not available for eight arboricultural features (G168-G175) and have been remotely surveyed using recent street view imagery from March 2023.
- 1.3.4 The walkover survey was undertaken in accordance with the following criteria:
- Arboricultural features have been recorded as tree groups where this has been deemed appropriate. Tree groups have been recorded on the basis that they form distinct arboricultural features either aerodynamically, visually or because they contain trees of similar cultural and biodiversity value.
  - Wooded areas were recorded on the basis of their corresponding location with the 'Priority Habitat Inventory - Deciduous Woodland (England)' dataset (last updated 26 July 2023) of MAGIC (**Ref. 17** – refer to Section 4.9 of **4.04.00**).



- Hedgerows have been recorded where they form substantial internal or boundary features and contain individual tree stems of 75mm stem diameter and over.
- The trees have been visually inspected from ground level only.
- No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- Tree heights and crown spreads have been estimated to the nearest 1m.
- Notes have been recorded where they relate to the quality of the arboricultural feature.
- Stem diameters have been measured in accordance with Annex C of BS 5837 (**Ref. 10** – refer to Section 4.9 of **4.04.00**).
- Diameters of single stem trees on level ground have been measured at 1.5m above ground level. The diameters of other commonly encountered stems have been measured as per the guidance. The combined stem diameters for multi-stemmed trees have been calculated in accordance with Section 4.6.1 of BS 5837 (**Ref. 10** – refer to Section 4.9 of **4.04.00**).
- By default, Root Protection Areas (RPAs) are calculated as an area equivalent to a circle with a radius 12 times the stem diameter and are capped at a distance of 15 metres.
- Following UK Government standing advice (**Ref. 11** – refer to Section 4.9 of 4.04.00), the RPA for ancient and veteran trees is a buffer with a radius of 15 times the stem diameter with no radial distance cap.

## 1.4 Quality Assessment

- 1.4.1 The quality of arboricultural features has been determined in accordance with BS 5837's Table 1 - Cascade Chart for Tree Quality Assessment (see text



copies in **Tables 1-1 to 1-4** overleaf). The quality and sub-category assigned to each arboricultural feature are identified within the Arboricultural Survey Schedule included in **Appendix B**.

- 1.4.2 The purpose of the quality assessment is to enable informed decisions to be made regarding the removal and retention of arboricultural features in the context of development. For an arboricultural feature to be assigned a particular quality category it should accord with descriptions provided in **Tables 1-1 to 1-4**.
- 1.4.3 The quality of each arboricultural feature is defined based on its sub-category. Sub-categories carry equal weight, do not influence retention priority and are simply included to indicate the primary value associated with each surveyed item. Sub-categories 1, 2 and 3 are intended to reflect arboricultural, landscape and cultural values, respectively.

**Table 1-1 – Category A sub-categories for arboricultural features with an estimated remaining contribution greater than 40 years**

<b>Sub-category</b>	<b>Qualities</b>	<b>Description</b>
1	Arboricultural	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).
2	Landscape	Trees, groups, or woodlands of particular visual importance as arboricultural and/or landscape features.
3	Cultural	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture).

**Table 1-2 – Category B sub-categories for arboricultural features with an estimated remaining contribution greater than 20 years**

<b>Sub-category</b>	<b>Qualities</b>	<b>Description</b>
1	Arboricultural	Trees that might be included in Category A, but are downgraded because of impaired condition, such that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the special quality necessary to merit Category A designation.
2	Landscape	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.
3	Cultural	Trees with material conservation or other cultural value.



**Table 1-3 – Category C sub-categories for arboricultural features with an estimated remaining contribution greater than 10 years**

Sub-category	Qualities	Description
1	Arboricultural	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
2	Landscape	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.
3	Cultural	Trees with no material conservation or other cultural value.

**Table 1-4 –Category U arboricultural features of very low quality with an estimated remaining contribution less than 10 years**

Sub-category	Description
None	Trees that have serious irremediable structural defects; Trees that are dead or are showing signs of immediate and irreversible physiological decline; or, Trees infected with significant pathogens or very-low quality trees suppressing specimens of better quality.





## 1.5 Veteran tree assessment methodology

1.5.1 Veteran trees (of which ancient trees are a sub-set in tree classification terms) were assessed according to tree girth and species information set out in Figure 1.3. of *Ancient and other veteran trees: further guidance on management* (Ref. 12– refer to Section 4.9 of **4.04.00**) plus observed physical features that include but are not limited to:

- extensive decay/hollowing;
- crown retrenchment/senescence;
- large quantity of crown deadwood;
- major limb fractures/storm damage;
- habitat spaces such as decay holes/hazard splits/crevices;
- aerial rooting;
- presence of wood decay fungi, sap runs/bark flux;
- presence of epiphytic plants/lichens;
- bark loss; and
- natural water pools.

1.5.2 The section NPPF (Ref. 7 – refer to Section 4.9 of **4.04.00**) defines an ancient or veteran tree:

*“A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage”.*



## 1.6 Notes and Limitations

- 1.6.1 Arboricultural survey data is of a preliminary nature and has been collected based on a walkover survey.
- 1.6.2 Only defects visible from the ground have been noted and each individual feature may not have been inspected closely due to access difficulties, the presence of dense ivy, other vegetation or safety constraints. Safety related features have not been recorded on the basis that the arboricultural features will be subject to a normal programme of tree hazard assessment and only those features which materially affect the quality of the feature or pose a real and immediate safety concern have been recorded.
- 1.6.3 Arboricultural survey data is typically valid for a period of two years unless otherwise stated. Significant environmental events (such as extreme weather conditions) or changes to the site may render it invalid within a shorter timescale.
- 1.6.4 Records held on the Ancient Tree Inventory are collected on a voluntary basis, therefore the absence of records does not demonstrate the absence of ancient or veteran trees but may simply indicate a gap in recording coverage. The Ancient Tree Inventory is hosted by the Woodland Trust and is part of a citizen science project which enables members of the public and other interested organisations to record preliminary information regarding trees of note. Trees of note primarily include those which are of substantial size irrespective of whether they display veteran features.
- 1.6.5 Whilst arboricultural surveys are not seasonally limited it is the case that certain pests and diseases may be more or less evident at different times of the year. This is especially true of certain wood decaying fungi such as the Giant Polypore (*Meripilus giganteus*) where fruiting bodies are short-lived, and the early stages of root decay may not result in other identifiable symptoms. Walkover survey data is therefore based upon observations made at the time of the site visit and may be subject to change should further or more detailed inspections be undertaken.



- 1.6.6 The survey has only been undertaken from land within the client's ownership, from public land or from areas where formal access has been arranged.
- 1.6.7 The position of arboricultural features not recorded in a topographical survey has been estimated using aerial photography and Ordnance Survey Mastermap information. The position and extent of these features should be regarded as approximate only.