Tree Survey and Arboricultural Impact Assessment/Method Statement/Tree Protection

Land at Cross Lane Brancaster

Norfolk Trees

Summary

The purpose of this report is to consider the arboricultural implications of the proposed construction of 1 dwelling on land at Cross Lane Brancaster. In accordance with BS5837:2012, Trees in relation to design, demolition and construction, trees deemed to be within the influencing distance of the proposed development have been evaluated. As a result 1 individual trees and 3s group of trees were inspected. The arboricultural related implications of the proposal are as follows:

1 Implication on Demolition/ Construction – The proposed building does not infringe on the Root Protection Area (RPA of any retained trees)

2 Cultural Implications – No pruning will be required in order to facilitate the proposal, some maintenance pruning is likely to be required in the future to maintain adequate clearance between T1 and the proposed dwelling.

3 Landscape Implications – 1 group of low value trees/scrub will require removal in order to facilitate the new access point.

4 Post Development Implications – There are no significant post development implications relating to trees and the proposed development.

1.0 Terms of reference

1.1 The aim of this report is to assess the condition of trees that could potentially be affected by the proposed construction works. It is the purpose of the report to assess the importance of the surveyed trees within the landscape and to consider their protection during construction and proposed works based on recommendations contained in BS5837:2012, Trees in relation to design, demolition and construction.

1.2 Drawings were provided which included details of the proposed footprints. Tree positions were provided on architects drawings. For a more accurate drawing a topographical plan detailing tree positions would be required, however in this circumstance the plan is considered suitable.

2.0 Site Description

2.1 The site is an area of flat grass containing a tennis court. Cross lane runs along the northern boundary with Marsh side to the west. There are further dwellings located to the north, east, south and west. Trees are located on the northern and eastern boundaries with a hedge along the western boundary. Only one tree is located centrally within the site. The area is flat with no significant level changes

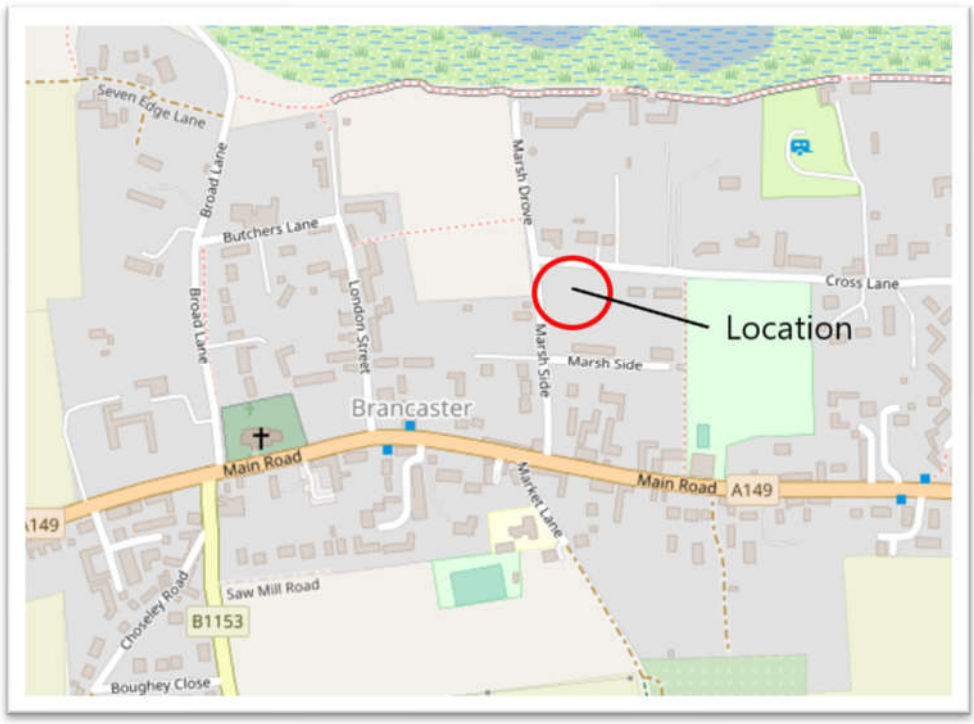


Figure 1. Site location

Figure 2.


G1 Retained


G2 to be removed
to create access
point

3.0 Tree Survey Details

3.1 All trees were inspected from ground level. No climbing inspections were undertaken.

3.2 The details recorded during the survey have been collected independently regardless of any development proposals. The categorisation of trees has been made solely on arboricultural grounds in accordance with BS5837:2012 Table 1.

RETENTION CATEGORY: Trees are classed as category U, A, B or C, based on criteria given in BS5837:2012; summary definitions as follow (see BS5837 for further details). Categories A, B and C are further characterised by the use of sub-categories: (1) refers to qualities of the tree of an arboricultural nature, (2) indicates qualities concerned primarily with their situation within the landscape and (3) refers to other values such as those of a cultural, historic or ecological nature. Examples of these qualities for each of the three categories are given below, although these are indicative only

U CANNOT BE RETAINED LONGER THAN 10 YEARS (●): Defective, poor or negligible specimens, not worthy of retention within a developed site. Trees whose existing value would be lost within 10 years, or which should be removed on grounds of sound Arboricultural management (e.g. trees that

will be left unstable by other essential works; poor quality that are trees suppressing better specimens*.)* **No tree Identified**

A TREES OF HIGH QUALITY (🟢): Important or valuable trees or groups of trees that are likely to make a substantial contribution to the locality for 40 years or more, Notably fine specimens; rare or unusual specimens; essential component trees within groups, semi-formal or formal plantings (e.g. dominant trees within an avenue etc.). Trees, groups or woodlands of particular screening benefit in relation to views into and out of the site; those of notable visual importance (including avenues & other features that may be assessed collectively as groups). Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees) **No tree identified**

B TREES OF MODERATE QUALITY (🔵): Trees or groups of some importance and likely to make a significant contribution for in excess of 20 years.
Fair quality but not notably fine; good specimens showing some impairment (e.g. remediable defects, minor storm damage or poor past management). Numbers of trees, groups or woodlands forming distinct landscape features that are of higher collective value than they would warrant as individuals (e.g. non category A trees within avenues). Also trees internal to the site that are of little visual impact within the wider locality. Trees, groups or woodlands with clearly identifiable conservation or other cultural benefits **2 Groups identified, G1 and G3. One Tree identified, T1**

C TREES OF LOW QUALITY (⚪): Trees or groups of rather low quality, but capable of retention for at least approx. 10 years, e.g. until new planting is established. Also small, young trees (below 15cm diameter) whose loss would be easily mitigated by new planting, or which would be capable of transplanting. Retainable (for the present), but not trees that represent a significant constraint. Secondary specimens within groups or woodlands whose loss would not greatly diminish their landscape value; trees providing only minor or short term screening benefit
Trees with very limited conservation or other cultural benefit. **One Group identified, G2**

4.0 ROOT PROTECTION AREAS OF SURVEYED TREES

Development within the root protection area (RPA)

The zone of influence for the rooting area of a tree has been determined using the calculation outlined in Table 2, of section 4.6 of BS5837:2012 Trees in relation to construction – Recommendations. This calculation utilises the diameter of the trunk, at a height of 1.5m from the surrounding ground level; and calculates the Root Protection Area (RPA) by multiplying the diameter by a value of 12; the result

is then used to calculate the total area (m²) of the RPA. The table below shows the RPA for the trees on the site.

Tree Identification Number	Tree Diameter @1.5m (in mm)	RPA Radius (m)	RPA (m²)
T1	650	7.8	191
G1	Up to 800	9.6	307
G2	140	1.7	9
G3	350	4.2	55

Root Protection Areas These values indicate the soil around the base of the tree to be retained which should ideally remain undisturbed. Any excavation within this area should be kept to a minimum and where necessary will be undertaken with care and by hand. Radius measurements should be taken from the main stem of each tree.

5.0 Development proposals

5.1 The development proposal is for the construction of 1 dwelling.

6.0 Implications of the proposed development

6.1 The proposed development will have the following implications:

6.2 **FELLING –** Under the proposal the following have been highlighted for removal:

- G2 – Remove to allow new access point

6.3. **PRUNING –** No tree will require pruning for the purpose of facilitating development. Some trimming back of vegetation will be required along the roadside of the northern boundary in order to achieve visibility splays.

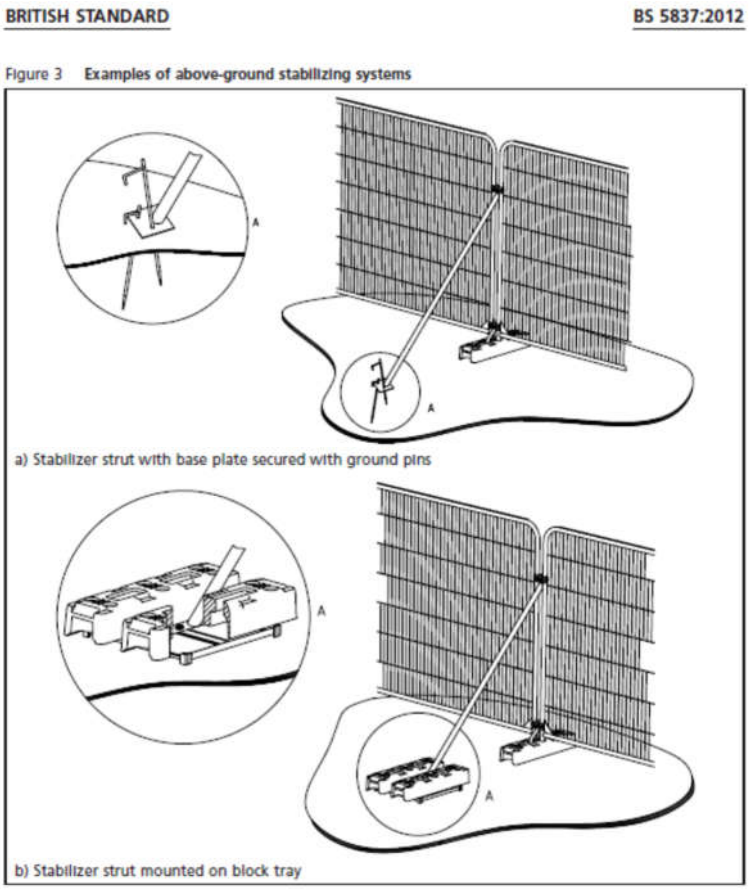
6.4 **DEMOLITION –** No demolition work is required under the current proposal.

6.5. **CONSTRUCTION –** The proposed dwelling does not infringe on the RPA of any tree. No specialist foundation type is required in order to avoid damaging tree roots.

6.6 **SERVICES -** Any service trench locations will be agreed in writing with the local planning authority prior to commencement of works. It is considered that it will not be necessary to locate services within the RPA of any retained tree.

7.0 Tree Protection

7.1 Prior to commencement of construction works, protective barriers shall be erected on site. These shall be fit for purpose and maintained to ensure that they remain rigid and complete throughout the development. Temporary protective fencing of the HERAS type is considered fit for purpose see below. The construction of the protective fencing is of a suitable design as shown in section 6 of BS5837: 2012, to withstand a high concentration of construction activity. The fencing is 2 metres high and should be erected using the vertical weld-mesh panels stood in rubber support blocks and clamped together as per the manufacturers specification and be well braced to resist impacts (see accompanying Tree Protection for layout of fencing). Once erected the fencing shall remain in situ until the completion of development works.



SUMMARY OF PROHIBITIONS WITHIN TREE PROTECTION ZONES & ADJACENT TO TREES

The Construction Exclusion Zone is demarked by the protective fencing; within the CEZ;

- No linear mechanical excavation whatsoever
- No excavation by any other means without arboricultural site monitoring

- No hand digging without advice from an arboriculturist
- No lowering of levels for any purpose except removal of grass sward using hand tools to a maximum depth of 50mm
- No construction of a sealed hard surface without advice from an Arboriculturist
- No storage of plant or materials
- No storage or handling of any chemical including cement washings
- No vehicular access
- No fire lighting

8.0 Conclusions and Recommendations

8.1 Following a site visit and arboricultural survey it is apparent that there are very few arboricultural factors constraining the development of the site. One group of low quality small trees and scrub will require removal in order to create a new access. All other trees on site can be retained.

9.0 TREE DATA SCHEDULE

Explanatory notes for tree data schedule

- The tree locations have not been provided on a topographical survey
- The common names of the trees are used.
- The tree height is estimated.
- The trunk diameter is measured at 1.5m from the surrounding ground level. The accuracy is given as ± 50mm. Where trees are located on third party land, diameters may be estimated.
- The tree crown spread is measured at the four cardinal directions.
- The height of the first significant branch is given an accuracy of ± 0.5m
- The height of the lowest branch in the crown is given an accuracy of ± 0.5m
- The Maturity is defined as follows;

Y/SM – Young/semi mature; establishing trees, should be fast growing, primarily in height than spread but only having a limited impact upon the landscape

EM- Early Mature; established young trees should be fast growing, primarily in height than spread but having some impact upon the landscape

M- Mature; well established trees still developing with some vigour but now have filled out, increasing in crown spread. In middle or half of useful life expectancies

OM- Over Mature; fully mature with low vitality and likely to have features that could be regarded as potential faults, such as large ponderous branches and old wounds. Likely also to have high visual amenity value

V- Veteran tree which can survive for many years, with health growth continuing although the tree may be of low vitality. Crown size is usually reducing through natural branch loss or tree management. Sites of decay are normally present which may represent a hazard to public or property. These trees have high conservation or historic or amenity value

- **The physiological condition**: is an assessment of relative vitality of the tree indicated by Dead; Poor; Fair; and Good. Dead or Moribund growth / dead; Poor = low vigour and declining growth, many dead twigs and branches within the outer crown; Fair = normal growth and twig extension; Good = very good growth extension, normally found in young and young mature specimens

- **The structural condition:** Is an assessment of the condition of the structural form of the tree which includes the branching system and stem and buttresses. Good; no obvious structural defects; basically a sound tree. Fair; minor or potential incipient defects that may require remedial tree work to reduce the risks to public safety. Poor; defects that are likely to result in actual failure in the medium to long term, not foreseeable in the short term. OD Obvious defects; the tree has already suffered significant level of structural failure and is at risk of collapse in whole or part in the short term

COMMENTS: Notes the condition, problems, or peculiarities to do with the tree.

LIFE EXPECTANCY: An estimate of the length of time in years that a tree might be expected to continue to make a useful contribution to the locality at an acceptable level of risk (based on an assumption of continued maintenance). <10 = Less than 10 years; 10-20 = 10 to 20 years; 20-40 = 20 to 40 years; 40+ = more than 40 years

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Tabulated Tree Data Schedule

Tree / Group No.	Species	Height	Dia @ 1.5m	Crown Spread				Crown Clearance	Age Class	Physiological Condition	Structural Condition	Comments	Management Recommendations	Remaining Contribution	Retention Category
				N	E	S	W								
T1	Oak	13	650	7	7	7	7	1	EM	F	G	Minor dead wood throughout canopy	Remove dead wood	40+	B2
G1	Monterey Cypress, Sycamore, Laurel	16	Up to 800	6	6	6	6	1	M	F	F	No comments	N/A	20+	B2
G2	Self - set Sycamore, scrub/bramble	6	140	2	2	2	2	0	SM	F/P	F/P	Low value scrub and poor quality trees	Fell to create new access	10+	C2
G3	Sycamore, Pine, Holm Oak, Poplar, Spruce	15	350	3	3	3	3	2	EM	F	F	Some dead wood and ivy.	Boundary trees should be inspected. Some poplar showing signs of decline with dead wood over adjacent gardens	40+	B2

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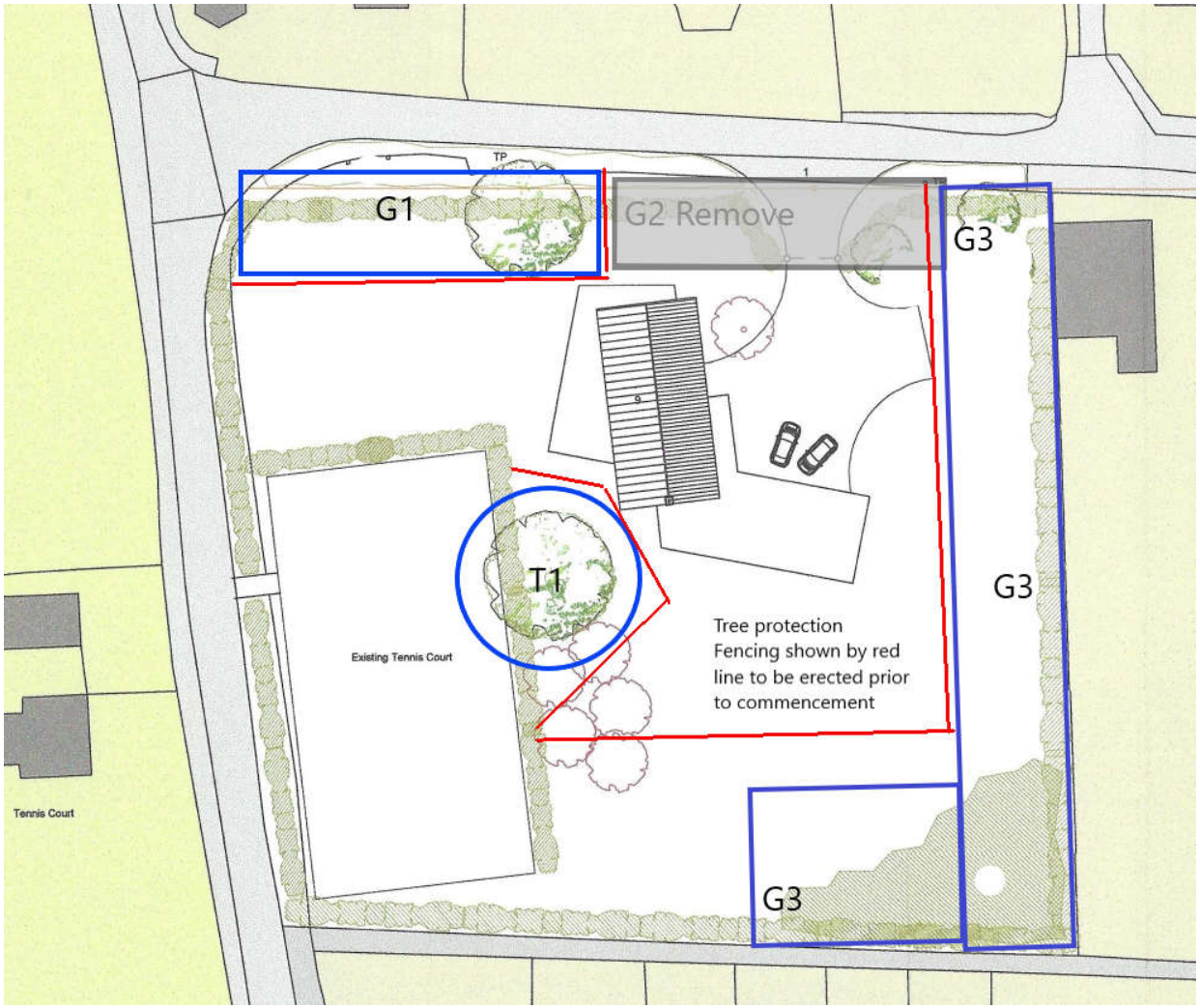

Fencing positions on the above plan are indicative. The fencing should be located at distances shown below.

T1 – fencing at 7.8 metres from the base of the tree

G1 – Fencing at 9.6 metres from the base of trees

G3 – Fencing at 4 .2 metres from bases of trees.