Tree report P 051

Land to the rear
84 Leicester Road
Hinckley
LE10 1LT

05 September 2024

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Table of contents

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1 Report limitations

1 I have prepared this report to accompany a particular planning application, my report would not be valid for any other purpose.

2 The scope of my report did not include the detailed evaluation of the degree of risk that may be posed by an individual tree. Gross defects and symptoms of interest would have been noted during my assessment, and where it was appropriate, recommendations for management intervention have been made.

3 I have prepared this report as an experienced arboriculturist, and the report relates to the conditions that were found at the time of the assessment and represents a considered analysis of my observations following an external assessment of the trees from ground level only. Therefore, my conclusions, and any recommendations flowing from those conclusions, may be subject to review upon the receipt of new information.

4 As an experienced arboriculturist I can make recommendations for engineering details such as foundation design, that will seek to protect the trees to be retained, but I am not competent to make detailed comments: if required the advice of a suitably qualified, experienced, and insured engineer should be sought.

5 Similarly, as an experienced arboriculturist I am not competent to comment upon construction details such as the erection of scaffolding or site logistics or procedural planning matters; if required the advice of an experienced building professional, or suitably, qualified, experienced and insured planning consultant should be sought.

6 It is possible that any recommendations I may make for tree management, where they conflict with the built form or the planning framework, would be overruled by the technical or procedural requirements proposed by the other professionals associated with the particular planning application, or the practical requirements associated with building out the approved scheme.

7 Because trees are dynamic and self-optimising living structures that respond and adapt to external stimuli, such as the availability of daylight, water and nutrients, the prevailing wind, the presence of pollutants or toxins, and to extreme weather events such as storms, this report can only remain valid for two years from the date of issue.

2 Introduction

8 The client for this report was Mr Paul Morris, Merrywell Properties Ltd, Edensor, Grendon, Atherstone. CV9 3DP.

9 The brief was to carry out a tree survey and prepare an arboricultural impact assessment, tree constraints plan and tree protection plan in accordance with **BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations** for the proposed development to the rear of 84 Leicester Road, Hinckley, LE10 1LT.

10 I was instructed to proceed on 4 September 2024.

11 **Tree report P 051** was dated **05 September 2024** and builds upon the antecedent report number 390 dated 2 February 2018 for the same site.

12 The appendices to this report are:

- **Appendix A**, tree survey data
- **Appendix B**, tree constraints plan
- **Appendix C**, tree protection plan
- **Appendix D**, site photos

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3 Constraints

13 The **MAGIC** website (https://tinyurl.com/yfk7peaz) did not reveal any national constraints upon development, from an arboricultural or silvicultural perspective. Similarly, none of the trees within the site had been identified as being of interest within the **Ancient Tree Inventory** (https://tinyurl.com/26mtjnf6).

14 How the proposal might fit with the **National Planning Policy Framework**, or with the local plan for **Hinckley & Bosworth Borough Council**, has not been considered in this report.

15 The property was not within a **Conservation Area**, but three of the five trees on the northern boundary of the site were included in **The Borough Council of Hinckley & Bosworth (Land at 84 Leicester Road, Hinckley) Tree Preservation Order 2008** (abbreviated here to the Order) according to the **Hinckley & Bosworth Borough Council** interactive map https://tinyurl.com/4wxxvhsv accessed on 4 September 2024.

4 The development proposal

16 The ambition was to gain consent to erect a number of dwellings on the plot, together with all the associated infrastructure.

5 The fieldwork

17 I visited the development site, behind the properties on Leicester Road, see figure 1, by appointment on 4 September 2024 to carry out the necessary fieldwork.

Figure 1, the site viewed from the air

6 The tree survey

18 The plot was approaching square in shape, with access from the Leicester Road to the southwest corner. There was a tongue of land on the southeastern corner, between the plot and the adjoining property.

19 There was an establishing mixed-species hedgerow to the rear boundary of the plot, see for example photo 1, including ash, hawthorn, holly, and Leyland cypress, as well as five mature trees, three of which were included in the Order: a sycamore on the western side, an ash in the centre and an oak on the eastern side, labelled in the Order as T1, T2 and T3 respectively.

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20 The sycamore T1 seen in photo 2 had a stem diameter estimated to be around 600mm (it was impossible to access the tree), and so a **Root Protection Area**[1] (referred to here as the RPA) as defined in **BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations** (referred to here as BS 5837) of 7.2m in radius: the tree was in the range of 10 – 12m tall, crown spread to the east was around 4.5m, to the south (into the site) the spread was some 2.5m and to the west the spread was approximately 4m. The stem forked at around 4m to give two co-dominant stems, there was ivy to around 6m, but the tree was apparently free from squirrel damage, symptoms of which can be seen on so many sycamore trees this autumn. Beneath the tree to the west was a patch of broadleaved scrub, primarily hawthorn growing to around 4 – 6m tall, all smothered in ivy.

21 There were three ash trees close together in the centre of the boundary, only one of which was covered by the Order, see photo 1. The two rearmost trees, referred to here as T2 and T3, were in the height range of 10 – 12m, the third tree, referred to here as T4, was only some 8 – 10m tall.

22 The ash tree T2 had an estimated stem diameter 300mm, there were holly and hawthorn developing beneath the tree's crown.

23 The ash tree T3 showed a narrow fork at 3 m with co-dominant stems, ivy smothered the lower stem. The tree's crown radial spread was a uniform 2 m.

24 The tree to the south of the group had the largest stem diameter, estimated to be 400mm, and so an RPA of 4.8 m in radius: the tree was in the range of 8 – 10m tall, the crown spread was eccentric, some 5 m to the east, 2 m to the south and little if any development to the west because of the neighbouring trees. The tree was of poor overall form with a distorted and ivy smothered stem.

25 The canopy cover of each of the three trees seemed poor, perhaps a symptom of ash dieback disease, see for example photos 3 (taken from Island Close) and 4.

26 The fifth tree to be assessed, the oak seen in photo 5, had a stem diameter of 500mm, and so an RPA of 6.0m radius, and the tree's height was in the range of 10 – 12m, radial crown spread to the east was around 5m, to the south some 4m. A significant limb had developed on the eastern side of the stem at around 1.2m. The tree was smothered by ivy to around the mid-crown.

27 Under the parameters of **Table 1 Cascade chart for tree quality assessment** (referred to here as Table 1) of BS 5837 the oak tree, referred to here as T5 (but T3 in the Order), was placed into Category A1 because of its age:

> **Category A**: Trees of high quality with an estimated remaining life expectancy of at least 40 years
>
> **Subcategory 1**: Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).

28 The sycamore tree, referred to here and in the Order as T1, was placed into Category B1:

> **Category B**: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
>
> **Subcategory 1**: Trees that might be included in the high category, 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.

29 The three ash trees referred to here as T2 to T4, including that labelled T2 in the Order, were placed into Category C1 because of their sparse canopies:

1 **Root Protection Area** is defined in BS 5837:
3.7 layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority

Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.

Subcategory 1: Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.

30 As the hedgerow was on the northern site boundary the shade analysis recommended under BS 5837 was considered to be irrelevant and so has not been included here.

7 Tree root protection area

31 To remain alive and functioning tree roots require water, oxygen, carbon dioxide, light, nutrients, appropriate temperature, correct pH, physical space for growth processes, and an open soil surface area for the replenishment of the essential resources used during respiration.

32 Roots utilize soil pore spaces (the space between soil particles, between structural blocks, plates, grains, soil prisms, along fracture lines, and the paths of decayed roots, animal diggings, etc.) for access to water and essential element resources, and it follows that root growth, density, and mass, will vary locally with the soil conditions.

33 Growing roots will follow pathways of interconnected soil pores, the more space that is infiltrated by roots, the more potential resources (water and nutrients) are available, and this is directly related to tree health.

34 It therefore follows that during development harm may arise if roots are severed or damaged when the ground is broken, or if the soil containing part of the tree's rooting mass is compacted by site traffic or construction, or if the soil surface is capped by an impermeable surface.

8 Arboricultural impact assessment

35 An arboricultural impact assessment considers the constraints imposed by trees, both above and below ground, as well as the proximity of the proposed structure to trees, to evaluate the cumulative direct and indirect effects of the proposed design and, where necessary, to recommend mitigation.

Above ground

36 The impact upon the mature trees along the boundary will be neutral to positive: if the trees are to be retained in harmony with the new development, then it is likely that some remedial pruning work will be required which would enhance their amenity value. Prior to the development taking place I believe that it would be prudent to consider the following:

- severing the ivy growing on all the retained trees, and once it has died and dried it should be stripped from the trees' stems and crowns, and
- pruning to lift the canopies and to reduce the crown spreads to provide adequate clearance for work activity, and
- removing any dead wood and stubs from the crowns of the retained trees.

37 If such work were to be required then it would be appropriate to engage a competent arboricultural contractor, such as an Approved Contractor of the Arboricultural Association, https://tinyurl.com/22eh34ku, to undertake the work against a specification prepared by a competent arboricultural consultant.

Below ground

38 To prevent encroachment over the RPAs of the trees included in the Order protective barrier fencing should be erected to protect the soil volumes that the trees' roots occupy.

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9 Arboricultural method statement

39 The recommendations below are offered as an indication of the measures that may be required: they are likely to require modification once the site layout has been agreed.

40 To prevent harm to the soil volumes occupied by the roots of the mature trees along the northern boundary, as well as to protect their stems and canopies from accidental collision damage with site traffic, a line of temporary protective barrier fence panels should be erected to create a robust **Construction Exclusion Zone**[2] (referred to here as the CEZ).

41 The performance of the barrier should be similar to that delivered by the default specification for such a barrier in BS 5837 at paragraph 6.2.2.3 and in figure 3, i.e. the bracing for the barrier fence panels should be sufficiently robust to repel disturbance by site traffic.

42 Paragraph 6.2.2.3 of BS 5837 states:

> 6.2.2.3 Where the site circumstances and associated risk of damaging incursion into the RPA do not necessitate the default level of protection, an alternative specification should be prepared by the project arboriculturist and, where relevant, agreed with the local planning authority. For example, 2 m tall welded mesh panels on rubber or concrete feet might provide an adequate level of protection from cars, vans, pedestrians and manually operated plant….. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins (Figure 3a)….

2 **Construction Exclusion Zone** is defined in BS 5837:
area based on the root protection area from which access is prohibited for the duration of a project

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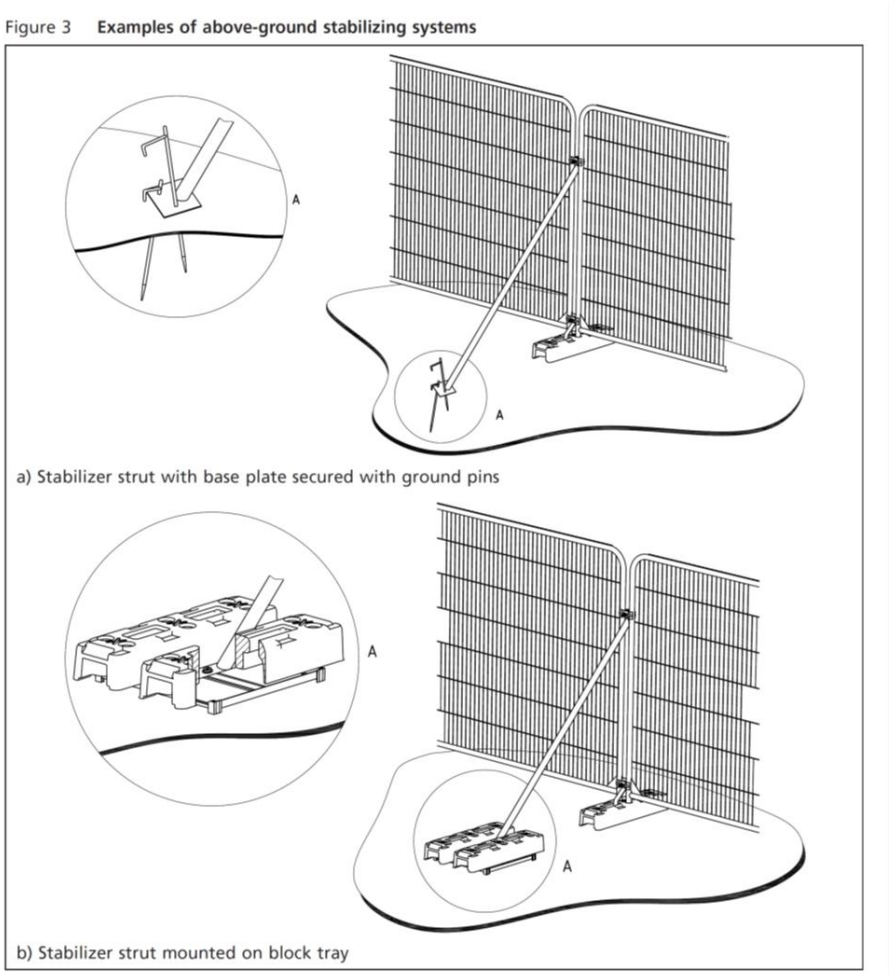

Figure 2, figure 3 from BS 5837

43 An indictive alignment for the CEZ is shown on the tree protection plan.

10 Summary

44 In summary it was my opinion that the three trees included in the Order were at little if any risk of harm from the proposal to develop the site, it would be extraordinarily unlikely, given the space available within the plot, that construction would take place with the trees' RPA.

45 In planning consent is granted than a detailed arboricultural method statement will be required prior to the commencement of the development, together with a tree protection plan.

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Appendix A – tree survey data

Tree number	Species		Stem diameter (mm)	RPA radius (m)	RPA (sq. m)	Tree height	Radial branch spread (m)				Age class	Physiological condition	Structural condition	General observations and comments	Estimated remaining contribution (yrs)	Tree quality assessment
							N	E	S	W						
1	Sycamore	*Acer pseudoplatanus*	600	7.2	163.0	10 - 12m		4.5	2.5	4	Mature	Good	Fair	Forked at 4m, main stem smothered in ivy to around 4.5m	20+	**B1**
2	Ash	*Fraxinus excelsior*	300	3.6	41.0	10 - 12m		2	1	3	Mature	Poor	Fair	Closest to rear garden boundary with Island Close. Thin canopy, perhaps as a consequence of ash dieback disease.	< 10	**C1**
3	Ash	*Fraxinus excelsior*	300	3.6	41.0	10 - 12m		2	2	2	Mature	Poor	Fair	Narrow fork at 3m. Thin canopy, perhaps as a consequence of ash dieback disease.	< 10	**C1**
4	Ash	*Fraxinus excelsior*	400	4.8	72.0	8 - 10m		5	2	0	Mature	Poor	Poor	The easternmost of the three stems. Thin canopy, perhaps as a consequence of ash dieback disease. Marked lean in stem within the plot. Eccentric crown development. Main stem smothered in ivy to around 4.5m	< 10	**C1**
5	Oak	*Quercus sp.*	500	6.0	113.00	10 - 12m		5	4	4	Mature	Good	Fair	Significant limb on the east side of the stem at around 1.2m. Main stem smothered in ivy to around 5m	40+	**A1**

Tree type	Ultimate height (m)	Water demand
Broadleaf	*22*	*Moderate*
Broadleaf	*23*	*Moderate*
Broadleaf	*23*	*Moderate*
Broadleaf	*23*	*Moderate*
Broadleaf	*20*	*High*

From **Table D.1** of **Annex D** to **BS 5837 2012**

From **Table 3** of the **NHBC Standards 2023**, **Chapter 4.2 Building near trees**

The data has been colour coded according to the tree's quality category under **Table 1 Cascade chart for tree quality assessment** of **BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations** as follows:

A	trees of high quality
B	trees of moderate quality
C	trees of low quality
U	trees that cannot be realistically retained

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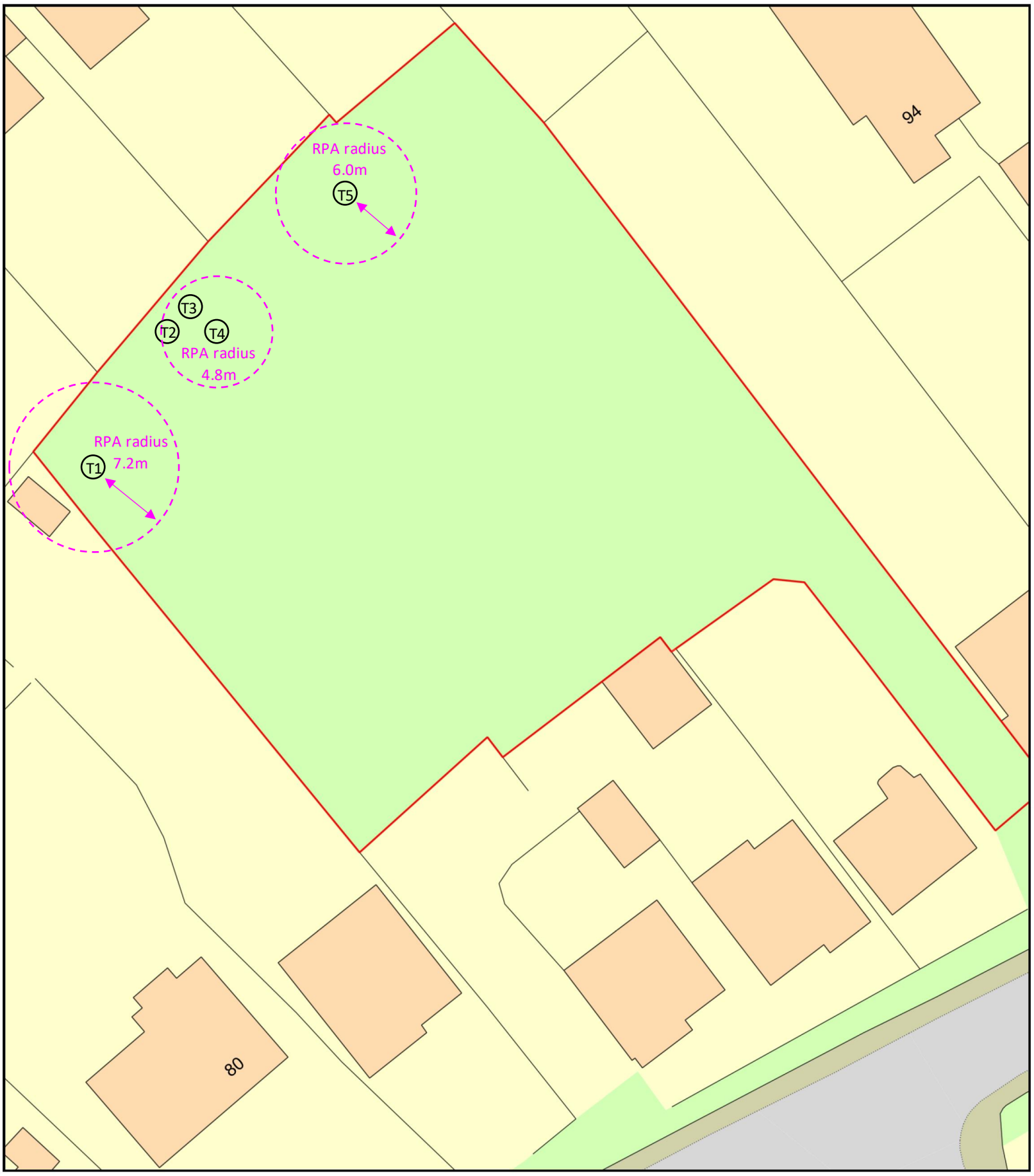
Appendix B – tree constraints plan

land to the rear, 84 Leicester Road, Hinckley



0 20
Metres

N

ReQuestaPlan

Plan Produced for: Jonathan Hazell

Date Produced: 04 Sep 2024

Plan Reference Number: TQRQM24248153433650

Scale: 1:500 @ A4

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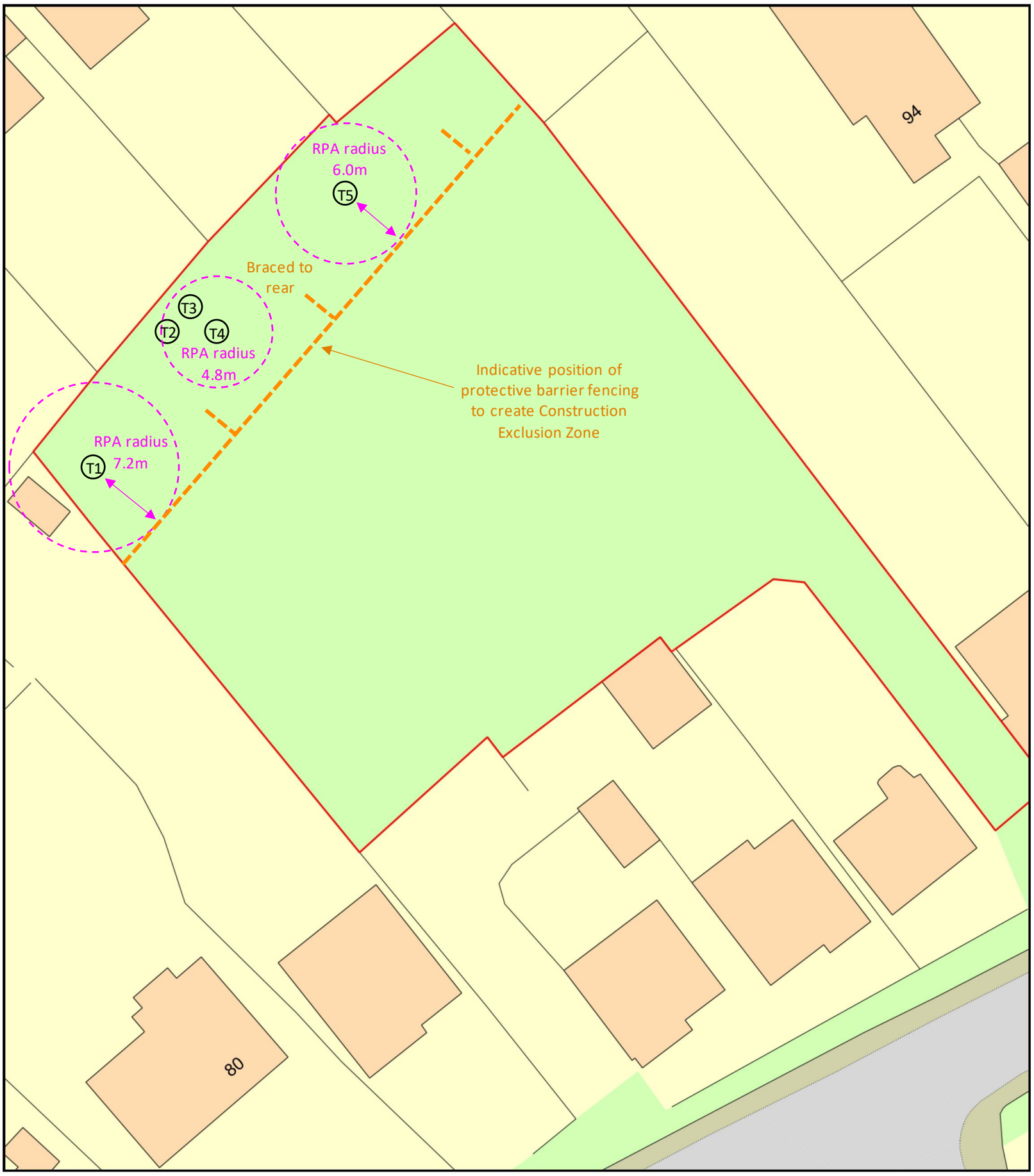
Indicative tree positions – do not scale

Appendix C – tree protection plan

land to the rear, 84 Leicester Road, Hinckley



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ReQuestaPlan

Plan Produced for: Jonathan Hazell

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Plan Reference Number: TQRQM24248153433650

Scale: 1:500 @ A4

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Indicative tree positions – do not scale

Appendix D – site photos

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

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