

**FLAT 1, NO. 105 PRIORY ROAD,
WEST HAMPSTEAD, NW6 3NN**

Arboricultural Assessment Report



May 2020

Mr & Mrs Knights

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Contents Record

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Signed: _____

Position: Director

Date: _____

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1. INTRODUCTION

- 1.1 Mr & Mrs Knights have commissioned The Ash Partnership UK Ltd. to undertake an arboricultural assessment of the tree resource in and around Flat 1, No.105 Priory Road, West Hampstead, NW6 3NN, hereafter referred to as the 'Site'.
- 1.2 This property comprises the ground floor flat of a large residential house, see *Ground Floor Plan as Existing Dwg. 1915_EX_130 Rev A* dated 10th February 2020 by AurAA Studio. The flat includes a driveway entrance to the east and a landscaped rear garden to the west.
- 1.3 In addition to a redesigned internal layout, it is proposed to extend the flat to the west and south, see *Ground Floor Plan as Proposed Dwg. 1915_PA_130 Rev A* dated 10th February 2020 by AurAA Studio in Appendix 1.
- 1.4 This Report establishes the baseline arboricultural resource and, where impacts are confirmed, sets out appropriate mitigation to minimise arboricultural impacts and retain the surrounding visual containment that the trees provide.

2. METHODOLOGY

- 2.1 The methodology was undertaken in accordance with BS 5837: 2012 *Guide for Trees in Relation to Design, Demolition & Construction: Recommendations* (BSI Standards Limited, April 2012 - ISBN 978 0 580 69917 7). This gives guidance on the principles to be applied when considering structures in relation to trees, shrubs and hedges. The standard recognises the problems of development close to existing trees that are to be retained, and of planting trees close to existing/proposed structures. Where development is proposed the standard provides specific guidance for:
- Deciding which trees are appropriate for retention;
 - Deciding the means of tree protection during development work; and
 - Deciding the means of incorporating trees into the developed landscape.
- 2.2 A summary of the procedures required for this survey is provided below.
- 2.3 Land Survey – Each individual tree was located on a base plan and the trees identified to species level. Although the Standard advises that the survey should continue outside the Site boundary to place the Site in context, if relevant, this was not undertaken. Notes on the ground level spot heights were also taken.
- 2.4 Relevant Trees – Only trees in excess of 75mm stem diameter when measured at 1.5m above ground level are considered relevant using the Standard, unless small specimens are of particular interest or potential value.
- 2.5 Species Identification – All native tree and shrub species were identified in accordance with Stace (1997).
- 2.6 Tree Inventory - For each identified tree, the following additional attributes were also assessed:
- (a) Height – in metres;
 - (b) Stem Diameter – in millimetres at 1.5m above ground level, or immediately above the root flare for a multi-stemmed tree;
 - (c) Branch Spread – at the four cardinal points to represent the crown;
 - (d) Age Class – Based on Young, Middle-aged, Mature, Over-mature and Veteran;
 - (e) Physiological Conditions – Based on Good, Fair, Poor and Dead;
 - (f) Structural Conditions – Details as required;
 - (g) Management Recommendations – Details as required;
 - (h) Estimated Remaining Contribution – in years;
 - (i) Category Grading – Based upon **A, B, C** and **U** grades, see Table 1 in the British Standard, to be shown on a Tree Survey Plan.

3. RESULTS

Tree Protection Orders

- 3.1 There are no relevant Tree Preservation Orders (TPOs) either within or adjacent to the Site boundary.
- 3.2 London Borough of Camden has confirmed that lime trees in the rear garden were previously covered by a blanket TPO but this has since been withdrawn. The lime trees still benefit from Conservation Area, and therefore any tree works would require permission from the Borough.

Ancient Woodland

- 3.3 There is no Ancient Woodland within the Site or within a 1km radius, as confirmed using www.magic.defra.uk.
- 3.4 For this reason, Ancient Woodland is not considered further.

Arboricultural Baseline

- 3.5 A total of five trees were recognised as the relevant tree resource, as shown in explanatory photographs at the rear of this Report.
- 3.6 An arboricultural schedule is attached as Table 1 and tree locations are shown in Figure 1.

Tree Categories

- 3.7 All of the trees are recognised as Category A specimens due to their strong contribution to visual containment:
- Trees **T1** to **T4** are located at the eastern end of a line of nine Common Lime *Tilia x europaea* that run along the southern property boundary.
 - Tree **T5** is a mature False-acacia *Robinea pseudacacia* that forms part of the street scene.

Tree Health

- 3.8 No significant physical constraints or infections were identified in the tree resource as identified within the Site.
- 3.9 Trees **T1** to **T4** have all been pollarded within the last two years and are now regenerating showing strong branch and epicormic stem growth. They are all covered in dense adherent Ivy *Hedera helix*.
- 3.10 Tree **T5** is surrounded by brick walls to the north and east, and both have cracks caused by the underlying root plate. In addition, the block-paved drive of property No. 105 has undulations that are similarly likely due to the underlying root plate from this tree.

4. EVALUATION

Development Layout

- 4.1 In addition to a redesigned internal layout, it is proposed to extend the flat to the west and south, see *Ground Floor Plan as Proposed Dwg. 1915_PA_130 Rev A* dated 10th February 2020 by AurAA Studio in Appendix 1.
- 4.2 No trees would need to be lost to accommodate the proposed flat extension.

RPA Impacts

- 4.3 The foundations for the proposed new building have been carefully located so to minimise loss of the Root Protection Areas (RPAs).
- 4.4 Only a single tree (**T1**) would be impacted by the proposed flat extension but this would only result in the direct loss of less than 5% of the RPA, while a further 12% would be impacted by the proposed new hardstanding – see Figure 2.
- 4.5 These combined impacts upon the RPA of tree **T1** are not regarded as significant, however, it is recommended that the impact is mitigated by means of the following two actions:
1. Any excavations within a 500mm radius of the foundations would be hand-dug within the anticipated area of the RPA under the inspection of the Project Arboriculturalist. This would allow significant roots (larger than 25mm diameter) to be retained, especially the structural roots, and covered/watered as soon as possible to prevent desiccation. Where roots need to be lost they would be cleanly severed.
 2. The new hardstanding surface would involve a 'No Dig' construction technique to retain the underlying root plate of tree **T1**.

Canopy Spread Impacts

- 4.6 The new extension will not impact upon the canopy spread of the tree resource, including the nearest tree (**T1**), see Figure 3.
- 4.7 As tree **T1** was recently pollarded, its regrowth is mostly vertical rather than horizontal. There would be no significant change to the degree of shading upon the western face of Flat 1 as a result of the development, and there are numerous future management options such as:
- Crown reduction to prevent branches extending towards the property;
 - Periodic re-pollarding of the tree line containing trees **T1** to **T4**; or
 - Future removal of only tree **T1**.

Tree Protection Plan

- 4.8 The proposed construction will be based on a scaled Tree Protection Plan (TPP) – see Figures 2 and 3. These show where any potential RPA and canopy spread impacts occur and identify where arboricultural exclusion fencing (TPF) is required.
- 4.9 Any such fencing should be of the Type I TPF specification as set out in BS5837:2012 *Guide for Trees in Relation to Design, Demolition & Construction: Recommendations*. This is based on interlinking 3.5m lengths of 2m high Heras fencing, set on foot blacks, the Type 1 fencing being additionally secured in place using 1.2m long steel road-pins that will be driven into the ground.

Construction Activities within RPAs

- 4.10 The RPAs within the Site should be regarded as exclusion areas in which the following precautions shall be observed at all times:
- No mechanical excavators or vehicular access;
 - No pedestrian access unless avoidable;
 - No storage of plant or materials;
 - No storage or handling of chemicals including cement washings;
 - No trenching or lowering of ground levels; and
 - No fire lighting.
- 4.11 In addition, the following should be observed:
- A 10m separation between trees and potentially injurious substances to tree health such as fuels, oil, bitumen, cement (and cement washings), builders sand and other chemicals; and
 - A 5m separation between the trees and any lit fire.
- 4.12 Excavation work within the RPA will only be in accordance with the following:
- Excavation work around the roots only with hand tools;
 - Careful work around any exposed roots to avoid damage, to be covered by wet hessian cloth if left exposed for more than a few hours.
 - Roots less than 25mm diameter can be severed, but those larger than this must first be examined by a qualified Arboriculturalist.
 - Prior to back-filling, any roots to be covered by sharp sand, or a similar granular fill, before the soils are replaced.

5. CONCLUSIONS

- 5.1 The baseline arboricultural resource within the Site is set out in section 3 of this Report.
- 5.2 Recommendations to minimise impacts upon the arboricultural resource as a result of development are set out in section 4 of this Report.
- 5.3 The proposed re-development of this Site is regarded as acceptable based upon this arboricultural assessment, and it can both retain healthy perimeter trees and maintain an acceptable level of visual containment.

TABLES

TABLE 1 - TREE RESOURCE AT NO.105 PRIORY ROAD, LONDON

Note - Based on abridged version of BS5837:2012 criteria

TREE NO.	SPECIES	COMMON NAME	FORM	DIAMETER AT BREAST HEIGHT [DBH] (mm)	ROOT PROTECTION AREA [RPA] (m)	TREE HEIGHT (m)	CANOPY SPREAD (m)	CANOPY BASE (m)	STRUCTURAL DEFECTS OR CONSTRAINTS	RECOMMENDATIONS	CATEGORY
T1	<i>Tilia x europaea</i>	Common Lime	Maiden (Pollard)	325	3.90	8	3 radius (post-pollard)	4	Pollarded in last two years, strong regrowth & associated epicormic growth as base. Dense cover of adherent mature Ivy on stem.	None	A
T2	<i>Tilia x europaea</i>	Common Lime	Maiden (Pollard)	300	3.60	8		4	Pollarded in last two years, strong regrowth & associated epicormic growth as base. Dense cover of adherent mature Ivy on stem.	None	A
T3	<i>Tilia x europaea</i>	Common Lime	Maiden (Pollard)	280	3.36	8		4	Pollarded in last two years, strong regrowth & associated epicormic growth as base. Dense cover of adherent mature Ivy on stem.	None	A
T4	<i>Tilia x europaea</i>	Common Lime	Maiden (Pollard)	230	2.76	8		3.5	Pollarded in last two years, strong regrowth & associated epicormic growth as base. Dense cover of adherent mature Ivy on stem.	None	A
T5	<i>Robinia pseudacacia</i>	False-acacia	Maiden	620	7.44	14	4.5N, 5E, 4S, 5S	6	Stem pressing onto eastern (street) wall and causing wall to fracture and buckle, repairs evident. Also cracking of brick wall between property boundaries. Underlying root plate causing heave beneath drive of No. 105, resulting in lifting/slumping in blockwork.	None	A

FIGURES

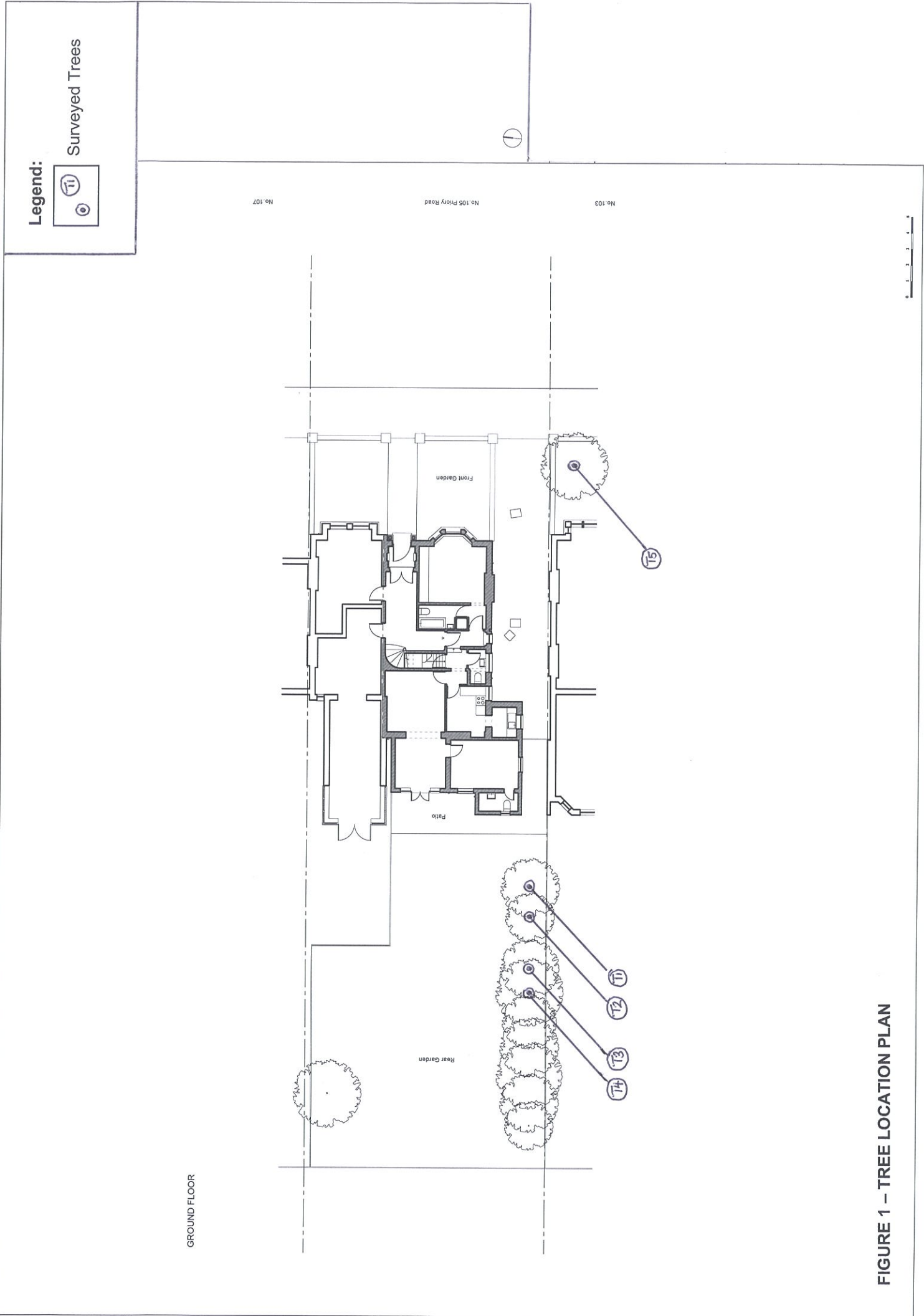
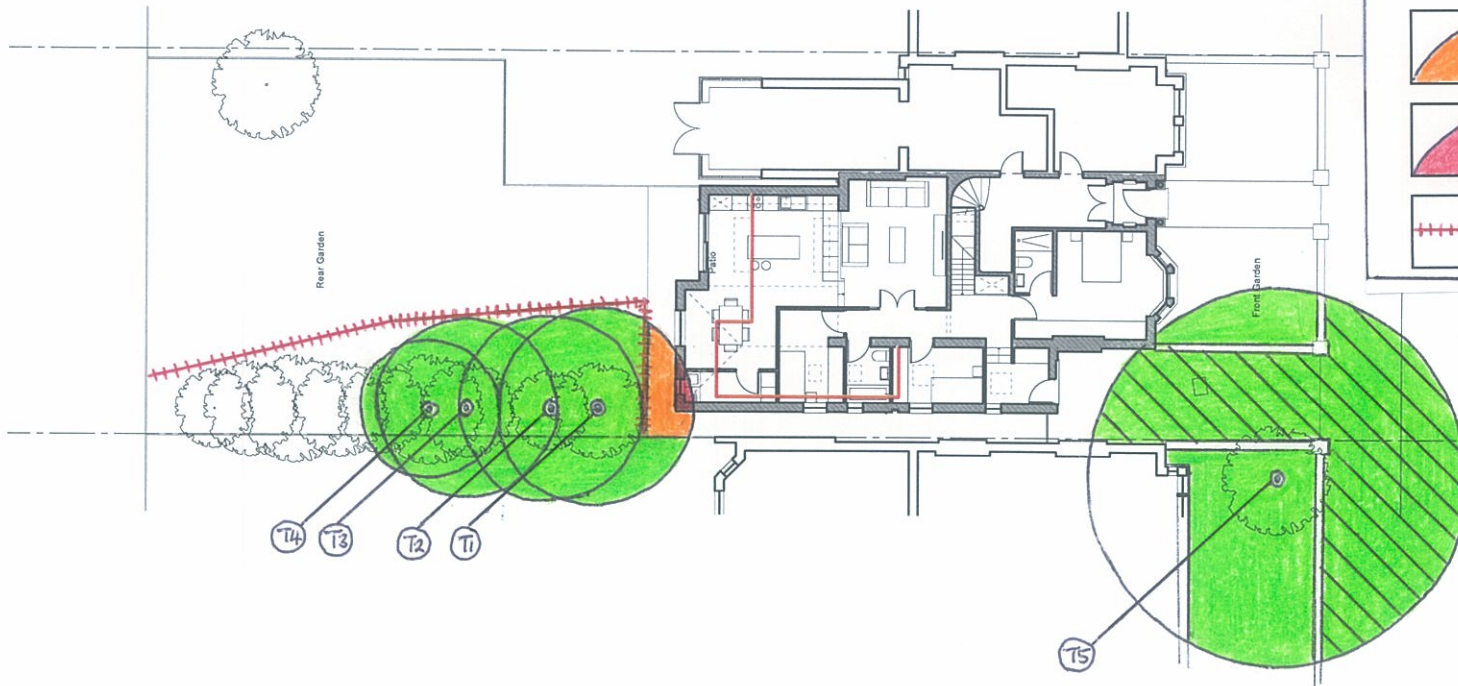


FIGURE 1 – TREE LOCATION PLAN

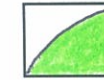
GROUND FLOOR



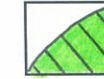
Legend:



Surveyed Trees



RPA Unaffected



RPA currently beneath hardstanding

Arboricultural Impacts



RPA beneath Hardstanding
Mitigation: Requires 'No Dig' solution



RPA impacted
Mitigation: None (Not Significant)



Mitigation: Tree Protection Fencing

No.105 F

No.103

FIGURE 2 – TREE PROTECTION PLAN (RPA)

Scale @ A4

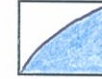


GROUND FLOOR

Legend:



Surveyed Trees

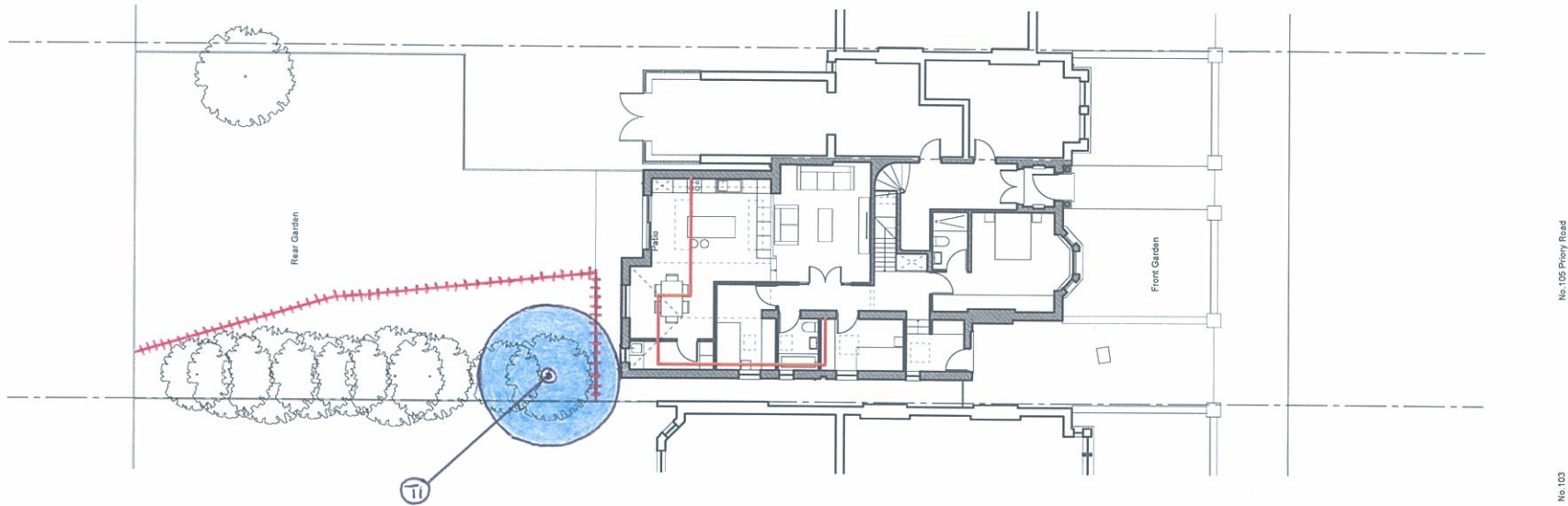


Canopy Impacted

Mitigation: Crown Lift or Remove



Tree Protection Fencing



No. 107

No. 105 Priory Road

No. 103



FIGURE 3 – TREE PROTECTION PLAN (CANOPY SPREAD)

Scale @ A4



PHOTOGRAPHS

PHOTOGRAPHS



Looking SW along lime trees



Trees **T1** to **T4**



Looking west along drive. Tree **T5**.



Adjacent tree **T5**



Bulging street boundary wall
beside tree **T5**

