

# Arboricultural Impact Assessment

13A Crossfield Road  
London  
NW3 4NS

22<sup>nd</sup> March 2018



PJC ref: 4815/18-02 Rev -

This report has been prepared by  
PJC Consultancy Ltd  
on behalf of  
Ms J Ladwig

**Prepared  
by**

**Peter Davies FdSc Arboriculture M.Arbor.A**

Peter has a Foundation Degree in Arboriculture from the University of Brighton and is a professional member of the Arboricultural Association. He has over ten years experience in the arboricultural industry, originally working as a groundsman and feller, and progressing into consultancy. He is a Lantra accredited professional tree inspector.

**Checked  
by**

**Nick Betts HND For M.Arbor.A**

Nick has attained an HND in forestry management and is a professional member of both the Arboricultural Association and the Consulting Arborists Society. He has worked in the arboricultural and forestry industries for 17 years. He started his career as a forestry worker before qualifying as a tree surgeon, working in both the private and commercial sectors. He has been a practising consultant since 2004. He is a Lantra accredited professional tree inspector.

**Sussex office:**

Chapter House, Priesthawes Farm  
Hailsham Road, Polegate  
East Sussex, BN26 6QU  
**Tel:** 01323 832120

**E:** [contact@pjconsultancy.com](mailto:contact@pjconsultancy.com)

**Kent office:**

Unit 1, Hanover Mill,  
Mersham, Ashford,  
Kent, TN25 6NU  
**Tel:** 01233 225365

**W:** [www.pjconsultancy.com](http://www.pjconsultancy.com)



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## 1 EXECUTIVE SUMMARY

1.1 This report should be read in conjunction with arboricultural survey ref. PJC/4815/18-01 and arboricultural method statement ref. PJC/4815/18-03.

1.2 **Site location:** The site is situated adjacent to the junction between Crossfield Road and Adamson Road in the London Borough of Camden. It has a central OS national grid reference of TQ268845. The surrounding land use is comprised of urban residential development in all directions, with Crossfield Road fronting the eastern site boundary. The location of the site within its environs is shown in figure 1.



*Figure 1: Location of Site and Environs*

1.3 **Proposal:** A proposal has been outlined to construct a new basement level for the ground floor apartment, and also to extend the building into the rear garden with a conservatory. The basement level will follow the south line of the building, but shall extend into the rear garden. A light well shall be installed directly north of the conservatory to provide light to the guest bedroom in the basement floor. A new garden patio shall be installed to the west of the conservatory and light well.

1.4 **Tree removals:** Tree T3 is a standing dead tree that shall be removed from the rear garden. All remaining trees shall be retained.

1.5 **Access facilitation pruning:** No access facilitation pruning is anticipated to enable the proposed construction works.

1.6 **Works within root protection areas:** The new basement level and light well will partially encroach the root protection area of T1. The new patio in the rear garden will also encroach the root protection area of T1.

## 2 INTRODUCTION

2.1 **Instruction:** PJC Consultancy has been instructed by Ms J Ladwig to provide an arboricultural impact assessment in accordance with BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*' for the proposed development at 13A Crossfield Road in Camden.

2.2 **Objectives of report:** This report has been undertaken with the following objectives:

- To identify the tree removals and pruning works that will be required as a result of the proposed development and to assess the impact of the tree works.
- To assess the potential impact the proposed construction works will have on retained trees.
- To provide recommendations for mitigation measures to reduce the impact of construction works on retained trees.

2.3 **Scope of this report:** This report is concerned with all significant trees and arboricultural features located within the site boundary. Additionally, trees located around the curtilage of the site have also been surveyed when they are considered likely to have the potential to impact on the development (in relation to root and crown protection or foundation design).

2.4 **Contents of report:** This report includes the following:

- A schedule of trees to be retained/removed.
- A schedule of access facilitation pruning required for the development.
- An assessment of the impact construction works will have on retained trees and mitigation measures to be implemented.
- Tree Constraints Plan and Tree Retention Plan.
- Tree Survey Schedule including management recommendations related directly to the proposed development.

2.5 **Documents and information provided:** The following documents were used to aid the preparation of this report:

- Drawing ref. 10591/TP/01 – Existing Plan, Block Plan & Location Plan
- Drawing ref. 10591/TP/02 – Proposed Floor Plans

### 3 ARBORICULTURAL IMPACT ASSESSMENT

3.1 **Tree removals:** Trees to be removed for the proposed development are shown with dashed outlines on the Tree Retention Plan in Appendix 1 and are shaded to indicate their BS5837 tree category. The only tree removal shall be T3, which is a standing dead specimen. All remaining trees shall be retained and protected.

3.2 **Access facilitation pruning:** Based on the information currently available, no access facilitation pruning will be required to enable the proposed construction works. All retained trees have adequate clearance to avoid any direct conflict with the proposed conservatory. Additionally access to the rear of the site where the construction and main excavation works will occur is along the narrow side path, and beneath the upper ground floor extension, therefore use of large plant machinery for this development will not be feasible.

3.3 Any requirements for access facilitation pruning that cannot be predicted at this stage in the design process shall be discussed at the pre-commencement meeting with the project arboriculturalist and agreed with the local authority arboricultural officer.

3.4 **Works within root protection areas:** The footprint of the new basement level is hatched blue on the Tree Retention Plan. This will encroach the root protection area of T1 in the area hatched orange on the plan. The basement encroaches the root protection area by 5.8%, which is a relatively minor encroachment. Due to the nature of the construction all roots within the footprint of the basement will be lost, however provided provision is made to avoid any further excavation or disturbance to the soil structure within the root protection area, the tree (which appears to be of good physiological condition) is expected to remain viable.

3.5 To prevent any over-dig into the root protection area, piles shall be installed along the edge of the basement footprint using a small mobile piling rig before the excavation commences. Provision must be made to prevent the stockpile of excavated soils within the root protection areas of retained trees where it would cause compaction of the rooting medium. This will be achieved through the installation of tree protection barriers as described in the arboricultural method statement.

3.6 The new garden patio adjacent to the conservatory will encroach the root protection area of T1 in the area hatched purple on the Tree Retention Plan. Due to the minor encroachment of the basement floor into the root protection area, it is essential that the patio is constructed in a manner that avoids either physical damage to the roots, or damage to the structure and quality of the rooting medium. The detailed specification for the patio is to be confirmed on the date of this report. To minimise any potential impact on T1 it should comply with the following principal specification:

- The patio shall be constructed directly onto the existing ground level without soil stripping (other than the careful removal of surface vegetation). If necessary a layer of sharp sand (or other inert granular aggregate) may be used to fill divots to create a level surface for the patio.
- The only exception to the no-dig rule is if a preliminary root investigation is undertaken by hand and verified by the project arboriculturalist or local authority arboricultural officer, to prove that soil stripping can occur without encountering roots. The densest concentration of tree roots is usually found close to the surface so it is likely that a no-dig specification will need to be implemented.
- The patio shall be constructed on a 75mm CellWeb TRP cellular confinement system filled with clean angular stone (Type 4/20mm). This will provide a permeable base for the patio

that will prevent localised compaction of the soil beneath. This is important because compacted rooting medium can have a significant detrimental impact on root function.

- The cellular confinement system shall be installed directly onto a TreeTex Geotextile membrane. A second membrane shall be installed above the cellular confinement system as well. These membranes will prevent the migration of soil, construction debris and other materials migrating through the cellular confinement system as that would otherwise impact on the porosity of the completed surface.
- The top surface of the patio shall also be permeable (e.g. resin bound gravel or block paving with permeable spacers and bedding aggregate) to allow continued moisture ingress and gaseous diffusion with the rooting medium.
- Traditional kerbing requiring linear trenching to install a concrete footing will not be suitable for use within the root protection area. As an alternative, treated timber edging, aluminium L-shaped edging, galvanised metal edging or no fixed edging shall be used.

**3.7 Services:** Details of changes to the routing of services resulting from excavation of the basement level or construction of the conservatory are not currently available. Once details of the routing of new services become available, prior to commencement, they shall be reviewed by the project arboriculturalist. The arboriculturalist shall then confirm to the local authority arboricultural officer either that no works will be carried out within root protection areas, or provide details of the methodology required to ensure the works are carried out in accordance with NJUG10 '*Guidelines for the planning, installation and maintenance of utilities in proximity to trees*' and BS5837: 2012.

## 4 CONCLUSIONS

4.1 Only one tree will be removed during the proposed development, and this is because it is dead rather than conflicting with the construction or hard landscaping works.

4.2 Although the basement level encroaches the root protection area of T1, it is a minor encroachment and the tree should remain viable provided adequate tree protection measures are implemented as described in the arboricultural method statement.

4.3 The impact on T1 will be compounded by the construction of a new patio within its root protection area, however as long as the specification for the patio complies with the basic specification described in this report (see appendix 3), the impact on the tree should be kept to an acceptable level.

4.4 Based on the above assessment, trees recommended for retention in this report can be protected during the proposed construction works and successfully integrated into the site post development.



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## Contact details

**Sussex office:**  
Chapter House  
Priesthaves Farm  
Hailsham Road  
Polegate  
East Sussex  
BN26 6QU

**Tel:** 01323 832120

**Author:** Peter Davies

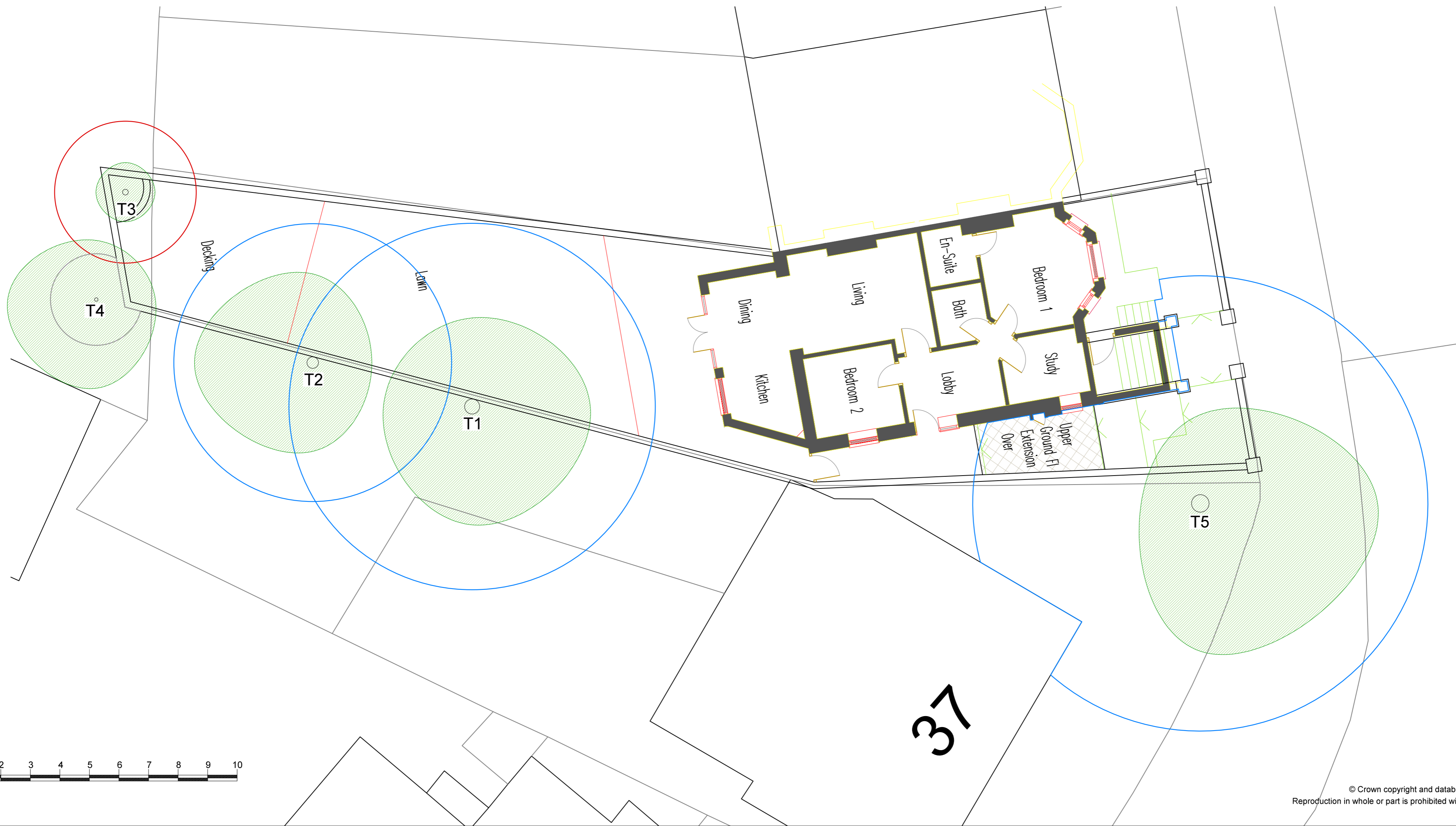
**Date:** 22<sup>nd</sup> March 2018

**E-mail:** [pete@pjconsultancy.com](mailto:pete@pjconsultancy.com)

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## APPENDIX 1

### Tree Constraints Plan and Tree Retention Plan



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\* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/4815/18-01 contains further information for each tree.

This drawing should be viewed in colour.

All tree positions on this drawing were approximately measured during the initial tree survey but should be checked on site.

- Key:**
- RPA for CAT B\* tree
  - RPA for CAT C\* tree
  - RPA for CAT U\* tree
  - Tree canopy

Drawing no: PJC/4815/18/A Rev: - Sheet number: 1 of 1

**Client and site:**  
 Ms J Ladwig

13A Crossfield Road  
 London  
 NW3 4NS

**Drawing title:** Tree Constraints Plan

**Date drawn:** 22/03/2018

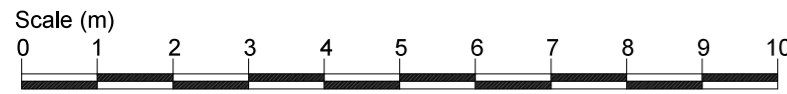
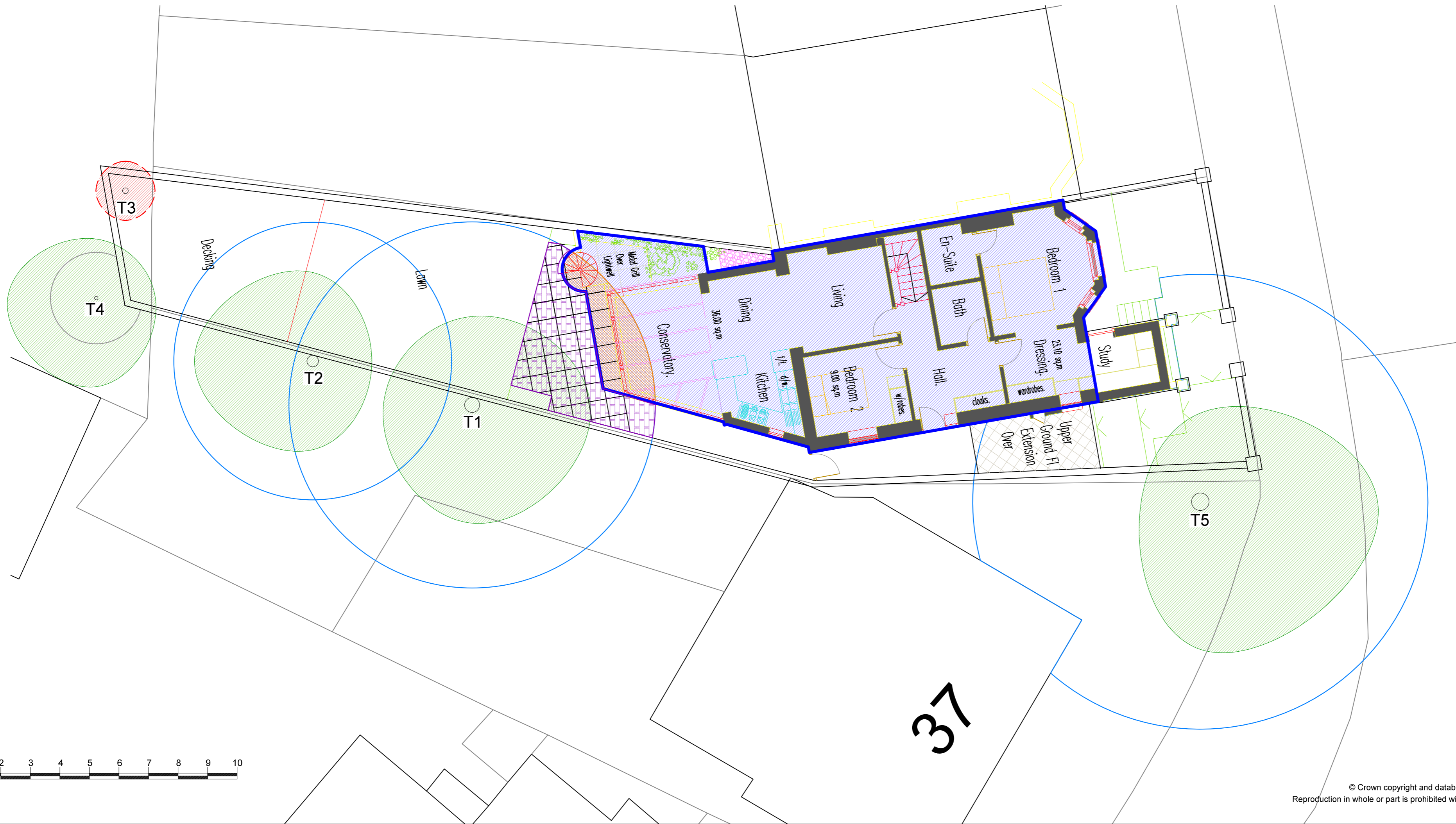
**Scale:** 1:100 at A2

**Drawn by:** PD

**Checked by:** NB



**PJC Consultancy**  
 Chapter House, Priestthawes Farm, Hailsham  
 Road, Polegate, East Sussex, BN26 6QU.  
 t: 01323 832120  
 e: contact@pjcconsultancy.com  
 w: www.pjcconsultancy.com



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\* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. PJC/4815/18-02 contains further information for each tree.

This drawing should be viewed in colour.

All tree positions on this drawing were approximately measured during the initial tree survey but should be checked on site.

- Key:**
- RPA for CAT B\* tree to be retained
  - RPA for CAT C\* tree to be retained
  - Canopy of tree to be retained
  - Canopy of CAT U\* tree to be removed
  - Footprint of new basement
  - Encroachment of new basement into RPA
  - New patio constructed within RPA

Drawing no: PJC/4815/18/B Rev: - Sheet number: 1 of 1

**Client and site:**  
 Ms J Ladwig

13A Crossfield Road  
 London  
 NW3 4NS

**Drawing title:** Tree Retention Plan

**Date drawn:** 22/03/2018

**Scale:** 1:100 at A2

**Drawn by:** PD

**Checked by:** NB



PJC Consultancy  
 Chapter House, Priestthawes Farm, Hailsham  
 Road, Polegate, East Sussex, BN26 6QU.  
 t: 01323 832120  
 e: contact@pjcconsultancy.com  
 w: www.pjcconsultancy.com

## APPENDIX 2

### Tree Survey Schedule

**Client:** Ms J Ladwig

**Site:** 13A Crossfield Road

**Survey date:** 19/03/2018

**Surveyor:** Peter Davies

## Tree Survey Schedule



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments	Management recommendation	Category grading	Root Protection Area (m <sup>2</sup> )	Root Protection Radius (m)
T1	Sycamore ( <i>Acer pseudoplatanus</i> )	15	150, 300, 300, 250 est	N: 3 E: 4 S: 4 W: 3	Crown: 4 north Branch: 4 north	Mature	Good	Good	Third party tree only viewed from site. Multi-stemmed. Crown lifted over site.	No action required.	B1/2	119.9	6.2
T2	Sycamore ( <i>Acer pseudoplatanus</i> )	12	300, 250 est	N: 3 E: 2 S: 3 W: 4	Crown: 4 west Branch: 2 west	Early mature	Good	Fair	Third party tree only viewed from site. Suppressed form. Crown reduced. Multi-stemmed.	No action required.	B2	69.0	4.7
T3	Unknown	6	200 est	N: 1 E: 1 S: 1 W: 1	Crown: N/A Branch: 2 east	Dead	Poor	Poor	Small standing dead tree smothered by ivy.	Fell to ground level and remove stump.	U	18.1	2.4
T4	Magnolia ( <i>Magnolia grandiflora</i> )	5	120 est	N: 2 E: 2 S: 3 W: 3	Crown: 2 average Branch: 2 average	Semi mature	Good	Good	Small third party tree only viewed from site. Root growth not expected to extend into site due to retaining wall.	No action required.	C1	6.5	1.4
T5	False acacia ( <i>Robinia pseudoacacia</i> )	17	600 est	N: 3 E: 6 S: 5 W: 2	Crown: 2 average Branch: 5 west	Mature	Good	Fair	Third party tree only viewed from site and road. Crown historically heavily reduced. Roots expected to be constrained by buildings.	No action required.	B2	162.9	7.2 (amended on Tree Constraints Plan)



## APPENDIX 3 Example No-dg Patio Specification

