

## **Arboricultural impact analysis**

**Tree**

**at**

**87 Belsize Lane  
London  
NW3 5AU**

**Harriet and Oli Nowell-Smith**

## **Skerratt**

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## 1. Introduction

- 1.1 This report contains a detailed appraisal of a single young-to-middle-aged Cabbage Palm (*Cordyline australis*) standing within the property boundary of 87 Belsize Lane, London NW3 5AU, in relation to proposed residential development.
- 1.2 The report considers the health and safety of the tree under its current growing conditions and assesses the likely impact of the proposed development measured against the advice and guidance set out in *BS5837 2012: Trees in relation to design, demolition and construction – Recommendations*.
- 1.3 The site investigation on which this report is based took place on the late afternoon of Tuesday 11 April 2017, in dry, bright conditions.
- 1.4 The report was commissioned by Square Feet Architects on behalf of the clients in an email dated 06 April 2017.
- 1.5 I have been provided with the following Square Feet Architects drawings in digital format (pdf):
  - 1626-L-001 – Location Plan
  - 1626-L-011 – Existing LG Floor Plan
  - 1626-L-017 – Existing Front Elevation
  - 1626-L-019 – Existing Section AA
  - 1626-L-070 – Existing Front Garden Plan
  - 1626-L-111 Rev A – Proposed LG Floor Plan
  - 1626-L-117 Rev A – Proposed Front Elevation
  - 1626-L-119 Rev A – Proposed Section AA
  - 1626-L-170 Rev A – Proposed Front Garden Plan
- 1.6 The **Tree survey plan** in **Appendix a** is based on Square Feet Architects Drawing Nos. 1626-L-011 – Existing LG Floor Plan and 1626-L-070 – Existing Front Garden Plan. The **Tree removals plan** in the same appendix is based on the **Tree survey plan**, with the footprint of the proposed development taken from Square Feet Architects Drawing Nos. 1626-L-111 Rev A – Proposed LG Floor Plan and 1626-L-170 Rev A – Proposed Front Garden Plan, overlaid.

## 2. Background information

### 2.1 Layout, boundaries and topography

- 2.1.1 87 Belsize Lane is a substantial Victorian mid-terrace dwelling on 4 levels (lower ground, raised ground, first and second floors).
- 2.1.2 The dwelling stands in a rectangular plot the longer axis of which runs north west to south east
- 2.1.3 The tree that is the subject of this analysis stands in a small, gently sloping frontage area abutting Belsize Lane, about 300mm below street level at the base of its main stem.
- 2.1.4 The **Tree survey plan** in **Appendix a** shows the existing site layout and the locations of the tree referred to in this analysis.

### 2.2 Geology and soils

- 2.2.1 According to British Geological Survey (BGS) data, the site is located upon deep Palaeogene London Clay bedrock.
- 2.2.2 No soil sampling was carried out on site.

### 2.3 Planning constraints

- 2.3.1 The dwelling is within the London Borough of Camden Belsize Park Conservation Area.
- 2.3.2 The tree is not covered by a Tree Preservation Order (TPO).

### 2.4 The tree

- 2.4.1 The tree referred to in this analysis is described in detail in the **Tree survey schedule** in **Appendix a**. Its location is shown on the **Tree survey plan** in the same appendix.

### 2.5 The proposed development

- 2.5.1 The development works to which this analysis refers include:
- Internal modifications to the existing dwelling
  - Associated external works including the construction of a cycle store

## 3. Analysis and conclusions

- 3.1 It is proposed to remove the existing tree to enable the construction of a proposed bicycle store, and to plant a replacement close to the centre of the frontage area after development works are complete.
- 3.2 The removal is necessary because, although at street level the proportions of the frontage area will be unchanged by the development, at lower ground level the proposed bicycle store will extend beneath the tree's location.
- 3.3 This Cabbage Palm makes a pleasant contribution to public visual amenity but, given its age and size, its loss could be very rapidly compensated for with appropriate replacement planting.
- 3.4 The clients' preference would be to plant a multi-stemmed Birch or another species of moderate ultimate size with similar growth characteristics.
- 3.5 In my opinion a replacement tree of the species proposed would enhance the visual amenities of the immediate locality in the short-to-medium term.
- 3.6 The **Tree removals plan** in **Appendix a** shows the approximate proposed replanting location.

## **Appendix a**

**Tree survey schedule**

**Tree survey plan**

**Tree removals plan**

## Explanatory notes

For general information on any entry in the detailed survey text, refer to the notes below which are organised on a column by column basis.

### Tree number

All trees have been numbered in the survey text to correspond to the location numbers shown on the accompanying Tree survey plan. No trees have been marked on site.

### Species

Common English names have been used wherever possible and Latin names are listed (in brackets in *italics*) in all cases.

### Dimensions

**Height** - are recorded in m.

**Stem diameter** – recorded in mm at breast height (1.5m) wherever possible. Where measurement at 1.5m is not possible, one of the alternative methods set out in *Annex C of BS5837:2012* has been used.

If the diameter has been measured at a different height, this has been recorded, e.g. 60 @ 1m = 60mm diameter at 1m height.

Other abbreviations used:

av - average

est/e - estimated

ms - multi-stemmed

max – maximum

gl - ground level

**Crown spread** - radial crown spreads in metres have been recorded at four points on the circumference of the crown (north, east, south and west). The accompanying Tree survey plan shows approximate crown shapes based on these measurements

**Crown height** - the height of the first major branch and the height of the lowest point of the crown are recorded in metres eg 3/3

## Explanatory notes

### Age

Y	Young	SM	Semi-mature
EM	Early mature	M	Mature
OM	Over-mature		

Where the precise age of a tree is known, it has been recorded in brackets adjacent to the general classification i.e. M(7).

### Condition

#### Physiological condition

Gives a measure of biological vigour and of the presence or absence of disease, insect attack or other debilitating factors.

G	Good
F	Fair
P	Poor

#### Structural condition

Gives a measure of each tree's physical form and mechanical stability.

G	Good
F	Fair
P	Poor

### Comments

Descriptive notes on the tree's shape, local environment and condition.

### Recommendations

Management recommendations under existing conditions.

### Separation distance (existing and proposed)

The distance between centre stem and the nearest point of existing or proposed built structures

## Explanatory notes

### RPA radius

The radius of each tree's Root Protection Area (RPA) as defined in *BS5837:2012 – Trees in relation to design, demolition and construction - Recommendations*

### Life expectancy

An approximate estimate for each tree's anticipated future safe life in the following ranges:

- <10 years
- 10-20 years
- 20-40 years
- 40+ years

### Retention category

This grading is based on the recommendations set out in *BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations*. The categories are summarised in the standard as follows:

- A Trees of high quality with an estimated remaining safe life of at least 40 years
- B Trees of moderate quality with an estimated remaining safe life of at least 20 years
- C Trees of low quality with an estimated remaining safe life of at least 10 years, or young trees with a stem diameter below 150mm
- U Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

In addition the British Standard requires one or more subcategories to be applied to the main Retention Category. In summary these are as follows:

- 1 Mainly arboricultural qualities (that is individual aesthetic characteristics)
- 2. Mainly landscape qualities
- 3. Mainly cultural values, including conservation

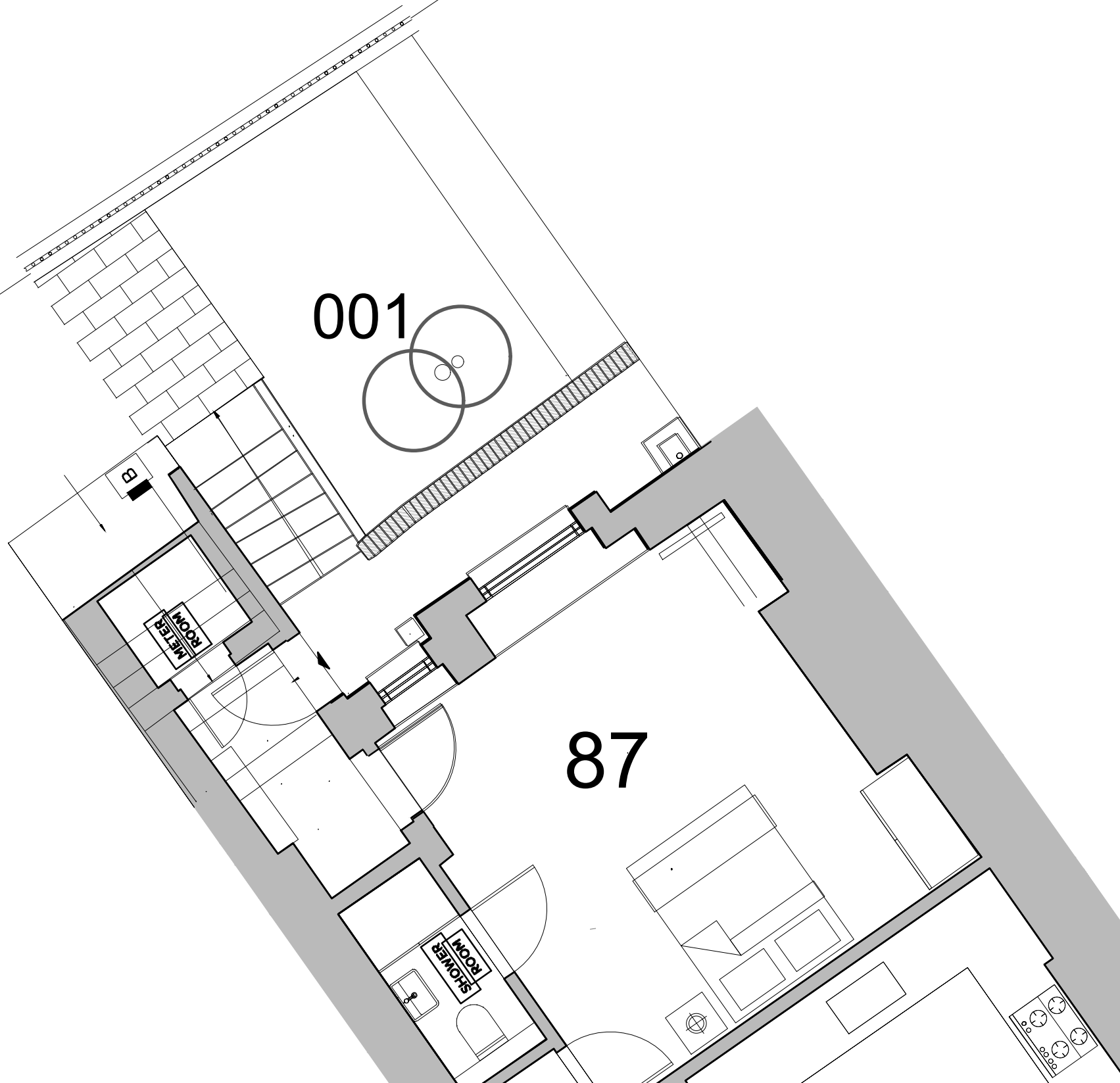
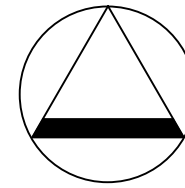


Tree survey schedule

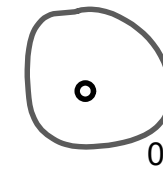
Tree No.	Species	Height (m)	Diam (mm)	Crown Spread (m)				Crown Height (m)	Age	Physiological Condition	Structural Condition	Comments	Separation distance (m)		RPA Radius (m)	Recommendations	Life Expectancy	Retention Category	Retention Sub-category
				N	E	S	W						Existing	Proposed					
001	Cabbage Palm <i>(Cordyline australis)</i>	6	120/ 160	2	2	2	2	1/1	SM	G	G	A 2 stemmed tree, each stem with a compact crown	1.70	na	na	No immediate action required	20-40	C	1

Client: Harriet and Oli Nowell-Smith  
 Location: 87 Belsize Lane, London NW3 5AU  
 Date: 11.04.17  
 Job No.: 545 A

BELSIZE LANE



KEY



EXISTING TREE

001

Trees are coloured on plan to correspond to the Retention Categories specified in: *BS5837:2012 Trees in relation to design, demolition and construction - Recommendations* as follows:

- Category A - GREEN
- Category B - BLUE
- Category C - GREY
- Category U - RED


REVISION	CHK'D	APP'D	DATE
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Client:  
HARRIET & OLI NOWELL-SMITH

Job Title:  
87 BELSIZE LANE  
LONDON  
NW3 5AU

Drawing Title:  
TREE SURVEY PLAN

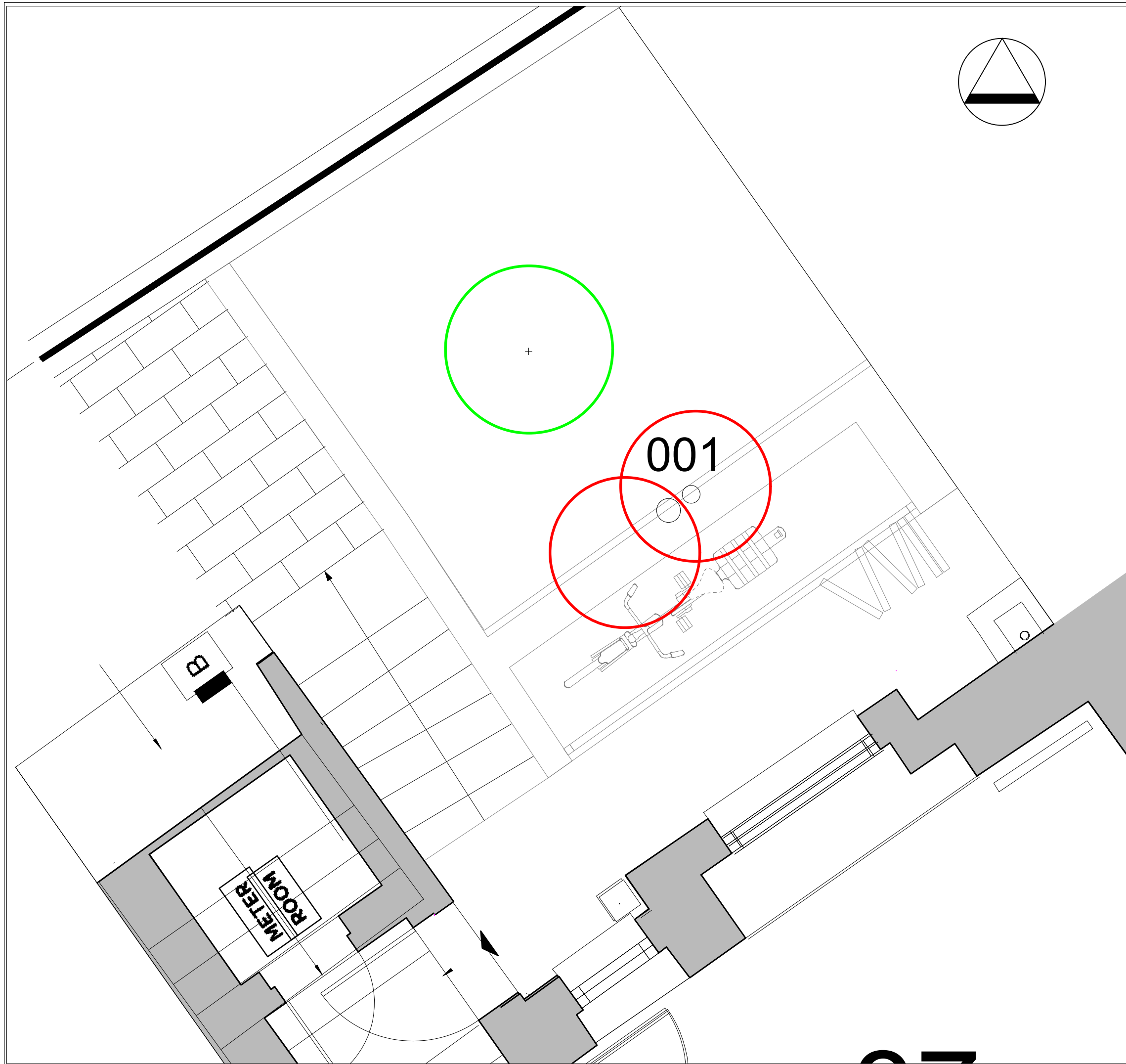
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Date: 11.04.17      Drawn by: RS

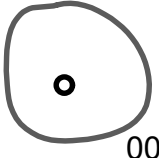
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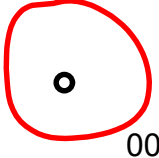


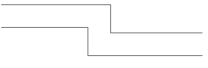
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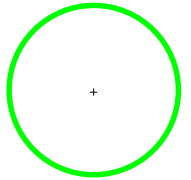
 EXISTING TREE  
001

Trees are coloured on plan to correspond to the Retention Categories specified in: *BS5837:20 12 Trees in relation to design, demolition and construction - Recommendations* as follows:

Category A - GREEN  
 Category B - BLUE  
 Category C - GREY  
 Category U - RED

 TREE TO BE REMOVED FOR DEVELOPMENT PURPOSES  
001

 PROPOSED DEVELOPMENT

 PROPOSED REPLACEMENT TREE (APPROXIMATE POSITION)


REVISION	CHK'D	APP'D	DATE
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Client:  
**HARRIET & OLI NOWELL-SMITH**

Job Title:  
 87 BELSIZE LANE  
 LONDON  
 NW3 5AU

Drawing Title:  
**TREE REMOVAL AND REPLACEMENT PLAN**

Drawing Number: 545.02.00	Scale: 1:25 (A3)
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Date: 11.04.17	Drawn by: RS
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