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Arboricultural Survey, Impact Assessment & Arboricultural Method Statement (BS5837:2012)

<u>Site</u>

12 Pilgrims Lane London NW3 1SN

Client

Mr Alex Shamash

Date of Report:

October 2024

Report Reference:

AIA/MF/0195/24

Report Prepared by:

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1.0 Introduction

- 1.1 This report has been commissioned by Wolff Architects on behalf of Alex Shamash to survey, assess and provide an Arboricultural Impact Assessment and Method Statement for the trees sited within close proximity of proposed development works at 12 Pilgrims Lane, London, NW3 1SN.
- 1.2 A site visit was conducted on 2nd October 2024 to survey and assess the trees. The weather at the time of inspection was bright and mild with trees in early spring mode.
- 1.3 The tree survey, report and recommendations have been compiled for the 11 no. trees and 1 no. group (T1-T14 excluding trees T7 & T8 previously removed within approved Application Reference: 2022/2398/P) surveyed within the site and neighbouring sites where relevant.
- 1.4 The details of the subject trees are set out in the tree survey table in *Appendix A*. The trees were surveyed on the date and time shown above and the tree survey assessment information for the tree describing size, condition and surroundings are found within this appendix.
- 1.5 The trees located within the site are shown in site plans T001-T003, Appendix B, and these correspond to the tree survey results table, Appendix A. Photographs of the trees can also be found in Appendix C.
- 1.6 This report and the opinions within it have been produced by Marcus Foster, a qualified arboriculturist and Professional Member of the Arboricultural Association with over 20 years experience and holding a National Diploma in Arboriculture, the Arboricultural Association's Technicians Certificate, Professional Tree Inspection Certificate (LANTRA) as well as a degree in History and Society. Work experience within the industry includes work as a Contracts Manager for an Arboricultural Association Approved Company, a Local Authority Tree Preservation Officer and an independent Arboricultural Consultant. As a consultant many of projects undertaken are in the inner London Boroughs of Islington, Hackney, Westminster, Camden, Southwark and RBKC, making Marcus Foster familiar with the most recent requirements of development and constraints on urban trees.
- 1.7 No additional documentation has been referred to relating to the trees or the property for the compilation of this report.

2.0 Survey Details and Scope

- 2.1 The site survey included the 11 no. trees and 1 no. group (T1-T14 excluding trees T7 & T8 previously removed within approved Application Reference: 2022/2398/P) as shown in the survey, *Appendix A*, and also highlighted on the site plans, *Appendix B*.
- 2.2 The trees and hedge were surveyed from ground level from within their site location. The diameter of the trunks have been measured using a DBH tape at 1.5m height. The height of the trees have been estimated.
- 2.3 The following information was recorded for each tree and is shown in the Tree Schedule included in *Appendix A*:
 - Number: an identity number which cross-references locations shown on the plan in Appendix A with the schedule in Appendix B.
 - Species: listed by common names
 - Tree Height: height in metres (m)
 - · Tree Spread: spread in metres (m)
 - Stem diameter: measured in millimetres (mm) and taken at 1.5m above ground level
 - · Age Class: Y (young); EM (early-mature); M (mature); OM (overmature)
 - · Vigour: G (good); F (fair); P (poor); D (dead)
 - · Structural Condition: G (good); F (fair); P (poor); D (dead)
 - · General Condition Specific comments relating to each tree
 - · Estimated Remaining Contribution (years)
 - BS5837 Category Grading
 - · Protection Distance m2 Area (where applicable BS5827: 2012)
 - · Protection Distance Radius (where applicable BS5827: 2012)
- 2.4 Information recorded in the tree survey, *Appendix A* is expanded in the report findings and preliminary recommendations have been made in *Section 5*.
- 2.5 Findings as shown within *Appendix A* and assessed within *Section 5* are also highlighted within *Appendix B* which incorporates the Existing Tree Survey (T001), Tree Constraints Plan (TCP) drawing T002 addressing areas where arboricultural solutions are required. The Tree Protection Plan (TPP) drawing T003 provides outline tree protection measures.

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3.0 Survey Limitations

- 3.1 No soil excavations have been carried out.
- 3.2 This report only considers the trees and conditions at the time of inspection. As the inspection was only visual no guarantee can be given concerning the condition of the wood at present in any of the trees inspected and furthermore that no future problems or deficiencies may arise.
- 3.3 The survey has been undertaken as a survey of the trees without prior influence of the development and implicating factors.
- 3.4 No invasive tools were used during this site survey.
- 3.5 It should be noted that vegetation including shrubs within this / the neighbouring sites have not been included in the survey as none were within close or relevant proximity.
- 3.6 The survey has been undertaken from within the site only and no topographical survey data was available for off site trees and / or landscape features

4.0 Tree Survey Summary

4.1 The trees have been surveyed in accordance with BS5837: 2012 'Recommendations for trees in relation to construction' (BS5837: 2012) and have been rated as follows:

Category 'A' trees

Trees of high quality with an estimated remaining life expectancy of at least 40 years. Trees have been categorised as 'A' trees for one of the following reasons:

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'A' category trees have a **green** outline as denoted within the site plan key / survey.

N/A

Category 'B' trees

Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Trees have been categorised as 'B' trees for one of the following reasons

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'B' category trees have a **blue** outline as denoted within the site plan key.

T3, T6, T9, T10, T12, T14

Category 'C' trees

Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Trees have been categorised as 'C' trees for one of the following reasons

- Arboricultural qualities unremarkable trees of very limited merit
- Mainly landscape qualities
- Trees with no material conservation or cultural value

Within the Site Plan (Appendix B) those trees rated as 'C' category trees have a grey outline as denoted within the site plan key.

T1, T2, T4, T5, G11, T13

Category 'U' trees

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. Within the Site Plan (Appendix B) those trees rated as 'U' category trees have a **red** outline as denoted within the site plan key.

N/A

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- 4.2 The trees have been surveyed taking into account condition, general health and form without the development process influencing the survey. In addition they have also been surveyed taking account of amenity value that is offered in relation to both the landscape and surrounding buildings and streetscape. This report outlines the impact that the proposed development will have on the overall treescape and landscape; it provides recommendations to ensure that long-term amenity value for the area is retained.
- 4.3 The report has been written with close reference to the British Standard Guidance, British Standard 5837: 2012 'Recommendations for trees in relation to construction' (BS5837: 2012), which addresses the juxtaposition between trees and structures. The Arboricultural Impact Assessment highlights areas where the trees will require protection which should be addressed within the Arboricultural Method Statement (AMS) and/or Tree Protection Plan (TPP) specific to the site and proposed scheme, and corroborating with all construction and landscape method statements as relevant.
- 4.4 The report specifies precautions which shall be taken when working close to retained trees. Important terms include:

Root Protection Area (RPA)

The area defined as requiring protection from development from retained trees within BS5837 (2012). Using a calculation provided within BS5837 a radius distance is provided based on a measurement of the main stem taken at 1.5m height.

Construction Exclusion Zone (CEZ)

This is the RPA where no construction activity should occur and damage is prevented by either installing fencing to restrict access or installing ground protection that allows limited access above the ground, while protecting the rooting environment below.

Due to site constraints and the encroaching nature of development for an area within the RPA outside the CEZ where works are proposed, works must be carried out with care to minimise any impact on the tree rooting environment.

Tree Protection Plan (TPP)

The document which defines the extent and methodology of tree protection for the entire development process. This should be referred to AT ALL TIMES by the principal contractor and shall ensure safe protection of all retained trees on site.

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5.0 Arboricultural Impact Assessment

Site Overview

5.1 The 13 no. trees and 1 no. group (T1-T14) located within close proximity of the proposed development works are sited within the following properties:

12 Pilgrims Lane Trees T1, T2, T3, T4, T5, T6, T9, T10

4 Downshire Hill Group G11 & tree T12

5 Downshire Hill *Tree T13*

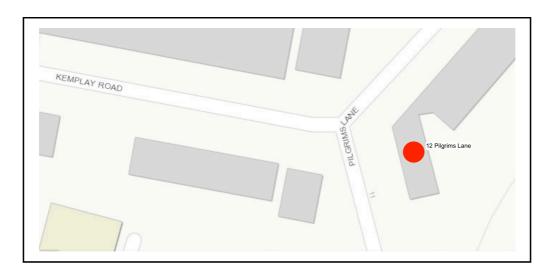
6 Downshire Hill Tree T14

5.2 The following statutory checks have been made in relation to the trees and their status within London Borough of Camden (LBC):

CONSERVATION AREA STATUS Hampstead Conservation Area

TREE PRESERVATION ORDER (TPO) STATUS Lime (T3) - LB Camden TPO Reference: 13H Beech (T6) - LB Camden TPO Reference: 13H

5.3 The following extracted map confirms the site location:



AIA/MF/0195/24: BS5837:2012 AIA Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN

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Extract from: GoogleMaps

5.4 The underlying soil to this area is classified as 'clayey loam to silty loam' within the UK Soil Observatory - www.ukso.org - a medium to heavy soil mix as confirmed below:



- 5.5 The presence of a clay element within the soil is significant in terms of both tree protection and foundation design. Clay soils can experience substantial volume changes when vegetation extracts moisture from the ground and they are also prone to compaction when wet; the soil is deemed as being of medium heavy texture. Any foundations should also be designed in accordance with the recommendations contained within NHBC Chapter 4.2 (National House Building Council, 2010) and should account for the possibility of both subsidence and heave.
- 5.6 The site comprises a semi-detached residential dwelling with hard and soft landscapes laid to the front and rear.
- 5.7 For the purposes of this report, reference has been made to the following plans for the proposed development:

ARCHITECTURAL DRAWINGS - Wolff Architects 2160-PL-100 - Site Location Plan 2160-PL-201-B_Proposed Lower Ground Floor Plan 2160-PL-202-B_Proposed Ground Floor Plan

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5.8 The proposed development comprises:

Alterations to Approved Application reference 2022/2398/P which comprises

- (i) Extended ground floor and lower ground floor
- (ii) Front and rear garden landscape updates
- (iii) General refurbishment works
- 5.9 The development has the potential to affect the trees in the following ways:
 - •Loss of no trees to facilitate development
 - •Potential impact to the root plate of retained trees during development process from development works
 - •General development process impacting retained tree's root plates
 - •The use of and storage of materials and chemicals including concrete on site within close proximity of the trees has the potential to cause damage
 - •The long-term impact of associated works of the proposed development
- 5.10 The trees and the impact from the proposed development are evaluated within this section to determine overall arboricultural impact from the proposed development. Where trees are retained the Root Protection Area (RPA) for each tree is evaluated in relation to proposed development works and the following is assessed:
 - (i) Where tree protection measures are deemed appropriate these are highlighted as being required
 - (ii) Tree protection measures are outlined within the Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP)
- 5.11 Additionally as no trees are proposed for removal, measures of mitigation are required to be evaluated.

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Arboricultural Impact Assessment

Trees T1-T10 - Trees at 12 Pilgrims Lane

- 5.12 Trees T1 T9 at frontage comprise a mix of larger mature plantings historic to the streetscape and smaller ornamental latter dated plantings. The key characteristics are as follows:
 - 1 no. mature 'B' category Lime (*Tilia x europeae*), T3 cyclically managed whilst retaining prominent form
 - 1 no. mature 'B' category Beech (*Fagus sylvatica*), T6 cyclically managed whilst retaining prominent form
 - 1 no. mature 'B' category Mulberry (*Morus nigra*), T9 with compact form having been heavily reduced to account for structural defects
 - 2 no. smaller trees providing understory screening and ornamental value to the property comprising Magnolia (*Magnolia grandiflora*), Japanese maple (*Acer palmatum*) and Cherry (*Prunus spp*) trees
 - 3 no. Screening trees to south of site acting as a buffer between property and no, 10 Pilgrims Lane comprising False acacia (*Robin pseudoacacia*), Leyland Cypress (*Cupressus x leylandii*) and Hornbeam (*Carpinus betulus*)
- 5.13 The arboricultural impact for the 2 no. mature trees, T3 & T6 where crowns and RPA's encroach against the existing footprint this impact is assessed under previous approval with impact deemed acceptable. The main arboricultural impacts as shown within the TCP are as follows:
 - (i) RPA of tree T3 at 7.4m radius distance / 173.92m2 set within existing footprint where further updates to ground and lower ground floor footprint are proposed namely refurbishment works
 - (ii) RPA of tree T6 at 9.7m radius distance / 296.75m2 set within existing footprint where further updates and extensions to ground and lower ground floor and ground floor no incursion for updated scheme incursion for development process only
 - (ii) RPA of tree T9 at 7.2m radius distance / 162.88m2 set within close proximity of development site no incursion for updated scheme incursion for development process only
 - (iii) Crowns of both trees T3 & T6 within close proximity of western elevation of existing structure where refurbishments shall be undertaken

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- 5.14 For determining arboricultural impact upon the root plates of the trees, trial works have been undertaken by GoRoots on 7th-9th February 2022 with results shown within the summary report appended within this report which supported the approved works relating to Application Reference: LB Camden 2022/2398/P.
- 5.15 For tree retention the following tree protection measures shall be applied as specified within Section 6, AMS and the TPP:

(i) TREE PROTECTION FENCING

Ground protection for RPA area exposed to construction works shall be implemented as shown within the AMS & TPP

(ii) GROUND PROTECTION

Ground protection for RPA area exposed to construction works shall be implemented as shown within the AMS & TPP

Trees G11- T14: Rear of 4-6 Downshire Hill

- 5.16 Trees within G11 & T12 -T14 at the rear (off site) comprise a mix of early mature to mature trees. The key characteristics of the trees and landscape are as follows:
 - 2 no. mature 'B' category Ash (*fraxinus excelsior*), both cyclically managed and with T14 with closest crown to rear south east elevation of structure
 - 1 no. early mature 'C' category Leyland Cypress with lapsed management and likely planted for screening
 - 1 no. semi mature 'C' category Leyland Cypress grouping with lapsed management and likely planted for screening
- 5.17 The arboricultural impact is limited to the 2 no. mature Ash trees, T12 & T14 where crowns and RPA's encroach within the site to within close proximity of development footprint. The main arboricultural impacts as shown within the TCP are as follows:
 - (i) RPA of tree T12 at 9.0m radius distance / 254.5m2 set within proposed lower ground floor footprint no incursion for updated scheme incursion for development process only
 - (ii) RPA of tree T14 at 7.2m radius distance / 162.88m2 set within close proximity of proposed lower ground floor footprint / landscape updates

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- (iii) Crown of tree T12 trees within close proximity of southern elevation of proposed structure in relation to future occupancy
- 5.18 For tree retention of the trees surveyed off site the following tree protection measures shall be applied as specified within Section 6, AMS and the TPP:

(i) TREE PROTECTION FENCING

Ground protection for RPA area exposed to construction works shall be implemented as shown within the AMS & TPP

(ii) GROUND PROTECTION

Ground protection for RPA area exposed to construction works shall be implemented as shown within the AMS & TPP

5.19 Furthermore he impact upon the future occupancy of the building for the trees is deemed limited as massing is of a lesser extent than that set out within Approval Reference: 2022/2398/P.

Ala/MF/0195/24: BS5837:2012 Ala Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN

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Summary of Arboricultural Impact

- 5.20 The proposed development is deemed to be limited and justifiable based on the following factors:
 - (I) Impact of development of lesser extent than set out within Approval reference 2022/2398/P which highlights as follows:
 - Modified RPA for tree T3 & T6 applicable based on trial works and projected foundation depths
 - Trial works for T12 & T14 demonstrating absence of tree roots on line of development footprint for rear / southerly extension
 - (II) No impact to trees to trees T6 & T9 where previous western extension is now omitted from updated schemeE
- 5.21 The development requires tree protection measures and mitigation for the implementation of development as follows:

Tree Protection applicable to the following trees:
T1 -T6 & T9- T14 as previously set out within Approval reference
2022/2398/P

- 5.22 In summary the arboricultural impact as outlined within drawing T002 Tree Constraints Plan (TCP): require the following tree protection measures
 - (i) TREE PROTECTION FENCING
 Specified as follows as highlighted within AMS & TPP
 - (ii) GROUND PROTECTION

 Ground protection for development process within RPA of trees as highlighted within AMS & TPP
- 5.23 There is no loss of trees for with no replacement planting scheme required. However it is imperative that proposed landscapes must adhere to existing levels within the RPA as demonstrated within the AMS which must corroborate with final and approved landscape scheme.

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6.0 Arboricultural Method Statement

A full Arboricultural Method Statement (AMS) shall be prepared and agreed at pre-commencement stage to fully corroborate with the construction methodology. The following tree protection measures require close adherence AT ALL TIMES with full supervision from the consulting arboriculturist. The measures are outlined within Tree Protection Plan (TPP) - drawing T003.

6.1 Tree Works

6.1.1 No tree works are required for the implementation of development as confirmed within the Tree Works Schedule - Section 7.

6.2 Tree Protection Fencing

- 6.2.1 Protection of the trees highlighted for retention must be implemented as explained below and as specified within the TPP drawing T003.
- 6.2.2 These measures must remain for the entire construction process in order to provide a comprehensive barrier from the trees
 - •The areas surrounding the trees must be surrounded by protective fencing as outlined in TPP T003
 - •The protective fencing used must be suitable for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees.
 - •This barrier must remain rigid and complete during the entire construction process.
 - Once the Exclusion Zones have been protected by fencing all weather notices as included in *Appendix D* must be put onto the barrier warning that the area is a construction exclusion zone.
 - No building materials or chemicals are stored within the tree protection zone as indicated on the TPP
- 6.2.3 The site notice as included in *Appendix D* summarising the above information must be visible at all times for employees working within the site.

6.3 Ground Protection

- 6.3.1 For ground protection this must be installed prior to enabling works at pre-commencement of development. The following must be adhered to:
 - Implementation of 75mm bark mulch layer overlapped with minimum 15mm plyboard surface or load bearing ground protection boards to provide ground protection for development process
 - No storage of spoil within this area
 - No storage of chemicals within this area
- 6.3.2 Where applied, ground protection shall be removed for final landscapes works within the RPA of retained trees.

6.4 Storage of Construction site related materials, plant and spoil

6.4.1 A designated storage area must be confirmed at pre-commencement stage which is located outside of the RPA of retained trees. Strict adherence to this area must be made to this area at all times.

6.5 Site Welfare & Site Office

6.5.1 Site welfare must be confirmed at pre-commencement stage and must be outside of the RPA of retained trees - no provision within the TPP is therefore required in relation to trees.

6.6 Fires

6.6.1 There must UNDER NO CIRCUMSTANCES be fires within this site.

6.7 Communication, Monitoring and Compliance

6.7.1 In ensuring that all Tree Protections Specifications as highlighted within this AMS are closely adhered to at all times, it is important to set out for the long term of the development, communication details for key individuals and tasks that require monitoring within the Arboricultural Scheme of Supervision. Refer to Section 8.

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6.8 Final Landscape Works

- 6.8.1 For final landscaping works the following must apply where carried out within the RPA of retained trees
 - No reduction in levels of the underlying soil surface will occur during final landscaping works within the RPA of retained trees
 - Close adherence with detailed root protections specifications as outlined within this report
 - No compaction of soils for establishing level base
- 6.8.2 No soakaway shall be sited within the RPA of retained trees
- 6.8.3 For Driveway / access updates within RPA of tree T1 there must be no excavations and permeable load bearing membrane implemented for surface

6.9 Installation of utility services

- 6.9.1 The installation and/or amendment of utility services within the RPA of retained trees is not required. However where this is required the consulting arboriculturist and Local Authority must be notified prior to any ground tree protection / fencing and barrier removal and the following details adhered to:
 - Trenching for the installation of underground services severs any tree roots present and can have a detrimental impact on the structural integrity of affected trees. When services are required to pass through a Tree Protection Area / CEZ, detailed plans showing proposed routes should be drawn up in conjunction with the consulting arboriculturist to avoid long term problems for related trees.
 - The preferable method for trenching is to use a 'Air Spade' or similar to remove soil with compressed air, therefore minimising damage to roots in the process. Should hand dug excavations be required within the RPA this shall only be undertaken with arboricultural supervision.
- 6.9.2 Further reference can be made to National Joint Utilities Group (Volume 4, Issue 2) for guidance but any approach must be approved by both the consulting arboriculturist and Local Authority tree officer.

7.0 <u>Tree Works Schedule</u>

7.1 Any tree work should be carried out to BS 3998; 2010 Recommendations for Tree Work.

		12 P	TREE WORKS SCHEDULE ilgrims Lane, London, NW3	1SN
Tree No.	Common Name	Category Rating	Tree Works	Reason for works
			No works required	

NOTE: Wildlife & Habitat Protection Guidelines

The tree work specifications included within this report do not provide an exemption from the requirements to comply with the Wildlife and Countryside Act 1981, the Habitats Regulations 1994 and the Countryside and Rights of Way Act 2000, or any acts offering protection to wildlife. Of particular note is the protection offered to bats, birds and their nests, whilst being built or in use. It must be noted that failure to comply with the Acts may result in a criminal prosecution.

Ala/MF/0195/24: BS5837:2012 Ala Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN

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8.0 Communication, Monitoring and Compliance

- 8.1 in ensuring that tree protections specifications as highlighted within the approved AMS are closely adhered to at all times, it is important to set out for the long term of the development, communication details for key individuals and tasks that require monitoring.
- 8.2 The key individuals appointed for advising and complying with Tree Protection specifications must adhere to the following at all times:
- Relevant parties / key individuals must be advised of any changes in personnel or contractor during the development process.
- Relevant parties / key individuals must be responsible for relaying information regarding tree protection within work force where deemed applicable / relevant
- 8.3 For all tree protection measures these must be considered as sacrosanct and should not be removed or altered without prior written consent from the Local Authority tree officer and/or consulting arboriculturist.
- 8.4 The local authority arboriculturist will have free access to the site and forward any concerns / recommendations directly to the consulting arboriculturist.

The following individuals and organisations shall be central to the delivery of the scheme in relation to the tree protection measures it requires:

CONSULTING ARBORICULTURIST

Name - Marcus Foster Marbora **Telephone -** 07812024070 Contact - Marcus Foster

Email - mail@marcus-foster.com

LONDON BOROUGH OF CAMDEN - TREE OFFICER

Name - Arboricultural Services - London Borough of Camden **Telephone -** 020 7974 5939 Contact - Nick Bell - Tree Officer

Email - nick.bell@camden.gov.uk

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Appendices Appendix A

Tree Survey Schedule (BS5837:2012)

12 Pilgrims Lane London NW3 1SN

Colour Key: BS5837: 2012 (see Section 2.6)



Three Survey Key: BS5837: 2012

- · Number: an identity number which cross-references locations shown on the plan in Appendix A with the schedule in Appendix B.
- · Species: listed by common names
- · Tree Height: height in metres (m)
- Tree Spread: spread in metres (m)
- Stem diameter: measured in millimetres (mm) and taken at 1.5m above ground level
- Age Class: Y (young); EM (early-mature); M (mature); OM (over-mature)
- · Vigour: G (good); F (fair); P (poor); D (dead)
- Structural Condition: G (good); F (fair); P (poor); D (dead)
- · General Condition Specific comments relating to each tree
- Estimated Remaining Contribution (years)
- BS5837 Category Grading
- · Protection Distance m2 Area (where applicable BS5827: 2012)
- · Protection Distance Radius (where applicable BS5827: 2012)

BS5837:2012 TREE SURVEY 12 Pilgrims Lane, London, NW3 1SN BS5837 Tree Schedule (BS5837:2012) - 02.10.24

Tree No	Species	Height (m)	DBH (mm)	Spread (m)	Age	Structural Condition	Vitality	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	Root Protection Area (RPA) m2	Root Protection Area (RPA) Radius (m)
T1	Japanese maple	5	m/s 120	N: 3 E: 3 S: 2 W:2	М	F	F	C1	10 years +	lvy clad at base / to 2m height. Union at 1m height; congested. Crown dominant to north - selectively pruned.	4.52	1.2
T2	Southern magnolia	7	150	N: 2 E: 3 S: 2 W:2	SM	F	F	C1	10 years +	Ornamental form; spreading habit with understory form to tree T3. Screening value	10.18	1.8
Т3	Lime	13	620	N: 4 E: 4 S: 4 W:4	М	F	G	B1	20 years +	Exposed anchorage roots to north east; accentuated buttress roots. Crown break from 4-6m height with balanced form. Cyclically reduced / managed; lapsed 3 years. Low growth developing over property / highway.	173.92	7.4
T4	Cherry	3.5	150	N: 2 E: 2 S: 1 W:2	SM	F	F	C1	10 years +	Ornamental form; low spreading habit	10.18	1.8
T5	Cherry	2.5	220	N: 3 E: 2 S: 1 W:2	EM	F	F	C1	10 years +	Ornamental form; low spreading habit; lean to north east	21.9	2.6
Т6	Copper beech	16	810	N: 4 E: 4 S: 5 W:4	М	F	G	B1	20 years +	Accentuated buttress roots at base to east with level change to this direction. Electricity unit attached at 2m height to east. Pruning wounds from previously crown lifted limbs fully occluded at 1.8m and 2.1m height to east. Ivy clad to 7m height obscuring main union at 4-5m height. Absence of branch framework to east from historic management towards property. Crown framework dominant to south and west. Management of previous reduction lapsed approx 2-3 years; crown overhanging property by 1.5m to east at 5-9m height	296.85	9.7
Т9	Mulberry	6	600	N: 2 E: 2 S: 4 W:2	М	F	F	B1	20 years +	Significant lean to south with partial support from surrounding shrub growth. Main stem gives way to a crown formed from 2 x sub leaders. Decay in main stem from base to pollard point at 2m height	162.88	7.2
T10	Hornbeam	10	m/s 300	N: 5 E: 4 S: 5 W:4	EM	F	G	B1	20 years +	Multi-stem form comprising 4 x stems; fusion between central stems at 1.2m height	28.28	3.0
G11	Leyland Cypress	7	200 (e)	N: 2 E: 2 S: 2 W:3	SM	F	F	C1	10 years +	Understory form; off site screening form. No overhang to property	18.1	2.4

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Tree No	Species	Height (m)	DBH (mm)	Spread (m)	Age	Structural Condition	Vitality	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	Root Protection Area (RPA) m2	Root Protection Area (RPA) Radius (m)
T12	Ash	16	750 (e)	N: 9 E: 7 S: 8 W:7	М	F	G	B1	20 years +	Off site; spreading form with crown dominant to north; over- extended leader to north. Limited overhang to property. Selectively crown reduced. No signs of ash dieback	254.5	9.0
T13	Leyland Cypress	12	m/s 400	N: 4 E: 4 S: 4 W:4	EM	F	F	C1	10 years +	Off site. Grouping of screening trees with understory form. Overhang of 3m at 4-8m height to property	72.39	4.8
T14	Ash	16	600 (e)	N: 7 E: 7 S: 4 W:7	М	F	F	B1	20 years +	Off site. Ivy clad to 8m height. Crown break at 8m height; suppressed to north by off site Copper beech. Thinning crown within upper crown with some minor evidence of dieback. Overhang of 5m at 6-12m height to property.	162.88	7.2

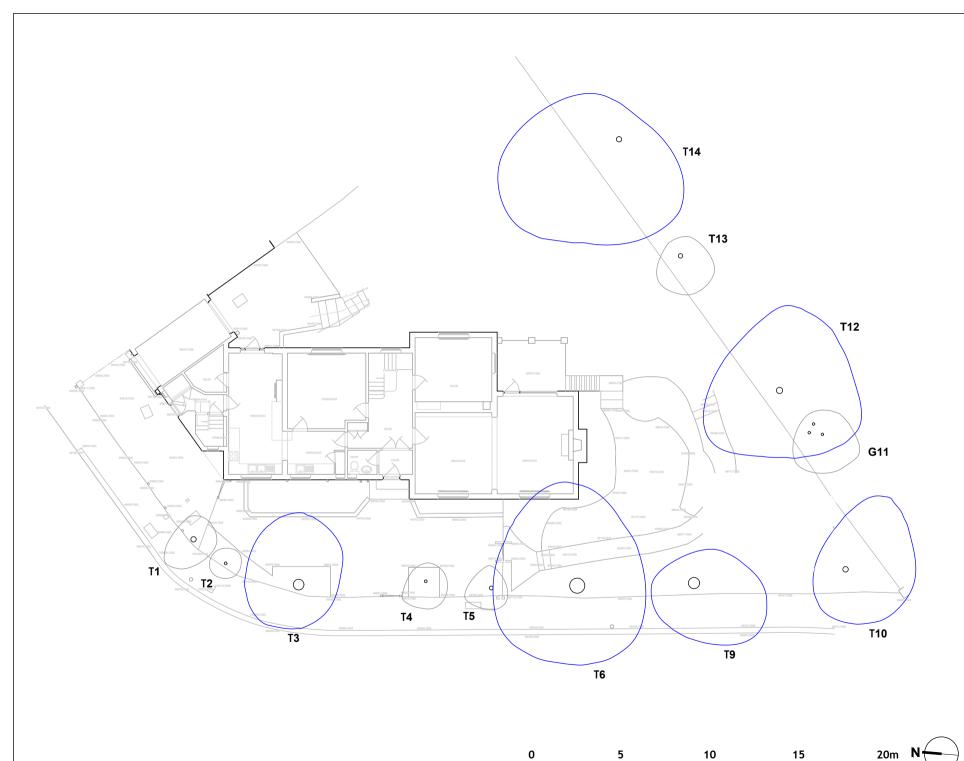
AR/MF/0196/24: BS5837:2012 AIA Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN Prepared for: Mr Alex Shamash Date: October 2024

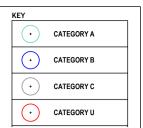
Appendix B

Tree Survey Plans BS5837:2012

Existing Tree Survey (T001)
Tree Constraints Plan (T002)
Tree Protection Plan (T003)

12 Pilgrims Lane London NW3 1SN





BS5837 (2012) Tree Survey Notes

- In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white.
- If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
- This drawing should be read in conjunction with all other relevant drawings and specifications.
- 4. Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
- Off site trees have been plotted based on site visit survey and locations are not based upon topographical survey.

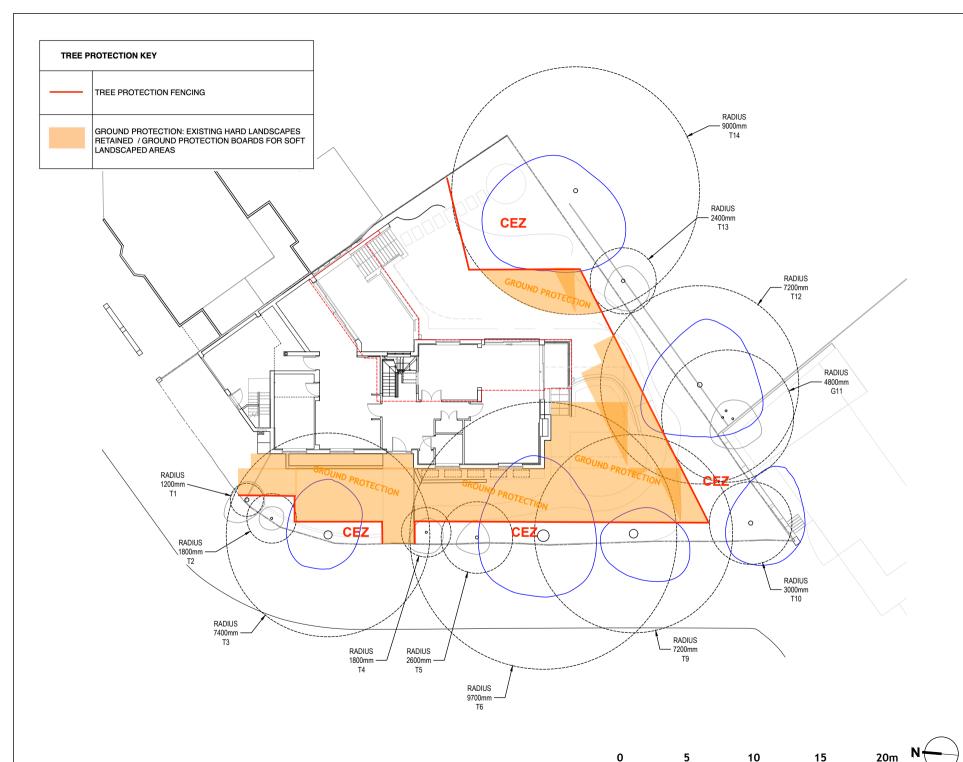
NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIs mapping has not been undertaken for the purposes of this survey. All off site trees where not plotted within topographic survey information are plotted using on site survey tools from within the site only.

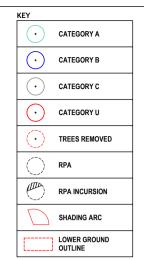
Revisions

Rev.	Date			Checked
1	13.10.2021	ISSUED FOR INFORMATI	ION	MF
/	03.03.2022	ISSUED FOR INFORMAT	ION	MF
/	23.10.2024	ISSUED FOR INFORMAT	ION	MF
SITE	1	Pilgrims Lane, Lond	lon, NW3	1SN
CLIE	NT N	r Alex Shamash		
DWG	TITLE E	xisting Tree Surve	y Plan	
SCAL	.E		DATE	
	1	:150 @ A3	Oct	24
JOB	NO		DWG NO.	
		AIA/MF/0195/24	T00	



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TREE CONSULTANCY





BS5837 (2012) Tree Survey Notes

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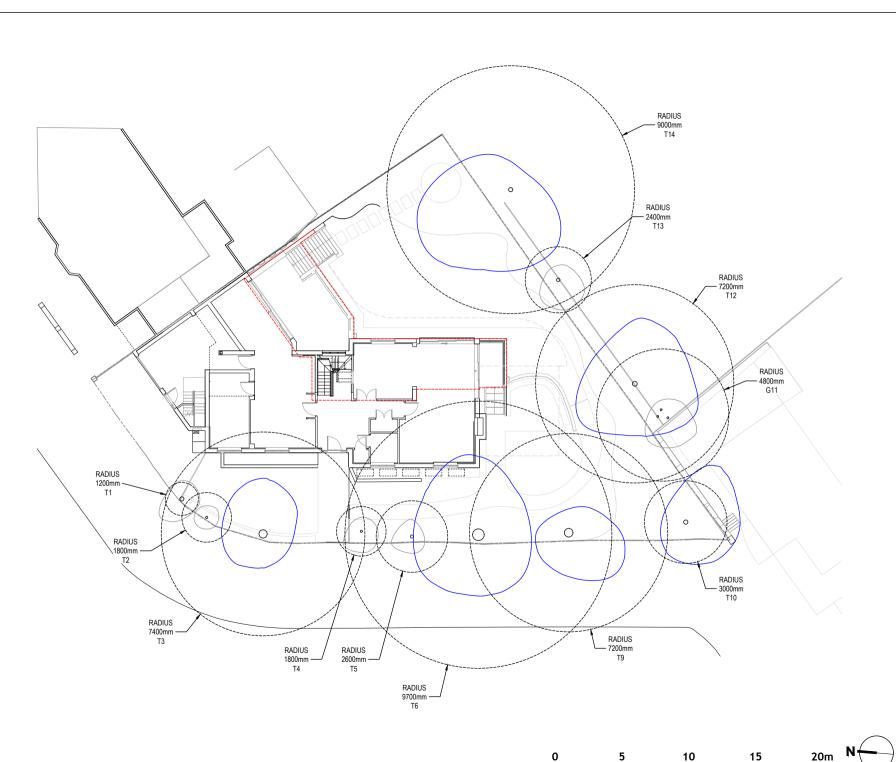
NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIS mapping has not been undertaken for the purposes of this survey. All off site trees where not plotted within topographic survey information are plotted using on site survey tools from within the site only.

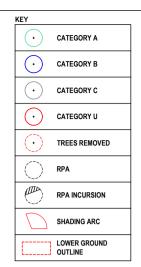
Rev	is	io	ns	

Rev.	Date			Checked
1	13.10.2021	ISSUED FOR INFORMAT	ON	MF
/	03.03.2022	ISSUED FOR INFORMAT	ION	MF
/	01.06.2022	ISSUED FOR INFORMAT	ION	MF
/	23.10.2024	ISSUED FOR INFORMAT	ION	MF
SITE		Pilgrims Lane, Lond	lon, NW3	1SN
		Alex Silalilasii		
DWG	TITLE T	ree Protection Pl	an	
SCAL	.E		DATE	
	1:2	200 @ A3	Oct	24
			DWG NO	
JOB	NO			



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Rev.	Date		Checked
1	13.10.2021	ISSUED FOR INFORMATION	MF.
1	03.03.2022	ISSUED FOR INFORMATION	MF.
1	01.06.2022	ISSUED FOR INFORMATION	MF.
1	23.10.2024	ISSUED FOR INFORMATION	MF
SITE	12	Pilgrims Lane, Londor	n, NW3 1SN
CLIE	NT Mr	Alex Shamash	
		Alex Shamash ee Constraints Plar	1
	TITLE Tr		DATE
DWG	TITLE Tr		
DWG	TITLE Tr	ee Constraints Plar	DATE



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Appendix C: Tree Protection Notice

Generic Tree Protection Notice (BS5837: 2012):





Notice to be clearly shown on site where fencing constructed

AT ALL TIMES

Appendix D: Tree Protection Fencing Specifications

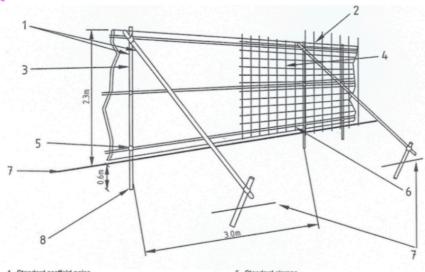
Figure 2: BS5837:2012

BS587 TREE PROTECTION FENCING & CONSTRUCTION EXCLUSION ZONE (CEZ)

The construction exclusion zone (CEZ) is the area protected by tree protection fencing. Within the CEZ the following exclusions shall apply:

- No excavation
- . No storage of materials or equipment
- No changes in levels
- No installation of services without arboricultural supervision
- No access

The fencing shall be maintained in a condition fit-for-purpose throughout the construction process



- 1 Standard scaffold poles
- 2 Uprights to be driven into the ground
- 3 Panels secured to uprights with wire ties and, where necessary, standard scaffold clamps
- 4 Weldmesh wired to the uprights and horizontals
- 5 Standard clamps
- 6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
- 7 Ground level
- 8 Approx. 0.6m driven into the ground

Appendix E: Air Spade Trial Investigation Report

Trial Works Undertaken by:
GoRoots
Report Prepared by:
Marcus Foster (February 2022)

Marcus Foster Arboricultural Design & Consultancy

BA (Hons) | NDArb | Techcert (AA) | MArborA



TREE ROOT TRIAL WORKS FINDINGS REPORT

DATE: 7-9 February 2022 SITE: 12 Pilgrims Lane, London, NW3 1SN WORKS UNDERTAKEN BY: David Dowling (GoRoots) DATE OF SITE VISIT: 7-9 February 2022 ARBORICULTURAL CONSULTANT: Marcus Foster MArbora PREPARED BY: Marcus Foster MARDORA

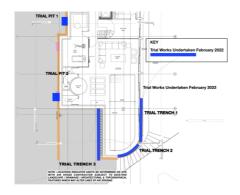
SUMMARY

(i) Trenches / trial pits based on sketch plan : TREE ROOT INVESTIGATION MARK UP 151121(extracted below)

(ii) Marcus Foster (MF) in attendance to oversee commencement of works and brief David Dowling (DD)

(iii) All photographs / site notes prepared by DD on site

PLAN (extracted)



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12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022



AIA/MF/0195/24: BS5837:2012 AIA Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN

Prepared for: Wolff Architects

TRENCH 1

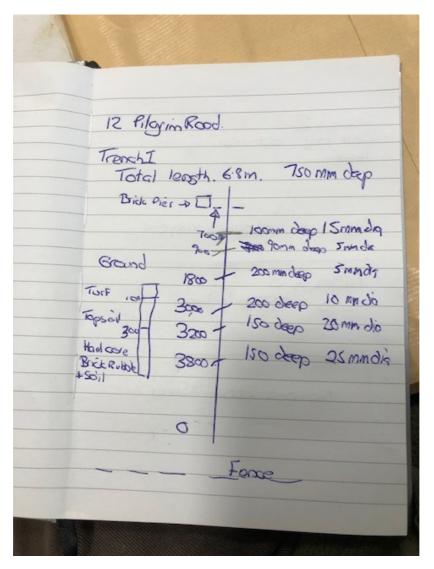


12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022

AlA/MF/0195/24: BS5837:2012 AlA Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN Prepared for: Wolff Architects Date: October 2024

TRENCH 1 FINDINGS

Notes prepared by Dave Dowling on site - 09/02/22



Summary by MF:

- Roots sub 25mm diameter
- Topsoil 0-300mm depth
 Made up ground 300-750mm depth

12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022

AIA/MF/0195/24: BS5837:2012 AIA Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN

Prepared for: Wolff Architects

TRENCH 2

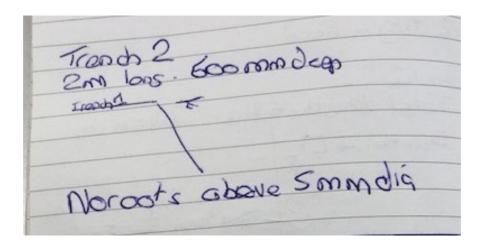






12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022

TRENCH 2 - FINDINGS



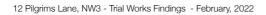
Summary by MF:

- Roots sub 5mm diameterRoots associated with shrub growth only / dead apple
- Desiccated soil

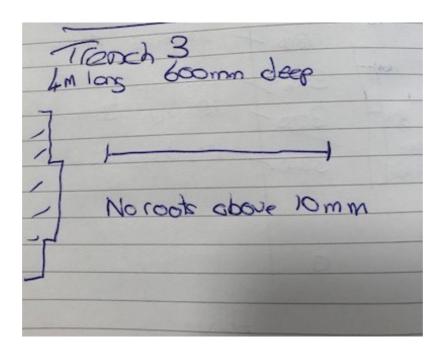
12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022

TRENCH 3





TRENCH 3 - FINDINGS



Summary by MF:

- Roots sub 10mm diameter
- No roots encountered above 10mm diameter 0-600mm depth
 Soil based profile

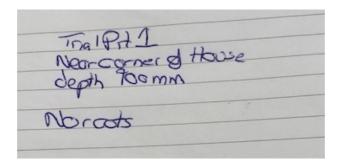
12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022

TRIAL PIT 1 (south west corner of property





TRIAL PIT 1 - Findings

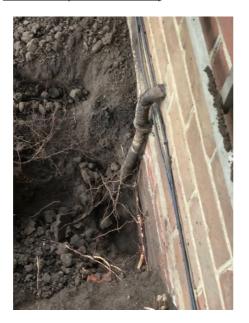


Summary by MF:

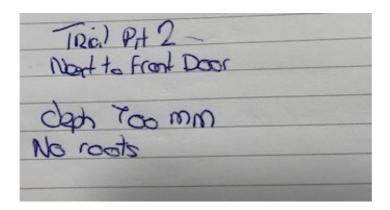
- 700mm depth
- No tree rootsFoundations to unknown depth beyond 700mm

12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022

TRIAL PIT 2 (next to front door)



TRIAL PIT 2 - Findings



Summary by MF:

- 700mm depth
- No tree roots
- Foundations to unknown depth beyond 700mm

12 Pilgrims Lane, NW3 - Trial Works Findings - February, 2022

AlA/MF/0195/24: BS5837:2012 AlA Tree Report Site: 12 Pilgrims Lane, London, NW3 1SN

Prepared for: Wolff Architects

Appendix F: References

- 1. BS5837: British Standard: Trees in relation to construction Recommendations, British Standard (2012)
- 2. Principles of Tree Hazard Assessment and Management, Lonsdale, D. (Department for Transport, Local Government and the Regions, 1999)
- 3. The Body Language of Trees, Mattheck, C. and Breloer, H. (HMSO, 1994)
- 4. Trees in Britain, Philips, R. (Pan Books, 1978).
- 5. Diagnosis of III Health in Trees, Strouts, R. and Winter, (TSO, 1994)
- 6. NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2), (November 2007)

PREPARED BY MARCUS FOSTER MArborA END OF REPORT _ page 38/38 DATE: October 2024

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