Leading solutions for the natural environment

Arboricultural Impact Assessment

Mr Wood 28 Redington Road, Hampstead.

Ref:	22-2440
Version:	1
Date:	April 2023
Author:	Shaun Phillips CMS HND Arb MArborA MICFor
Position:	Arboricultural Consultant

Northamptonshire Office

7-8 Melbourne House Corbygate Business Park Weldon Northamptonshire NN17 5JG 01536 408 840 contact@nicholsonsgb.com

Oxfordshire Office The Park North Aston Oxfordshire OX25 6HL

01869 340342 contact@nicholsonsgb.com

www.nicholsonsgb.com





This page has intentionally been left blank

DOCUMENT CONTROL SHEET

Arboriculture Project Team										
Ian Dudley BSc (Hons) MICFor CEnv CMLI	Associate Professional Services Manager									
Bob Staig NDArb Chort	Senior Arboricultural Consultant									
Freddy McCreery FdSc Arb MArborA	Arboricultural Consultant									
Ben Jones BSc (Hons) MSc DipArb TechArborA	Arboricultural Consultant									
Shaun Phillips CMS HND Arb MArborA MICFor	Arboricultural Consultant									
Tom Smith BA (Hons)	Trainee Tree Surveyor									
Alex Cannon	Trainee Tree Surveyor									
Marie Allcoat	Project Administrator									

REVISION HISTORY

Rev	Description of change	Date	Initials
1	Original report	21.04.2022	SP

COPYRIGHT ©

The copyright of this document remains with Nicholsons. Its' contents must not be copied or reproduced in whole or in part for any purpose without the written consent of Nicholsons.

DISCLAIMER

While all reasonable efforts have been made to identify defects in the subject trees, the statements made in this report do not take into account the effects of extreme weather events, vandalism or accidents, or changes to the site that may affect trees that have taken place since the date of the survey. Nicholsons does not accept any responsibility in connection with these factors. The comments and observations made within this report will cease to be valid either within two years of the date of the survey (unless specifically stated elsewhere within the report), or when site conditions change or any works to trees take place that have not been specified within this report, whichever is the sooner.

EXECUTIVE SUMMARY

Nicholsons has been instructed to update the arboricultural survey and prepare a corresponding Arboricultural Impact Assessment to supplement a planning application at 28 Redington Road, Hampstead, London.

The proposal is for a garden pavilion and creation of a natural swimming pond.

The site visit was undertaken on 8th March 2023 to update an existing tree survey (ref 20-3473). The tree stock is of mixed quality with trees from low to high arboricultural value.

The proposal requires the removal of no trees but will impact the Root Protection Area (RPA) of 8 trees (T15, T16, T17, T24, T27, T29, T30, T37), and one group of trees (G23).

An assessment of the position for the pavilion and swimming pond has influenced the design to achieve successful long-term retention of the impacted trees. The incursion into the rooting environment of most of the affected trees (T16, T24, T27, T29, T30, T37), will not be impacted by greater than 15% of the radial RPA. Two trees RPA's (T15 and T17) will be impacted by more than 15% of a radial RPA. However, the constraints of the site will allow for offsetting to achieve sufficient rooting environment to successfully retain the trees.

Tree T15 is categorised as retention Cat A, though the condition of the tree is poor, with only 5-10% live canopy remaining, and is being retained as a feature for its ecological benefits. Therefore, the impact on the rooting environment has been assessed to be of less importance and the greater incursion of the RPA considered acceptable due to this.

The proposed foundation design for the pavilion and patio area which are light weight constructions, is to use ground screw piles, or pile and beam. This will minimise the impacts, though the incursion within the RPA is assessed to be acceptable to successfully retain affected trees.

All retained trees within, or directly adjacent to the site, will be protected through tree protection measures. The nature of the construction, limited access, and topography of parts of the site will mean that Construction Exclusion Zones (CEZ) designated by orange netlon fencing (or similar demarcation) will be an appropriate level of protection. Temporary ground protection maybe required subject to confirmation of construction methods and machinery.

TABLE OF CONTENTS

1.	INTRODUCTION	7
	Instruction	7
	Site Description	7
	Caveats and Limitations	7
2.	TREE SURVEY AND CONSTRAINTS	8
	Scope	8
	Tree Survey	8
	Tree Constraints	8
	Soils	9
	Statutory Considerations	9
	National and Local Planning Policies	9
3.	ARBORICULTURAL IMPACT ASSESSMENT	11
3.	ARBORICULTURAL IMPACT ASSESSMENT Design Principles	
3.		11
3.	Design Principles	
3.	Design Principles Development Proposal Arboricultural Impacts	
3.	Design Principles Development Proposal Arboricultural Impacts Arboricultural Impact Assessment	
3.	Design Principles Development Proposal Arboricultural Impacts	
3.	Design Principles Development Proposal Arboricultural Impacts Arboricultural Impact Assessment Principles of Protection of Retained Trees	

Attachments

Description	Reference	Version
Tree Schedule	20-3473	2
Tree Constraints Plan	22-2437	1
Arboricultural Impact Plan	22-2438	1
Draft Tree Protection Plan	22-2443	1

PURPOSE OF DOCUMENT

NICHOLSONS Leading solutions for the natural environment

This report has been commissioned to provide an assessment of the trees at 28 Redington Road in accordance with the guidelines provided by BS5837:2012 *Trees in relation to design, demolition and construction – Recommendations*.

It consists of:

- A Tree Survey that records all relevant information about the trees on or adjacent to the site that may be impacted by the proposals. This includes a Tree Constraints Plan that shows the location of the trees on the site irrespective of any development considerations.
- An Arboricultural Impact Assessment to consider the impact that the development proposal may have on the trees. It provides details of how any adverse impact will be mitigated (including indicative protection measures) and includes an Arboricultural Impact Plan. This shows the location of the trees in relation to the proposed development and the above and below ground constraints posed by the trees. It will also show an illustration of the recommended tree protection measures on a Draft Tree Protection Plan.

The purpose of this report is to demonstrate how the tree constraints have been considered in the design and layout of the site. It also provides the local authority (Camden Borough Council) with the necessary information to assess the tree issues associated with the planning application.

The aim is to present the information in a manner that can easily be understood by people without specific knowledge of tree related matters.

1. INTRODUCTION

Instruction

1.1 Instruction was received from Emily Erlam on 7th March 2023 to update an existing tree survey and to prepare an Arboricultural Impact Assessment to supplement a planning application for a proposed garden pavilion and natural swimming pond development at 28 Redington Road.

Site Description

- 1.2 The site is the rear garden to a residential dwelling.
- 1.3 The site is influenced by tree stock of mixed quality and age diversity. Containing trees of Low to high arboricultural value. One tree T15 has been retained for its ecological value as appose to its arboricultural value due to its poor condition.

Caveats and Limitations

- 1.4 While all reasonable efforts have been made to identify defects in the subject trees, the statements made in this report do not take into account the effects of extreme weather events, vandalism or accidents, or changes to the site that may affect trees that have taken place since the date of the survey.
- 1.5 While the author warranties that the survey has been undertaken in accordance with industry best practice recommendations and guidance, no warranty is provided in relation to changes to the site that occur after the date of the survey that may have an impact on the tree stock present at the time of the survey.
- 1.6 The comments and observations made within this report will cease to be valid either within two years of the date of the survey (unless specifically stated elsewhere within the report), or when site conditions change or any works to trees take place that have not been specified within this report, whichever is the sooner.
- 1.7 The survey has been undertaken with the benefit of a topographical survey plan prepared by Mobile CAD Surveying in August 2015. The location of all trees, hedges and groups detailed in this report have relied upon the detail provided in this survey and no warranty is given by Nicholsons as to the accuracy of this data.
- 1.8 This survey has been limited to identifying arboricultural features within the site. It therefore does not include any ecological assessment or landscape appraisal of trees, groups, woodlands or hedges beyond the scope of BS5837.

2. TREE SURVEY AND CONSTRAINTS

Scope

- 2.1 The survey has been carried out in accordance with the recommendations laid down by BS5837:2012 *Trees in relation to design, demolition and construction Recommendations*.
- 2.2 The information collected during the survey has been used to assist in the preparation of a report to accompany a planning application. This report includes:
 - A Tree Schedule to include basis data and condition assessment;
 - A Tree Constraints Plan (TCP) that provides illustrative information on the constraints posed by trees to any development proposal; and
 - An appraisal of the impact that the proposed development may have on the trees and the resulting impact this may have on the local amenity.
- 2.3 The purpose of the tree survey has been to provide guidance to the developer on the existing tree stock and to inform the site design and layout. The results of the survey allow the opportunity to balance the retention of significant trees against the opportunity to enhance the existing tree stock through proactive management.

Tree Survey

- 2.4 A tree survey was originally undertaken on 15th August 2020 by Steve Westmore, and was reinspected by Shaun Phillips on 8th March 2023.
- 2.5 A copy of the recorded data can be seen in the tree schedule attached to this report.
- 2.6 The tree survey considered all trees that have the potential to be impacted by any development proposals. This included trees that are outside the application boundary, but within influencing distance.

Tree Constraints

- 2.7 The above ground constraints posed by canopy spread are plotted as a continuous line around the tree, shown in the corresponding BS5837 retention category colour.
- 2.8 The below ground constraints posed by the Root Protection Area (RPA) have been plotted as a magenta line with the text RPA inscribed.
- 2.9 A summary of the assessment of the quality of trees, groups of trees, hedges and woodlands that have been identified on the site is summarised in **Table 1**.

	Category A	Category B	Category C	Category U	Total
Trees	6	6	12	0	24
Groups	0	1	2	0	3
Total	6	7	14	0	27

Table 1: An overview of the quality of trees on the site

2.10 Full details of the assessment criteria for the tree survey can be found in **Appendix 1**.

NICHOLSONS Leading solutions for the natural environment Soils

2.11 An online search has been undertaken with the British Geological Survey¹ geology viewer to provide a summary of the geological materials that underlie the site. This shows:

NICHOLSONS Leading solutions for the natural environment

- Bedrock: Claygate Member Clay, silt and sand.
- Superficial deposits: None recorded.

Statutory Considerations

- 2.12 A search has been undertaken on the Local Planning Authority (LPA) website to determine the presence or otherwise of Tree Preservation Orders or Conservation Areas.
- 2.13 The search confirms that the site is within Redington/Frognal Conservation Area.
- 2.14 Furthermore, the LPA do not keep online records of TPOs. However a review of planning history associated with the site confirms that one tree within the site is subject to a TPO. This tree is located to the front of the property outside the proposal for this application. This is summarised in **Table 2** below:

Table 2: Planning History Search Results

Survey Reference Number	Species	TPO Reference
Т1	Copper Beech	ТРО/5Н/Т60

National and Local Planning Policies

National Planning Policy Framework 2021

- 2.15 National Planning Policy is currently defined by the National Planning Policy Framework (NPPF). This provides the most current and up to date planning guidance.
- 2.16 At the heart of the NPPF is a presumption in favour of sustainable development, and specifically states that for decision making, the LPA should be approving development proposals that accord with the development plan without delay.
- 2.17 Section 15 of the NPPF recognises the importance of conserving and enhancing the natural environment, and specifically acknowledges the role of trees and woodland in the provision of natural capital and ecosystem services, stating that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland" (paragraph 174, b).

2.18 It further acknowledges the importance of ancient woodlands and veteran trees for habitats and biodiversity and requires that planning consent should be refused where development schemes require the removal of such features unless there are wholly exceptional reasons, stating that:

¹ https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/

- 2.19 "development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists." (Paragraph 180, c).
- 2.20 Where the LPA does not have a development plan or the development plan is out of date, the LPA should grant planning consent in so far as the development proposals do not breach the NPPF.

Local Planning Policy

- 2.21 The site is located within the boundary of the Camden Council planning authority. The LPA has a statutory obligation to ensure that provision is made for the protection of trees through section 197 of the Town and Country Planning Act (1990). Camden Council has prepared a specific development plan which includes trees and the natural environment. This plan is Camden Local Plan (2017).
- 2.22 Also of note is that Camden Council have prepared Supplementary Planning Guidance regarding trees which sets out the Local Authorities expectations of how trees will be considered as part of any development proposals.
- 2.23 Furthermore, the London Plan (March 2016) and emerging New London Plan (2017), which sets out the spatial development strategy for London applies to the site.
- 2.24 A review of these plans has been undertaken to assist design and layout of the site. This has ensured that the existing trees on site have been considered in the context of planning policy and have influenced the design proposals submitted as part of this application.

Camden Local Plan (2017)

2.25 The relevant policies to this development proposal are Policy A3 – Biodiversity and Policy D2 - Heritage (**Appendix 2**).

London Plan (March 2016)

2.26 The relevant policy to this development proposal is Policy 7.21 – Trees and Woodlands (Appendix 3).

Emerging New London Plan (2017)

- 2.27 The relevant policy to this development proposal is Policy G7 Trees and Woodlands. (Appendix 4).
- 2.28 These policies have formed the basis of this design proposal to ensure that those trees of most significant arboricultural quality have been considered as part of the design process and incorporated within the scheme.

3. ARBORICULTURAL IMPACT ASSESSMENT

Design Principles

- 3.1 Due to the extensive tree cover in and adjacent the garden, the root protection areas of retained trees are going to be impacted to achieve the proposed pavilion and swimming pond. An assessment of the positions has been undertaken to reduce the impacts and achieve successful long-term retention of existing trees by ensuring most tree's rooting environments are impacted by no greater than 15% of the radial RPA.
- 3.2 Two trees (T15 and T17) are impacted by more than 15% of a radial RPA. However, the constraints of the site will allow for offsetting to achieve the required rooting environment to successfully retain the impacted trees.
- 3.3 Though T15 is categorised as retention Cat A, the condition of the tree is poor with only 5-10% live canopy remaining, and the feature has been retained for ecological benefits. Therefore, the impact on the rooting environment has been assessed to be of less importance and justifies the greater incursion of the RPA.

Development Proposal

- 3.4 The proposed development is for a garden pavilion and creation of a natural swimming pond.
- 3.5 This report has relied upon the following drawings and documents that have been prepared as part of this planning application:

Provider	Reference	Title	Date Provided
Emily Erlam Studio	RG-GA-016	Rear Garden_Masterplan	21.04.23
Emily Erlam Studio	RG-GA-016	Rear Garden_Section A	21.02.23

Table 3: Drawings and Documents Relied Upon for this Report

Arboricultural Impacts

- 3.6 The Arboricultural Impacts from this development proposal are graphically presented in the Arboricultural Impact Plan (AIP) that is attached to this report.
- 3.7 The AIP helps to identify:
 - Trees that have the potential to be impacted by the design proposal;
 - Trees that are to be removed; and
 - Trees that require facilitation pruning.

Tree Removals

3.8 No trees are required to be removed.

Tree pruning or other remedial works

3.9 The proposed development will require the pruning of two existing trees on site (Table 4).

NICHOLSONS Leading solutions for the natural environment

Table 4: Tree pruning works

Tree Number	Pruning Works Required										
T15	Removal of large deadwood over the swimming pond.										
T24	Facilitating pruning to allow installation works, and formative prune to improve canopy shape.										

Arboricultural Impact Assessment

The Impact of Buildings

3.10 The proposed foundation design for the pavilion and patio area which are light weight constructions, is to use ground screw piles, or pile and beam. This will minimise the impacts, though the incursion within the RPA is assessed to be acceptable to successfully retain impacted trees.

Impact of Surfaces (permanent and temporary)

- 3.11 No dig construction will be used for the proposed foot path.
- 3.12 Temporary ground protection will be required subject to the proposed construction. The site has limited access and large machinery will not be used due to the restriction. It is essential the pre-commencement meeting assesses and agrees the need for ground protection.

Impact of Underground Services

3.13 Final position of and installation of services will require agreement at the pre-commencement meeting. Services have been installed at the time of the heat source pump installations, through the first section of the garden and will run around the perimeter of the swimming pond. The final section of any services will require agreement of the project arboriculturalist.

Principles of Protection of Retained Trees

- 3.14 The successful retention of those trees that will remain on the site will be dependent upon the quality and maintenance of any protection system that is put in place.
- 3.15 Indicative tree protection measures have been considered within this report and are graphically presented in the Draft Tree Protection Plan (DTPP).
- 3.16 A 'No-Dig' solution will be implemented in accordance with industry best practice and in particular with reference to paragraph 7.4 of BS5837 which provides guidance as to the installation of hard surfaces within the RPA. The area directly beneath the finished hard surface and on top of the RPA will be protected by the installation of a three-dimensional cellular confinement system. The area for permanent ground protection can be identified by the purple hatching on the attached DTPP.
- 3.17 The following principles for the protection of retained trees will be adopted by the developer during the construction of the new properties:
 - All retained trees will be protected by fencing that will form a construction exclusion zone (CEZ). The fencing has been indicated on the TPP by a dashed black line with the orange diagonal hatching showing the CEZ.

- There will be no storage of materials, or access for construction workers or machinery within any CEZ.
- There will be no level changes within a CEZ.
- There will be no excavation within a CEZ. All utilities and underground services will be located outside the CEZ or tap into existing service routes.
- Any storage or mixing station located outside of a CEZ will be located in a place that minimises the risk of contaminated runoff entering the CEZ and damaging the rooting environment. This may be achieved by using a non-permeable membrane on the ground, surrounded by sandbags to contain any spillage.
- There will be no fires within a CEZ.
- There will no use of herbicides within CEZ.
- 3.18 It is anticipated that an Arboricultural Method Statement will be required as a condition of any planning consent to provide detail of how the necessary tree protection can be implemented.
- 3.19 The processes of construction are highly unlikely to have a detrimental effect upon the health of the retained trees assuming tree protection recommendations made in this report are adhered to at all times by the contractors.

Other Considerations

Landscape and Visual Impacts

3.20 A landscaping plan showing the location of tree planting will be submitted as a separate report to this one (Ref RG-GA-016Rear Garden_Masterplan).

4. **REFERENCES & BIBLIOGRAPHY**

British Standards Institution (2012) *BS5837: Trees in relation to design, demolition and construction – recommendations*. London: BSI

British Standards Institution (2010) BS3998: Tree Works - recommendations. London: BSI

Ministry of Housing, Communities and Local Government (2021). *The National Planning Policy Framework*. London: HMSO.

Mapapps.bgs.ac.uk. (2019). *Geology of Britain viewer* | British Geological Survey (BGS). [online] Available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html? [Accessed: 17th July 2020].



5. APPENDICES

Appendix 1: Tree Survey Criteria (BS5837:2012)

5.1 The assessment of the trees has been carried out in accordance with the guidance provided in paragraph 4.4.2.6 of BS5837 which recommends that:

4.4.2.6 The measurement conventions should be as follows.
a) height, crown spread and crown clearance should be recorded to the nearest half metre (crown spread should be rounded up) for dimensions up to 10 m and the nearest whole metre for dimensions over 10 m;
b) stem diameter should be recorded in millimetres, rounded to the nearest 10 mm (0.01 m);

c) estimated dimensions (e.g. for off-site or otherwise inaccessible trees where accurate data cannot be recovered) should be clearly identified as such (e.g. suffixed with a "#").

Plate 1 - Source: BS5837 (2012) p.7

- 5.2 All observations were made from ground level, without detailed investigation with regard to the general condition of the tree.
- 5.3 Trees that are located outside of the application boundary (red line) to a distance of 15m have been considered as part of this survey and have been annotated on the accompanying plan as such.
- 5.4 The trees are categorised in an order defined in **Table 1** of BS5837, a copy of which can be seen below in **Figure 1**, but which can be summarised as:
 - **A Category** Trees of high quality and value in such a condition as to be able to make a substantial contribution for a minimum of 40 years.
 - **B Category** Trees of moderate quality and value in such a condition as to make a significant contribution for a minimum 20 years.
 - **C Category** Trees of low quality and value currently in adequate condition able to remain until new planting can be established. These trees are expected to remain for a minimum of 10 years. It also includes young trees with a stem diameter less than 150mm measured at 1.5 metres above ground level.
 - **U Category** Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural or forestry management.
- 5.5 Additionally, BS5837 (2012) provides subcategories 1-3 within the category system outlined above which indicate the area(s) in which a tree or group retention value lies. Details of those subcategories is provided in Table 1 of BS5837, and a copy of this table is reproduced below:

Identification on plan		See Table 2				See Table 2 or	See Table 2	See Table 2
		is expected due to collapse, (e.g. where, for whatever is overall decline trees nearby, or very low	ht be desirable to preserve;	3 Mainly cultural values, including conservation		Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Trees with material corservation or other cultural value	Trees with no material conservation or other cultural value
ppropriate)		Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low could'th trees cummestion adjacent trees of the health and/or safety of other trees nearby, or very low	Category U trees can have existing or potential conservation value which it might be desirable to preserve; 7.	2 Mainly landscape qualities		Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits
definition Criteria (including subcategories where appropriate)	(see Note)	 Trees that have a serious, irremediable, structural defect, such that the including those that will become unviable after removal of other categreason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and Trees infected with pathogens of significance to the health and/or safe cuality trees currentees in addicent trees of hearth and/or safe 	NOTE Category U trees can have existing see 4.5.7.	1 Mainly arboricultural qualities	antion	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. within an avenue) principal trees within an avenue)	Trees that might be included in category A, 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 for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories
Category and definition	Trees unsuitable for retention (see Note)	Category U Those 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		Trees to be considered for retention	Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	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

Plate 2 - Cascade chart for the quality assessment (Source: BS5837(2012) p.9)

Leading solutions for the natural environment

Appendix 2: Camden Local Plan (2017) – Policies

"Policy A3 Biodiversity

The Council will protect and enhance sites of nature conservation and biodiversity. We will:

a. designate and protect nature conservation sites and safeguard protected and priority habitats and species;

b. grant permission for development unless it would directly or indirectly result in the loss or harm to a designated nature conservation site or adversely affect the status or population of priority habitats and species;

c. seek the protection of other features with nature conservation value, including gardens, wherever possible;

d. assess developments against their ability to realise benefits for biodiversity through the layout, design and materials used in the built structure and landscaping elements of a proposed development, proportionate to the scale of development proposed;

e. secure improvements to green corridors, particularly where a development scheme is adjacent to an existing corridor;

f. seek to improve opportunities to experience nature, in particular where such opportunities are lacking;

g. require the demolition and construction phase of development, including the movement of works vehicles, to be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species;

h. secure management plans, where appropriate, to ensure that nature conservation objectives are met; and

i. work with The Royal Parks, The City of London Corporation, the London Wildlife Trust, friends of park groups and local nature conservation groups to protect and improve open spaces and nature conservation in Camden.

Trees and vegetation

The Council will protect, and seek to secure additional, trees and vegetation. We will:

j. resist the loss of trees and vegetation of significant amenity, historic, cultural or ecological value including proposals which may threaten the continued wellbeing of such trees and vegetation;

k. require trees and vegetation which are to be retained to be satisfactorily protected during the demolition and construction phase of development in line with BS5837:2012 'Trees in relation to Design, Demolition and Construction' and positively integrated as part of the site layout;

I. expect replacement trees or vegetation to be provided where the loss of significant trees or vegetation or harm to the wellbeing of these trees and vegetation has been justified in the context of the proposed development;

m. expect developments to incorporate additional trees and vegetation wherever possible.

Policy D2 Heritage

The Council will preserve and, where appropriate, enhance Camden's rich and diverse heritage assets and their settings, including conservation areas, listed buildings, archaeological remains, scheduled ancient monuments and historic parks and gardens and locally listed heritage assets.

Designated heritage assets

Designed heritage assets include conservation areas and listed buildings. The Council will not permit the loss of or substantial harm to a designated heritage asset, including conservation areas and Listed Buildings, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

a. the nature of the heritage asset prevents all reasonable uses of the site;

b. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation;

c. conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and

d. the harm or loss is outweighed by the benefit of bringing the site back into use.

The Council will not permit development that results in harm that is less than substantial to the significance of a designated heritage asset unless the public benefits of the proposal convincingly outweigh that harm.

Conservation areas

Conservation areas are designated heritage assets and this section should be read in conjunction with the section above headed 'designated heritage assets'.

In order to maintain the character of Camden's conservation areas, the Council will take account of conservation area statements, appraisals and management strategies when assessing applications within conservation areas. The Council will:

e. require that development within conservation areas preserves or, where possible, enhances the character or appearance of the area;

f. resist the total or substantial demolition of an unlisted building that makes a positive contribution to the character or appearance of a conservation area;

g. resist development outside of a conservation area that causes harm to the character or appearance of that conservation area; and

h. preserve trees and garden spaces which contribute to the character and appearance of a conservation area or which provide a setting for Camden's architectural heritage.

Listed Buildings

Listed buildings are designated heritage assets and this section should be read in conjunction with the section above headed 'designated heritage assets'. To preserve or enhance the borough's listed buildings, the Council will:

i. resist the total or substantial demolition of a listed building;

j. resist proposals for a change of use or alterations and extensions to a listed building where this would cause harm to the special architectural and historic interest of the building; and

k. resist development that would cause harm to significance of a listed building through an effect on its setting.

Archaeology

The Council will protect remains of archaeological importance by ensuring acceptable measures are taken proportionate to the significance of the heritage asset to preserve them and their setting, including physical preservation, where appropriate. Other heritage assets and non-designated heritage assets The Council will seek to protect other heritage assets including non-designated heritage assets (including those on and off the local list), Registered Parks and Gardens and London Squares. The effect of a proposal on the significance of a non-designated heritage asset will be weighed against the public benefits of the proposal, balancing the scale of any harm or loss and the significance of the heritage asset."

Appendix 3: London Plan (March 2016) – Policies

"POLICY 7.21 TREES AND WOODLANDS

Strategic

A) Trees and woodlands should be protected, maintained, and enhanced, following the guidance of the London Tree and Woodland Framework (or any successor strategy). In collaboration with the Forestry Commission the Mayor has produced supplementary guidance on Tree Strategies to guide each borough's production of a Tree Strategy covering the audit, protection, planting and management of trees and woodland. This should be linked to a green infrastructure strategy.

Planning decisions

B) Existing trees of value should be retained and any loss as the result of development should be replaced following the principle of 'right place, right tree'. Wherever appropriate, the planting of additional trees should be included in new developments, particularly large-canopied species.

LDF preparation

C) Boroughs should follow the advice of paragraph 118 of the NPPF to protect 'veteran' trees and ancient woodland where these are not already part of a protected site.D) Boroughs should develop."

Appendix 4: Emerging New London Plan (2017) – Policies

"POLICY G7 TREES AND WOODLANDS

A Trees and woodlands should be protected, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.

B In their Development Plans, boroughs should:

1. protect 'veteran' trees and ancient woodland where these are not already part of a protected site

2. identify opportunities for tree planting in strategic locations.



C Development proposals should ensure that, wherever possible, existing trees of quality are retained [Category A and B trees as defined by BS 5837:2012]. If it is imperative that trees have to be removed, there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy."

Leading solutions for the natural environment

Environmental Planning

Arboriculture Ecology and Biodiversity Net Gain Green Infrastructure Landscape and Visual Impact Assessment (LVIA) Expert Witness Natural Capital Appraisal Building with Nature Soils and Land Restoration

Garden & Landscape Design and Construction

Garden Design and Construction Landscape Design and Construction Landscape Contracting Garden & Landscape Maintenance

Forestry, Woodland and Tree Management

Forestry New Woodland Design and Creation Tree Risk Survey and Management Advice Vacant & Derelict Land Tree Surgery

Oxfordshire: The Park, North Aston, OX25 6HL | 01869 340342 Northamptonshire: 7-8 Melbourne House, Corbygate Business Park, Weldon, NN17 5JG | 01536 408840

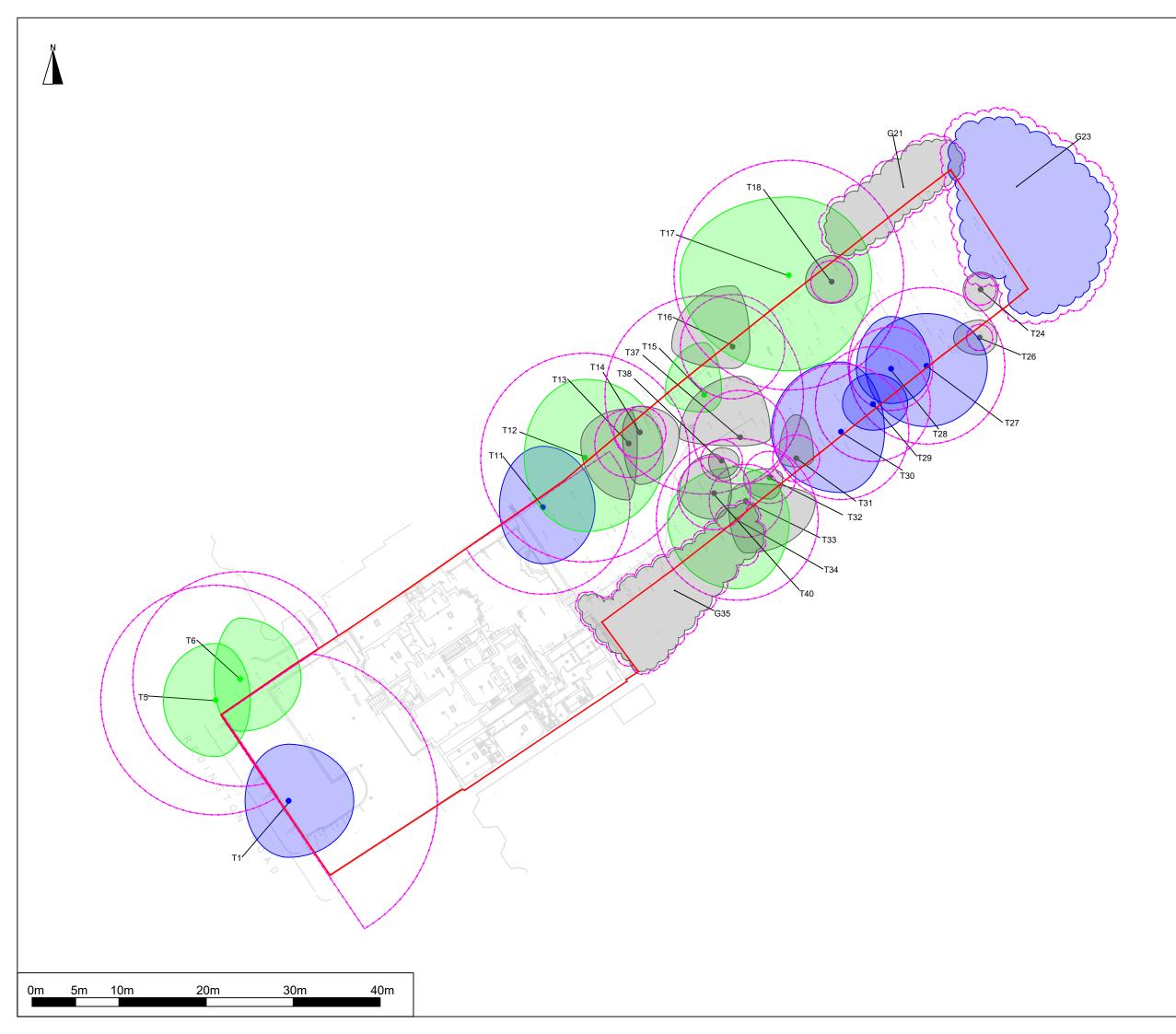
contact@nicholsonsgb.com | www.nicholsonsgb.com



Client:														Reference: 20-3473 v2						
Site:	28 Redington Road,	Hampste	ad			Surveyor(s): Shaun Phillips Key to Notations											Date of survey: 08.03.2023			
					Age Class			Definition	ition Category Grading ER								ERC Sub category			
Stem Dia:	Stem diameter (mm) at 1.5m	n above grou	und level		Y	Young			Trees that have not yet reached 1/3 of their expected mature height								Aainly Arboricultural			
C.C.	Height of crown clearance al Lowest branch height in met	bove ground	level		EM	Early Mate	ure	The stage in the life cycle of a tree between youth and maturity 20- Close to full heids and crown size 6 Midderate Duality & Value 10- Close to full heids and crown size 6 Midderate Duality & Value 10-							20+	2	Mainly Landscape			
D.L.B.	Direction of Lowest Branch	.015			OM	Over Mat	ure	Lines to tui negm and crown size of the diameter increases more slowly to be constructed on the diameter increases more slowly to be diameter							<10		- Mainy Cultural			
E.R.C	Estimated Remaining Contril	bution (in ye	ears)		V	Veteran					and shows signs of ancientness	U	Unsuitable for rete							
Physiological	condition (PC)	Good - No	significant h	ealth proble	ms	Fair - Sym	ptoms of hea	alth that can	he remediat	pd	Poor - Significant ill health			If a tree is des	anated as yet	eran the RPA calculation	is determined as 15x the stem diameter			
Structural co	ndition (SC)	Good - No	significant d	efects			ificant defect				Poor - Significant defects with no remedy		NOTES:	for greater pro						
Tree No.	Species	H (m)	Stem	No of	Canony (m)	CC (m)	LB (m)	LB (m)	LB (m)	LB (m)	DLB (m)	Age	Condition	Observations	Recommendations	ERC	Cat.	Sub Cat	RPA (m2)	RPA Radial distance (m)
			Dia.	Stems	Canopy (m) N - 6.5		. ,	. ,	0.		Tree located within property frontage. Distinct level change of approximately 2m west					. ,				
Т1	Beech, copper (Fagus sylvatica purpurea)	17	1010	1	E - 7.5 S - 6.5 W - 5	2	3	West	Mature	PC - Fair SC - Good	and retaining boundary wall which will have restricted go growth. Previosuly crown lifted and minor deadwood throughout. Dieback in upper canopy, which has reduced category. Overhangs offsite footpath, parking and access drive. Tagged 2205.	Monitor physiological condition due to upper crown dieback.	20+	В	1	452	12.00			
Т5	Plane, london (Platanus x hispanica)	18	976	2	N - 6.5 E - 4 S - 6.5 W - 6	2	1	South	Mature	PC - Good SC - Fair	Offsite tree - all measurements estimated. Stem bifurcates at 0.5m and stems bifurcate again at 2.5m. Restricted rooting south due to boundary wall and distinct level change between sites. Overhangs site, footpath and car parking.	None.	40+	A	1	430	11.70			
Т6	Sycamore (Acer pseudoplatanus)	18	883	4	N - 7 E - 7 S - 6 W - 3	3	-	South	Mature	PC - Good SC - Fair	Offsite tree - all measurements estimated. Multistemmed from base and restricted rooting environment south due to distinct level change between sites. Canopy overhangs site.	None.	40+	А	1	346	10.50			
T11	Beech, common (Fagus sylvatica)	20	630	1	N - 7 E - 6 S - 6.5 W - 5	1	3	North	Mature	PC - Good SC - Fair	Tree located adjacent northern boundary. Possibly previously pollarded at 9m with good regrowth. Tagged 2224	None.	20+	В	1	177	7.50			
T12	Oak, pedunculate (Quercus robur)	20	1010	1	N - 9 E - 9 S - 8.5 W - 7	4	4	North	Mature	PC - Good SC - Good	Offsite tree - all measurements estimated. Tree growing directly on boundary with slight lean north. Good example of species. Tagged 2225	None.	40+	А	1	452	12.00			
T13	Beech, common (Fagus sylvatica)	18	320	1	N - 4 E - 1 S - 6.5 W - 5.5	2	3	West	Early Mature	PC - Fair SC - Fair	Suppressed by neighbouring trees with aysmmetric growth. Tagged 458.	None.	10+	с	1	48	3.90			
T14	Beech, common (Fagus sylvatica)	13	250	1	N - 3 E - 4.5 S - 6 W - 2	1	3	North	Early Mature	PC - Fair SC - Fair	Aysmmetric form. Tagged 2226	None.	10+	с	1	28	3.00			
T15	Oak, pedunculate (Quercus robur)	16	960	1	N - 6 E - 2 S - 2 W - 4.5	9	8	North	Veteran	PC - Poor SC - Poor	Retrenching canopy with significant deadwood throughout. Aysmmetric canopy as a result of retrenchment. Epicormic growth on limbs and large open cavities at 5m, and exposed bark at base south. Tagged 2228. Tree approved for structural pollar under Section 211 consent (2020/1786/T). Works	The tree has declined in condition since the initial survey. The life expectancy as a viable living tree is limited and the tree would be considered a Cat U if not for the veteran features. The tree is being retained for the ecological benifits and veteran features. Ecological dead wooding more appropriate management than structural pollard.	40+	A	3	638	14.40			
T16	Pine, scots (Pinus sylvestris)	17	500	1	N - 7 E - 2 S - 2.5 W - 7	13	10	North	Mature	PC - Fair SC - Poor	nostnoned due to nestina birds Majority crown growth north, with deadwood south and east. Previously crown lifted and woodpecker holes south at 8m Prominent tree but reduced life expectancy due to condition and removal of neighbouring trees.	None.	10+	с	1	113	6.00			
T17	Oak, pedunculate (Quercus robur)	20	1100	1	N - 9 E - 9.5 S - 11 W - 12.5	3	6	West	Mature	PC - Good SC - Good	Offsite tree - all measurements esimtated. Not plotted on topographical survey - position on plans remains indicative. Very prominent specimen with wide spreading canopy and good example of species.	None.	40+	A	1	547	13.20			
T18	Holly (Ilex sp.)	10	210	1	N - 3 E - 3 S - 2.5 W - 3	-	4	N/A	Early Mature	PC - Fair SC - Fair	Tagged 2232	None.	10+	с	1	18	2.40			
G21	Mixed Species (Mixed species)	8	170	1	N - 2.5 E - 2.5 S - 2.5 W - 2.5	-	1	South	Early Mature	PC - Good SC - Fair	Offsite group - all measurements estimated. Not plotted on topographical survey - position on plans remains indicative. Widely spaced group of 2 yew and 1 holly adjacent boundary fence.	None.	10+	с	2	14	2.10			
G23	Mixed Species (Mixed species)	18	300	1	N - 4 E - 4 S - 4 W - 4	4	2	West	Mature	PC - Good SC - Fair	Sporadically spaced offsite group - all measurements estimated. Not plotted on topographical survey - position on plan remains indicative. Consists of sycamore, horse chestnut and ash.	None.	20+	В	2	41	3.60			
T24	Holly (Ilex sp.)	9	160	1	N - 2 E - 2 S - 2.5 W - 2	-	1	N/A	Young	PC - Fair SC - Fair	Tagged 2237	None.	10+	с	1	10	1.80			
T26	Holly (Ilex sp.)	9	138	2	N - 2 E - 2 S - 2 W - 3	3	1	West	Young	PC - Fair SC - Fair	Offsite tree - all measurements estimated. Not plotted on topographical survey - position on plan remains indicative.	None.	10+	с	1	10	1.80			
T27	Sycamore (Acer pseudoplatanus)	20	743	2	N - 6 E - 7 S - 7 W - 7	4	1	South	Mature	PC - Good SC - Fair	Tree located on southern boundary. All measurements estimated. Stem bifurcates at 1m with stem lean south.	None.	20+	В	1	254	9.00			

	Key to Notations												
			Age Class		Definition				Category Grading			ERC	Sub category
Stem Dia:	Stem diameter (mm) at 1.5m	above ground level	Y	Young	Trees that have	ve not yet reached	d 1/3 of their ex	xpected mature height	Category			40+	1 - Mainly Arboricultural
C.C.	Height of crown clearance ab	ove ground level	EM	Early Mature	The stage in t	the life cycle of a tre	ree between yo	outh and maturity	А	High Quality & Va	High Quality & Value		2 - Mainly Landscape
L.B.	Lowest branch height in meter	ers	м	Mature	Close to full h	neight and crown si	size		В	Moderate Quality	/ & Value	10+	3 - Mainly Cultural
D.L.B.	Direction of Lowest Branch		OM	Over Mature	Close to full h	eight and crown si	size while main-	-stem diameter increases more slowly	C	Low Quality & Value <10			
E.R.C	Estimated Remaining Contrib	ution (in years)	v	Veteran	A tree that ha	is survived the rigo	ours of life and :	shows signs of ancientness	U	Unsuitable for ret	tention		
Physiologica	Physiological condition (PC) Good - No significant health problems		condition (PC) Good - No significant health problems Fair - Symptoms of health that can be remediated		Po	oor - Significant ill health		NOTES:	If a tree is desi	ignated as vete	ran, the RPA calculation is determined as 15x the stem diameter		
Structural co	Structural condition (SC) Good - No significant				Po	or - Significant defects with no remedy		Notes.	for greater pro	otection			

Tree No.	Species	H (m)	Stem Dia.	No of Stems	Canopy (m)	CC (m)	LB (m)	DLB (m	Age	Condition	Observations	Recommendations	ERC	Cat.	Sub Cat	RPA (m2)	RPA Radial distance (m)
T28	Sycamore (Acer pseudoplatanus)	17	410	1	N - 6 E - 4.5 S - 4 W - 4	1	4	North	Mature	PC - Good SC - Fair	Tagged 2240	None.	20+	В	1	72	4.80
T29	Holly (Ilex sp.)	11	540	1	N - 3.5 E - 4 S - 3 W - 3.5	3	2	South	Mature	PC - Good SC - Fair	Tree located on boundary. Stem bifurcates at abse but fuses at 1.5m and bifurcates again at 2m. Distinct lean south and previously crown lifted but good example of species. Tagged 2241	None.	20+	В	1	137	6.60
Т30	Sycamore (Acer pseudoplatanus)	19	658	2	N - 8 E - 5 S - 7 W - 8	5	-	North	Mature	PC - Good SC - Fair	Tree located on boundary. Stem bifurcates at base with boundary fence attached to southern stem. Previously crown lifted and prominent tree. Tagged 2242	None.	20+	В	1	191	7.80
T31	Birch, silver (Betula pendula)	18	230	1	N - 5 E - 2 S - 1 W - 2	3	3	South	Early Mature	PC - Fair SC - Fair	Leaning north due to neighbouring competition. Insufficient stem taper for height and species characteristics. Tagged 2243	Consider removal to benefit growth of neighbouring trees.	10+	с	1	23	2.70
T32	Holly, Golden King (Ilex x altaclarensis)	12	260	1	N - 1 E - 1.5 S - 2.5 W - 3	3	4	West	Early Mature	PC - Good SC - Fair	Stem lean east and aysmmetric canopy due to neighbouring trees. Previously crown lifted. Tagged 2244	None.	10+	с	1	28	3.00
Т33	Sycamore (Acer pseudoplatanus)	16	350	1	N - 2 E - 8 S - 6 W - 2	5	8	South	Mature	PC - Fair SC - Poor	All canopy growth south and east due to neighbouring trees. Tagged 2245	None.	10+	с	1	55	4.20
T34	Sycamore (Acer pseudoplatanus)	20	770	1	N - 6 E - 6 S - 8 W - 8	5	7	South	Mature	PC - Good SC - Good	Tree located adjacent boundary fence. Partially ivy clad stem. Lower bark fully occluded around old metal fence and superficial longitidunal stem crack east from 1.5m to 4.5m. Previously crown lifted and prominent tree. Tagged 2246	Monitor structural condition of stem due to foreign objects and superficial longitudinal crack.	40+	A	1	272	9.30
G35	Laurel (Laurus sp.)	5	85	1	N - 2.5 E - 2.5 S - 2.5 W - 2.5	-	-	N/A	Early Mature	PC - Good SC - Fair	Offsite group - all measurements estimated. Not plotted on topographical survey - position on plan remains indicative. Dense group that overhangs boundary fence.	None.	10+	с	2	3	0.90
T37	Birch, silver (Betula pendula)	18	440	1	N - 7 E - 3.5 S - 1 W - 7	8	9	North	Mature	PC - Good SC - Fair	Slight lean north and majority crown weight north. Neighbouring failed tree caught in western canopy. Tagged 2247	None.	10+	с	1	92	5.40
T38	Birch, silver (Betula pendula)	15	210	1	N - 1.5 E - 2 S - 2 W - 1.5	9	11	South	Early Mature	PC - Fair SC - Poor	Aysmmetric canopy due to neighbouring trees and poor form with insiginificant stem taper. Tagged 2249	Consider removal to benefit growth of neighbouring trees.	10+	с	1	18	2.40
T40	Holly (Ilex sp.)	12	340	2	N - 4.5 E - 2 S - 3 W - 4	-	-	North	Mature	PC - Fair SC - Fair	Stem bifurcates at base with majority crown growth north and west. Tagged 557	None.	10+	с	1	55	4.20



Legend:



Category A Trees (Stem and Canopy Spread)

Category B Trees (Stem and Canopy Spread)

Category C Trees (Stem and Canopy Spread)

Category U Trees (Stem and Canopy Spread)

Root Protection Area

Existing Layout

NICHOLSONS Leading solutions for the natural environment

Tree Constraints Plan

Site Overview

28 Redington Road

Emily Erlam Studio

22-2437

v1

21.04.2023

1:400@A3

North Aston, Bicester, Oxfordshire, OX25 6HL. Not to be reproduced without the permission of Nicholsons.

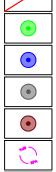
 The Park, North Aston
 7 - 8 Melbourne House

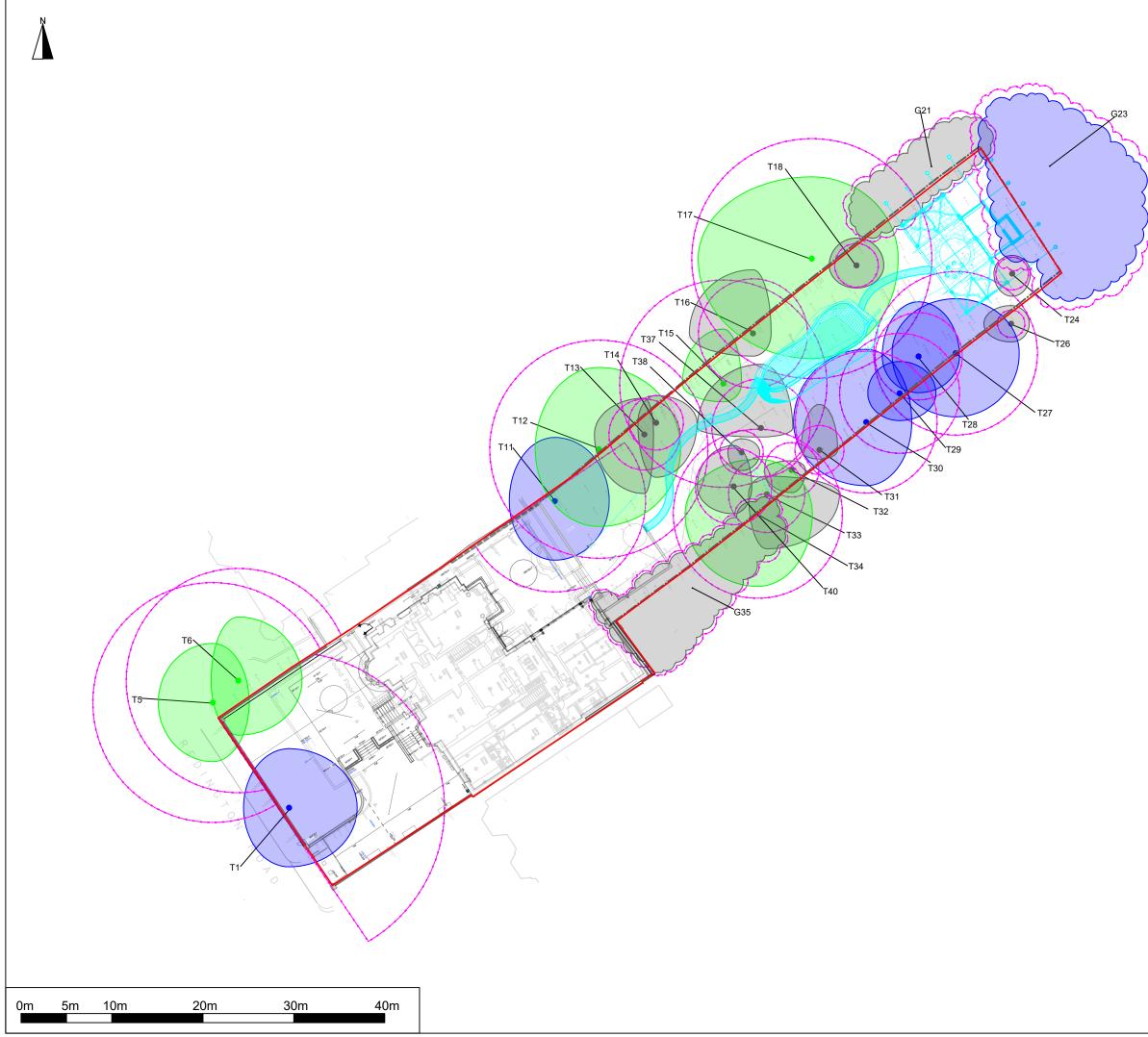
 Bicester
 Corbygate Business Park

 Weldon, Corby
 Oxfordshire OX25 6HL

 01869 340342
 01536 408840

Cite De





Legend:

 $\mathbf{\bullet}$

 $\mathbf{\bullet}$

ullet

ullet

1



Category A Trees (Stem and Canopy Spread)

Category B Trees (Stem and Canopy Spread)

Category C Trees (Stem and Canopy Spread)

Category U Trees (Stem and Canopy Spread)

Root Protection Area

Trees to be Removed

Existing Layout

Proposed Layout

NICHOLSONS Leading solutions for the natural environment

Arboricultural Impact Plan

Site Overview

28 Redington Road

Emily Erlam Studio

22-2438

v1

21.04.2023

SP

1:400@A3

SF

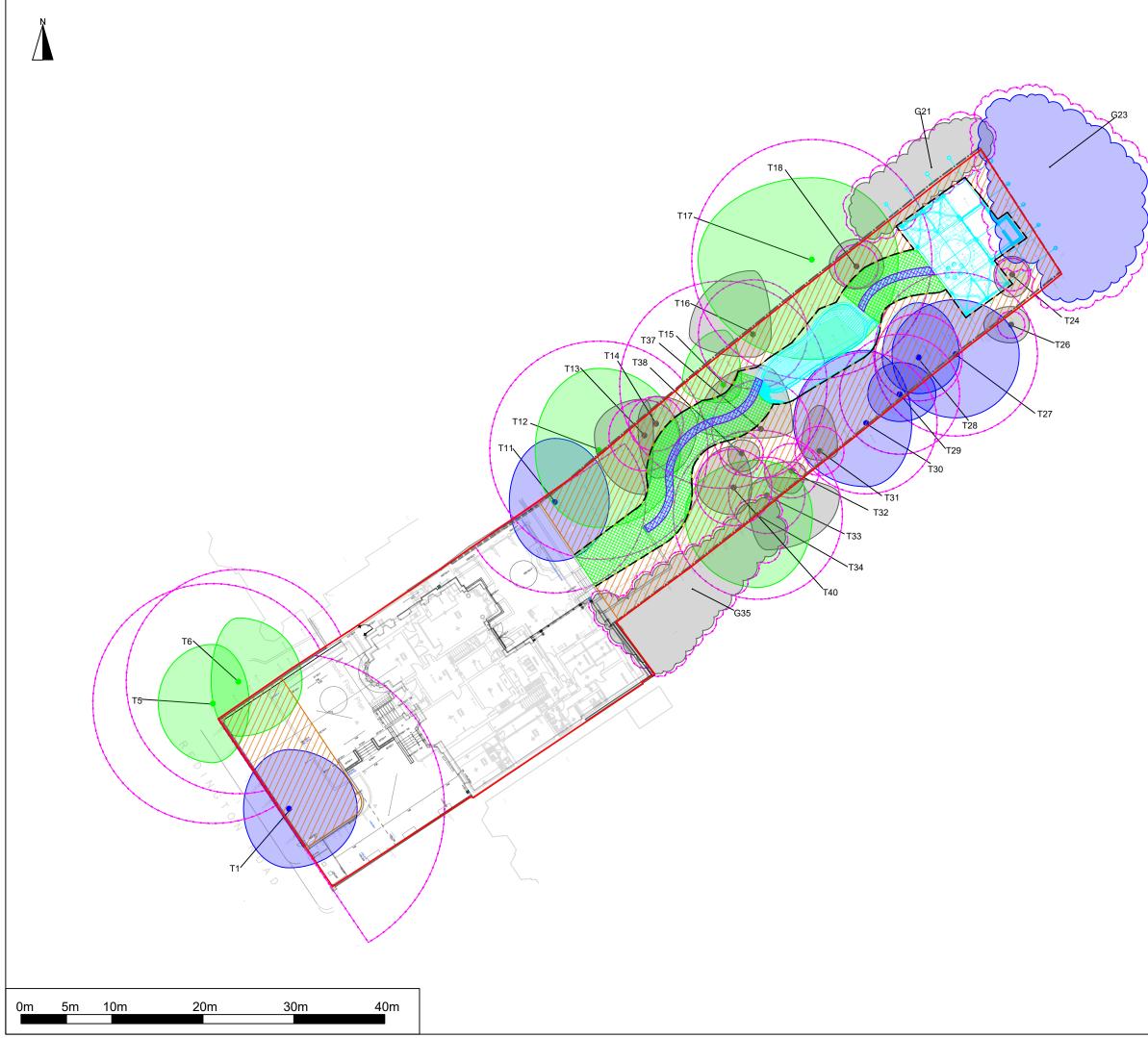
Reproduced with the permission of The Controller of His Majesty's Stationery Office Crown Copyright (c) Lience number: 100035654, Nicholsons, The Park, vorth Aston, Bicser, Odordshire, 0x25 GHL. Not to be reproduced without the permission of Nicholsons. The Park, 7 - 8 Melbourne House North Aston Corbygate Business Park

 The Park, North Aston
 7 - 8 Melbourne House

 Bicester
 Corbygate Business Park

 Weldon, Corby
 Oxfordshire OX25 6HL

 01869 340342
 01536 408840



2		
)	Ì	
$\left(\right)$	Ś	
)	3	
) J	3	
í		

 \bullet

 \bullet

 \bullet

ullet

.....

/

Site Boundary

Category A Trees (Stem and Canopy Spread)

Category B Trees (Stem and Canopy Spread)

Category C Trees (Stem and Canopy Spread)

Category U Trees (Stem and Canopy Spread)

Root Protection Area

Trees to be Removed

Tree Protection Fence

Temporary Ground Protection

Permanent Ground Protection

Construction Exclusion Zone (area required to protect retained trees roots and canopy)

Existing Layout

Proposed Layout

NICHOLSONS Leading solutions for the natural environment

Draft Tree Protection Plan

Site Overview

28 Redington Road

Emily Erlam Studio

22-2443

v1

21.04.2023

SP

PRODUCED BY:

1:400@A3

roduced with the permission of The Controller of His Majesty's Stationery ce Crown Copyright (c) Licence number: 100015654, Nicholsons, The Park, th Aston, Bicester, Oxfordshire, OX25 6HL. Not to be reproduced without th mission of Nicholsons. The Park, 7 - 8 Melbourne House

 The Park, North Aston
 7 - 8 Melbourne House

 Bicester
 Corbygate Business Park

 Weldon, Corby
 Oxfordshire OX25 6HL

 01869 340342
 01536 408840