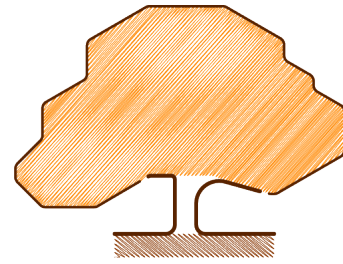


S843-J2-IA-1

# REPORT

regarding the impact on trees of proposals for development  
at  
8 Pilgrims Lane, London, NW3 1SL



JOHN CROMAR'S  
ARBORICULTURAL  
COMPANY LTD

[www.treescan.co.uk](http://www.treescan.co.uk)  
[admin@treescan.co.uk](mailto:admin@treescan.co.uk)

01582 808020  
07860453072



Registered Consultant of the Arboricultural Association  
John Cromar, Dip. Arb. (RFS), F.Arbor A.



## Contents

1	Instructions.....	1
2	Executive summary.....	1
3	Introduction.....	1
4	Observations.....	3
5	Arboricultural impact assessment (AIA).....	5
6	Conclusion .....	6
7	Sources and relevant documents used.....	6
8	Copyright.....	6
9	Arboricultural method statement (AMS) .....	7
10	Plans .....	13

# 1 Instructions

I am instructed by STArchitects Ltd on behalf of clients to make an assessment of tree amenity value and condition of trees at 8 Pilgrims Lane, London, NW3 1SL and of the impact of a proposal for development (excavation of 2 x rear side lightwells to existing basement) on such trees, and to supply an arboricultural methods statement and tree protection plan. The design and access statement / design summary submitted by STArchitects Ltd describes the scheme.

Application ref: 2020/4013/P

Condition 4. Prior to the commencement of any works on site, details demonstrating how trees to be retained shall be protected during construction work shall be submitted to and approved by the local planning authority in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction". All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details.

Reason: To ensure that the development will not have an adverse effect on existing trees and in order to maintain the character and amenity of the area in accordance with the requirements of policies A2 and A3 of the London Borough of Camden Local Plan 2017.)

## 2 Executive summary

The impact on trees of the scheme proposed, will require no trees to be removed. The impact on public amenity will overall be negligible. All retained trees will be easily protected from harm during the project.

## 3 Introduction

### 3.1 The environmental role of Local Planning Authorities

Local planning authorities (LPAs below) play an important part in the almost continual balancing act that is part and parcel of contemporary democratic government. They regulate development in the interests of the community. Increasingly, the environment plays a role in our lives, and strongly affects our health, both mental and physical. This is typically recognised in planning policy determined by LPAs, and the formal planning guidance published by them. LPAs process planning applications in line with this policy and guidance.

### 3.2 British Standards

These continue to play a significant role in the quality of our lives in the UK, by defining minimum standards for many products, and making recommendations where precise, exhaustive specifications are not absolutely possible, for example with services.

### 3.3 British Standard 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'

BS 5837:2012 (the Standard, below) is the fourth version in a series, the first being in 1980. This Standard provides a framework for the valuation, in ornamental terms, of trees, and gives recommendations for their protection on building sites.

### 3.4 How the Standard is used by an arboriculturist

It is used as a tool by an arboriculturist, who for the purposes of this type of professional activity, is someone who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction. This is the profession which is concerned, in a wider sense, with the care and cultivation of trees for amenity (all the benefits). An arboriculturist, then, uses the Standard:

- a) to assess the value, in terms of amenity, of the trees on and adjoining a particular site, whether such trees are formally protected or not, for example by reason of being in a Conservation Area or because they are scheduled within a Tree Preservation Order. (Both of these provisions are part of the Town and Country Planning Act 1990, part VIII.);
- b) secondly, to help assess the impact upon the trees of the proposal for development;
- c) lastly, to give ways of protecting retained trees during construction, should the proposal receive planning consent.

### 3.5 How the arboriculturist prepares tree protection methods

In practice, as advances in materials and techniques are rapid, the arboriculturist does not necessarily specify a precise commercial product, but defines the essential components of methods of demolition and construction which often make use of specialized materials. These may be termed 'tree-friendly' methods, meaning that they have as their focus the well-being of the tree. These appear on the tree protection plan(s) appended, typically titled: 'Tree Retention and Tree Protection Measures', and within the text below.

### 3.6 Classification of trees

The Standard recommends a way of classifying trees when assessing their potential value in relation to proposed development. Value means (mainly) *visual* value to the general public. It also allows for other values to be considered such as historic or conservation value. Some surveys may not find any trees of one or more categories.

Table 1 describes, as: 'U', a low-value tree; denoted by a **dark red** outline on plans, the shape of the edge of the tree's crown typically more or less concentric to the trunk position.

It also shows 'A', 'B' and 'C', in descending merit:

- 'A' category, **green** crown outline, are trees of high vitality or good form, or of particular visual importance.
- 'B' category, **blue** crown outline, are good trees but may be of slightly poorer form or be not sited as importantly as 'A' category trees.
- 'C' category, **grey** crown outline are trees of no particular merit, but in adequate condition for retention.

A minimum expected safe useful life is also assessed. Please note that a low value tree may have a very long life expectancy. The two factors are only linked in that, for example, a very high value tree cannot also have a very low life expectancy.

### 3.7 Root protection area

'RPA' below. The RPA is a zone around the trunk of the tree, in which protective measures must be used in order to prevent significant damage to trees.

### 3.8 Use of appended plans

The appended plans have different applications:

- Plan reference no. S843-J2-P1, shows the spread of the crowns (the upper, leaf-bearing part of trees), and is intended to indicate the relationship of any neighbouring trees to each other. This plan gives a quick reference assessment of value as per section 4, table 1, page 9 of the Standard.
- S843-J2-P2 is the 'tree protection plan' referred to in the Standard (section 3.11). It is colour-coded to indicate where tree-friendly methods are proposed during the overall construction process, which may involve demolition, main construction and landscaping phases.

## 4 Observations

### 4.1 Site visit

I visited the property on 17th March 2022 in order to carry out an inspection. Weather conditions were good; they permitted adequate inspection.

### 4.2 Survey method

I used a tree mallet, spade, diameter tape, laser rangefinder, pocket retractable tape, binoculars, scaling pole, tree data recording software, pen, pencil and paper. No trees were climbed: inspection was from ground level.

### 4.3 Appraisal identification

My appraisals of observations, discussions and other data are italicised below, in each relevant section and paragraph. This emphasises the clear separation between data and opinion to assist the end-users: client, architect and LPA case and tree officers.

### 4.4 Amenity / Screening by trees and shrubs

There are glimpse or partial views of trees from adjoining public spaces.

*I do not consider the tree actually on the site to be of any significant general public amenity value, but it (tree 1) is of local amenity value to owners / users of the site, and to those of adjoining properties. (See cover photo)*

### 4.5 Statutory constraints

The site is in the administrative area of the London Borough of Camden.

The site stands within the Hampstead Conservation Area.

There are Tree Preservation Orders (TPOs) on the site, ref. C974 2011. Tree 1 is T1 of this TPO.

### 4.6 Soil assessment

The British Geological Survey (BGS) information for the area indicates that the underlying sub-soil is the Claygate beds (silt and fine-grained sand).

*Topsoil within the site appears to derive from the underlying subsoil. The ground surface was largely covered by plastic sheeting. I saw no evidence of soil-stripping, trenching, or level-alteration in the recent past, nor did I observe any apparent compaction or drainage problems.*

### 4.7 Measurements on site

Tree heights estimated by scaling pole.

Tree diameters measured as per the Standard, Annex C.

Tree spreads on the plans below are approximately to scale, determined on site, typically by laser rangefinder, direct measurement, pacing, sighting in relation to site features and architect-supplied plan data.

#### 4.8 Tree data table

The figures in columns 5 and 6 below indicate the RPA. The edge of this is typically the basic tree protection fence position.

In all cases, in the absence of negative comment on health/vitality and structure, normal physiological (health) and structural condition applies. Dependent on time of year of survey, deciduous trees may not have been in leaf at the time of inspection. This may have limited precise identification. Unless stated otherwise, 'tap tests' for the sonority typically associated with decay in trees were normal. Unless stated otherwise, no signs of protected species were noted; for example, potential bat roost features (PRFs).

Tree number	Tree type	Height	Stem diameters	Radius of RPA if circle (mm)	RPA (m <sup>2</sup> )	Comments	Life expectancy	Assessed BS5837 value category
1	Japanese cherry (TPO)	9	360	4320	58.6	Locally ornamental	20+	C1
2	western red cedar	17	800	9600	289.5	No access. Top of tree may be visible from Downshire Hill as skyline feature	40+	B1
3	purple plum	9	400	4800	72.4	No access. Locally ornamental; some views from Downshire Hill	20+	B1
4	holm oak	9	220	2640	21.9	No access. Screening function and potential	40+	B1

## 5 Arboricultural impact assessment (AIA)

### 5.1 RPAs – modifications to shape

I carried out an assessment as per the Standard (section 4.6.2) in connection with the plotting of the RPAs of all trees. This section requires that site conditions such as location of various structures, the internal support mechanisms of various trees, etc., are taken into account in determining the likely position of roots. Adjoining structures have been noted in this respect. Where applicable, the modified-shape RPA, of equivalent area, has been plotted on the plans appended (shown as shapes bounded by an orange line). The subsoil is likely to be silt, typically a slightly shrinkable medium.

*Adjoining structures have likely affected the RPAs, as indicated on plans. This factor is of little overall relevance in connection with this site, and has no particular significance in connection with proposed tree protection.*

### 5.2 Roots and the design

It is usual for discussions between the arboriculturist and architect to take place at an early stage following the arboriculturist's site survey. Modifications, minor or major, to the proposals as first received are typically discussed, with a view to promoting tree retention and health.

*No need arose in this case to discuss, as I found no significant conflicts with trees worthy of retention, q.v. below.*

### 5.3 The static root plate (SRP) compared with RPA

SRP is an abbreviation for static root plate, (Mattheck, 1991, etc.) and means the structurally significant roots nearest the trunk: the principal roots that hold the tree upright. This is derived from a radial dimension based on trunk diameter near ground level. The RPA is a guide to where physiologically significant roots, those necessary for, primarily, water uptake, are likely to be located. No encroachment on the RPA (or SRP) of any retained tree is entailed.

### 5.4 Assessment of SRP/RPA encroachment

No encroachment on the SRP or RPA of any retained tree is entailed.

*In this case all trees to be retained can be adequately protected by exclusion fencing and tree-friendly methods as proposed below to reduce impacts on root systems of retained trees.*

### 5.5 Perception of trees by building users

The proposed structures (light wells) are not habited.

*In view of the above I conclude that shading by and perception of trees has been considered (as the Standard (sections 5.3.4 and 5.6.2.6) recommends) and appear not to be negative factors.*

### 5.6 Superstructure and tree appraisal – tree pruning

In accordance with the Standard, section 4.4.2.5 (f), I note from the drawings supplied that no encroachment by the structures on the crowns of retained trees will occur.

## 5.7 Access clearance

*I note from my site visit and the plans received that no retained tree conflicts with pedestrians, construction traffic, nor end-user vehicles.*

## 5.8 Policy compliance

The LPA website was searched for relevant policy documents and supplementary planning documents (SPDs). I am aware of:

- [The Camden Local Plan](#)
- [Camden Planning Guidance - Trees](#)
- [Hampstead Conservation Area Statement](#)

I submit that the proposals in this report if observed, and the tree protection methods, if implemented, will facilitate fair compliance with any such relevant policies.

# 6 Conclusion

## 6.1 Summary

I conclude that the impact on trees of the scheme proposed, subject to implementation of the arboricultural method statement's contents, will, overall be negligible.

## 6.2 Note to LPA

I invite the LPA to consider, if it is minded to grant consent, the incorporation of the specific *order of implementation* of the **Arboricultural method statement** below into any Conditions applied. Such measures are likely to maximise tree protection.

# 7 Sources and relevant documents used

- Ground-level inspection
- Supplied plans:
  - STArchitects Ltd. drg. no.: SITE PLAN - EXISTING
  - STArchitects Ltd. drg. no.: SITE PLAN - VWTMP

# 8 Copyright

Copyright of the report above is retained by the writer. It is a report for the sole use of the client(s) named above. It may be copied and used by the client in connection with the above instruction only. Its reproduction or use in whole or in part by anyone else without the written consent of the writer is expressly forbidden. The AMS below, including schedule of tree work and the plan or plans, may be reproduced to contractors for the purpose of tendering, and for setting out and maintaining tree protection measures on site.



## 9 Arboricultural method statement (AMS)

### 9.1 Overview

The methods required involve not only physical arrangements on site but effective administration prior to implementation. Trees that have been the recipients of careful handling during construction add considerably to the appeal and value of the finished development. If conflicts between any part of a tree and the building(s) arise in the course of building works these can often be resolved quickly and at little cost if an arboriculturist is consulted promptly. Lack of such care is often apparent quickly and decline and death of such trees can wreck design aims. It can of course also affect saleability, and reflects poorly on the construction and design personnel involved.

I propose that arboricultural administration takes place as outlined below. Needless to state the MC must fully comply with these proposals for them to be effective. This involves proper initial contact with the retained arboricultural consultant, followed by persisting contact, throughout the contract, until at least late landscaping stage.

### 9.2 Administration

#### A. Identification of key personnel in order of responsibility for tree protection on site

Role	Name	Company	E-mail	Mobile	Landline
site manager	TBC	TBC	TBC	TBC	TBC
main contractor	TBC	TBC	TBC	TBC	TBC
architect	Milan Stamenkovic	starchitects ltd	milan@starchitects.co.uk	07745 871962	02077 949920
arboriculturist	John Cromar	JCAC Ltd.	johncromar@treescan.co.uk	07860 453072	01582 808020

#### B. Induction and personnel awareness of arboricultural matters

Prior to commencement a meeting will be held on site between the arboriculturist and the site manager (who will be required to sign the awareness document) and during which meeting all the tree protection methods, materials, order and integration with the build programme will be considered. This document, confirming awareness on the part of personnel of the various items, will be retained for the LPA.

#### C. Inspection of and supervision schedule for tree protection measures, frequency and methods of site visiting and record keeping

At site possession, the tree protection measures applicable to the works, as detailed in this report will be inspected by the arboriculturist and signed off if compliant. An initial inspection will take place; a monthly inspection will take place routinely; unannounced site inspection may also be carried out. Additionally, the arboriculturist shall attend site as required by architect, or site agent, or the LPA. *All reports on site visits to be copied to the LPA within 5 days of site visit.* These reports to be compiled, and an end of project summary produced, together with any recommendations for future action.

**D. Procedures for dealing with variations and incidents**

As C above. Additionally, the architect shall inform the arboriculturist of any design variations or variation intention of tree protection; also, the site manager shall inform the arboriculturist if he intends to vary or deviate from the agreed tree protection methods or timing. Action in response to incidents will be commensurate with and appropriate to the nature of any such incident.

**E. The order of work on the site, including demolition, clearance and building**

As per tree protection methods below

**F. How problems will be reported and solved**

Any breaches of tree protection measures shall constitute a Tree-Related Incident ('TRI'), a report on which will be copied to architect, client and LPA. A remedial action notice will be served by the arboriculturist, copied to all parties and timescales for remediation completion monitored. *All reports on site visits will be copied to the LPA within 5 days of site visit.* Action in response to incidents will be commensurate with and appropriate to the nature of any such incident. Any breach of the stipulated timescale for remediation will trigger a further TRI report.

**G. How accidents and emergencies involving trees will be dealt with**

Dependent on nature of incident; as above; an e-mail with photographic inclusion will be sent by the site agent. The arboriculturist or staff will attend site to appraise the situation and determine remedial action. A TRI report will be issued, as above.

**9.3 Implementation on site**

It is proposed that the methods specified below are followed in their entirety. Please note that the methods are referenced by various colours, lines and hatches on the tree protection plans appended. The scale of the plans is dependent on the paper size on which any hardcopy is produced.

It is highly important to tree health and vitality that construction activities are carried out strictly in accordance with the tree-friendly construction methods below. It is widely not understood outside the arboricultural profession, for example, that a single traverse of a root protection area by a mechanical excavator can cause significant and permanent damage to trees, even if this is not visible immediately afterward.

N.b. The methods below are intended to be read not only by the instructing client, but also by all others concerned with processing and determining of the application. Following planning approval, the methods are finally intended for full implementation on site by the main contractor or in some cases by a DIY builder. A degree of familiarity with the language of basic building techniques is assumed. I will of course explain any unfamiliar term – see contact details on cover page, and at the end of the report.

**9.4 Tree-friendly construction methods and awareness document**

(To be read and duly completed.) I the undersigned builder / site agent / main contractor have been given a copy of the tree protection measures reproduced below and the plans S843-J2-P1 v1, S843-J2-P2 v1 with which they are to be read. I have studied these tree protection measures on site with the arboriculturist. I have asked questions if I have been unsure about the practicability or safety of any measure. Any queries arising have been

resolved. I see no reason why the tree protection should not be implemented as outlined below and undertake to take all reasonable steps within my remit to promote their installation and retention for the duration required, as outlined below. Section 9.4 including all the methods below should be printed out; the plans to full scale, and kept readily to hand on site.

There are 4no. methods in this set, to be implemented in the order given unless stated otherwise.

## PREPARATION / DEMOLITION

Please read with tree protection plan reference S843-J2-P2, appended.

### Method 1: TREE PROTECTION FENCING

Tree protection fencing shall be erected, consisting of 'Heras' type fencing (weld-mesh panels), each section securely attached to uprights driven at least 0.6m into ground, as per the layout as shown on the plan (pink lines). No ground levels reduction or excavation shall take place within (=the tree side of) the fence lines. The standard rubber supports ('elephant's feet') shall if used, be as per BS 5837:2012 section 6.2.2, figure 3, below; that is, pinned to the substrate with re-bar.

Below the crowns of trees with branches extending to less than 2m above ground level, in order to avoid unnecessary pruning, it is permissible to replace sections with manufactured boards at least 11mm thick (hoarding), attached securely to timber uprights driven at least 0.6m into the ground, providing the finished fence stands at least 1.5m above ground level.

Where required to infill odd sections, tree protection fencing may be varied to >1.8m high hoarding of >11mm thick manufactured board and timber uprights >50mm x 100mm, no part of any of which is to be attached to any tree.

No fires shall be made on any part of the site, or within 20m of any tree to be retained. No storage of materials shall be made within the protective fences. No breaching or moving of the protective fences shall take place without the approval of an arboriculturist.

### Method 2: GROUND SURFACE HANDLING and PROTECTION

This method shall apply in the zone hatched blue on plan. NO levels reduction shall take place. This includes no 'scraping up' with a mechanical excavator or otherwise. Any existing hard surfacing, any existing surface debris, light vegetation, etc., that lies within the zone shall be removed using hand tools only. A 2D geotextile membrane, such as 'Ekotex' shall be laid;

Figure 3 Examples of above-ground stabilizing systems

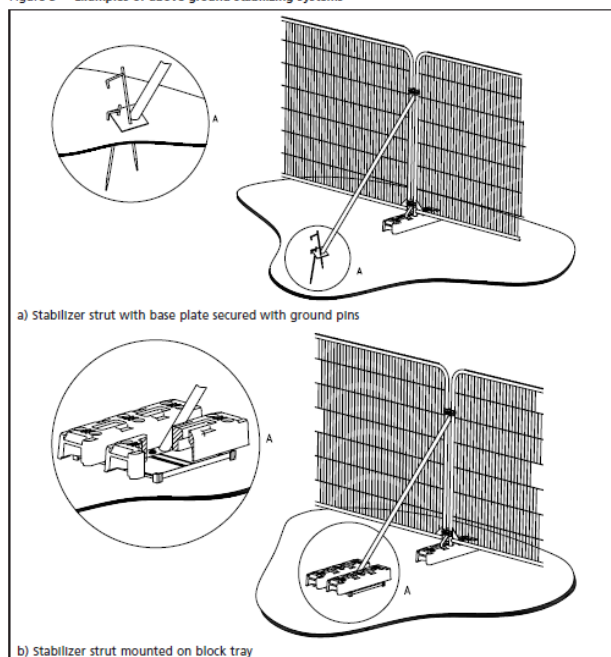


Figure 1 BS 5837:2012 section 6, figure 3

100mm of green-source woodchip; continuously abutted scaffold boards or manufactured boards so as to completely cover this area.

OR

To handle loads imposed by pedestrian-operated plant up to 1 tonne gross weight, a 2D geotextile membrane, such as 'Ekotex' shall be laid, and in sequence; 100mm of green-source woodchip; continuously abutted scaffold boards and a layer of manufactured board at least 25mm thick screwed to the underlying scaffold boards.

This area shall be used for pedestrian access and dry materials storage only. Any scaffold erection shall take its bearing directly off the ground surface via spreader plates/scaffold boards.

### **Method 3: DEMOLITION**

This method shall apply generally. Arisings shall be removed for disposal off site. None shall be spread in root protection areas (orange shapes/circles).

## **LATE CONSTRUCTION and LANDSCAPING PHASE**

### **Method 4: LANDSCAPING PREPARATION IN ROOT PROTECTION AREAS**

This method shall apply after completion of main build only. Operations shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. Ground preparation within root protection areas shall entail use of hand tools only. The ground surface shall be thoroughly hand-forked over in vertical mode only to one spit's depth (250mm). Care shall be taken not to damage tree roots greater than 20mm diameter. Weed treatment if required shall be via BASIS qualified operatives. Surface debris shall be removed by hand to barrow and disposed of off-site. No wheeled or tracked plant shall be used: hand-held power tools may be used. (Outside root protection areas, mechanical cultivation shall be permitted.) The finishing soil horizon where additional planting medium is required shall be composed of biochar, see: <https://www.soilfixer.co.uk/biochar-article>

mixed with topsoil (to BS3882:2015 topsoil) - 5% by volume (equating to 20 kgs of product per cubic metre of topsoil), which shall be laid by hand-barrow: no mechanical plant shall over-run the loose-tipped material. All handling of soils/soil-mix shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. The mix shall be laid to finish to required levels and allowed to settle via mist irrigation / watering-in / natural rainfall. The ground surface shall be worked to a fine tilth with hand tools prior to planting. No mechanical compaction whatever shall be used. Levelling and minimal consolidation shall be by hand tools / foot and board only, or naturally. Earthworm Inoculation Units, see: <https://www.wormsdirectuk.co.uk/product/worm-colonies-lawn-areas/>

shall be placed 150mm below ground level at 5m intervals in all soil build-up areas.

Name [print]:

For construction company:

Date:

Signature.....

S843-J2-IA-1

End of main body of report – plans appended.

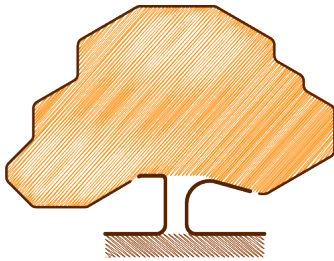
Dated: 24th March 2022

Signature (for John Cromar's Arboricultural Co. Ltd.)

A handwritten signature in black ink that reads "John Cromar". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

John Cromar

Dip. Arb. (RFS), FArborA, RCarborA



John Cromar's  
Arboricultural  
Company Ltd.

[admin@treescan.co.uk](mailto:admin@treescan.co.uk)

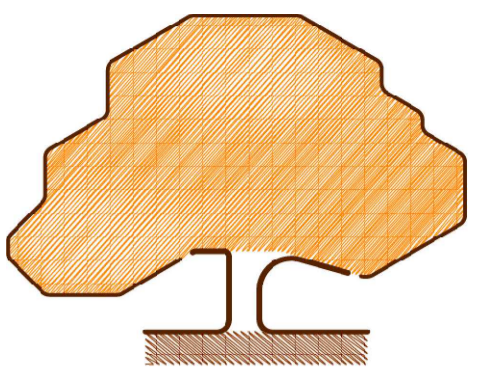
01582 808020  
07860453072

## 10 Plans

N.b. The scale of the plans is dependent on the paper size on which any hard copy is produced.

S843-J2-P1 v1

S843-J2-P2 v1



**JOHN CROMAR'S  
ARBORICULTURAL  
COMPANY  
LIMITED**

THE OLD SCHOOL,  
TITLEY, KINGTON,  
HR5 3RN.  
at Wheatley, Oxford  
& Harpenden, Herts.

TEL 01582 808020  
FAX 01544 231006  
MOB 07860 453072  
admin@treescan.co.uk  
www.treescan.co.uk

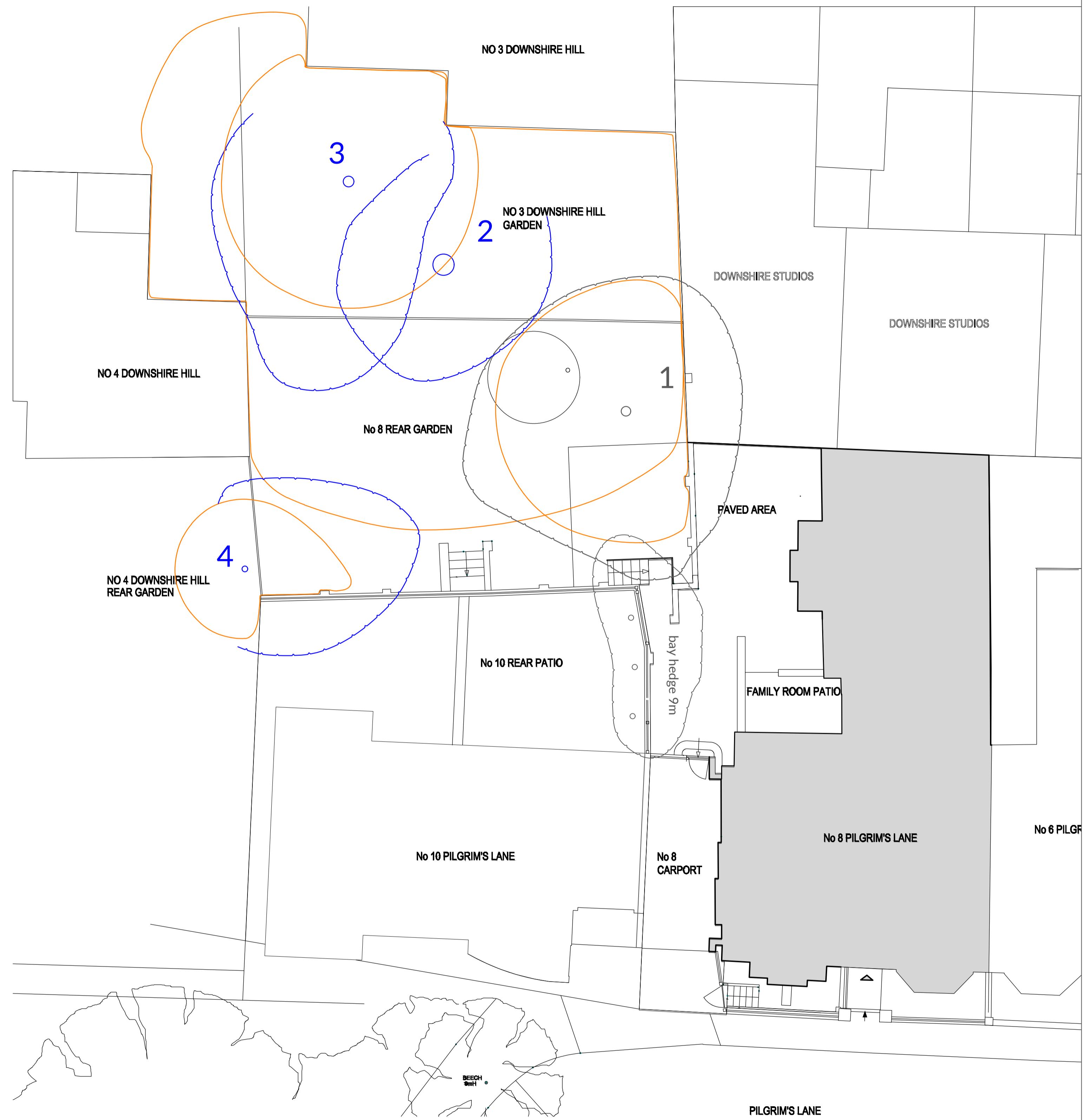


**KEY TO COLOURS /  
LINETYPES USED IN  
RELATION TO TREES**

- GREEN - High Value (A)
- BLUE - Moderate Value (B)
- BLACK - Low Value (C)
- RED - Very short life expectancy (U)
- ORANGE SHAPES: Root Protection Areas

**Spread and trunk colours correspond directly to those used in British Standard 5837:2012, Table 2.**

 TOOTHED LINE: Tree spread line



**DRG. NAME  
TREE VALUE  
ASSESSMENT  
(AS PER BS  
5837:2012) &  
ROOT  
PROTECTION  
AREAS**

NOTES  
Do not use for setting out purposes.  
All dimensions to be checked on site.

Any scale referenced below applies ONLY when plan printed at ISO A1 size.

The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

TEXT  
FOR FULL DETAILS OF TREE VALUE  
PLEASE SEE REPORT

BASED ON  
STARCHITECTS LTD. DRG. NO.: SITE  
PLAN-EXISTING SUPPLIED

SITE ADDRESS  
8 Pilgrims Lane, London, NW3 1SL

DRG. REF. S843-J2-P1	REV. NO. v1
SCALE & SIZE 1:100 @ A1	DATE 25-Mar-22
0	5



The methods below typically each have a unique colour code and hatch or other reference to the plan, for example, pink lines indicate where fences to protect trees should be positioned.

**PREPARATION / DEMOLITION**

**Method 1: TREE PROTECTION FENCING**

Tree protection fencing shall be erected, consisting of 'Heras' type fencing (weld-mesh panels), each section securely attached to uprights driven at least 0.6m into ground, as per the layout as shown on the plan (pink lines). No ground levels reduction or excavation shall take place within (=the tree side of) the fence lines. The standard rubber supports ('elephant's feet') shall if used, be as per BS 5837:2012 section 6.2.2, figure 3; that is, pinned to the substrate with re-bar.

Below the crowns of trees with branches extending to less than 2m above ground level, in order to avoid unnecessary pruning, it is permissible to replace sections with manufactured boards at least 11mm thick (hoarding), attached securely to timber uprights driven at least 0.6m into the ground, providing the finished fence stands at least 1.5m above ground level.

Where required to infill odd sections, tree protection fencing may be varied to >1.8m high hoarding of >11mm thick manufactured board and timber uprights >50mm x 100mm, no part of any of which is to be attached to any tree.

No fires shall be made on any part of the site, or within 20m of any tree to be retained. No storage of materials shall be made within the protective fences. No breaching or moving of the protective fences shall take place without the approval of an arboriculturist.

**Method 2: GROUND SURFACE HANDLING and PROTECTION**

This method shall apply in the zone hatched blue on plan. NO levels reduction shall take place. This includes no 'scraping up' with a mechanical excavator or otherwise. Any existing hard surfacing, any existing surface debris, light vegetation, etc., that lies within the zone shall be removed using hand tools only. A 2D geotextile membrane, such as 'Ekotex' shall be laid; 100mm of green-source woodchip; continuously abutted scaffold boards or manufactured boards so as to completely cover this area.

OR

To handle loads imposed by pedestrian-operated plant up to 1 tonne gross weight, a 2D geotextile membrane, such as 'Ekotex' shall be laid, and in sequence; 100mm of green-source woodchip; continuously abutted scaffold boards and a layer of manufactured board at least 25mm thick screwed to the underlying scaffold boards.

This area shall be used for pedestrian access and dry materials storage only. Any scaffold erection shall take its bearing directly off the ground surface via spreader plates/scaffold boards.

**Method 3: DEMOLITION**

This method shall apply generally. Arisings shall be removed for disposal off site. None shall be spread in root protection areas (orange shapes/circles).

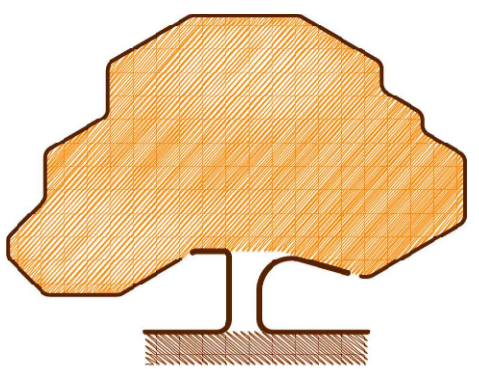
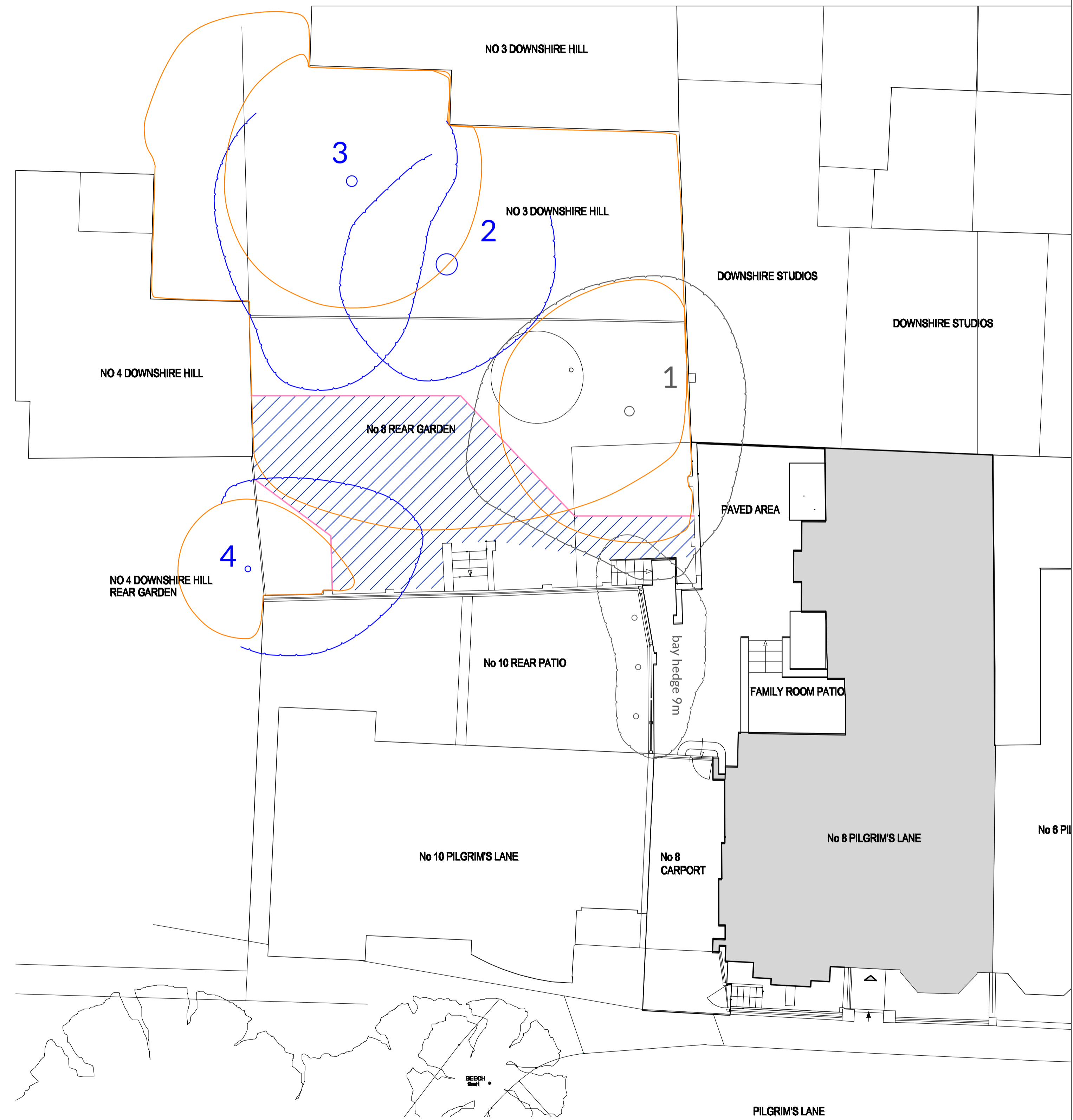
**LATE CONSTRUCTION and LANDSCAPING PHASE**

**Method 4: LANDSCAPING PREPARATION IN ROOT PROTECTION AREAS**

This method shall apply after completion of main build only. Operations shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. Ground preparation within root protection areas shall entail use of hand tools only. The ground surface shall be thoroughly hand-forked over in vertical mode only to one spit's depth (250mm). Care shall be taken not to damage tree roots greater than 20mm diameter. Weed treatment if required shall be via BASIS qualified operatives. Surface debris shall be removed by hand to barrow and disposed of off-site. No wheeled or tracked plant shall be used: hand-held power tools may be used. (Outside root protection areas, mechanical cultivation shall be permitted.) The finishing soil horizon where additional planting medium is required shall be composed of biochar, see: <https://www.soilfixer.co.uk/biochar-article>

mixed with topsoil (to BS3882:2015 topsoil) - 5% by volume (equating to 20 kgs of product per cubic metre of topsoil), which shall be laid by hand-barrow: no mechanical plant shall over-run the loose-tipped material. All handling of soils/soil-mix shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. The mix shall be laid to finish to required levels and allowed to settle via mist irrigation / watering-in / natural rainfall. The ground surface shall be worked to a fine tilth with hand tools prior to planting. No mechanical compaction whatever shall be used. Levelling and minimal consolidation shall be by hand tools / foot and board only, or naturally. Earthworm Inoculation Units, see: <https://www.wormdirectuk.co.uk/product/worm-colonies-lawn-areas/>

shall be placed 150mm below ground level at 5m intervals in all soil build-up areas.



**JOHN CROMAR'S  
ARBORICULTURAL  
COMPANY  
LIMITED**

THE OLD SCHOOL,  
TITLEY, KINGTON,  
HR5 3RN.  
at Wheatley, Oxford  
& Harpenden, Herts.

TEL 01582 808020  
FAX 01544 231006  
MOB 07860 453072  
admin@treescan.co.uk  
[www.treescan.co.uk](http://www.treescan.co.uk)



**KEY TO COLOURS /  
LINETYPES USED IN  
RELATION TO TREES**

- GREEN - High Value (A)
- BLUE - Moderate Value (B)
- BLACK - Low Value (C)
- RED - Very short life expectancy (U)
- ORANGE SHAPES: Root Protection Areas

**Spread and trunk colours correspond directly to those used in British Standard 5837:2012, Table 2.**

**For planting key please see report.**

**DRG. NAME  
TREE RETENTION  
& TREE  
PROTECTION  
MEASURES**

**NOTES**

Do not use for setting out purposes.  
All dimensions to be checked on site.

Any scale referenced below applies ONLY when plan printed at ISO A1 size.

The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

**TEXT**

FOR FULL METHOD DETAILS  
PLEASE SEE REPORT

BASED ON  
STARCHITECTS LTD. DRG. NO.: SITE  
PLAN-VWTMP SUPPLIED

SITE ADDRESS  
8 Pilgrims Lane, London, NW3 1SL

DRG. REF. S843-J2-P2	REV. NO. v1
SCALE & SIZE 1:100 @ A1	DATE 25-Mar-22
0	5