



**Arboricultural Impact Assessment and Method
Statement**

**CAS/2022/124
Amended March 2025**

**For
Robert Hirschfield Architects**

**Proposed Development Site
4 Oak Hill Park, Hampstead, London, NW3 7LG.**

**Boyd Saunders
Dip Arb L4- Tech 'Arbor A'**

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1.0 Introduction

1.1 Instruction

- 1.1.1 Cantia Arboricultural Services were instructed to undertake a tree survey and provide arboricultural advice on the site known as 4 Oak Hill Park, Hampstead, London, NW3 7LG. to accompany a planning application.
- 1.1.2 The site visit was carried out on Monday 28th March 2022, between the hours of 1030-1330hrs (180 minutes) and weather conditions were noted as clear with visibility conducive of surveying.

1.2 Aim of Report

- 1.2.1 To survey in accordance with BS 5837: 2012 ‘Trees in Relation to Design, Demolition and Construction – Recommendations’ to plot and assess the quality of the existing trees located on site and within 15m of proposed development operations.
- 1.2.2 To assess the impact of the proposed development upon trees located on site and within the immediate vicinity. To provide advice on trees requiring removal and outline protective measures for trees marked for retention.
- 1.2.3 To provide a work specification as required by retained trees to accommodate the proposed development.
- 1.2.4 To provide recommendations and guidance on how trees and other vegetation may be successfully retained within the proposed development

1.3 Documentation & Disclosure

- 1.5.1 The following documentation has been made available
- Existing and Proposed Site Plans – 244_P_TE_001_A SITE PLAN.dwg & 244_P_TE_002_A SITE PLAN- GROUND WORKS

2.0 Site & Tree Discussion

2.1 Site Description

- 2.1.1 The site consists of a detached house set in a plot of approx. 1,724 square metres (0.4 Acre). The property faces Southwards with the garden areas laid before the property. The gradient of the land falls away from the house dropping approx. 4m between the house and the Southern boundary.



- 2.1.2 The garden contains a mix of grassed areas and planter beds which contain a variety of trees and shrubs. One large Oak tree stands to the Western edge of the lawn area which itself is split into two sections by an existing retaining wall.
- 2.1.3 The Southern boundary of the garden is adjacent Oak Hill Park & Oak Hill Mews with a retaining wall setting the property above the road level. The majority of the site's trees and shrubs are located in a planter bed along this Southern boundary.
- 2.1.4 An existing brick outbuilding is located in the Western section of the plot adjacent to the access driveway which runs up from Oak Hill Park around the Western boundary and into the plot adjacent to the property.



Brick Outbuilding (left) with main property located behind trees

2.1.5 The property is bordered on all sides by the land of neighbouring properties.

2.2 Access

2.2.1 Vehicle and plant access to site is unencumbered via Oak Hill Park and existing hard surfaced areas which currently service the property.

2.3 Proposal

2.3.1 The proposal is –

- Demolition and rebuild of existing dwelling
- Re-surfacing of existing tarmac driveway with a new porous resin-bound aggregate drive from the road up to and including the areas abutting the property.
- Construction of Swimming Pool and Filter House (Added March 2025)
- Construction of terrace on the south side of the house for outdoor relaxation and dining. Steps leading down from the terrace to an area of traditional garden.
- New landscaping / planting to provide bio-diversity, habitat provision and screening

2.4 Scope of Report / Limitations

- 2.4.1 This is a preliminary assessment from ground level and observations have been made solely from a visual perspective for the purposes of assessment in terms relevant to planning and development. No invasive or other detailed internal decay detection devices have been used in assessing internal conditions.
- 2.4.2 All individual trees within a 15m radius of the development that have a stem diameter over 75mm at 1.5m above ground level have been surveyed. Each tree is surveyed and allocated an identifying number. Then data is collected, and individual trees measured with regards to their height, stem size, canopy size and potential to pose a material constraint to development. Subject trees are each allocated one of four grade categories (A, B, C or U) indicating their quality. Trees, groups and hedges have been graded upon individual merit in the context of their existing surroundings regardless of any proposed development of the site.
- 2.4.3 Any conclusions relate to conditions found at the time of inspection. Any alteration to the site that may affect the trees that are present or have a bearing on planning implications (including level changes, hydrological changes, extreme climatic events or other site works) will necessitate a re-assessment of the trees and the site and render any previous advice/ findings invalid.
- 2.4.4 Trees are living organisms and even apparently healthy trees cannot be considered completely safe due to forces of nature and environmental fluctuations which dictate a natural failure rate of intact and healthy trees.
- 2.4.5 Where there are access restrictions data has been estimated. This is reflected in the survey schedule with a (#) symbol before measurement.
- 2.4.6 The survey was carried out with the assistance (where required) of the following inspection equipment-
- Binoculars – Inspection of upper sections of the tree
 - Sounding Mallet – Assessment of wood quality, decay extent
 - Steel Probe – To test resistance of wood and depth of cavities

- Secateurs – Removal of basal growth & ivy to allow inspection
- DBH (diameter) Tape – Measurement of stem diameter
- Clinometer- To measure height of tree
- Laser measure – Measurement of canopy dimensions & tree location

2.5 Tree Discussion

- 2.5.1 A total of ten individual trees and six groups of trees have been assessed in detail from ground level by visual means only. The Tree Survey Schedule, at Appendix 2, details the trees in respect of dimension and quality in accordance with the methodology set out in the British Standard 5837:2012. The following categories were recorded-

Category	Quantity	Identification Numbers
A	2	T03 & T04
B	3	G03, T08 & T09
C	9	G01, G02, G04-G06, T02, T05-T07 & T10
U	1	T01

- 2.5.2 Trees categorised as A or B are viewed as a constraint to development. Should any proposed development require the removal of trees/groups (or parts of groups) within these categories then it is likely that local authorities would require mitigation in the form of a robust soft landscaping/planting plan. Trees classed as category C are generally not viewed as a constraint although plans to remove large numbers of these would likely still require mitigation. Trees classed as category U are trees in irreversible decline unlikely to be in situ for more than 10 years. These trees are therefore not considered a constraint and also have no RPA (Root Protection Area) plotted.
- 2.5.2 Where trees have been surveyed and plotted in groups they typically contain specimens of varying age class and size. Please take note of survey schedule for indication of average height/size and maximum height/size within group. Where groups of trees have been surveyed and plotted, the largest DBHs' of the trees located along the groups edge have been noted and used to indicate the maximum RPA potential.

- 2.5.3 Also noted on site were numerous small trees / woody shrubs too small to warrant inspection in accordance with BS5837 Trees in Relation to Design, Demolition and Construction 2012 : Recommendations.
- 2.5.4 Searches carried out On Camden Councils Interactive Map indicated that the property falls within the Hampstead Conservation Area. Therefore, any tree works / tree removals of trees with a DBH of over 75mm can only be carried out with written consent from the Local Planning Authority. Correspondence with Camden Council revealed that there are no Tree Preservation Orders affecting the site.
- 2.5.5 Trees numbered T04 Sycamore, T05 Sycamore, T06 Horse Chestnut, T07 Sycamore, G03 Sycamore and G05 Leyland Cypress have had their RPAs' altered to reflect constraints to the root zone which would have affected symmetrical root growth. Features such as existing structures, hard surfacing and areas of compacted soil etc represent areas which are less hospitable to root growth and thus, it would be expected that reduced root mass, or no roots at all would be encountered in these areas. Alternately, grass or exposed soil represents areas very hospitable to root growth and thus these are areas in which increased root mass will be likely.



Trees numbered T04 Sycamore, T06 Horse Chestnut, T07 Sycamore (left)

- 2.5.6 Tree numbered T03 Oak is located on the edge of an incline which falls away to the South by approx. 1.6m. Therefore, the RPA of this tree has been moved in a Northerly direction to reflect the tendency of trees to root up a bank as compensation for the self-undermining of roots located down the bank due to wind movement. Some cracking was noted to existing tarmac located to the North of the tree which would indicate root growth beneath.



Tree numbered T03 Oak



Cracking to tarmac

3.0 Arboricultural Impact Assessment on Retained Trees

3.1 Demolition

- 3.1.1 The removal of existing hard surfaced areas (tarmac driveway and concrete slope), steps and walls are scheduled to take place within the measured RPA of tree numbered T03 Oak which is marked for retention. These operations must be carried out as stipulated in section P5.0 of the Arboricultural Method Statement.

3.2 Construction

- 3.2.1 The removed tarmac driveway will be resurfaced / replaced using a bound gravel porous material. This will allow for enhanced water movement and gaseous exchange across approx. 125 square metres (32% of total RPA) of the root zone of tree numbered T03 Oak which was previously under a non-porous surface. This will offer improved conditions for root mass within this area.
- 3.2.2 The new steps linking the mown grass pathways to the patio propose the use of corsten steel risers with resin bound gravel in between. These will conflict with the measured RPA of tree numbered T03 Oak by 13.7 square metres (3.5% of total RPA). Therefore, to support these steps mini piles will be used to minimise impact upon the root zones. These must be installed as outlined in section P6.0 of the Arboricultural Method Statement.
- 3.2.3 The proposed new terrace to the South of the existing property will conflict with the measured RPA of tree numbered T03 Oak by 10.6 square metres (2.7% of total RPA). Therefore, a pre-emptive root pruning trench will be excavated. This must be implemented as outlined in section P4.2 of the Arboricultural Method Statement and where shown on the Tree Protection Plan CAS/2022/124.
- 3.2.4 The new stepped path connecting the driveway to the existing outbuilding area will conflict with the measured RPA of tree numbered T03 Oak by 1.7 square metres (0.4% of total RPA). The majority of the steps will be constructed in the footprint where existing steps are to be removed. Where possible the existing sub-base should

be retained and augmented into the new design. Where this is not possible mini piles can be used to minimise the impact upon the root zone. Typically, this could involve small piles with a lintel set at or above ground level to support the structure and negate the requirement for excavation. These must be installed as outlined in section P6.0 of the Arboricultural Method Statement.

T03 Oak Total Impact Assessment -

Tree Number / Species	Total Amount of New Conflicts / Square Metres	Total Amount of New Conflict / Percentage of RPA	Total Area of Hard Items /Surfacing to be Removed	Removed Area as Percentage of RPA
T03 Oak	26 square metres	6.6%	153 square metres	40%

The above table shows combined new conflicts and combined areas where existing infrastructure / hard surfacing to be removed.

- 3.2.5 The proposed new wall adjacent to the new gates will conflict with the measured RPA of group numbered G03 Sycamore by 1 square metres (approx. 2.5% of total RPA). The trees are located on a raised bank above the area of excavation and therefore it is unlikely root mass will be encountered. Therefore, as a precautionary measure a root pruning trench will be excavated. This must be implemented as outlined in section P4.2 of the Arboricultural Method Statement and where shown on the Tree Protection Plan CAS/2022/124.
- 3.2.6 **Added March 2025** – The East of the plot will see the construction of a 9m x 3m swimming pool with recreational areas around it and serviced by a filter house. The proposed location of the filter house will create the following conflicts with the measured RPAs' of trees marked for retention –

Tree Number	Category	Conflict / Square Metres	Conflict / Percentage of RPA
T04	A	2.8 square metres	0.75%
T09	B	10.4 square metres	3.74%

Pile type foundations with a diameter of 150mm have been proposed and therefore three trial holes were dug by use of hand tools under arboricultural supervision to assess the viability of pile locations. Photographs of the trial pits below (red dot indicates proposed pile location)



The installation of these piles must be carried out as outlined in section P7.0 of the Arboricultural Method Statement.

- 3.2.7 New pathways and hard surfacing to be installed to service the swimming pool / filter room. This will create the following conflicts with the measured RPAs' of trees marked for retention –

Tree Number	Category	Conflict / Square Metres	Conflict / Percentage of RPA
T04	A	3.6 square metres	1.0%
T09	B	3.5 square metres	1.25%

Therefore, in this area of trees numbered T04 & T09 construction must be of a no-dig design. Typically, this could involve the use of a 3d cellular system to avoid the risk of soil compaction with a permeable final surface. These must be installed as outlined in section P6.0 of the Arboricultural Method Statement. The installation of no-dig

elements may require a ramp or small step to accommodate the level changes with the other areas of pathway outside of the RPAs’.

- 3.2.8 No service run plans have been provided. It is assumed that existing ducts and runs will be utilised and augmented within the design. Adequate space exists on site so that any requirement for fresh runs can be located outside of the measured RPAs’ of trees marked for retention.

3.3 Trees Requiring Removal

- 3.3.1 The proposal seeks the removal of the following trees / groups of trees –

Tree Number / Species	Category	Comments
T01 Silver Birch	U	Dead Tree – Removal desirable regardless of development.
T02 Cherry	C	Removal required to accommodate proposal
T10 Sycamore	C	Removal required to accommodate proposal
G01 & G04 Small Shrubs & Apple	C	Removal required to accommodate proposal

Visibility of removed trees within the public realm is limited. There is good scope for replacement planting which can match and in time enhance the arboricultural, ecological and wider landscape contribution of the area to the public.

3.4 Implications for Retained Trees

- 3.4.1 Trees marked for retention will require no additional pruning or intervention due to the proposed development.

4.0 Conclusions

- 4.1.1 The proposal requires the removal of three trees and two groups of trees. These are low grade, unremarkable specimens the removal of which will have limited impact upon the arboricultural / landscape value of the site. Proposed new planting / landscaping gives good opportunity to provide the required 20% bio-diversity gain whilst enhancing the arboricultural, habitat and landscape contribution of the site.
- 4.1.2 Root pruning trenches will be employed / excavated where small conflicts exist between the proposed design and trees marked for retention.
- 4.1.3 Mini piles will be employed for new steps / walls where these conflict with the measured RPAs' of trees marked for retention.
- 4.1.4 Pile type foundations will be employed where conflicts exist between the new filter house and the measured RPAs' of trees marked for retention.
- 4.1.5 No-dig surfacing will be implemented where small areas of conflict exist between the proposed pathway adjacent to the filter house and the measured RPAs' of trees marked for retention.
- 4.1.6 So long as the precautionary and protective measures outlined within this report are strictly observed and adhered to then the proposed development will have positive impact upon trees marked for retention.

Arboricultural Method Statement

1.0 Summary

- 1.1 This document outlines the principles that are approved and enforced by the local planning authority, including site specific instructions on the methods required to protect the existing tree stock agreed for retention. These methods are set out in a logical sequence of operations with location of protective measures shown on the accompanying Tree Protection plan CAS/2022/124

2.0 Important Tree Information

- 2.1 As the majority of tree roots are found in the upper metre of soil, development works, including for example even shallow excavation, soil compaction and soil contamination, can be harmful to trees in close proximity. Trees differ in their tolerance of root loss or disturbance, according to their age, species and/or condition. All protection works within this document will be in accordance with BS 5837: 2012 ‘Trees in Relation to Design, Demolition and Construction – Recommendations’
- 2.2 An assessment of the site’s tree stock has been undertaken and those trees to be retained are clearly shown on the Tree Protection Plan (TPP). A calculation has been made of the volume of soil required to ensure the survival of these and this is represented by the Root Protection Area (RPA) indicated by the magenta circles or squares around the retained tree on the plan.
- 2.3 The RPA has been used to inform the Construction Exclusion Zone (CEZ), the area to be protected during development by the use of barriers, ground protection and specialised construction techniques - outlined below:-

3.0 Sequenced Methods of Construction and Tree Protection

P1.0 Phase 1 - Pre-Contract Meeting

- P1.1 If stipulated by the local authority an onsite meeting will be held with all relevant parties including the developer, appointed arboricultural supervisor and Local Planning Authority (LPA) representative.

P2.0 Phase 2 - Execute Agreed Tree Works

Tree Number	Proposed Works	Reason
G01, G04, T01, T02 & T10	Removal	Removal required to accommodate proposal

- P2.1 All tree work is to conform to BS 3998:2010 and to current arboricultural best practice. Tree works are to be undertaken by a professional and specialist arboricultural contractor, who carries the appropriate experience and insurance cover and following formal approval from the LPA

P3.0 Phase 3 - Tree Protection Barriers and ground protection

- P3.1 In order to protect the tree stems from significant construction activity, protection barriers will be erected. See Plan for fencing location. Fencing should be of a reasonable standard and suitable for the purpose of preventing machinery entering the protected zones see example given below in appendix 1.
- P3.2 BS5837 Trees in Relation to Design, Demolition and Construction (2012) requires that the root protection area be calculated for each tree marked for retention on the development. The root protection area is the minimum area in m² which should be left undisturbed around each retained tree, including the delivery of machinery, materials, plant or equipment to the site or any adjacent land. The protective measures will remain in situ until final completion or a time agreed by the LPA and Contractor.

- P3.3 Tree protection fencing will be required to be installed as shown on the Tree Protection Plan CAS/2022/124. Fit for its purpose fencing must be installed after any required tree works and prior to any construction operations on site. Once the barriers have been properly erected in position, they are to be considered as sacrosanct and are not to be removed or altered in any way without prior approval from the LPA.
- P3.4 Clear notices as shown below are to be fixed to the outside of the fencing with words such as ‘Tree Protection Zone – Do not remove this fencing’. All operatives and other relevant personnel are to be informed of the role of the exclusion barriers and their importance. Protective fencing should remain in situ throughout the entire construction process. The site manager should be aware that it is his responsibility to maintain protective measures adequately and these should be casually inspected at regular intervals with written records of inspection.



- P3.5 Where stipulated on the Tree Protection Plan ground protection should be laid. The gross weight of predicted traffic in the area should be calculated and ground protection laid as stipulated below –
- *For pedestrian access, a single thickness of scaffold boards placed on a driven scaffold frame, so as to form a suspended walkway or on a compressive- resistant layer such as, e.g. woodchip 100mm min, laid onto a geotextile membrane will be sufficient.*

- *For pedestrian operated machinery up to a gross weight of 2t inter linked ground protection boards places on top of a compression- resistant layer, as above, will be required.*
- *For machinery greater than 2t and engineered specification will be required.*

P3.6 If there is a requirement to move or carry out operations inside the area of protective fencing then ground protection should be laid over any exposed ground prior to movement or works commencing. This should be laid in accordance with section P3.5 of the Arboricultural Method Statement.

P3.7 When there is a requirement to carry out work in an area covered with ground protection then only the immediate area of work should have the protection rolled/scraped back. Once the task in hand is completed then ground protection should be instantly re-instated.

P3.8 Adequate room is available for the locating of compounds and material storage within the site boundaries and outside of any measured RPA.

P4.0 Phase 4 - Ground works

P4.1 Spoil, including soil and rubble surplus to requirements will be removed from site and not stored against any protective fencing.

P4.2 Where foundations require pre-emptive root pruning this should be excavated outside the line of foundation closest to the tree by hand or with the use of an air pick to a depth of 600mm. Roots discovered less than 25mm in diameter may be cut, roots greater than 25mm in diameter must only be cut after consultation with the project arboriculturalist and or the LPA. Once roots have been cut conventional excavation can be carried out.

P4.3 Service runs to be located outside any indicated RPA.

P5.0 Phase 5 – Demolition and Removal of Hard Surfacing within the RPA

- P5.1 Where an existing hard surface is scheduled for removal, care should be taken not to disturb tree roots that might be present beneath it. Hand-held tools or appropriate machinery should be used (under arboricultural supervision) to remove the existing surface, working backwards over the area, so that the machine is not moving over the exposed ground. If a new hard surface is to be laid, it is preferable to leave any existing sub-base in situ, augmenting it where required.
- P5.2 When demolishing a structure (including underground structures) within what would otherwise be the RPA, barriers should be erected, and ground protection installed, to protect the underlying soil to the edge of the existing structure prior to the commencement of operations.
- P5.3 Where trees stand adjacent to structures and walls to be removed, the demolition must be undertaken inwards within the footprint of the existing building or on to existing hard surfacing (often referred to as “top down, pull back”).
- P5.4 The advice of an arboriculturist should be sought where underground structures present within the RPA are, or will become, redundant. In general, it is preferable to leave such structures in situ, as their removal could damage adjacent tree roots.
- P5.5 All plant and vehicles engaged in demolition works should either operate outside the RPA or run on the ground protection. Where such ground protection is required, it should be installed prior to commencement of operations.

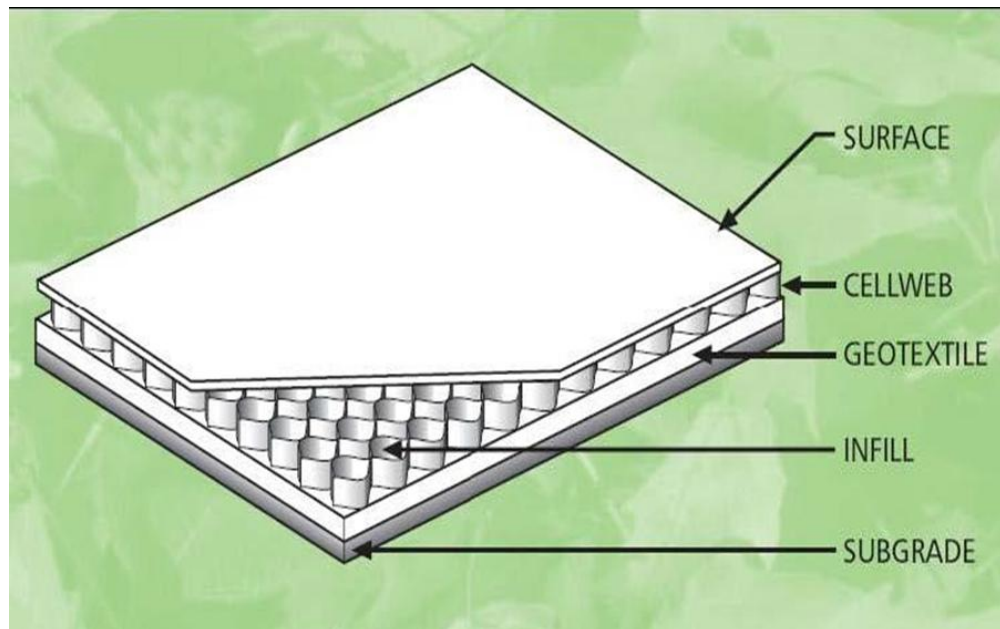
P6.0 Phase 6 – No-Dig Surfacing Installation

- P6.1 Designs for ‘no-dig’ surfacing that would minimize adverse impact on trees should include particular attention to existing levels, proposed finished levels and cross-sectional details.
- P6.2 The design should not require excavation into the soil, including through lowering of levels and/or scraping, other than the removal, using hand tools, of any turf layer or other surface vegetation.

- P6.3 The gross weight of proposed traffic for the area must be calculated and the design include a suitable three-dimensional cellular confinement system to alleviate risk of future soil compaction.
- P6.4 The sections below offer generic installation techniques relating to the construction of hard surfaces, for example, roads and paths, parking areas and bases for bicycle or bin stores not required to be to an adoptable standard and within the CEZ of retained trees. Manufacturers installation guidelines should be referenced and where required supersede the instructions below.
- P6.5 The construction area is to be levelled by filling hollows and removing protrusions and hard landscaping. No soil excavation, other than the removal of a 'turf or vegetation layer' is to be carried out during this process and filling material should be of a porous nature to allow water and oxygen to reach the soil below. In the unlikely event that roots are required to be pruned, sharp cutting tools are to be used to ensure that minimum damage is caused. No roots, greater than a diameter of 25mm, are to be pruned without prior agreement with the appointed arboricultural supervisor or LPA representative.
- P6.6 A geo-textile membrane (Terram or similar) is then to be laid over the whole surface, including any retained hard surfaces. This is to be fixed firmly into position with ground pegs.
- P6.7 Where edging blocks or stone are to be used to retain the drive surface within the CEZ, the mix into which they are set will be laid directly onto the geo-textile membrane over the supporting base. No deeper excavations are to be made to accommodate the footing of the edging detail.
- P6.8 A geoweb material is then placed over the membrane and also fixed into position. An aggregate sub-base material is then introduced in to the geoweb. The depth of the sub-base aggregate should be the same depth as the geoweb and no less than 100mm. The aggregate should be a granular no fines material (typically 40-20mm). Not only

will this material dissipate load and reduce soil compaction, this will permit easy passage of air (oxygen) to the rooting area of the tree below the surface.

- P6.9 The sub-base material is to be compressed into position ready for the final surface treatment. This surface can also be used as a temporary works access route prior to the laying of the final surface.



- P6.10 Final surface details for residential purposes will be of a porous nature such as gravel, block paviors or small paving slabs and should be approved by the LPA. In the usual way these should be bedded into a lean mix that is also highly porous. Final surface treatment can be installed as part of the landscaping works.

P7.0 Phase 7 – Installation of Piles / Posts within the RPA

- P7.1 Where Pile / Posts are selected then an investigation will be required to determine their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600 mm.

- P7.2 Piles / Posts to be installed near to trees must be of the smallest practical pile diameter as this reduces the possibility of striking major tree roots and reduces the size of the rig required to sink the piles.
- P7.3 Pile holes must be lined with an impermeable sleeve to reduce risk of leeching into the root zone of the trees.
- P7.4 If a piling mat is required, this must conform to the parameters for temporary ground protection given in section P3.5 of the Arboricultural Method Statement.

P8.0 Phase 8 - Dismantling Protection Barriers and Landscaping Works

- P8.1 A minimum notice period of seven days will be given to the LPA prior to the dismantling of the protection barriers.
- P8.2 All landscaping once the barriers have been removed will avoid soil re-grading and disturbance within the CEZ and no soil levels be altered after the protection barriers have been removed. All vehicles are strictly prohibited from entering any RPA once barriers are removed.

4.0 General Principles for Tree Protection

- 4.1 A copy of this AMS and the attached TPP is to be retained on site at all times and all personnel associated with the construction process will be made familiar with the principles within.
- 4.2 No fires are to be lit on site at any stage during the construction process.
- 4.3 A designated storage area is to be created away from retained trees. All materials for construction purposes are to be stored in this compound. Care must be taken to avoid the leakage or leaching of noxious materials into the soil.

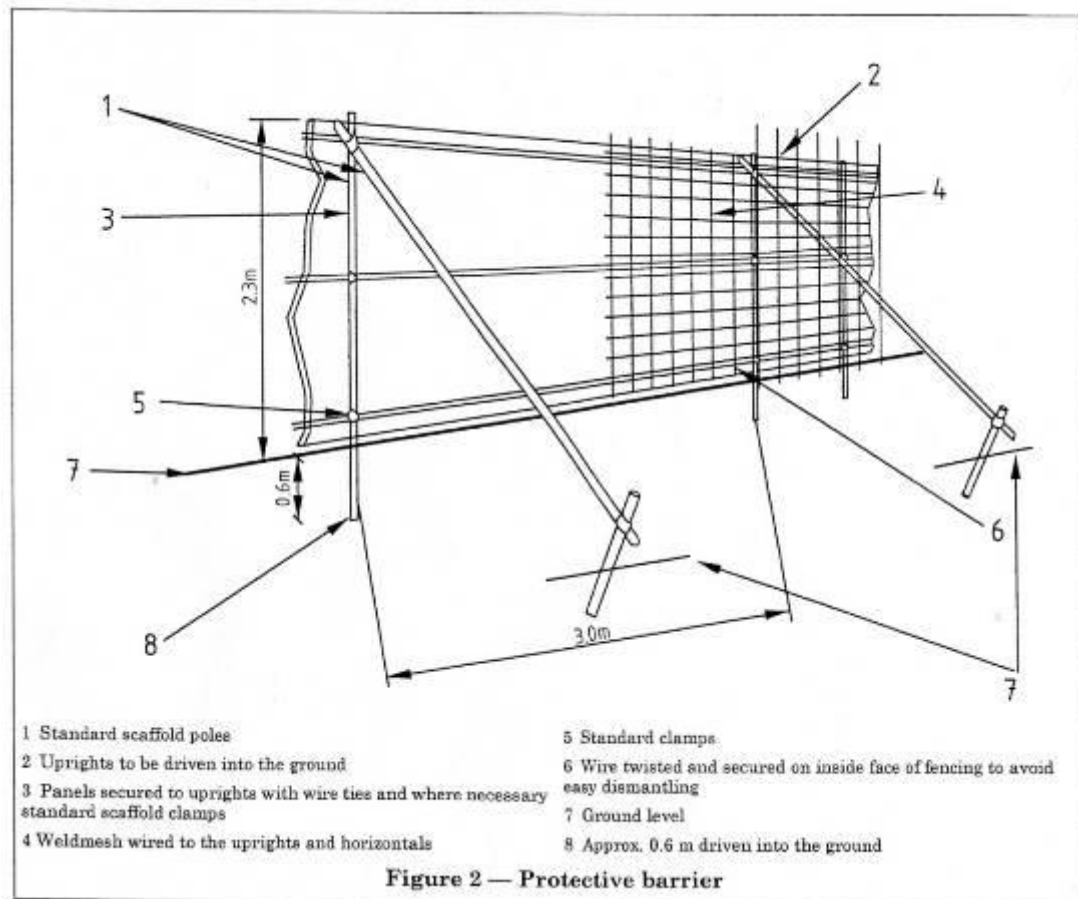
- 4.4 No materials will be stored or left stacked in positions around the site other than within the storage compound area.

5.0 Communication Details, Monitoring and Compliance

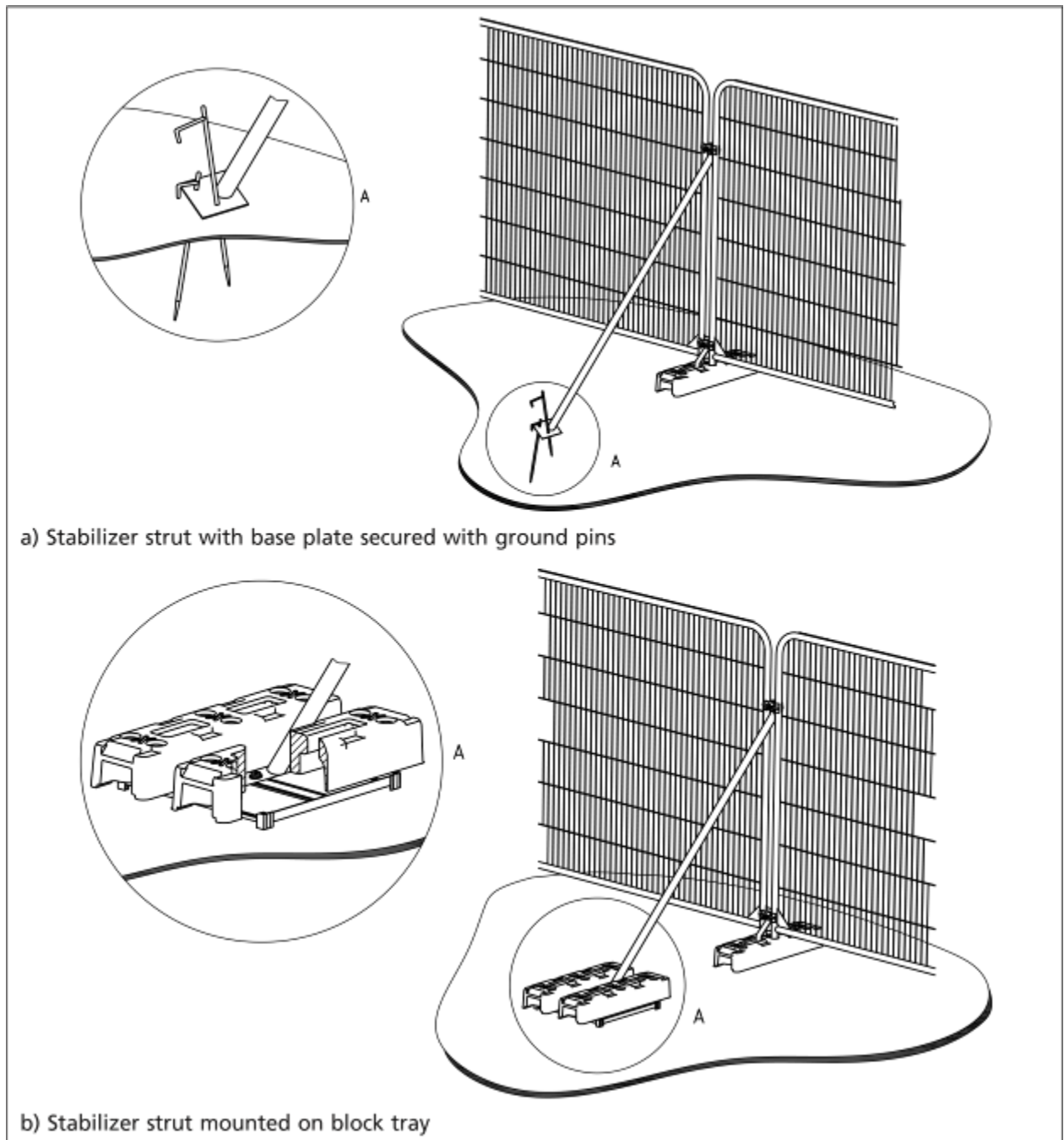
- 5.1 In order to ensure that the principles of tree protection set out in the statement are adhered to, it is important to set out communication details for key individuals and tasks that require monitoring. These details should be retained by all relevant parties and available on site at all times. Relevant parties will be advised of any changes in personnel or contractor during the development process.
- 5.2 Before construction begins written confirmation that the developer/contractor or its agents agree to comply in full with the principles set out within this Method Statement will be lodged with the LPA.

Appendix 1: Tree Protection Fencing

High Traffic Areas



Low Traffic Areas



Appendix 2 - Tree Schedule Explanatory Notes

Ref.no	Identifies trees, groups and hedges on the accompanying plan.
Species	Common names are provided to aid wider comprehension.
Height	Describes the approximate height of the tree measured in metres from ground level
Canopy Spread	Indicates the crown radius from the base of the tree in four compass directions, recorded to the nearest metre.
Ground Clearance	Height of crown clearance above adjacent ground in metres.
DBH (mm)	DBH is the diameter of the stem measured in cm at 1.5m from ground level for single stemmed trees or just above root flare for multi-stemmed trees. Stem Diameter may be estimated where access is restricted.
RPR (cm)	Root Protection Radius (RPR) is area required to be protected measured radially from the trunk centre.
RPA (m2)	Root Protection Area (RPA) is the minimum rooting area in m2 which should remain undisturbed around each tree.
Age Class	Age of the tree expressed as Y- Young, MA- Middle-Aged, EM- Early Mature, M- Mature or OM- Over-Mature
General Condition	Overall condition of tree expressed as :Good, Fair, Poor, Dead
Physiological and structural condition	May include general comments about growth characteristics, how it is affected by other trees and any previous surgery works. Also specific problems such as dead wood, pests, diseases, broken limbs. Etc
Estimated Remaining Years	Categorised in year bands of less than 10, 10+, 20+, 40+
BS Category	B.S. Cat refers to (BS 5837:2005 Table 1) and refers to tree/overall group quality and value; 'A' - High; 'B' - Moderate; 'C' - Low; 'U' - Remove.
Sub Category	Sub Cat refers to the retention criteria values where 1 is arboricultural, 2 is landscape and 3 is cultural including conservation, historic and commemorative

Appendix 3 – Tree Retention Category (as per cascade chart, Table 1, B.S. 5837:2012)

Tree Category	Description
A	Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years. Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features. Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).
B	Category B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. 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.
C	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 150 mm. 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.
U	Category U – Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

BS5837 Survey Data



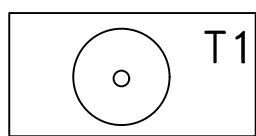
Ref.	Species	Measurements	General Observations	Category	Recommendations
G01	Not identified (Not identified)	Height (m): 7 Rem. Contrib.: 10+ Years	Group of bamboo grass & mahonia with DBHs too small to warrant inspection under BS5837. Likely planted for visual screening.	C2 RPA Area: 32 sq m, plus a 1m buffer.	
G02	Leyland Cypress (Cupressocyparis leylandii X)	Height (m): 16 Stem Diam (mm): 250 Life Stage: Mature Rem. Contrib.: 20+ Years	Group of 3 x Leyland cypress with dbh 250, 160 & 150. Ivy cover on main stems to 8m	C1,2 RPA Area: 13 sq m, plus a 1m buffer.	
G03	Sycamore (Acer pseudoplatanus)	Height (m): 17 Stem Diam (mm): 300 Life Stage: Mature Rem. Contrib.: 20+ Years	Group of 4 Sycamore with dbh 300, 150, 250, 150.	B2 RPA Area: 40 sq m.	
G04	Apple (Malus sp.)	Height (m): 4 Stem Diam (mm): 120 Life Stage: Early Mature Rem. Contrib.: 20+ Years		C1 RPA Area: 57 sq m.	
G05	Leyland Cypress (Cupressocyparis leylandii X)	Height (m): 15 Stem Diam (mm): 250		C2 RPA Area: 162 sq m.	

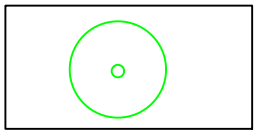
Ref.	Species	Measurements	General Observations	Category	Recommendations
G06	Not identified (Not identified)	Height (m): 4 Stem Diam (mm): 80 Rem. Contrib.: 20+ Years	Group of woody shrubs & saplings too small to warrant inspection in accordance with BS5837	C1 RPA Area: 134 sq m, plus a 1m buffer.	
T01	Silver Birch (Betula pendula)	Height (m): 10 Stem Diam (mm): 250 Spread (m): 2N, 3.5E, 4S, 4W Crown Clearance (m): 3 Lowest Branch (m): 3(S) Life Stage: Dead	Ivy cover on lower stem Tree devoid of fresh buds - new shoots	U RPA None - due to Retention Category of U.	Remove tree.
T02	Cherry (Prunus sp. 'Cherry')	Height (m): 4 Stem Diam (mm): 80 Spread (m): 1#N, 0.5E, 3S, 3W Crown Clearance (m): 1.5 Lowest Branch (m): 1.5(W) Life Stage: Young Rem. Contrib.: 20+ Years		C1 RPA Radius: 1.0m. Area: 3 sq m.	
T03	Turkey Oak (Quercus cerris)	Height (m): 22 2 stems, diam(mm): 530, 750 Spread (m): 10N, 9.5E, 9.5S, 8.5W Crown Clearance (m): 3 Lowest Branch (m): 2(SE) Life Stage: Mature Rem. Contrib.: 40+ Years	Tree located on acute bank which drops to South by aprox 1-1.2m. Seam between two main stems extends approx 20cm below union - however no evidence of significant fault noted.	A1,2 RPA Radius: 11.0m. Area: 382 sq m.	
T04	Sycamore (Acer pseudoplatanus)	Height (m): 23 Stem Diam (mm): 890 Spread (m): 7N, 3.5E, 9#S, 10#W Crown Clearance (m): 7 Lowest Branch (m): 8(NE) Life Stage: Mature Rem. Contrib.: 30+ Years	Cobra bracing system visible between two primary stems @ approx 15m. Woodpecker holes noted on large shard of standing deadwood.	A1,2 RPA Radius: 10.7m. Area: 369 sq m.	

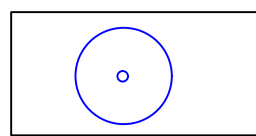
Ref.	Species	Measurements	General Observations	Category	Recommendations
T05	Sycamore (Acer pseudoplatanus)	Height (m): 17 2 stems, diam(mm): 500, 360 Spread (m): 10N, 9.5E, 9#S, 9#W Crown Clearance (m): 4 Lowest Branch (m): 4(E) Life Stage: Mature Rem. Contrib.: 20+ Years	Prolific ivy cover on main stems. Fungal fruiting bracket noted on larger stem @ ground level to North.	C1,2 RPA Radius: 7.4m. Area: 186 sq m.	
T06	Horse Chestnut (Aesculus hippocastanum)	Height (m): 11 Stem Diam (mm): 300 Spread (m): 5.5N, 5.5E, 5.5S, 3W Crown Clearance (m): 2 Life Stage: Early Mature Rem. Contrib.: 30+ Years	Ivy cover on main stem	C1,2 RPA Radius: 3.6m. Area: 42 sq m.	
T07	Sycamore (Acer pseudoplatanus)	Height (m): 15# Stem Diam (mm): 280 Spread (m): 5N, 2E, 4#S, 6#W Life Stage: Early Mature Rem. Contrib.: 20+ Years	Old pruning wounds visible on main stem with healing wood present.	C1,2 RPA Radius: 3.4m. Area: 36 sq m.	
T08	Sycamore (Acer pseudoplatanus)	Height (m): 18 Stem Diam (mm): 320 Spread (m): 4N, 2.5E, 2.5S, 4W Life Stage: Mature Rem. Contrib.: 30+ Years		B1,2 RPA Radius: 3.8m. Area: 45 sq m.	
T09	Horse Chestnut (Aesculus hippocastanum)	Height (m): 19 3 stems, diam(mm): 500, 410, 440 Spread (m): 7N, 7E, 8#S, 5W Life Stage: Mature Rem. Contrib.: 30+ Years	Ivy cover on main stems to 5m	B1,2 RPA Radius: 9.4m. Area: 278 sq m.	
T10	Sycamore (Acer pseudoplatanus)	Height (m): 17 Stem Diam (mm): 350 Spread (m): 4.5N, 4.5E, 7.5S, 7.5#W Crown Clearance (m): 7 Life Stage: Mature Rem. Contrib.: 30+ Years	Hanging deadwood noted in canopy	C1,2 RPA Radius: 4.2m. Area: 59 sq m.	

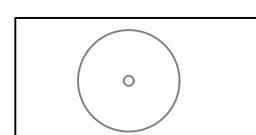
Arboricultural
Constraints
Plan

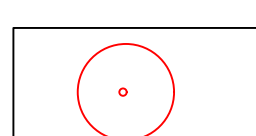
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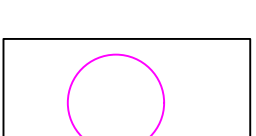
 T1 Existing Tree colour referenced in accordance with BS 5837 2012 as shown below

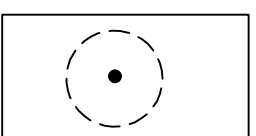
 Green – Cat A Trees of high quality and value

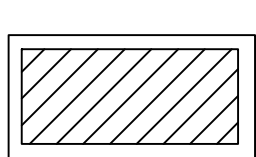
 Blue – Cat B Trees of moderate quality and value

 Grey – Cat C Trees of low quality and value

 Red – Cat U Trees that are dead or showing signs of irreversible decline

 Root Protection Area as calculated in accordance with BS 5837 2012

 Existing tree to be removed colour in accordance with BS 5837 as shown below.

 Existing Building

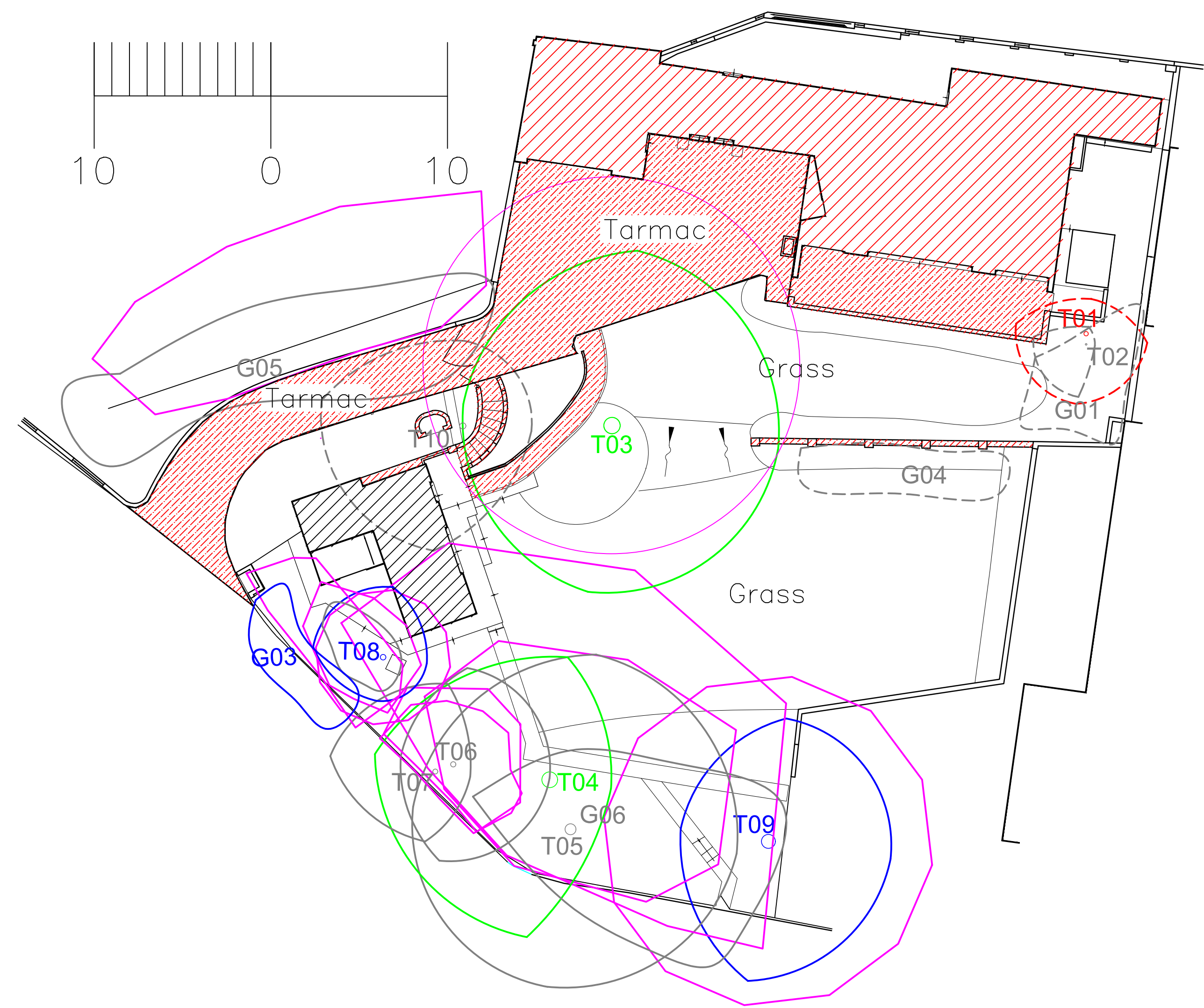
 Existing Building Scheduled for Demolition

 Existing Hard Elements to be Removed.

REV.	DATE	INITIALS	DETAILS

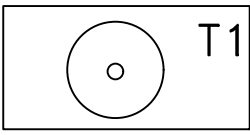
CLIENT Mr Keith Pocock			DWG. TITLE Arboricultural Constraints Plan		
SITE 4 Oak Hill Park, Hampstead, London, NW3 7LG					
DRAWN BY BJS	CHECKED BY BJS	SCALE 1:200 @ A1	DATE September 2022	DWG NO. CAS/2022/124	REV.

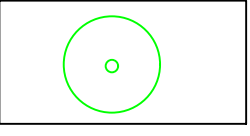
Please do not scale off this drawing. Tree locations not plotted to a topographical survey so locations cannot be confirmed, Dwg is to scale as indicated above.

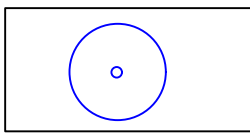


Proposed Development Plan

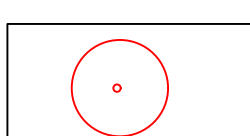
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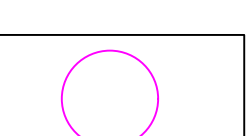
 T1 Existing Tree colour referenced in accordance with BS 5837 2012 as shown below

 Green – Cat A Trees of high quality and value

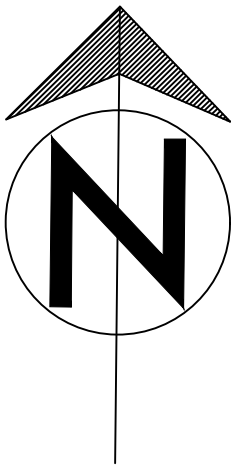
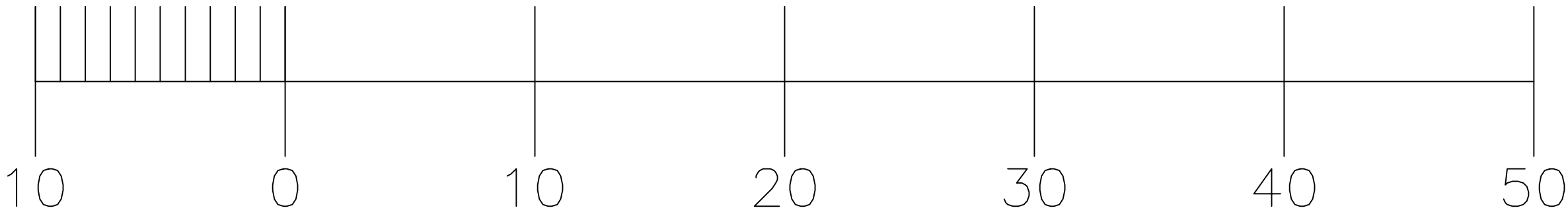
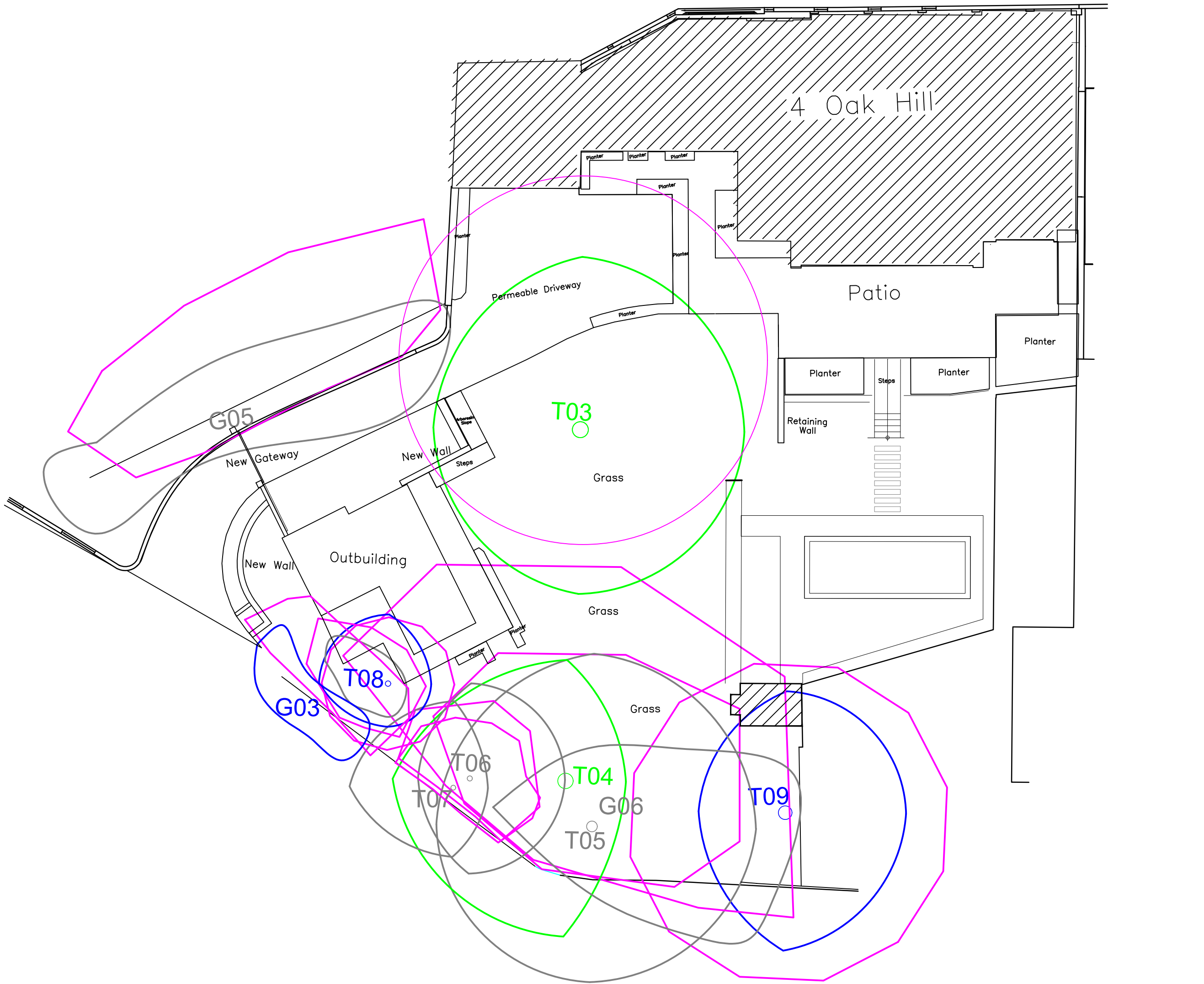
 Blue – Cat B Trees of moderate quality and value

 Grey – Cat C Trees of low quality and value

 Red – Cat U Trees that are dead or showing signs of irreversible decline

 Root Protection Area as calculated in accordance with BS 5837 2012

 Proposed New Building



REV.	DATE	INITIALS	DETAILS

CLIENT Mr Matthew Walker		DWG. TITLE Proposed Development Plan			
SITE 4 Oak Hill Park, Hampstead, London, NW3 7LG					
DRAWN BY BJS	CHECKED BY BJS	SCALE 1:200 @ A1	DATE March 2025	DWG NO. CAS/2022/124	REV.

Please do not scale off this drawing. Tree locations not plotted to a topographical survey so locations cannot be confirmed, Dwg is to scale as indicated above.

Tree Protection Plan

KEY

T1 Existing Tree colour referenced in accordance with BS 5837 2012 as shown below

Green – Cat A Trees of high quality and value

Blue – Cat B Trees of moderate quality and value

Grey – Cat C Trees of low quality and value

Red – Cat U Trees that are dead or showing signs of irreversible decline

Root Protection Area as calculated in accordance with BS 5837 2012

Area designated for ground protection

Approximate line of protective fencing to be erected in accordance with BS5837 and to be maintained throughout entire development process.

Location of root pruning trenches

REV.	DATE	INITIALS	DETAILS
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CLIENT Mr Matthew Walker			DWG. TITLE Tree Protection Plan		
SITE 4 Oak Hill Park, Hampstead, London, NW3 7LG					
DRAWN BY BJS	CHECKED BY BJS	SCALE 1:200 ▲ AT	DATE March 2025	DWG NO. CAS/2022/124	REV.

Please do not scale off this drawing. Tree locations not plotted to a topographical survey so locations cannot be confirmed, Dwg is to scale as indicated above.

