

**British Standard [BS 5837: 2012]
Trees in relation to design, demolition and
construction – Recommendations:**

- **Tree Constraints Plan**
- **Arboricultural Method Statement**
- **Arboricultural Impact Assessment**
- **Tree Protection Plan**



Prepared for:

Jing Dai

Drawing ref no:

DW/DATS/JD/BSTS/25/01

Planning Application number:

Not available yet

Dated:

08th July 2025

Control Sheet:

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Date of Issue:	2025
Status: Final / Draft:	Final
Revision:	-
Revision details:	-

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1. Summary:

Based upon the proposed site layout plan and using the UFG 'Impact Guide' including the construction information provided, the impact of the proposed development in relation to trees on and/or influencing the site is considered as: **High Damage** to trees.

In response to this considered level of **Damage**, the tree protective measures as described below are set out on the attached BS 5837 Tree Constraints and Protection Plan, which is also seen in the Appendix at the end of this document as a visual reference.

Very Low Damage = No intrusion within any of the 'tree root protection areas (RPAs)'.

Moderate Damage = Some minor intrusion into some of the RPAs and with no considered significant damage to the tree roots and/or tree canopies.

Damaging = Intrusion into 'tree root protection area/s' that is estimated to possibly cause tree root cutting to tree roots and with proposed structures conflicting with tree canopies.

High Damage = Tree/s require felling with tree stumps to be dug out or ground down and with the proposed development intruding into remaining 'tree root protection areas' and with proposed structures conflicting with tree canopies

Very High Damage = A substantial amount of tree felling, and tree stump removal is required and/or the proposed development intrudes within any of the 'tree root protection area/s' involving likely tree root cutting with proposed structures conflicting with tree canopies and loss of screening and wildlife habitat afforded by trees.

2. Specific points identified:

None other than identified below

3. The Brief:



Image 1 – Facing view of the property

1.1 In relation to the above site address, Urban Forestry Group [UFG] has been asked by Paul Cox to undertake a 'BS 5837 Tree Survey, at the request of the local planning authority where:

I have a client who is looking to install a garden room office shed in the garden in Didsbury. I've attached some photos of the proposed location which will be approx. where the trampoline is located.

The house sits in the Didsbury Park conservation area and due to the design of the garden room and proximity of the building to the boundary this will require a planning application. Could you provide me with a quote for putting together a report on the existing trees and any mitigation measures to be submitted as part of the planning submission?

1.2 UFG will provide BS: 5837 – 2012 services for trees within and affecting the application site, that could influence, or be affected by the development; this includes:

- BS: 5837 - 2012 Tree Survey.
- Tree Constraints Plan.
- Arboricultural Impact Assessment.
- Arboricultural Method Statement.
- Tree Protection Plan. (Tree Protective Fencing and Ground Cover).

4. Site description:

The site represents a residential property in a residential area on level ground, the proposed development site is situated in the rear garden which is laid to lawn with small trees and shrubs around the boundary.

5. Demolition and construction in proximity to existing trees:

5.1 The following points are of importance and guidance:

BS 5837 2012 states that in:

s7.1.1 Construction within the RPA should accord to the principle that the tree and soil structure take priority, and the most reliable way to ensure this is to preserve the RPA completely undisturbed.'

s7.1.2: 'The ability of a tree to tolerate some disturbance and alteration of its growing conditions depends on specific circumstances, including prevailing site conditions, and in general, the older the tree, the less successfully it will adapt to new conditions.'

6. Tree Constraints Plan (BS 5837 s5.2 p.11)

Below Ground Constraints

6.1 Please refer to the calculated tree root protection areas (RPAs) around each of the category **B** trees on the attached BS 5837 Site Plan PDF - that represent the below-ground constraints.

Comments:

- A boundary section of the Bamboo hedge is also being removed. It is recommended to establish the bamboo species to determine the best course of action following <https://www.rhs.org.uk/plants/types/grasses/bamboo-control>

6.2 Above-ground Constraints

6.3 With reference to **BS 5837 s5.2.3 (a) – (h)**

The site sits within the Didsbury St James Conservation Area.

The proposed development sits within the tree root protection area of the trees to be retained at approx.. 1.4m from the tree trunks.

There is adequate garden area for materials storage as a working area and access following facilitation pruning of branches facing the proposed development cut back to the trunk to the height of the proposal roof to allow a minimum 1m clearance.

The amenity value of the trees is unlikely to be noticed due to the site position in the corner of the rear garden.

The proposal will introduce a small soakaway within the soil beds at a suitable distance from the proposed garden room and boundary. Power will be supplied by a below ground conduit.

The end use of the space adjacent to the retained trees is for access to small garden office.

There is space within the garden to introduce trees suitable for small gardens.

7. Arboricultural Impact Assessment: (BS 5837 s5.4 p.14)

7.1 This arboricultural impact assessment, is based on the information identified in the Tree Constraints Plan (As above) together with;

The applicant has been asked to provide site-specific construction answers concerning any identified conflicts within the RPAs as seen on the BS 5837 Tree Survey site plan in a **Project Development Questionnaire**, as seen at:

<https://www.urbanforestry.co.uk/development-project-questionnaire/>



Image 2 – View of the proposed development area

7.2 The applicant's answers to the **Project Development Questionnaire** are used in assessing the arboricultural impact of the proposed site layout for construction layout conflicts within the tree's RPAs.

7.3 The answers provided also assist in:

- Determining any trees that are proposed to be removed.
- The level and type of tree protection for those trees to be retained.
- The layout of tree protective fencing and ground cover to help protect the soil environment.

8. Comments on the Applicant's Answers to the Project Development Questionnaire: (Wed 18/06/2025 20:57)

Q1. Are there any Tree Preservation Order's [TPO] applicable for the tree works to the site: N/A

Q2. Are there any Conservation Area Details applicable to the site: Yes the property sits within the Didsbury St James Conservation Area

Q3. Description of the proposed development: Single storey garden room located in the rear garden of the property

Q4. Trees / Hedges to be removed: The proposal is to remove 2 trees and a portion of existing hedge

Q12. Details of the proposed site construction access and the proposed construction access routes within the site: Site access to the rear garden is via the side path

Q13. Contractor's car parking: The contractor can park on the drive or on the road in front of the property

Q14. Phasing of construction works: There is no phasing proposed for the work

Q15. Is heavy plant being used? No

Q16. The availability of special construction techniques in relation to trees: The foundations design proposes to use screw piles to support a raised timber deck

Q17. Any construction proposals for bridging tree roots, or inserting tree root barriers: The foundations design proposes to use screw piles to support a raised timber deck

Q18. The location, space and depth of any proposed trenching works for all:

- A. Service Runs
- B. Foul and surface water drains
- C. Land Drains
- D. Soakaways
- E. Gas
- F. Oil
- G. Water
- H. Electricity
- I. Television.
- K. Communications cables
- L. Other

D. Soakaways, and H. Electricity

Please supply any detailed information for the above selections. (A-L): The proposal will introduce a small soakaway within the soil beds at a suitable distance from the proposed garden room and boundary.

Power will be supplied by a below ground conduit.

Q19. Please describe the proposed development foundation type/s and depth/s, including any driveways, kerbs and other proposed structures: Ground screws at a depth of 1-1.5m

Q20. All changes in ground level, including the location of retaining walls, steps, and making adequate allowance for foundations of such walls and back fillings: No ground level changes

Q21. Space for cranes, plant, scaffolding and access during works: Spaces is required for plant equipment

Q22. Space for site huts, temporary latrines [including their drainage] and other temporary structures: Space for site welfare can be provide on the driveway at the front of the property

Q23. The type and extent of post landscaping works, which will be within 'tree root protection protected' areas: The post landscaping works will include a layer of bark mulch

Q24. Safe storage of materials: The rear garden area is surrounded by masonry garden walls and is accessible via a lockable side gate

Q25. If there is a slope/s on the site, how are any materials or harmful liquids to be stored, so that they don't seep into the ground and damage tree root systems? This includes washing out of cement mixers and construction equipment: The site is flat

Q26. Details of any new tree planting to provide mitigation for removal of any tree/s: No proposed tree planting at this stage.

Q27. Please provide details of any demolition procedure, including lifting driveways and removal of materials / spoil off site, location of skips: No demolition proposed

Q28. Are there any visibility splay conflicts with the tree root protection areas of trees: N/A

Q29. Please provided information as to the removal and replacement of any boundary fencing and / or walls: N/A

Q30. Any other 'known possible potentially damaging activities' in relation to the 'tree root protection area/s' either above, or below ground: N/A

Q31. If following completion of this questionnaire you have any 'additional and supporting drawings and / or specific site information', please attach it here. Any files larger than 2.5 MB - please email them to urban forestry group, including a brief summary along with any points you would like to make: 5 PDF site plans received relating to:

- Location plan
- Existing site layout
- Proposed ground floor layout
- Proposed roof lay out
- Proposed evaluations

Comments:

- Unknown as to the long-term influence of tree roots on the screw piles.
- Ensure bark much is laid on a good quality long lasting geotextile membrane at min 50mm depth.

9. Arboricultural Method Statement: (BS 5837 s6.1 p.18)

A precautionary approach towards tree protection should be adopted and any operations, including access, proposed within the RPAs (or crown spread where this is greater) where identified are here described. This is to demonstrate that the operations can be undertaken with minimal risk of adverse impact on trees to be retained as an ideal outcome.

10. Tree Protection Plan: (BS 5837 s5.5 p.15)

10.1 Please refer to the attached BS 5837 Tree Survey Site Plan, which illustrates a yellow hatch are of ground 20mm external plywood to be put in place prior to development and remaining in place to reduce the impact on the soil environment around the trees.

10.2 These tree protection plans should be incorporated into relevant subsequent plans and construction drawings issued for use on site, to ensure that all interested parties are fully aware of the areas in which construction access and works may and may not take place.

10.3 Where underground services require trenching works, they should be situated outside the Tree Root Protection Areas. If for whatever reason this is not possible, then any associated trenching works that are required should follow **BS 5837 section 7.7 Underground and above-ground utility apparatus**.

11. Tree Protective Fencing Specification: (None specified)

11.4 All trees that are being retained on site should be protected by barriers before any materials or machinery is brought onto the site and before any demolition, development or stripping of soil commences.

11.5 Where all activity can be excluded from the RPA, vertical barriers should be erected to create a construction exclusion zone.

11.6 The protected area should be regarded as sacrosanct, and once installed, barriers and ground protection should not be removed or altered without prior recommendation by the project arboriculturist and where necessary, approval from the local planning authority.

11.7 Where required, pre-development tree work may be undertaken before the installation of tree protection measures, with the agreement of the local planning authority if appropriate.

11.8 If required the project arboriculturist can confirm that the barriers have been correctly set out on site, prior to the commencement of any other operations.

11.9 Care should be exercised when locating the vertical poles to avoid underground services.

12. Ground Protection

Due to human construction traffic moving around the development site; the use of 20mm exterior plywood boards is recommended to be used as secured ground protection between the tree root protection fencing and extremities of the tree root protection areas, to minimise any possible compaction to the soil / tree root environment. This marked on the tree survey site plan as 'Ground Protection'.

13. Specifications for Tree Root Pruning:

In **BS 5837 s7.1.3** it states: Roots smaller than 25 mm diameter may be pruned back, making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw), except where they occur in clumps. Roots occurring in clumps or of 25 mm diameter and over should be severed only following consultation with an arboriculturist, as such roots might be essential to the tree's health and stability.

14. Post construction Landscape near trees:

Layer of bark mulch.

15. General considerations for demolition and construction activities in proximity to existing trees:

15.1 It is important to consider the underground respiration requirements of trees ideally the ground around trees needs to be porous and allow gaseous exchange from the soil environment to maintain a soil environment where tree roots can undertake their functions.

15.2 No fires are to be lit on site, as the heat produced can seriously damage soil / tree roots and the canopies of trees that will become scorched and dieback.

15.3 To avoid damage to tree roots, existing ground levels should be retained within the RPA. Intrusion into soil (other than for piling) within the RPA is generally not acceptable, and topsoil within it should be retained in situ.



Image - An example of an exposed mature tree root system.

16. Wildlife considerations in relation to trees:

Any site clearance work including trees must follow the Wildlife and Countryside Act Regulations 1993 including the pruning of trees should be undertaken outside the bird nesting season: Jan – Aug and should consider the recommendations of any ecological surveys and account in writing as to the principles of trees and wildlife to achieve net gain.

17. An indication of potential direct obstruction of sunlight:

Taking in to account the proposed tree removal and pruning the remaining trees will cast some shade over and around the proposed development.

s18. Arboricultural site monitoring:

18.1 At present no 'arboricultural site monitoring' has been requested to be included in this BS 5837 assessment and tree protection process.

12.2 BS 5837: 2012 s6.3 states:

18.2 'Wherever trees on or adjacent to a site have been identified within the tree protection plan for protective measures, there should be an auditable system of arboricultural site monitoring. This should extend to arboricultural supervision whenever construction and development activity is to take place within or adjacent to any RPA.

NOTE Existing planning regulations include the provision for local authorities to enforce planning requirements. The project arboriculturist appointed by the developer can help monitor site activity, but enforcement is the responsibility of the local authority.

18.3 A calendared programme of 'arboricultural site monitoring' should check that the approved tree protection measurements including any recommended ground cover are correctly implemented and signed off as completed satisfactory at the appropriate stages of development.

18.4 A PDF copy of this programme of 'arboricultural site monitoring' can be supplied to all parties during the inspection process; so that any special arboricultural protection considerations are identified and observed by building contractor's, including any other relevant parties during the approved works, so that the trees are adequately protected.

18.5 Existing planning regulations include the provision for local authorities to enforce planning requirements. The project arboriculturist appointed by the developer can help monitor site activity, but enforcement is the responsibility of the local authority.

18.6 If instructed to do; UFG can provide a quotation for a spreadsheet based auditable system of 'arboricultural site monitoring and post development tree management' Please contact the office for further details.

s19. Contingency Plans:

If prior to and / or during the works any questions arise concerning trees and tree protection; please either contact the local planning authority tree officer, quoting the planning reference number or Urban Forestry Group.

S20. References:

1. Image * - <http://gibneyce.com/index.html>

Appendix:
BS 5837 Tree Survey Site Plan. Included in this document as a not-to-scale visual reference. Please refer to the scale drawing supplied separately.

