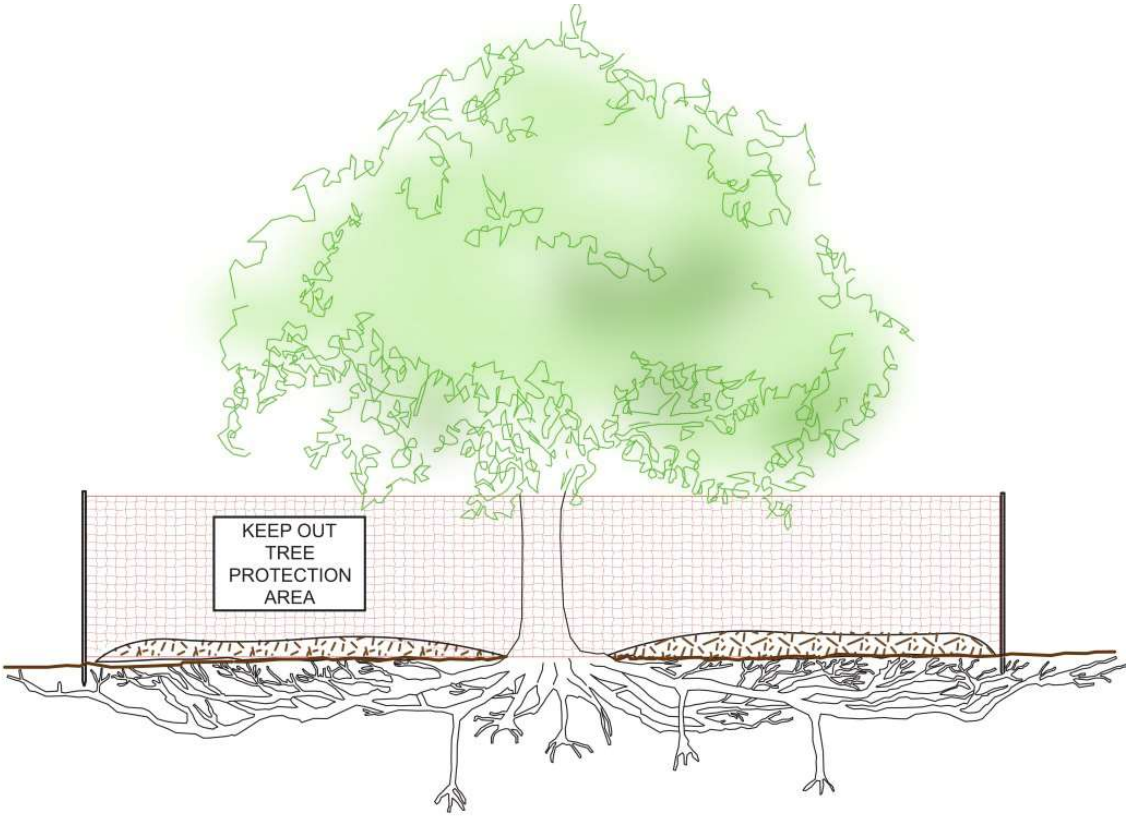
The Cottage

Spaniards Road, London NW3 7JH

Tree Protection Method Statement

Revision A



October 2023

Summary

The following information is a brief summary gathered as part of this report.

- As long as the tree protection measures specified are enforced, it is not expected any significant arboricultural impact on the health of the retained trees.
- The proposed works includes an erection of a first floor side extension above existing garage; part two-storey rear extension; associated alterations including replacement windows and insulated rendering system to external fabric.
- The Tree Protection Plan (Dwg PL23) shows in orange hatch the affected areas of tree T2, where work within the tree protection area (RPA) is necessary to allow for the excavation of the new proposed extension and patio.
- The footings of the building will use a pile and beam system, designed to avoid major roots. Piles as small as possible will be used in accordance with Engineers specification.
- Excavation within the RPA of T2 for the construction of the extension and patio shall be carried out carefully by hand. The construction methodology is detailed in the method statement.

Tree protection status

The site is in a conservation area.

A TPO application form must be completed to seek consent for felling or pruning a tree on the site at the Cottage, Spaniard Road and on adjacent sites.

1. Arboricultural Impact assessment

1.1. Impact of Tree Loss

1.1.1. There are no proposals to remove any of the existing trees.

1.2. Impact of Tree Pruning

1.2.1. No trees pruning is required for the purpose of development.

1.3. Impact of General Construction Activity

1.3.1. Tree protection measures are specified in section 2 of the method statement to ensure that the impact of the construction activities is minimal.

1.3.2. Any work within the Root Protection Area shall be done by hand to minimise damage to the existing trees.

1.4. Impact of Demolition / Removal of Surfaces

1.4.1. Any work within the Root Protection Area shall be done by hand to minimise damage to the existing trees.

1.4.2. Care will be required when existing hard landscape will be removed as the RPA of T2 cannot be fenced off completely.

1.4.3. The areas dashed in orange on the Tree Protection Plan indicate where the root protection area of these trees lies outside of the protective fencing. Care must be taken to ensure that no excavation, soil compaction or ground contamination take place in these areas.

1.5. Impact of Changes in Ground Levels

1.5.1. No changes of level within the RPA of existing trees is proposed. A new suspended path adjacent to the house will be built on posts and frame to accommodate the sloping ground.

1.6. Impact of Changes in Ground Surfaces

1.6.1. The new construction should have minimal impact on the existing trees as long as the tree protection measures are followed.

1.6.2. All ground surfaces are to remain the same or similar in properties (permeable) for most of the trees except for T2 which will have a portion of its RPA built over by the new extension.

1.6.3. The RPA of T2 is calculated as 594m2 in area, of which 9m2 (1.5%) is proposed to be built over by the new extension.

1.7. Impact of the Proposed Extension

1.7.1. The construction of the new extension should have no impact on the existing trees as long as the tree protection measures are followed.

1.8. Foundation and Floor

1.8.1. The excavation within the RPA of T2 should be done carefully by hand to avoid any damage to the roots.

1.8.2. Piles and beams technique will be used to minimise impact on the existing trees.

1.9. Services and Drainage

1.9.1. Underground services are to be installed outside the RPA (Root Protection Area) so that there should be no arboricultural impact from services.

1.10. Hazardous Materials

1.10.1. All hazardous materials are to be controlled to ensure that there is no detrimental impact on tree health.

1.11. Effect of Retained Trees on the Development

1.11.1. Most of the existing trees to be retained are situated at sufficient distance from the proposed development so that future growth will not affect the new extension.

1.12. Summary

1.12.1. As long as tree protection measures are implemented as per method statement, there shall be no significant arboricultural impact of the development.

2. Method Statement

This section details all of the tree protection measures to be adopted in order to protect the tree to be retained.

Pre construction phase

2.1. Tree Works

2.1.1. Before works commence and before any materials or machinery are brought onto the site the tree protection fence will be erected to form the construction exclusion zone and will be maintained throughout the construction period.

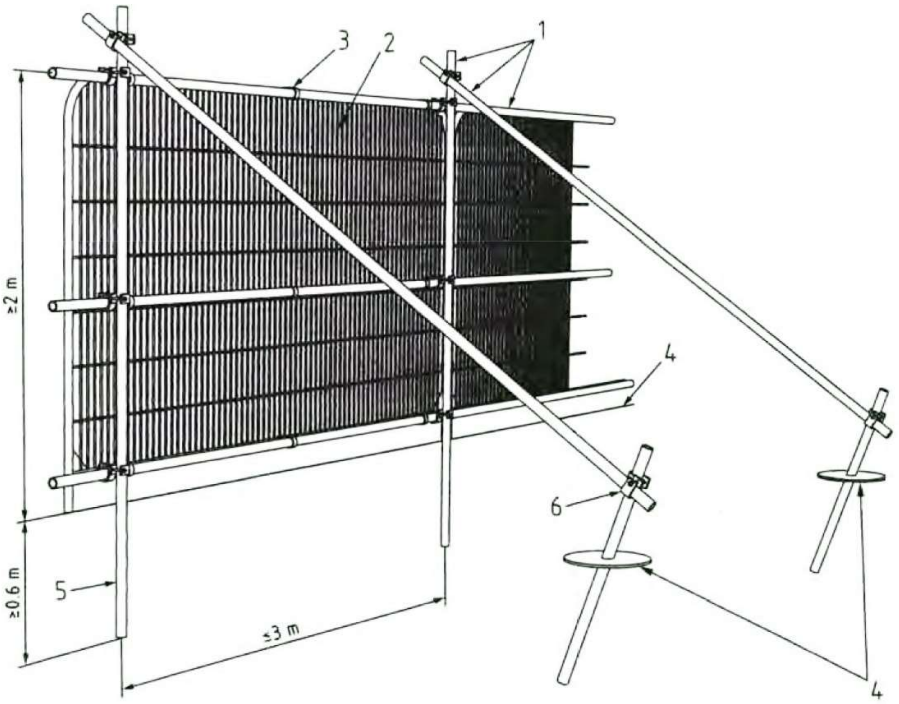
2.1.2. All tree work should comply with BS3998. All arisings shall be removed from the site unless otherwise specified. The Local Authority Tree Officer shall be informed of the intended date of works and invited to inspect the works following completion.

2.2. Protective Fencing

2.2.1. The protective fencing needs to be installed in accordance with the Tree Protection Plan.

2.2.2. In ground system to form the exclusion zone.

2.2.3. Protective fence (in ground system) will consist of a scaffold framework in accordance with BS 5837:2012 which comprise a vertical and horizontal framework, well braced to to resist impact, with vertical tubes spaced at a maximum interval of 3m. Onto this, weldmesh panels will be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not resistant to impact and should not be used.



Example of protective fencing

- Standard scaffold poles
- Uprights to be driven into the ground
- Panels secured to uprights with wire ties and where necessary standard scaffold clamp
- Weldmesh wired to the uprights and horizontals
- Standard clamps
- Wire twisted and secured on inside face of fencing to avoid easy dismantling
- Ground level
- Approx. 0.6m driven into the ground
- BS 5837:2012 – Protective barrier

2.2.4. Once erected the barriers should be regarded as sacrosanct, and should not be removed or altered without prior recommendation by an Arboriculturalist and approval of the local planning authority.

2.2.5. Once the protective barriers have been erected an all weather notice will be erected on the barrier indicating ‘Construction exclusion zone – Keep out’. The notice should list all restrictions as listed below. These restrictions shall apply to the fenced off area

- No construction activity at all in this area
- No tree works without the written consent from the council
- No change in ground levels or conditions
- No chemical or cement washings
- No excavations
- No temporary structures
- No storage of soil, rubbles, or other
- No vehicles or machinery to be used or parked
- No fixtures (signs, lighting, etc) attached to trees.

- No fires within 10 metres of the canopies of trees or hedge.

2.2.6. The ‘Strut and Block-tray’System Panels with anti-climb mesh (2x3.5m standard.) linked with anti-tamper couplings, concrete blocks feet secured with soil pins, struts to stabilise the fence with bloc tray loaded with concrete blocks or sandbags every third panels to prevent the fence to be moved.

2.2.7. The ‘Heras Steadfast Systems ‘Panels with anti-climb mesh, high visibility blocks with small struts increase the stability of the fence and prevent lifting. Soil pins prevent easy movement of the feet and antitamper coupler can only be removed with the use of a specialist tool.

2.2.8. Where tree crowns overhang the provisional position of tree protection barriers, an assessment by an Arboriculturalist will be done to determine whether it may be necessary to increase the area of protection or determine the extent of pruning.

2.2.9. It is not practical to completely fence off the RPA of tree T2. The areas dashed in orange on the Tree Protection Plan indicate where the root protection area of those trees lies outside of the protective fencing. Care must be taken to ensure that no excavation, soil compaction or ground compaction take place in these areas.

2.3. Special Tree Trunk Protection of T2

2.3.1. The tree trunk of T2 is to be enclosed with a timber stud frame shethed in 18mm ply to form hoarding of 2.4m height. This hoarding is to enclose the trunk for protection.

2.4. Special Ground Protection Measures

2.4.1. If necessary to have pedestrian movement within the RPA the installation of the ground protection will be required.

2.4.2. In order to avoid compaction, disturbance and contamination protective boards shall be used. 18mm shuttering ply shall be secured to timber supports. The space between the boards and the ground level shall be filled with woodchip (50mm).

2.4.3. The boards shall remain secure throughout the entire construction phase. They shall be installed before commencement of all construction activity and shall be removed only when all construction is completed.

2.5. Contingency Plans

2.5.1. In the event of unforeseen incidents occurring, that may adversely affect or threaten the welfare or security of the trees, the resident site agent/Manager shall inform the Arboricultural consultant at the earliest opportunity and not more than one working day following incident.

2.5.2. Incidents which may merit such contingency plans include:

- Accidental/unauthorised damage to the limbs, roots or tree trunks
- The spillage of chemicals within or adjacent to a Root Protection Area
- The discharge of toxins/waste within or adjacent to the Root Protection Area

Construction Phase

2.6. Removal of Hard Surfaces

2.6.1. Only hand tools shall be use to remove hard surfaces within the RPA (Root Protection Area) and no excavation shall take place other than what is required to remove the surface and sub base.

2.7. Foundation and Level Grading

2.7.1. No re-grading shall take place within the RPA

2.7.2. The footings of the building will use a pile and beam system, designed to avoid major roots. Piles as small as possible will be used in accordance with Engineers specification.

2.7.3. On-site investigation will (using a mix of hand-digging and air spade methods) identify the location of major root systems to produce a plan of on-site roots.

2.7.4. The air-spade will be used in the presence of an appointed consulting Arboriculturalist.

2.7.5. Piles as small as possible will be used.

2.7.6. The Engineer shall then produce a piling plan that respects the tree root system on site.

2.7.7. The floor surface, made of suspended floors, beams or slabs, will be supported by the piles at or above ground level.

2.7.8. No excavation will be carried out within the RPA of the tree.

2.7.9. Excavations which have to be undertaken within the Tree Protection Area for the foundation should be carried out carefully by hand. If roots are found they should be wrapped in dry clean Hessian sacking to prevent desiccation and to protect from sudden change in temperature.

2.7.10. Roots smaller than 25mm diameter may be pruned back to a side branch, but roots larger than 25mm shall not be severed.

2.7.11. Any hessian wrapping must be removed prior to back-filling and roots should be surrounded with sharp sand (not builders sand as its salt content is toxic to the roots) before soil is replaced.

2.8. Use of Heavy Plant

2.8.1. All machinery shall only operate outside of the Tree Protection Areas.

2.9. Underground Services

2.9.1. Underground services and drains are to be routed to avoid the Root Protection areas of all trees so no specialist techniques are required.

2.10. Siting of Cabins

2.10.1. All cabins and site services are to be positioned outside the Tree Protection Zone at the front of the property.

2.11. Storage of Materials

2.11.1. All building materials and spoil heaps shall be located outside the Tree Protection Zone at the front of the property.

2.12. Hazardous Materials

2.12.1. All mixing of cement based materials is to take place outside Tree Protection Zone. Provision shall be made to ensure that no water runoff enters the RPA (Root Protection Area). Special care shall be taken as the site slope down towards existing trees.

2.12.2. All other chemicals hazardous to tree health, including petrol and diesel are to be stored in suitable containers as specified by COSHH Regulations 2002, and kept away from the RPA (Root Protection Area). All storage of chemicals should be kept at the front of the property.

2.12.3. Cleaning water shall be left in containers for at least 24 hours so that cement products may settle and clean water may be poured out. The cleaner water may be poured into holes at least 3m beyond any RPA (Root Protection Area). Cement residue shall be removed from site. Any cleaning water shall be poured at the front of the property.

2.13. Ground Level Changes

2.13.1. No ground changes in excess of 100mmm are to take place anywhere within the RPA.

2.14. Scaffolding

2.14.1. Care is required when erecting scaffolding close to trees. Ground protection measures shall be implemented.

Post Construction Phase

2.15. Removal of Fencing

2.15.1. This will be done after all major construction work is complete.

2.15.2. The local authority Tree Officer should be made aware that the fencing is to be removed.

2.16. Landscaping

2.16.1. No machinery used within landscaping operations is to operate within the RPA (Root Protection Area).

2.17. Tree Works

2.17.1. No remedial tree works are anticipated since the trees are to be well protected. However, the trees should be inspected after the construction phase in case any unforeseen damage has occurred so that remedial works may be commenced.