

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction.
Detailed Specification: To comprise either 2.4m wooden stile hoarding; or 2.3m high scaffolding framework comprising of vertical and horizontal frames, well suited to the installation of uprights to be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. On top, this standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffold framework with wire.
Secondary Specification: To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-ladder components, installed so they can only be removed from inside the fence. The panels should be supported on the inner side by stabilizer struts, which should be attached to a base plate and secured with ground pins.
All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

Tree Protection Area
KEEP OUT

Do not move this fence

Trees enclosed by this fence are protected by planning conditions AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER. CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION.

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

ARBTECH

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Ground boarding

New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

Note The ground protection might comprise one of the following:
a) for pedestrian movements only, a single thickness of scaffold boards laid flat overtop of a given subgrade frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
b) for pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked grid pattern boards placed on top of a hand saw or compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
c) for wheeled or tracked construction traffic exceeding 2 t gross weights, for proposed foundations, hard surfacing or precast reinforced concrete slabs to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

Manual Excavation

Excavation within the RPAs will be initially undertaken by hand under on-site arboricultural supervision to a minimum of 600mm depth of any excavation, whether for proposed foundations, hard surfacing or underground services. The soils to be loosened with the use of a fork or pick and then cleared with the aid of an air-spade and air-ovac. All roots to be cut will be dealt separately with the use of a hand saw or secateurs. The edge of the excavation closest to the related trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by any excavation, whether for proposed foundations, hard surfacing or sheltered, regular pile or individual piles. Any deeper excavations may be undertaken by a machine provided it works from outside of the RPA or has appropriate ground protection in place to move and work upon.

Foundations within RPAs

The use of traditional strip foundations could result in excessive root loss and as such should be avoided.
Designs for foundation that would minimize the adverse impact upon trees soil include particular attention to the existing levels, proposed finished levels and cross sectional details. Site specific and specialist advice should be sought from the project engineers and arboriculturist.

Road gateways can be minimized by using:

- Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air displacement, to a minimum depths of 600mm;
- Beams, laid off at above ground level, and cantilvered as necessary to avoid tree roots identified by site investigation.

Where a slab for minor structures (e.g. shed bases) is to be formed within the RPA, it should bear on the existing ground level, and should not extend on areas greater than 20% of the existing unsurfaced ground.

Slabs for larger structures (e.g. dwellings) should be constructed with a ventilated air space between the underside of the slab and the existing soil surface (to enable gas exchange and venting through the soil surface). In such cases, a specialist irrigation system should be employed (e.g. rod fed drippers radiating under the slab). The design of the foundation should take into account of the effect on the load bearing properties of the underlying soil from the redirected roof run-off.
Approval in principle for a foundation that relies on total retention and reduction in waterlogging must be obtained from building control authority prior to this approach being relied upon.

Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If it piling mat is required, this should conform to the parameters for ground boarding. Use of the smallest practice piling rig is also important because if the meeting point of the branch spread is exposed, this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete, e.g. steered bored piles or screw-piles.

This information is compliant with British Standard BS5951-2:2012 Trees in relation to design demolition and section 7(1)(d) of the Planning Act 2008 and complies with Part 7A of the Environmental Impact Assessment Regulations 2011.

Arboricultural Supervision

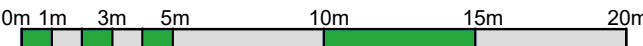
The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection area. This will include:
1. Pre-commencement site meetings.
2. Location of protective measures.
3. Manual excavation for site investigations and any subsequent root pruning within RPAs of trees nos. 3 & 6.
4. Any further excavation should be sought for RPAs, including foundations, hard surfacing or underground services.
5. Removal of protective measures and sign off.

Arboricultural Method Statement

Please refer to Arbtech Consulting Ltd., Tree Schedule and Arboricultural Method Statement, for full details on all surveyed trees and how all aspects of the development maybe implemented without detriment to retained trees.

Trees for transplantation

No.	Species	Trunk Diameter	Physical Condition
9	Norway maple	340mm	Good
25	Mountain ash	170mm	Fair
28	Whitebeam	120mm	Good

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