



No.	Species	Works	Category
G01	Various	Puna - Retain as required to give a ground clearance of 5m to facilitate vehicle access over proposed track	B2
G03	Various	Partial removal of group - Fall tree to ground level	B2
T02	Common Ash	Fell to ground level	U
T03	Sycamore	Fell to ground level	U
T04	Common Oak	Puna - Retain as required to give a ground clearance of 5m to facilitate vehicle access over proposed track. Puna - Retain as required to give a ground clearance of 5m to facilitate vehicle access over proposed track. Puna - Retain as required to give a ground clearance of 5m to facilitate vehicle access over proposed track.	C1
T05	Common Oak	Puna - Retain as required to give a ground clearance of 5m to facilitate vehicle access over proposed track. Puna - Retain as required to give a ground clearance of 5m to facilitate vehicle access over proposed track. Puna - Retain as required to give a ground clearance of 5m to facilitate vehicle access over proposed track.	C1

**Protective Fencing**

To be erected prior to the commencement of all works on site, and retained in place throughout construction.

**Default specification:** To comprise either 2.4m wooden site hoarding or 2.2m high scaffolding framework comprising vertical and horizontal framework, well braced to resist impacts, with uprights to be spaced at a maximum of 0.8m intervals and cross rails to be a minimum of 600mm. On this, a standard anti-climb welded mesh panels are to be installed to the scaffold framework.

**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 one anti-climb cap, installed so they can only be removed from inside the fence. The panels should be supported on the tree side by stabilizer ends, which should be attached to a tree side plate and secured with ground pins.

All weather notices should be erected at regular intervals on the welded mesh panels with words such as 'Tree Protection Area - Keep Out'.

**Tree Protection Area KEEP OUT**  
Do not move this fence

THESE NOTICES ARE THE PROPERTY OF ARBTECH CONSULTING LTD. ANY REUSE OR ALTERATION OF THESE NOTICES WITHOUT THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY IS PROHIBITED.

**Trunk Protection**

**Protective trunk wrapping:** To be attached to the trunks of retained trees prior to the commencement of all works on site, and retained in place throughout construction. To comprise of a minimum of three wraps of clear dry hearse around the trunk from ground level up to 2m above the proposed platform and held in place using steel. Once the hearse has a minimum of three wraps of chestnut palling and is to be held in place by 2x40mm mild steel galvanneal wire in three locations and fixed into place using staples fixed into the chestnut palling.

**Ground protection**

The proposed no dig sub-base will be installed to act as ground protection. If the proposed no dig sub-base is not to be installed until later in the schedule of works, new temporary ground protection will be installed in the interim.

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 placed either on top of a drainage channel or on a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a proprietary inter-locked ground protection boards placed on a proprietary compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
- b) for wheeled or tracked construction traffic, exceeding 2 t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

For situations other than those described in a) or b), the ground protection is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice, to be able to support the expected loading to be placed upon it.

In all cases, the objective of the ground protection is to avoid compaction of the soil beneath, so that root function remains unimpacted.

**'No Dig' Surfacing**

**Multi-dimensional confinement system:** Existing vegetation may be removed with hand tools or sprayed with an approved non-residual herbicide such as Glyphosate. The new hard surfacing will be constructed using a 'No Dig' surfacing situated entirely above the existing soil surface and where needed using a proprietary cellular confinement system (GeoWeb) or similar (over a base of geogrid (Densar TriAx or similar). Prior to this any small hollows on the surface will be filled with a 20mm depth of aggregate. The 'GeoWeb' will be a maximum depth of 100mm. The 'GeoWeb' is to be back filled by hand with a no-fine aggregate of 20mm. The 'GeoWeb' will be covered with a permeable geotextile fabric and the finished wearing course laid on top. Edge supports of an appropriate size and strength should be set above ground level and secured with haunching or steel pins driven into the ground. The outer edge of the supports may be backed up with clean top soil.

NOTE: The use of a multi-dimensional confinement system will affect the finished level of the hard surfacing by raising the levels and needs to be taken into consideration when designing foundations and setting the finished floor levels of adjacent buildings.

**Supervised Excavation**

All excavations within and immediately adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision.

Any roots that are to be cut will be clearly severed by the project arboriculturalist using a suitable hand saw or secateurs. The edge of all excavation closest to the retained trees will be covered with damp hearse to prevent drying out, and where necessary be shrouded to prevent soil collapse or contamination by concrete.

If appropriate soil beneath the depth of the excavation may be sheet piled, lagged piled or have individual piles installed.

**Manual excavation:** Excavations within the RPAs will be initially undertaken by hand under direct on-site arboricultural supervision to a minimum of 600mm deep (to be confirmed by the project arboriculturalist), whether this is for proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and/or air-spade and then cleaned with a shovel and the aid of an air-spade and air-vac.

**Mechanical excavation:** Excavation within the RPAs will consist of a mixture of mechanical and manual excavation. Where an excavator is used it will be fitted with a suitable sized bucketless grapple bucket, using a grading / scraping motion rather than digging. During such motion the excavator will not be permitted to remove more than 10-20mm deep of soil in any one pass. If any roots are discovered, mechanical excavation will immediately be stopped and manual excavation will take over to expose the root. Upon the root being unrooted and either severed or protected the excavations can then continue.

Any excavator or other machinery that is to be used will be situated outside of the RPAs of all retained trees on top of a suitable ground protection.

Where an excavator or any other machinery is to be used within RPAs or beneath canopies the project arboriculturalist will clearly instruct the operator about what they want and expect to happen prior to any works commencing.

**Arboricultural Supervision**

The arboriculturalist will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:

1. Pre-commencement site meeting.
2. Location of protective measures.
3. Supervised excavation of foundations (both structure and decking).
4. Installation 'No Dig' hard surfacing within and immediately adjacent to the RPAs of retained trees.
5. Any excavations within and immediately adjacent to RPAs including foundations, hard surfacing, or underground services.
6. Removal of protective measures and sign off.

**Arboricultural Method Statement**

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



**Project:** Laverick Cottage and the Bothy, Fourstones, Hexham, NE47 5DX

**Client:** Blue Forest on Behalf of Mr and Mrs Middleton

**Drawing:** Tree Protection Plan

**Based on:** 1044 - 090 - C

**Drawing No:** Arbtech TPP 01

**Date:** March 2023

**Scale:** 1:200 @ A0

**Drawn:** CMW

Key:	Tree No.	Tree Canopies	Trunks
	T01	Tree Canopies	Trunks
	RPAs	RPAs	RPAs
	Category W groups	Category W trees	Trees to be removed
	Existing Site (Topo)	Proposed Site	Proposed Services
	Protective Fencing	Trunk Protection	Ground Protection
	Arboricultural Supervision (No Dig)	Arboricultural Supervision	Ground Protection

