

Protection and Retention of Existing Vegetation

The Contractor shall exercise extreme care when performing operations beneath the canopy of existing mature trees and vegetation and within the specified Root Protection Areas designated for protection and avoid at all times damage to the roots, trunk and branches.

All excavations, cultivation and grading beneath the canopy of existing mature trees and within the specified Root Protection Areas of the existing trees and vegetation shall be carried out using hand tools, taking care not to damage or disturb any existing tree roots.

All trees to be retained on site shall be protected with fencing erected around the area of mature vegetation in accordance with BS 5837: 2012 'Trees in Relation to Design, Demolition, and Construction - Recommendations'. The fencing shall be installed, protected and maintained during the main works by the Contractor who shall be responsible for protecting any area beneath the canopy of the existing trees and within the specified Root Protection Areas.

The installed protective fencing shall be 2.0 metres height 'Heras' Welded Wire Mesh Fencing secured to a scaffolding framework, set into the existing ground, and positioned to the outside edge of the existing tree Root Protection Areas specified.

All tree protection to be in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition, and Construction - Recommendations'. The fencing should be strained, and fixed to fences, walls, knee rails where possible to provide a complete protected area.

Day-glo ribbons shall be maintained during the main works by the Main Contractor attached to the top of the fencing to ensure that the fencing is clearly visible during the works. Fencing shall be used to enclose the full canopy spread of any tree in accordance with the specified Root Protection Areas and generally with 1.5m on either side of any hedge.

All such fencing shall be maintained for the full contract period. All necessary excavations, earthworks and cultivation beneath the canopy spread of any existing tree; shrub or hedge shall be undertaken by hand. Repositioning of the protective fencing during the course of the contract as the contract works progress shall need to be agreed with the Landscape Architect.

At the end of the contract period the Contractor shall remove protective fencing from the site. All retained vegetation shall be healthy and thriving at the handover date.

Within the protected area the following activities must not take place;

- No vehicles are to be used in the fenced off areas;
- No materials are to be stockpiled or stored;
- No chemicals are to be stored;
- No excavation or increase in the soil level shall occur;
- No fires shall be lit on site.

Removal of Existing Vegetation

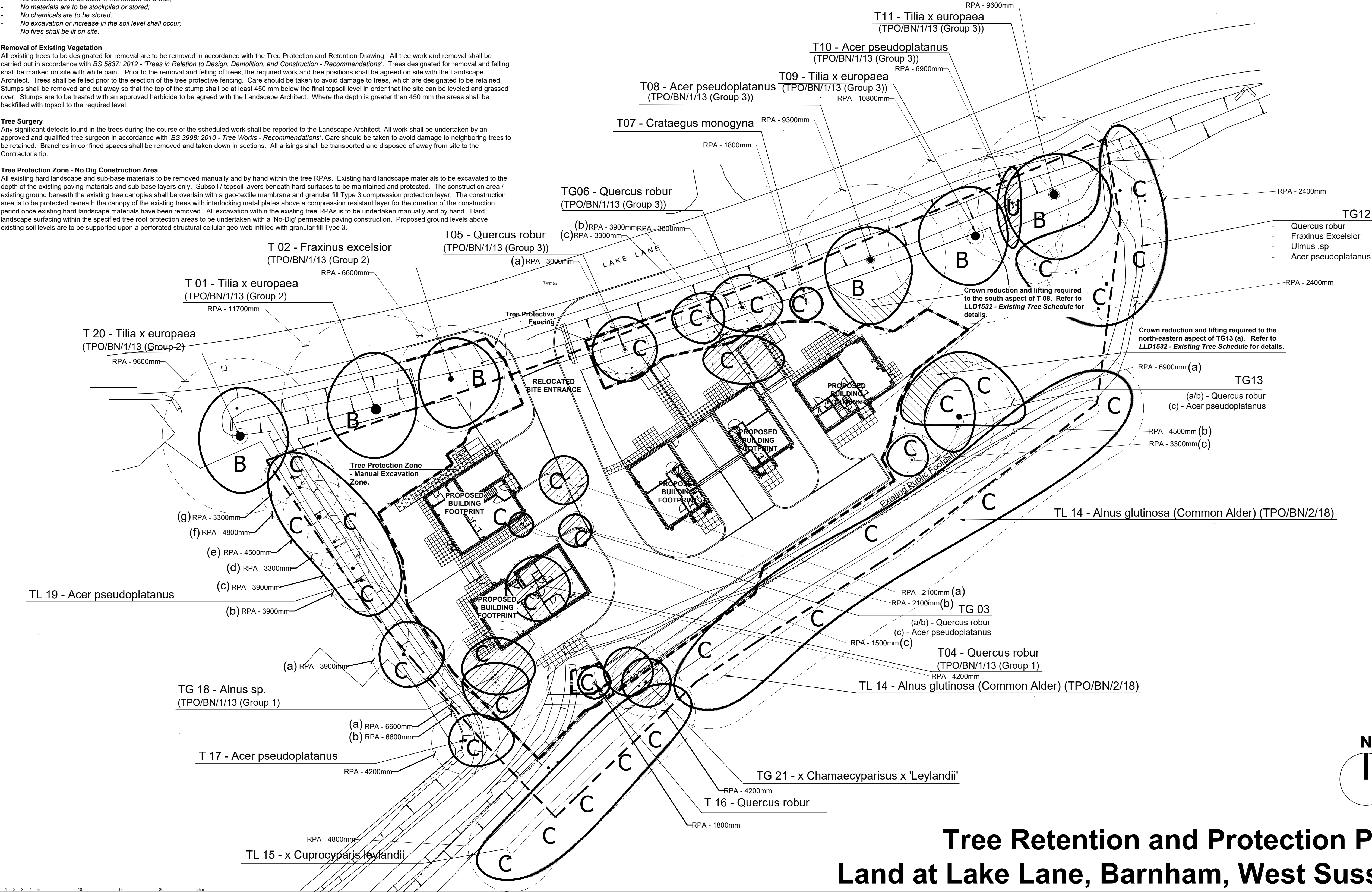
All existing trees to be designated for removal are to be removed in accordance with the Tree Protection and Retention Drawing. All tree work and removal shall be carried out in accordance with BS 5837: 2012 - 'Trees in Relation to Design, Demolition, and Construction - Recommendations'. Trees designated for removal and felling shall be marked on site with white paint. Prior to the removal and felling of trees, the required work and tree positions shall be agreed on site with the Landscape Architect. Trees shall be felled prior to the erection of the tree protective fencing. Care should be taken to avoid damage to trees, which are designated to be retained. Stumps shall be removed and cut away so that the top of the stump shall be at least 450 mm below the final topsoil level in order that the site can be leveled and grassed over. Stumps are to be treated with an approved herbicide to be agreed with the Landscape Architect. Where the depth is greater than 450 mm the areas shall be backfilled with topsoil to the required level.

Tree Surgery

Any significant defects found in the trees during the course of the scheduled work shall be reported to the Landscape Architect. All work shall be undertaken by an approved and qualified tree surgeon in accordance with 'BS 3998: 2010 - Tree Works - Recommendations'. Care should be taken to avoid damage to neighboring trees to be retained. Branches in confined spaces shall be removed and taken down in sections. All arisings shall be transported and disposed of away from site to the Contractor's tip.

Tree Protection Zone - No Dig Construction Area

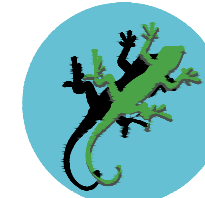
All existing hard landscape and sub-base materials to be removed manually and by hand within the tree RPAs. Existing hard landscape materials to be excavated to the depth of the existing paving materials and sub-base layers only. Subsoil / topsoil layers beneath hard surfaces to be maintained and protected. The construction area / existing ground beneath the existing tree canopies shall be overlain with a geo-textile membrane and granular fill Type 3 compression protection layer. The construction area is to be protected beneath the canopy of the existing trees with interlocking metal plates above a compression resistant layer for the duration of the construction period once existing hard landscape materials have been removed. All excavation within the existing tree RPAs is to be undertaken manually and by hand. Hard landscape surfacing within the specified tree root protection areas to be undertaken with a 'No-Dig' permeable paving construction. Proposed ground levels above existing soil levels are to be supported upon a perforated structural cellular geo-web infilled with granular fill Type 3.



Legend

- Development Area Site Boundary / Survey Area.
- Tree and Shrub Numbers.
- T02
- Tree Root Protection Areas
Tree Root Protection Areas calculated and specified in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction'.
- Category B Trees
Trees of Moderate Quality and Value.
- Category C Trees
Trees of Low Quality and Value.
- Category U Trees
Trees Unsuitable for Retention.
- Existing Trees / Vegetation to be Removed from Site Prior to Tree Protection works / measures.
- Crown Lifting and Crown Reduction
The north-eastern aspect of TG 13 (a) - Quercus robur requires crown lifting to approximately 2.0m height to accommodate the existing Public Right of Way. The south-eastern aspect of T 05 requires crown reduction by 1.0 m, and crown lifting to approximately 3.0 m to accommodate the proposed garden shed. All tree surgery works would be done in accordance with 'BS3998:2010 - Tree Works - Recommendations'.
- Tree Protective Fencing
All Tree Protective Fencing to be in accordance with BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction' to be 2.0 metres height 'Heras' Welded Wire Mesh Fencing secured to a scaffolding framework, set into the existing ground, and positioned to the outside edge of the existing Tree Root Protection Area, or as specified.
- Tree Protection Zone - Manual Excavation Area - Hard Landscape Areas
A Limited Manual Excavation Zone shall be implemented to allow for the construction of the hard landscape areas within the RPAs of existing trees. The excavation encroaches into the RPA of existing trees and therefore shall be undertaken with due care with hand held tools only. No general trenching shall occur within the Root Protection Area. No roots shall be severed greater than 25mm thickness within the Root Protection Zone without specialist advice.

Rev	Description	Date	Initials
00	Planning Issue	16.03.22	JJ

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Drawing title Tree Retention and Protection Plan Tree Works Application			
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