Proposed Tree Surgery Works

Existing Oak tree - T01 to have crown reduction prior to tree protection measures being implemented. Tree Surgery operations to be in accordance with *BS3998:2010 - 'Tree Works - Recommendations'.*

Tree Protective Barrier

All Tree Protection and Tree Protective Barrier to be in accordance with *BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'*. Tree Protective Fencing - 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 Protective Measures - No-Dig Construction

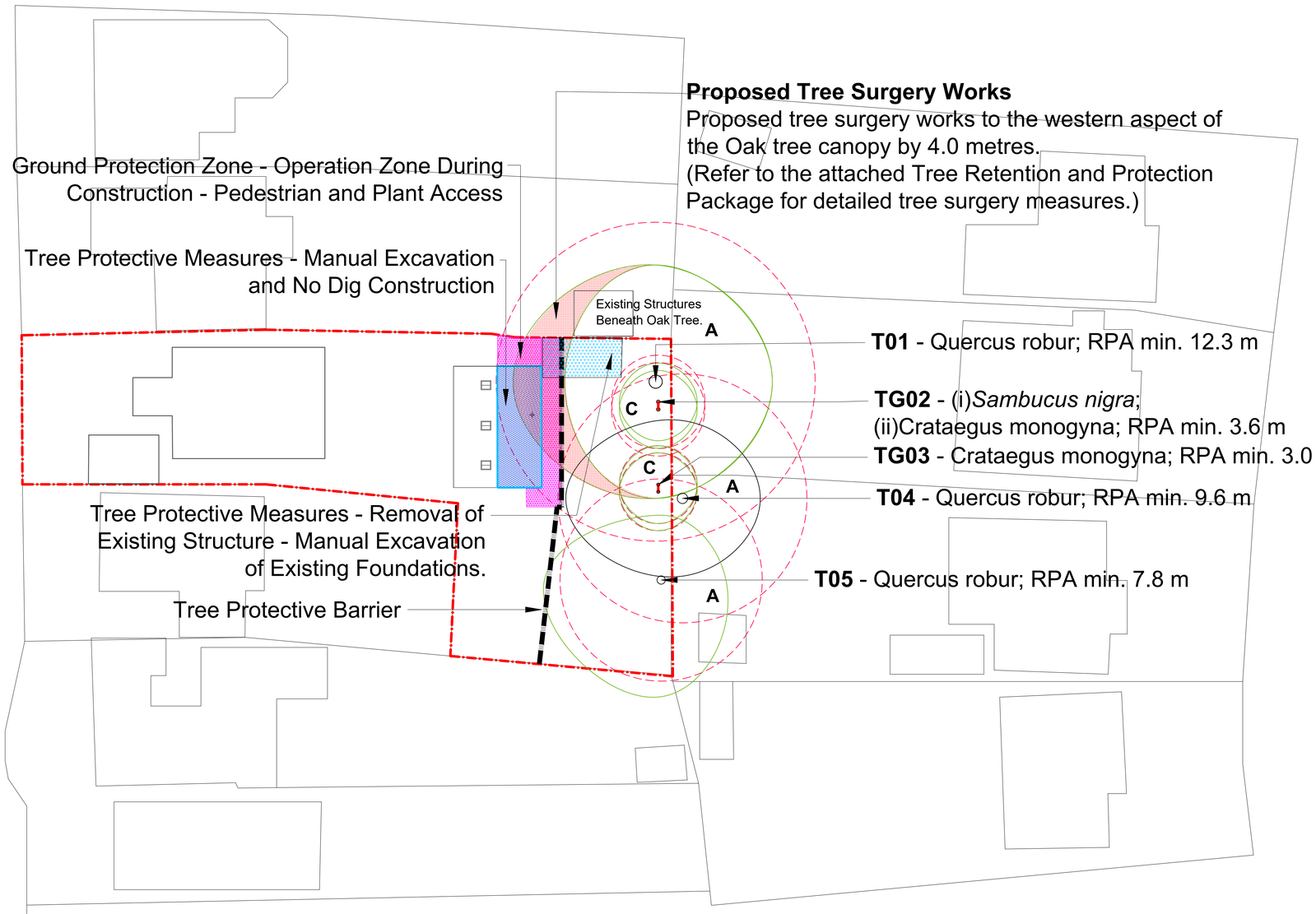
A 'no-dig' construction method shall be employed during the construction of the proposed building in order to avoid damage to existing tree roots and localised compaction of subsoil within the tree root protection areas of trees proposed for retention.

Ground Protection Zone - Operation Zone During Construction

While construction work is commencing on the proposed building, the existing ground levels within the RPAs of trees to be retained are to be protected. For pedestrian access only, protection should consist of a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (100 mm depth of woodchip) laid onto a geotextile membrane; for pedestrian-operated plant up to a gross weight of 2 tonnes proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (*150 mm depth of woodchip*), laid onto a geotextile membrane should be used. The ground protection should be in place for the duration of the construction period in accordance with *BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'.* When construction work is completed the ground protection can be removed.

Ground Protection Zone - Manual Excavation and Minimal-Dig Construction Zone

Where the proposed building foundations increase the depth of construction within the tree RPA, a manual excavation and 'minimal-dig' construction method shall be employed in order to avoid damage to existing tree roots and localised compaction of subsoil within the tree root protection areas of existing trees. The foundations of the existing shed structure within the garden area to the northern site boundary shall be removed using a manual excavation technique.



Proposed Tree Surgery Works

Proposed tree surgery works to the western aspect of the Oak tree canopy by 4.0 metres.
(Refer to the attached Tree Retention and Protection Package for detailed tree surgery measures.)

T01 - Quercus robur; RPA min. 12.3 m

TG02 - (i)*Sambucus nigra*;
(ii)Crataegus monogyna; RPA min. 3.6 m

TG03 - Crataegus monogyna; RPA min. 3.0 m

T04 - Quercus robur; RPA min. 9.6 m

T05 - Quercus robur; RPA min. 7.8 m

N

0 1 2.5 5 10 m

Scale 1:200

Tree Retention and Protection Plan
Langoustine Cottage, Emsworth

Legend

T02 **Tree and Shrub Numbers.**

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 - Recommendations'.*

Category A Trees
Trees of High Quality and Value.

Category C Trees
Trees of Low Quality and Value.

Tree Protection Zone - 'Pile and Beam' Construction
Implementation of foundations to proposed structures within RPAs of existing good quality trees should be carried out using small diameter piles and beams to minimise disturbance to root zone of mature trees. Location and density of piles subject to site / ground investigation. Construction details to Engineer's specification.

Proposed Tree Surgery Works
Existing trees to have crown reduced prior to protection measures being implemented. Tree Surgery operations to be in accordance with *BS 3998:2010 - 'Tree Works - Recommendations'.*

Tree Protection Zone - 'No Dig' Construction
A 'No Dig' Construction shall allow for construction to be implemented without intrusion or change of existing ground levels, in accordance with *BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction'.*

Ground Protection Zone - Operation Zone During Construction.
An Operation Zone to enable construction work within the Root Protection Area is to be secured beneath the canopy of the existing trees with a ground protection layer, fit for the expected level of traffic, above a compression resistant layer for the duration of the construction period in accordance with *BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'.*

Tree Protection Zone - Manual Excavation / Demolition
Limited Manual Excavation / Demolition Zone shall be implemented, in accordance with *BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction'.* Any excavation within the tree root protection areas of existing trees shall be undertaken with due care with hand held tools under *Arboricultural Supervision* only.

Tree Protection Barrier
All Tree Protection and Tree Protection Barriers to be in accordance with *BS 5837:2012 - 'Trees in Relation to Design, Demolition and Construction - Recommendations'.*
Tree Protective Barrier 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.

Notes:
1. Drawing to be read in colour;
2. For details of existing trees and vegetation refer to: *LLD2043-ARB-SCH-001 - Existing Tree Schedule;*
3. *For assessment of effects of the proposed development on existing trees refer to LLD2043-ARB-REP-001 - Arboricultural Impact Assessment and Method Statement.*

Planning Issue

Rev	Description	Date	Initials
01	Planning Issue	16.10.20	LB

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Client
RJCA Architects

Project Title and Location
Langoustine Cottage, Kingsey Avenue,
Emsworth

Drawing Title
Tree Retention and Protection Plan

Scale	*Drawn*	*Approved*	*Date*
1:200@A1	LB	JJ	24.08.20

Drawing No **LLD2043-ARB-DWG-002** *Revision* 01