Arboricultural Impact Assessment, Arboricultural Method Statement and tree protection 17 Danecourt Road, Poole BH14 0PG

Reference AIA/449/1
Client Beechvale Construction Ltd
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31 October 2023

There are no trees on the site.

On the site next door at 15 Danecourt Road stands T001, a Deodar Cedar on the boundary with 17 Danecourt Road.

This tree is outside the control of the client and is to be retained and can be protected from construction impacts.

Introduction

This AIA has been written to meet the concerns of the Tree Officer for this fresh application. This AIA document identifies and assesses the significance of the effect of direct and indirect impacts on the tree to be retained and recommends mitigation where appropriate. This document and accompanying Tree Protection Plan RNapc/449/TPP/1 support the development of the site.

The development

Residential development with access and parking can be achieved

The proposal is for residential units with access and parking.

There are no trees on the site. T001, a Deodar Cedar growing in 15 Danecourt Road overhangs the site. The root protection area (RPA) of this tree will extend into the site. In no.15, where most of the RPA will be and which is not in the control of the client, the surface has been block paved.

In no.17 the surface over the RPA was a tarmac drive (see photo 1) which led from the road to the former house.

The level of information supplied meets the requirements of BS5837:2012

The recommendation in BS5837:2012 *Trees in relation to design, demolition and construction* – *Recommendations* (BS5827:2012) section 6.1 requires a precautionary approach towards tree protection and working in the Root Protection Area (RPA). It suggests that an arboricultural method statement should be appropriate to the proposals.









On this site the corner of the new building Block 1 just cuts inside the notional RPA of T001. My view is that this minor incursion is of low impact and significance to the tree and does not require a special foundation.

The tree protection plan RNapc/449/TPP/1 shows the area of RPA on the site to have the existing hard surfacing retained as ground protection during development. This area would be a good location for site huts or dry material storage on pallets.

I have attached sufficient detail in Appendix B and the Tree Protection Plan that can be referred to in a planning condition to ensure the protection of the trees during the construction process.

Photo 1 shows the canopy height of the Deodar Cedar and the hard surfaced track that led to the former dwelling



The proposed parking bays are within the RPA of the tree

Parking, bin stores and cycle parking is shown within the RPA of the tree. A porous hard surface would be acceptable in this location. I have not shown a load suspension layer (eg Cellular confinement system) for this site because the existing sub base of the tarmac drive is suitable for the loading that will occur. The use of the final surface within the RPA is mainly footpath, with one parking space and a bin and bike store, which can be sited on shallow concrete slabs. The area of porous hard surfacing will mitigate any impact that two concrete slabs causes.

There are no changes in levels within the RPA

No changes in levels are proposed.









New service trenches should not affect the trees

All drains and services should be located outside the RPA of the trees to be retained.

The ducting for cables for any lighting or electric charging points will need to be dug by hand within the RPA of retained trees. The specification is provided at Appendix B.

Recommendations

There are no supportable or reasonable grounds for refusing permission in terms of trees

The scheme is technically compliant with BS5837:2012 and the way in which that Standard has been applied. Tree Protection Plan RNapc/449/TPP/1 complete this bundle.

Appendices include Tree Survey data and Tree Protection details Appendix A is the tree survey data collected on site.

Appendix B contains model specifications to demonstrate that tree protection can be achieved.

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Appendix A Tree Survey

Reference	Common Name	Retention Category	Stem Diameter (mm)	RPA: Radius (m), Area (m²)	Comments	Height (m)	Crown spread North	Crown spread East	Crown spread South	Crown spread West	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Remaining Contribution
T001	Deodar Cedar	B1	700	Radius: 8.4 Area: 222	Stem measured at 1m. Centre 1m from fence. 8.8m from x. Natural unions, upswept form typical of species, some deadwood over the site.	13	6	9	5	7	3.5	Early Mature	Fair	Fair	20+ Years









Appendix B Method Statement and Tree Protection

Tree protection

General precautions

Fires should be avoided

Where they are unavoidable, they should not be lit in a position where heat could affect foliage or branches, so take wind direction and potential size of the fire into account.

Run-off from concrete mixing causes damage to tree roots

Avoid washing out concrete mixers in the precautionary area. Concrete mixing should take place on a ply board on top of a polythene membrane and outside the canopy spread of a retained tree.

Materials must not be stored and handled near

Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the canopy of a tree

Construction specifications

Construction specifications necessary to protect retained trees The following are specific to the construction activities on this site. These are arboricultural specifications based on the physiological needs of the trees and are not engineering specifications. BS5837:2012 is the arboricultural reference.

This report provides sitespecific mitigation... It is based on the Arboricultural Impact Assessment data for soil, species, sensitivity of the trees to damage and the magnitude of the impacts of the proposed development

...in order to reduce the likelihood of damage to trees...

The guidance in BS5937:2012 *Trees in relation to design, demolition and construction- Recommendations* Technical Design stage Sections 6-8 applies

...and in order to comply with any planning conditions

Planning conditions typically require adherence to an Arboricultural Method Statement (AMS) and may require a pre-commencement meeting.

Ground protection

Retain the existing tarmac surface during the demolition and construction phases The tree protection plan RNapc/449/TPP/1 shows a precautionary area where the existing tarmac should be retained. The tarmac wearing course can be broken up after completion of construction and a new wearing course laid on the existing sub-base, without any extra excavation.

This area within the RPA would be suitable for site huts, dry material storage on pallets and contractor parking.

Ground protection must be used if plant over 2t is used in the precautionary Use inter-linked boards (eg Ground Guard) on 150mm deep woodchip laid on a geotextile. Heavy traffic will need a proprietary system or fit-for-purpose ground protection (piling mats).









Groundwork

Ground works

All plant engaged in groundwork should work from outside the root protection area (RPA) or on the retained tarmac surface. All groundworks should be carried out using a toothless bucket

Extract from BS5837 7.2 &

7.2 Avoiding physical damage to the roots during demolition or construction

7.3.2

7.2.1 To avoid damage to tree roots, existing ground levels should be retained within the RPA. Intrusion into soil (other than for piling) within the RPA is generally not acceptable, and topsoil within it should be retained in situ. However, limited manual excavation within the RPA might be acceptable, subject to justification. Such excavation should be undertaken carefully, using hand-held tools and preferably by compressed air soil displacement.

NOTE Due to the demands that manual excavation places on a development project, and limitations arising from health and safety considerations, it is not realistic to plan for excavation using hand-held tools where there is a need for trench shoring or grading the sides of the excavation to a stable angle of repose.

- **7.2.2** Roots, whilst exposed, should immediately be wrapped or covered to prevent desiccation and to protect them from rapid temperature changes. Any wrapping should be removed prior to backfilling, which should take place as soon as possible.
- **7.2.3** Roots smaller than 25 mm diameter may be pruned back, making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw), except where they occur in clumps. Roots occurring in clumps or of 25 mm diameter and over should be severed only following consultation with an arboriculturist, as such roots might be essential to the tree's health and stability.
- **7.2.4** Prior to backfilling, retained roots should be surrounded with topsoil or uncompacted sharp sand (builders' sand should not be used because of its high salt content, which is toxic to tree roots), or other loose inert granular fill, before soil or other suitable material is replaced. This material should be free of contaminants and other foreign objects potentially injurious to tree roots.

New services and soakaways

Any service trenches that are required should avoid the RPA of retained trees, unless agreed by the Arboriculturist. Soakaways should not be located within the RPA of a retained tree.

Landscaping within the tree's root protection area

Changes in levels must be approved by the Arboriculturist Any soil removal or replacement, excavation for hard landscape or installing any structure including lighting, water, etc must be approved by the Arboriculturist.

Only use handheld tools, NOT A ROTOVATOR

Unwanted vegetation can be removed using hand held tools avoiding damage to the stems of retained trees

Post holes should be dug by hand

If any roots >25mm diameter are encountered, either the post hole shall be moved and the hole backfilled.

Do not plant shrubs within 1m of tree stems Planting holes for shrubs shall be dug by hand and will be repositioned if woody roots are encountered







