



23/04932/X | Application for the variation of conditions 8, 9 & 17 of permission 21/01999/F Erection of 62 dwellings with associated parking, new vehicular access, and associated infrastructure and landscaping. | Former Car Park College Road Clifton Bristol BS8 3HX.

Summary

We remain concerned about the continuing threat to the trees that are to be retained on this site. No proposals have been made to protect them, given the plans to undertake construction within their root zones.

We repeat our request that the retained trees on the site be protected with Tree Preservation Orders, given the threats they face.

Our comments

Three of the trees that are to be retained - T05, a Wellingtonia classified as A1,2 under BS5837:2012; T06, a Deodar/Atlas Cedar classified as B2; and T07, a Weymouth Pine classified B2 - are significant specimens, part of the original Bristol Zoo Gardens tree collection. These trees are prominent and provide significant visual amenity from the public realm (Figure 1).



Figure 1: The Wellingtonia (T05), the Deodar/Atlas Cedar (T06) and the Bhutan/Weymouth Pine (T07), as seen from Cecil Road.

We remain concerned that the proposed ground and building works will fall within the root protection areas (RPAs) of these three trees. These works comprise roads, hardstanding and, in the case of T05, foundations and the building above. The canopies of trees T06 & T07 also oversail the proposed roads and hardstanding, which also risk damaging them.



Figure 2: Detail of the Proposed Ground Floor Plan¹

Section A.2.1 of *Trees in relation to design, demolition and construction - Recommendations (BS5837:2012)*, warns that:

The part of a tree most susceptible to damage is the root system, which, because it is not immediately visible, is frequently ignored. Damage to, or death of, the root system affects the health, growth, life expectancy and safety of the entire tree. The effects of such damage might only become evident several years later.

¹ 23_04932_X-PROPOSED_GROUND_FLOOR_PLAN-3592564



Our Comments - 02 February 2024

Paragraph 7.4 of BS5837:2021 - **Permanent hard surfacing within the RPA**, advises that:

Where permanent hard surfacing within the RPA is considered unavoidable, site-specific and specialist arboricultural and construction design advice should be sought to determine whether it is achievable without significant adverse impact on trees to be retained.

Paragraph 7.4.2.1 advises:

The design should not require excavation into the soil, including through lowering of levels and/or scraping, other than the removal, using hand tools, of any turf layer or other surface vegetation. If it is intended to use the new surface for construction access, it is essential that the extra loading and wear arising from this are taken into account during the design process.

Further detailed design recommendations are also given in this document.

Paragraph 7.5 provides special engineering guidance for foundations within the RPA:

7.5.1 The use of traditional strip footings can result in extensive root loss and should be avoided. The insertion of specially engineered structures within RPAs may be justified if this enables the retention of a good quality tree that would otherwise be lost (usually categories A or B). Designs for foundations that would minimize adverse impact on trees should include particular attention to existing levels, proposed finished levels and cross-sectional details. In order to arrive at a suitable solution, site-specific and specialist advice regarding foundation design should be sought from the project arboriculturist and an engineer. In shrinkable soils, the foundation design should take account of the risk of indirect damage.

Further detailed engineering recommendations are also given.

Ideally, these structures should not be placed within the RPAs of any of these trees in the first place. If a '*significant adverse impact*' cannot be avoided, then the application should be rejected.

However, if it is considered that the construction of permanent hard surfacing, foundations and buildings within these RPAs is indeed '*achievable without significant adverse impact*', the applicant needs to explain why this is so and set out the construction methodology to be used. This has not been done.

In the meantime, we repeat our request that these trees be given Tree Preservation Order protection in any event, given the manifest threats they face as a result of these proposals.