

Planning Application 19/02632/PB - Hengrove Park, Hengrove Way

[Development Control A Committee meeting](#)

Wednesday, 16th October 2019 at 6.00 pm

Bristol Tree Forum Statement

1. Summary

Hengrove Park is just under 51.5 hectares in area and contains [545 mapped trees](#) comprising 37 species. There are many more unmapped trees also growing there.

These trees have a [Capital Asset Valuation of Amenity Trees \(CAVAT\)](#)¹ value of at least £5.2 million, a valuation which is based on measurements of the tree diameters made at least 10 years ago. In the meantime, the trees will have continued to grow, making the current CAVAT value even greater.

The Bristol Tree Forum (BTF) was not consulted about the proposed development of this site, which will result in the removal of hundreds of these trees. Many local residents have submitted comments expressing concern about this aspect of the development.

BTF's starting position is that trees should not be felled if at all possible, and that everything that can reasonably be done to avoid this should always be considered before a felling decision is made. If trees must be felled, then compensatory planting should be undertaken in such a way that there is no net environmental loss.

In order to implement the Council's recent declaration of a climate emergency, increase net biodiversity and help double tree canopy cover, this development needs to be redesigned to fit around the existing trees, not remove them.

The current documents make various assertions as to the numbers of trees to be lost and the calculations for replacements required under the Bristol Tree Replacement Standard. This can be addressed by the imposition of our proposed planning conditions (see below).

¹ One of a range of tools recommended by The Trees and Design Action Group ([TDAG](#)) for valuing trees and green infrastructure - https://bristoltreeforum.files.wordpress.com/2019/10/tdag_valuingtreesgi_2019.pdf

2. Implementing Bristol’s declaration of a climate emergency

Bristol City Council was the first UK local authority to declare a climate emergency. As Professor Corinne Le Quéré FRS² has said, “Actions to tackle climate change have to penetrate all the decisions that we take in society.”

The Government’s 25-year environment plan states that it will strengthen existing requirements for net gain for biodiversity in national planning policy. As it is, we have calculated (appendix 1) that this scheme, if permitted, will result in a net environmental loss of just over £3.65 million³.

Bristol also has ambitious plans to double its tree canopy by 2046. If it is to implement this, and is serious about its declaration of a climate emergency, and wishes to achieve a net gain in biodiversity, then developments like this need to be radically rethought so that we build houses around existing trees rather than felling them, thereby avoiding or at least minimising the loss of our precious existing tree stock.

In addition, we note that the plan is also to remove a row of black poplar trees, a key landscape feature of the site. This is contrary to Policy BCS9 of the Bristol Core Strategy.

3. Conflicting figures for the calculation of replacement trees under the Bristol Tree Replacement Standard

The figures for the number of trees to be felled differ within the various planning documents and the BTRS calculations are confusing. We address this in detail at Appendix 1.

A technical note (23rd September 2019) identifies 859 trees to be felled, to be replaced by 1,280 new trees. Elsewhere in the note, a table lists the values given for each BTRS category, which come to a total of 181 trees to be felled with 294 replacements. The table produced at paragraph 5.5.17 of the Environmental Statement Addendum gives different values again - 674 trees to be felled with 986 replacements.

² Professor Corinne Le Quéré FRS is Professor of Climate Change Science at the University of East Anglia and former Director of the Tyndall Centre for Climate Change Research. She conducts research on the interactions between climate change and the carbon cycle. She leads the annual update of the Global Carbon Budget.

³ Our CAVAT valuation of the trees potentially lost to this development is nearly £3.8 million (point 8 of Appendix 1). If the figures for tree felling relied on by the Council are accepted, then the figure will be much higher.

These serious discrepancies need to be resolved before the Committee can form any clear idea of the impact of this development on the park's trees. We propose a number of planning conditions, set out below, to ensure that the BTRS calculations are correctly made.

We are also concerned to read the Tree Officer's report which states "As a number of the proposed trees are extra heavy standards it is considered that these can count as three new trees and overall the BTRS is met". This is simply wrong. The BTRS contains no such protocol.

4. The care of replacement trees after planting

Many trees that have been planted as a result of large schemes like this fail because they are not properly looked after. A recent example is the Metrobus scheme, in which large numbers of trees were planted but have failed, probably due to lack of watering or, in some cases, vandalism. So far, Metrobus (the developer) has not given any indication that it will replace these lost trees.

In our view, any replacement planting must be done under British Standard BS8545:2104 (*Trees: from nursery to independence in the landscape*) with a detailed specification in these terms being made a condition of the development. This should include a clear obligation placed on the developer to replace trees which fail within, say, five years of planting.

5. Planning conditions requested by BTF

The information that has been used to undertake the BTRS calculation is both incorrect and two years out of date.

If the Committee allows this proposal to proceed despite this, we request that the following planning conditions be imposed:

1. No felling and replacement of any of the trees on the site should take place unless and until an updated survey is undertaken and the actual numbers and DBH values of all the trees (both individually and in groups) identified for felling are ascertained.
2. The BTRS replacements required are agreed with the Bristol Tree Forum and a Planning Arboricultural Officer.
3. All tree planting conforms with British Standard BS8545:2104 (*Trees: from nursery to independence in the landscape*).
4. A condition of the development includes a clear obligation on the developer to replace trees which fail within, say, five years of planting.

Appendix 1

The application of BTRS requires that the trunk diameter (called *Diameter at Breast Height*, or DBH) of each tree identified for felling be measured. This measurement is then used to calculate the number of trees to be planted as replacements for the felled tree using this table:

Trunk diameter of tree lost (cm measured at 1.4 metres above ground level)	Number of replacement trees
< 15 cm	0
>= 15 & <20 cm	1
>=20 & <30 cm	2
>=30 & <40 cm	3
>=40 & <50 cm	4
>=50 & <60 cm	5
>= 60 & <70 cm	6
>=70 & <80 cm	7
>=80 cm	8

This planning application is based on a tree survey that was undertaken some time in November 2017 and set out in an Arboricultural Impact Assessment dated May 2019. Part of this survey was updated in Appendix C of an Environmental Statement Addendum dated 4th September 2019.

There is also a technical note dated 23rd September 2019 which identifies 859 trees to be felled, to be replaced by 1280 new trees. The following table is produced on page 5 of this note:

Table 2: Final Tree Removals and Required Replacements Per Tree Under BCC Policy (incorporating the new junction impact and including impacts to tree groups G1, G354, G355, G380 and G417)

Stem Diameter Range (mm)	Number of Required Removals to Facilitate Development	BCC Replacement Number	Tree Total	Replacement Trees Required
<150	36	0-1		0
150 - 199	51	1		51
200 - 299	55	2		110
300 - 399	25	3		75
400 - 499	12	4		48
500- 599	2	5		10
600 - 699	-	6		0

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Technical Note



700 - 799	-	7		0
>800	-	8		0
Total	859 (prev. 674)	-		1280 (prev. 986)

However, the values given for each BTRS category come to a total of 181 trees to be felled with 294 replacements, not the totals shown above.

The table produced at paragraph 5.5.17 of the Environmental Statement Addendum gives different values again: 674 trees to be felled with 986 replacements. However, this excludes the number of individual trees within groups G1, G354, G355, G380 and G417, so it is impossible to make any like-for-like comparison.

Having [collated](#) the two surveys published in the Arboricultural Impact Assessment and in Appendix C of the Environmental Statement Addendum, we note the following:

1. 533 individual trees have been identified and their DBH values recorded.⁴ Of these, 167 are identified for felling.
2. 43 tree groups have also been identified, 13 of which are listed for removal or part removal.

⁴ These values are now two years out of date; The trees will have grown in the meantime.

3. Save for groups G347, G347b and G347c (which have 5, 24 and 7 trees respectively in them) the number of trees in each group (or the number of trees to be removed) is not given.
4. Save for groups G347, G347b and G347c (which have 5, 22 and 7 DBH values respectively listed), only one DBH value is given for each group.
5. If we assume one tree per species listed for each unnumbered group,⁵ then 228 trees in total are identified for felling.
6. This produces a BTRS value of 294 replacement trees (again, if we assume one tree per species for each unnumbered group and that all these trees have the same DBH⁶ as that given).
7. Of the trees surveyed, 176 are given an 'Estimated Remaining Contribution' (life expectancy) of 10+ years; 46 have a life expectancy of 20+ years; and the remaining six have <10 years of life left. These 10+ and 20+ values are meaningless as they give no upper range. The CAVAT approach is to set life expectancy within these bands:
 - a. <5 years.
 - b. >=5 & <10 years.
 - c. >=10 & <20 years.
 - d. >=20 & <40 years.
 - e. >=40 & <80 years.
 - f. >=80 years.
8. Applying a life expectancy of between 40 and 80 years and a CTI factor for Bristol of 150,⁷ we calculate that the 228 trees we have identified for felling have a CAVAT value of £3,784,282. Using the same factors, the 294 BTRS trees (assuming standards with a DBH of 5 cm) would have a CAVAT value of £134,184, a net environmental loss of £3,653,652.

⁵ We accept that each group probably contains more trees than our working assumption.

⁶ We accept that the DBH values will vary from tree to tree.

⁷ A CTI factor is applied to the base CAVAT value to account for population density. Bristol has a population of 459,300 and a land area of 10,970 hectares. This gives a population density per hectare of 41.9 and so a CTI Index of 150.