



TIM MOYA ASSOCIATES

Arboricultural Report

**CAVAT assessment for planning
application 2023/0282/P**

Chester Terrace
London
NW1 4ND

October 2023

220928-PD-19b

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CONTENTS PAGE

1 INTRODUCTION..... 4
INSTRUCTION 4
DEFINITIONS 4
SCOPE..... 4
AUTHOR 5

2 CAVAT CALCULATIONS 6
EXISTING TREE VALUES 6
PROPOSED TREE VALUES 6
RELATED ARBORICULTURAL AND OTHER MATTERS 8

3 CONCLUSION..... 11

1 INTRODUCTION

Instruction

- 1.1 This *Arboricultural Report* ('the Report') has been instructed by *The Crown Estate Paving Commission* ('the Client' - note that the Client is also 'the Applicant').

Definitions

- 1.2 The following particular terms and abbreviations may be used within this Report. These terms are defined as follows:
- **Capital Asset Value for Amenity Trees ('CAVAT')** - CAVAT provides a basis for managing trees in the UK as public assets rather than liabilities. It is designed not only to be a strategic tool and aid to decision-making in relation to the tree stock as a whole, but also to be applicable to individual cases, where the value of a single tree needs to be expressed in monetary terms.
 - **Local Planning Authority ('LPA')** - the planning department of the borough, district, or metropolitan council (in this case *The London Borough of Camden*).

Scope

- 1.3 This Report has been prepared to respond to the comments raised by the LPA for the current planning application *2023/0282/P* ('the Application') via email from Charlotte Meynell (a *Senior Planning Officer* at the LPA) on the 11th of September 2023 ('the Response'). For clarity, this Application affects *Chester Terrace* ('the Site') is for development described as follows: "*Demolition and rebuilding of listed garden retaining wall and balustrade*" ('the Proposed Development').
- 1.4 Specifically, in the context of this Report, the Response requested the following: "*An existing CAVAT value assessment [and] a CAVAT value forecast for the replacement planting*" - a particular timeframe was not provided. Other particulars were also outlined in the Response, though these are not addressed within this Report, because they do not relate to arboriculture.
- 1.5 This Report therefore outlines the CAVAT values of the trees that are specified for removal and the CAVAT value of those specified to be planted (including projected values at Year 0, Year 10, and Year 40), and provides a comparison between the figures with an associated discussion. This data is provided at Appendix A and is discussed in detail within the following section of this Report (i.e., *Section 2*).

1.6 Owing to the fact that this Report has been prepared in response to a request for information by the LPA for a current planning application, this Report must be read in conjunction with the details submitted within the aforementioned Application. In particular, this Report must be read in conjunction with the following documents:

- *Arboricultural Impact Assessment Report (220928-PD-11b)*.

Author

1.7 This Report was written by Christopher Wright ('the Author'). Christopher is an arboricultural consultant dealing with trees in relation to all forms of human activity including built development. He is a *Technician Member* of the *Arboricultural Association*, a member of the *Royal Forestry Society*, a member of the *Institute of Chartered Foresters*, holds the *Level 6 Diploma in Arboriculture (ABC)*, the *Professional Tree Inspection certificate (LANTRA)*, and has received a *BSc (Hons) Conservation and Environment (2:1)* from *Writtle University College*.

2 CAVAT CALCULATIONS

Existing tree values

Precursory scope information

- 2.1 The Proposed Development specifies the removal of 20no. trees, which are specified at paragraph 6.1 of the *Arboricultural Impact Assessment Report* that has been prepared for the Application (as referenced from paragraph 1.3 above). Consequently, this Report focusses exclusively on the 20no. trees that are specified for removal.

Calculated CAVAT value

- 2.2 The value attributed to the existing trees that are specified for removal is £1,203,311. This value is provided in tabular format at Appendix A.

Proposed tree values

Precursory scope information

- 2.3 The Proposed Development specifies the planting of 20no. new trees, within the Site (i.e., at ground level). The stem size values that this Report relies on for the initial values of the 20no. trees are provided by the landscape architect as specified girths, which have been converted to diameter values through division by Pi (i.e., the specified girth divided by 3.14).
- 2.4 The extent to which this Report projects future tree value extends to 40no. years into the future, which is a matter that is further discussed later within this Report. For clarity, for planted trees within the public realm, this Report provides 3no. values:
- Year 0 value (i.e., value at the time of transplanting);
 - Year 10 value (i.e., estimated value after 10 years of successful growing); and
 - Year 40 value (i.e., estimated value after 40 years of successful growing).

Assumed growth rate

- 2.5 CAVAT calculations are based on a number of factors, though the starting point is stem size. Anticipating the growth rate of the stem sizes of trees is difficult and prone to significant fluctuation - particularly, in urban areas (as is the case in this instance). Consequently, there is generally understood to be a wide range as regards the rate a tree stem may grow. In some cases, trees may grow at a rate in excess of 1cm increase in diameter each year, though in other cases it may be as little as 0.25cm increase in diameter each year.

2.6 To further complicate matters, this rate is affected by influencing factors that may temporarily or permanently limit it. Some notable factors in this instance include:

- tree species (trees inherently grow at different rates);
- transplanting stress (trees usually are subject to 'shock' after transplanting, often for up to 3no. years - larger trees usually are subject to a greater degree of 'shock');
- soil space and aftercare (trees require theoretically unlimited soil to grow within and need to be cared for once planted via irrigation, for ideally up to 5no. years); and
- mortality (some trees die after transplanting, which is normal but is significantly reduced by appropriate aftercare - in particular, effective irrigation).

2.7 In the context of this Report, noting that the Site comprises a private garden area assumed to have good quality soil and that the trees being planted are relatively modest in terms of their initial sizes (to reduce the probability of stress and death associated with transplanting), an estimation of a stem diameter increase of 1cm per tree per year is assumed for the majority of the 20no. trees (except the *Rhus* and *Osmanthus* specimens). This is considered to present a realistic reflection of the general growth rate of the trees over a 40-year period owing to assumed good quality soil at the Site (as is indicated by the general good health of existing mature trees), though it does operate on the basis of the following assumptions:

- that all trees are actively and effectively irrigated for up to 5 years (to reduce the risk of stress and mortality); and
- that trees that die (should any die) are replaced like-for-like with a tree of the same species and initial planting size.

Calculated CAVAT value - Year 40

2.8 The value attributed to the proposed trees that are to be planted after 40no. years is £1,156,406. This value is provided in tabular format at Appendix A.

2.9 For clarity, values are also provided for Year 0 and Year 10, at Appendix A; these values are provided, to grant some context to the initial planting values of these trees, in addition to giving an indication of the rate of increase in their values once they have begun to establish as semi-mature specimens (i.e., after 10no. years).

Value differentials after 40no. years

- 2.10 Consequently, it is after a period of approximately 40no. years that the new tree planting at the Site in the context of the Proposed Development will mitigate the loss of the 20no. trees that are specified for removal - potentially up to 45no. years. This is considered to be an acceptable length of time, owing to the relevant arboricultural and other matters that are discussed in the following paragraphs of this Report.

Related arboricultural and other matters

The nature of the Applicant

- 2.11 The Applicant is not a property developer or a for-profit organisation; instead, the Applicant is statutorily responsible for maintaining the Site and other private gardens within the vicinity of *The Regent's Park*. Specifically, they have been responsible for maintaining the Site since the early 1800s, in order to maintain its long-term verdant character in the context of its setting adjacent to *The Regent's Park*, and to ensure that it remains fit for purpose in the context of health and safety matters.

The nature of the Site

- 2.12 The Site forms part of the wider John Nash designed Regent's Park estate. Specifically, it is a private garden that is only accessible by residents of the adjacent residential properties; although visible from the public realm, it is not a public garden. Its visual qualities can therefore be enjoyed in part from the public realm, though the trees within it are not directly accessible. As noted in the *Regent's Park Conservation Area Appraisal and Management Strategy* under the *Landscape and topography* section, "*the levels around the terraces to the park are raised to reinforce the architectural hierarchy and to enhance views and grandeur*".

The nature of the Proposed Development

- 2.13 The Proposed Development is not a for-profit venture; it instead comprises works to repair a retaining wall element that supports a balustrade in the context of health and safety matters - it is ultimately a structural and landscaping-led type of Application. Owing to the position of the retaining wall in relation to the adjacent vehicular highway, there are design and logistical constraints that apply - particularly, because of the Site's narrow form. In turn, this is the prevailing basis for the specified removal of the 20no. trees.

- 2.14 The Proposed Development, in response to the specified loss of trees, proposes the planting of 20no. new trees. Originally, the design intention was to re-introduce the historic landscape vision for the Site, in order to improve views to and from *The Regent's Park* to the important architectural form of the terraced dwellings along *Chester Terrace* itself. As noted by *Richard Simpson FSA* in his pamphlet *Regent's Park: a history* that is reproduced in the *Regent's Park Conservation Area Appraisal and Management Strategy*, "in 1822 Nash emphasised the importance of views of the Park from the surrounding roads and terraces".
- 2.15 Upon an initial review by the LPA in the context of the Application, this design was amended to facilitate the planting of a greater number of trees spaced in a manner that holds less adherence to the original design vision for the Site; it is upon this amended design that the CAVAT values of this Report have been prepared.
- 2.16 Owing to the deviation from this original design vision, combined with the Applicant being a not-for-profit organisation with a long time-horizon interest in managing the Site, plus the fact that the Proposed Development is to maintain the Site to enable it to be used indefinitely in the future as a private garden, that the new tree planting will take approximately 40-45 years to address the loss in CAVAT terms is considered reasonable. It would in the opinion of the Author be fair to apply a stricter (i.e., more short-term) requirement to a for-profit development (e.g., the construction of a dwellinghouse at the Site), though as the Site is being maintained effectively to sustain its current form, it is considered that achieving no net loss in CAVAT terms over a shorter time-period is excessive. Particularly, that would require the Site to be planted extensively with trees, which would wholly divorce it from the original design vision. The Proposed Development also aims to minimize transplanting stress to the new trees, which will be cared for by in-house horticultural staff, and hence is an approach likely to have the greatest chance of success with the initial planting.

The role of trees in public amenity

- 2.17 The trees (and also shrubs) at the Site positively contribute to the character of the public realm, given that they are visible from the surrounding areas (to varying degrees from various vantages). The surrounding area is considered to be very verdant, owing to the fact that to the west is *The Regent's Park* within which many trees are present.

- 2.18 As part of the Proposed Development, some of the existing trees and most of the shrubs will be retained, whilst some of them will be replaced. The retention of some of the existing trees and shrubs will ensure that the Site keeps some of its current verdant character, with the surrounding area being sufficiently verdant in itself not to be subject to any erosion of its verdant character. The removal of some of the larger trees also means that views to and from *The Regent's Park* towards the terraced dwellinghouses along *Chester Terrace* are improved, which does align with the original design vision for the Site. This approach is also consistent with that identified within the *Regent's Park Conservation Area Appraisal and Management Strategy* where it is noted in trees and open spaces that "*some flexibility to reduce trees to allow important views through the park and estate to be retained*" should be allowed.
- 2.19 The planting of the new 20no. trees will, after a period of even 10no. years, begin to re-fill some of the space where trees previously were; at this point in time, it is considered likely that the Site will already again be sufficiently verdant for members of the public to not perceive the change that occurred to implement the Proposed Development. Fundamentally, this is because the Site will still contain many trees (including those retained and those recently planted) and the wider area will remain by its own nature verdant, and in turn the general character of the public realm will not obviously be different to the existing situation.
- 2.20 After a period of 40no. years, the planted trees will begin to reach their mature life stages and at this point the Site will carry a very similar visual form to its existing situation to members of the public, whilst also aligning to a greater extent with the original design vision.
- 2.21 For clarity, the Proposed Development is also accompanied by a series of elevations that show the Site in its proposed form after a period of 10no. and 40no. years - specifically, the plans prepared by *Todd Longstaffe-Gowan Landscape Design* (i.e., 231017_TLG.515.SS.400 through 231017_TLG.515.SS.416). These prepared plans demonstrate how it is anticipated that the proposed 20no. trees will contribute to the visual character of the Site, which provides valuable weighting to the above paragraphs in this sub-headed portion of this Report - in particular, given that it is evident that the Site will in its proposed context carry a similar visual form when compared to its existing condition.

3 CONCLUSION

- 3.1 The Proposed Development will, after a period of approximately 40no. years, mitigate the loss of the 20no. trees that are specified for removal, in CAVAT terms. This is considered to be acceptable, given the use of the Site and the context of the Proposed Development.
- 3.2 Whilst in CAVAT terms the loss of trees will be mitigated over the aforementioned period, in visual amenity terms the proposed new trees will ensure that the area retains its verdant character after a much shorter period of time.

APPENDIX A - CAVAT tables

- CAVAT - Existing tree values
- CAVAT - Proposed tree values (Year 0)
- CAVAT - Proposed tree values (Year 10)
- CAVAT - Proposed tree values (Year 40)



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