

14 Endsleigh Street

Arboricultural Impact Assessment Addendum Report

Overbury

Project number: 60641578

November 2020

Project number: XXXXX

Quality information

Andy Wakefield Associate Arboricultural Consultant		Thomas Fairhurst Senior Arboricultural Consultant		Verified by		Approved by		
				Georgina Tear Senior Arboric Consultant		Georgina Tearne Senior Arboricultural Consultant		
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Prepared for:

Overbury

Prepared by:

Andy Wakefield Associate Arboricultural Consultant T: +44 (0) 1256 310 496

M: 07741 940872

E: andy.wakefield@aecom.com

AECOM Limited Midpoint, Alencon Link Basingstoke Hampshire RG21 7PP United Kingdom

T: +44(0)1256 310200 aecom.com

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1. Introduction

This document has been prepared as an addendum to the AECOM Arboricultural Impact Assessment (dated August 2020) submitted as part of the planning application for 14 Endsleigh Street. The purpose of this document is to provide additional information on the proposed Tree Replacement Strategy and satisfy the London Borough of Camden of its suitability in support of completing the S106.

2. Site Selection Methodology

The initial tree survey was undertaken in accordance with the requirements of BS5837 and as per the methodology stated within section 1.3 of the Arboricultural Impact Assessment. Whilst attending site to undertake the survey, AECOM were also afforded the opportunity to view the proposed locations for tree replacement within the close vicinity to the site. This combined with aerial imagery and up to date site photographs has been used to determine the appropriateness of each location. These locations included:

- John Adams Hall (UCL Student Residency);
- Campbell House West (UCL Student Residency);
- 36 38 Gordon Square;
- UCL Main Quad;
- Frances Gardner House (UCL Student Residency).

36 – 38 Gordon Square was deemed not appropriate as on review of the completed Landscape scheme, it was deemed there was not sufficient space for new trees to achieve their potential. The possible location would also cause future concern due to proximity to surrounding buildings and neighbouring walls.

On review of the UCL Main Quad site, there was not sufficient space for the size of tree required due to existing tree coverage, limitations on planting which would obscure important sight lines/architectural features and areas regularly used for formal outdoor events with large marquees. This area was therefore discounted.

Frances Gardner House was deemed not acceptable due to its location not being within a close enough proximity to site to fulfil the London Borough of Camden requirements.

Due to the current climate, AECOM have also relied on land ownership / available land assessment from UCL who will also have the best understanding of their own established built-up estate and existing constraints / opportunities. This has included reviewing the UCL Biodiversity Improvement Recommendation that was produced by the London Wildlife Trust on behalf of the University. Following review and discussion with UCL, a location outside of the IOE on Woburn Square was identified as a possible potential site for tree location. On review, it is deemed there is sufficient space for a single 20-25cm girth tree and two 10-12cm girth lower growing trees.

AECOM have since been provided with and reviewed the UCL Tenure Plan and this is provided in *Appendix A*. A more in-depth review of this information has confirmed no obvious alternative straight forward planting sites when focusing on areas of unsurfaced ground.

Initial direction from London Borough of Camden was to try to provide replacement locations within a close proximity to the development site and this wording is reflected in the S106. Based on the above information, it is deemed that the following sites are appropriate and represent the most viable sites for new trees.

Location A - Rear Garden of Campbell House West (UCL Student Residency);

Location B - Rear Garden of John Adams Hall (UCL Student Residency);

Location C - IOE Woburn Square.

Confirmation of these locations, including proposed species, are shown on the Tree Replacement Location Plan and associated photos in *Appendix B*. AECOM have had confirmation from UCL that the proposed locations are all on UCL owned land.

The proposed new tree locations (which following a review of available land are considered to be the optimal sites feasible) are in positions set back from boundaries and properties so that they can develop without a significant negative impact on adjacent structures/land use and with only minimal future management

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requirements over time. In addition, the locations proposed at John Adams Hall and Campbell House West will have additional space compared to those trees that are to be felled (two trees instead of seven and planting locations set back from walls and structures).

Positions have been reviewed using site knowledge (from the tree survey), aerial imagery and up to date site photographs along with consultation with UCLs Estate team.

3. Species Selection and Value

The replacement planting species have been selected based on the following parameters:

- 1. Resilience to urban conditions, a changing climate and the potential impact of pests and disease.
- 2. Appropriateness for location, balancing provision of trees of a significant size in maturity vs available space.
- 3. Consideration of the existing surrounding tree stock, with an aim to increase species diversity in the locality.

In comparison to the proposed species submitted in the Arboricultural Impact Assessment, there is an amendment to the species selection. On reflection oak/Quercus species has not been taken forward due to potential Oak Processionary Moth (OPM) concerns in areas of regular use (in this case in the rear garden of a Student Residence). OPM can cause itching skin rashes and eye irritations, as well as sore throats and breathing difficulties in people and animals we have therefore removed this species from the proposal.

Oak will be replaced with maidenhair tree (*Gingko biloba 'Tremonia'*) this is a tree that will grow to a significant size but has a conical form suited to the garden space. The Tree and Design Action Group (TDAG) species guidance describes Gingko as a 'large' species. Barchams Ltd (a well-respected tree nursery) indicate that the mature height of *Gingko biloba 'Tremonia'* is 15-20m, so it is a substantial tree.

As stated AECOMs CAVAT estimate indicates that the stem diameter/trunk size of both oak and Gingko will be broadly equivalent for at least 40yrs. Non garden spaces have not been identified as viable apart from those at IoE.

On undertaking a further review and discussion with UCL, an additional two smaller lower growing trees (suggested 10-12cm girth standards) are proposed in the open space around the IoE which will add additional interest (such as autumn colour, flowering or fruits) and could utilise species such as crab apple, Amelanchier or Acer griseum. This will increase the total number of replacement trees to six. The estimated CAVAT value of the proposed new tree planting to mitigate the tree removals is detailed in the table below. Future CAVAT values are based on the same parameters as highlighted in the Arboricultural Impact Assessment.

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Table 1: Estimated CAVAT Value for New Tree Planting

Tree Species	DBH at planting (cm)	CAVAT Value (£)	DBH after 10 yrs (cm)	CAVAT Value (£)	DBH after 20 yrs (cm)	CAVAT Value (£)	DBH after 40 yrs (cm)	CAVAT Value (£)
Liquidamber styraciflua 20- 25cm girth	ciflua 20-		13	4,216	19	8,104	31	19,177
Quercus palustris 20- 25cm girth	7	1,222	13	4,216	19	8,104	31	19,177
Betula nigra 20-25cm girth	7	1,222	13	4,216	19	8,104	31	19,177
Gleditsia triacanthos 20- 25cm girth	7	1,222	13	4,216	19	8,104	31	19,177
Malus sp or equivalent 10- 12cm girth	3.5	290	9.5	2,139	15.5	5,124	27.5	12,073
Malus sp or equivalent 10- 12cm girth	3.5	290	9.5	2,139	15.5	5,124	27.5	12,073
Total Value of New Tree Planting (£)		£5,468		£21,142		£42,664		£100,854
Total Value of Trees to be Removed (£)	-	£22,890		£24,062		£17,796		£22,803

As highlighted in the Arboricultural Impact Assessment, the overall value of the trees to be removed is £22,890. Using the CAVAT methodology, as identified in *Table 1* above, replacement planting will provide equivalent asset value benefits in ten to 20 years (the actual balance point against the value of removed trees is year 11). If using an alternative, less conservative methodology (based on a 0.94mm increase in diameter annually), this would be reduced to seven years.

The estimate of potential future value of the removed trees, if they were to be retained, illustrates that the value of the new planting would be nearly double that of existing trees by year 20 and nearly four times the value by year 40. This is an improvement of £24,146 for the total yr 40 value on that which was provided in the report to support the planning submission (taking into account the two additional trees).

The 'value' being replaced relates to 5nr inappropriate trees and 2nr small trees/shrubs that would arguably need removing or very significantly pruning regardless of the development and provided little benefit to the ward residents being hidden in the rear garden.

The new scheme mitigates this loss with more appropriate trees but also adds trees to more publicly accessible space where such space allows. The new planting scheme also provides an opportunity to increase the diversity of age and tree species to increase resilience and the range of ecosystem services and amenity benefits provided.

The proposed trees are also all robust species which are tolerant of urban conditions including consideration of the changing climate and will help to boost the diversity and resilience of the local tree stock.

Aftercare will be the responsibility of UCL who will ensure trees are watered and maintained into establishment.

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New trees in the rear of Campbell House West and John Adams Hall will involve a significant logistical challenge and will require the use of large cranes to lift them over properties and into the garden spaces. Extensive aftercare will also be required until the trees are established which demonstrates UCLs commitment to providing robust mitigation for tree loss associated with the development.

4. Conclusion

In conclusion the removal of seven trees (consisting of five trees and two shrub species, all of which were in close proximity to damaged masonry walls and structures and arguably not suitable for their location) will be mitigated by six new trees which will match the asset value of removed trees within seven to eleven years (dependent on the growth modelling methodology applied) but crucially will provide sustainable long term benefits into the future.

New planting locations are limited across the UCL estate. Potential planting areas have been reviewed on site, via aerial imagery and assessment of site photography and have also been informed by the UCL Estate teams site specific knowledge.

The final location for proposed new trees will ensure they have reasonable space to develop into maturity with minimal intervention. Large stock sizes requiring substantial logistical effort for planting will be used for four of the six tree locations. The tree species selected will be appropriate for the locations available and will help to increase the diversity and resilience of tree cover in the ward. Planting locations include areas of greater public visibility so the new planting scheme will increase amenity provision compared to the inaccessible trees removed from land at 14 Endsleigh Street.

References

British Standards Institution (BSI), BS5837:2012. Trees in relation to design, demolition and construction – Recommendations. BSI

London Borough of Camden (2019) Camden Planning Guidance - March 2019 - Trees

The London Plan (2016). The Spatial Development Strategy for London (Consolidated With Alterations Since 2011). The Greater London Authority (GLA).

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Appendix A UCL Tenure Plan

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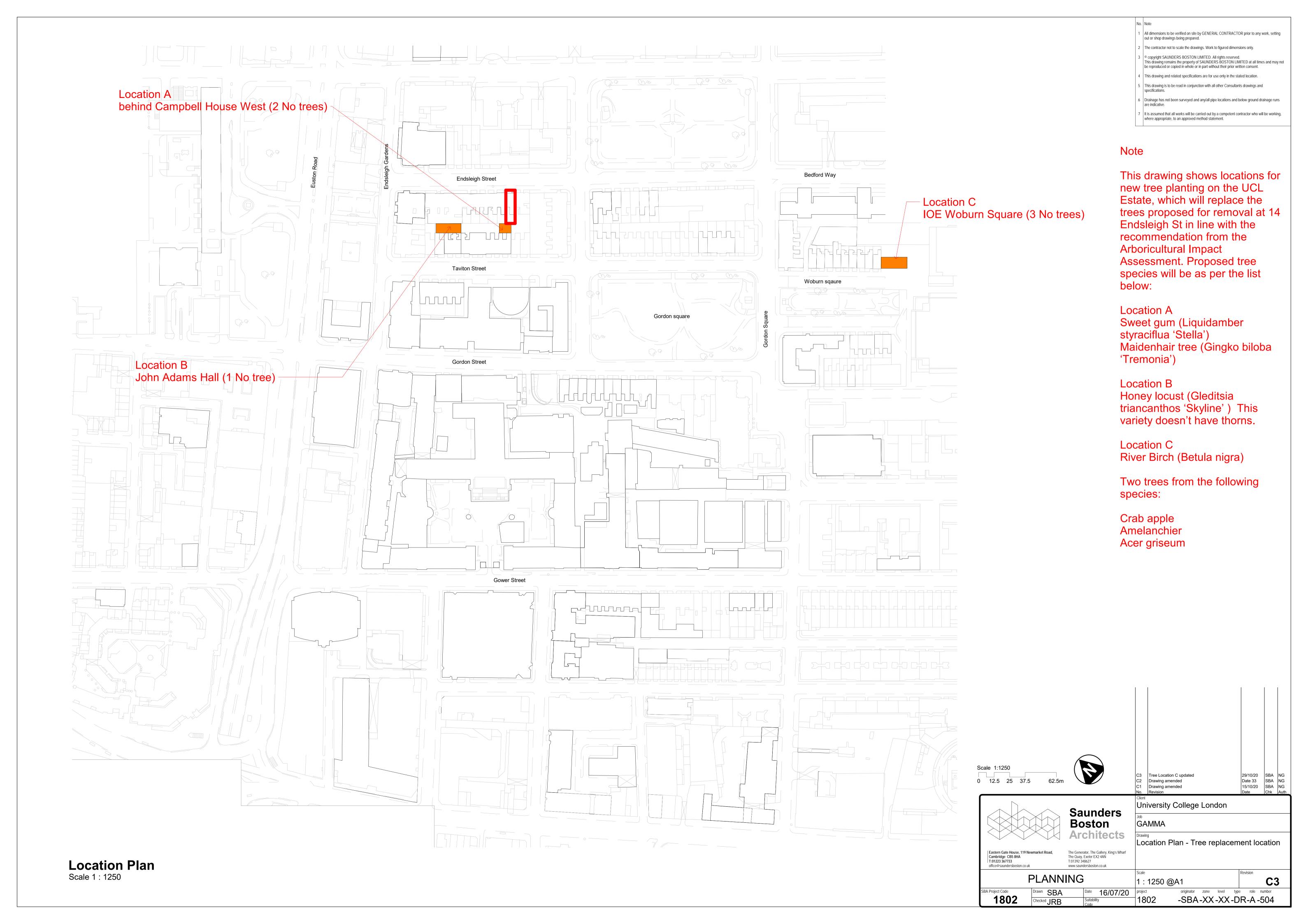


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Appendix B Tree Planting Location Plan

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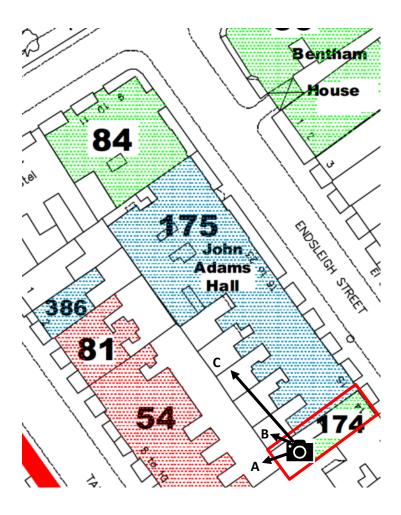


John Adams Hall Tree Location (B)



Campbell House West Tree Location (A)







John Adams Hall Tree Location (C)

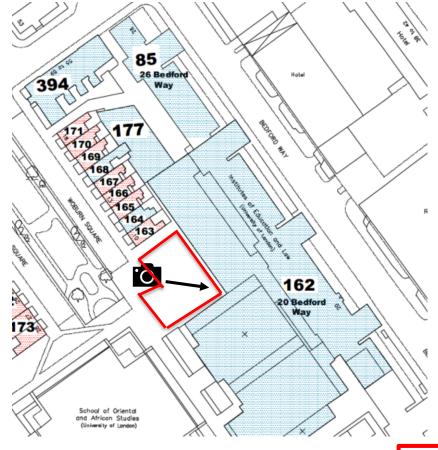
Direction of Picture

Location picture taken from

A / B / C Proposed Tree Location







Proposed final tree locations at IOE subject to agreement with Camden Council of 2nr additional trees species. It has been confirmed that this is an appropriate location for the proposed additional species and they will be afforded the proper space for growth.

The red line boundary on the plan on the right confirms the boundary within which the trees will be planted.

Proposed IOE Location

Direction of Picture

Location picture taken from

Appendix C Site Photography

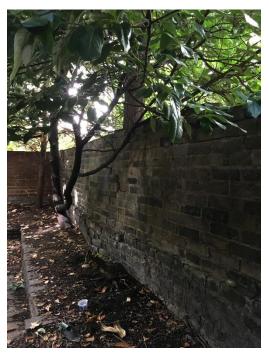


Figure 1: T1 and bulging boundary wall.



Figure 3: T4 Lime leaning on rear boundary wall.

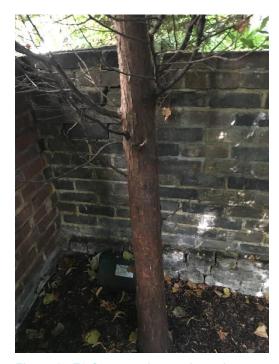


Figure 2: T3 Cypress close to boundary wall with cracking.



Figure 4: T5 Lime close to boundary wall with stepped cracking.

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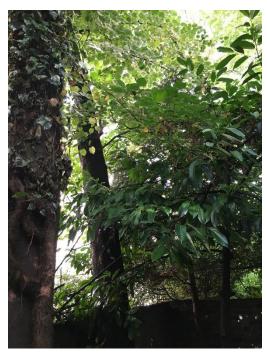


Figure 5: T4 illustrating lean to north.



Figure 7: T7 Tree of heaven beyond the western boundary wall.

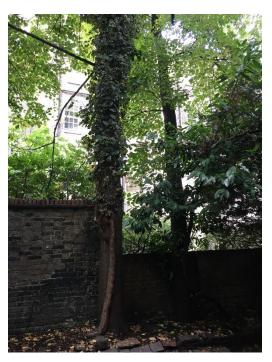


Figure 6: T4 and T5 showing wider context to the rear of the garden.

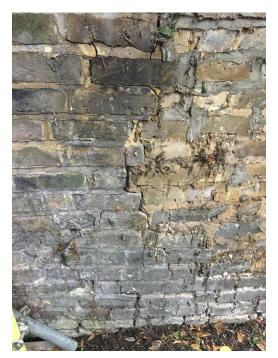


Figure 8: Illustrating cracked and bulging wall adjacent to T7.

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Andy Wakefield
Associate Arboricultural Consultant
T: +44 (0) 1256 310 496
M: 07741 940872
E: andy.wakefield@aecom.com

AECOM Infrastructure & Environment UK Limited Midpoint, Alencon Link Basingstoke Hampshire RG21 7PP United Kingdom