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Arboricultural Implications Report

Proposed re-development at

157-159 Hornsey Park Road

Wood Green



January 2024

Ref. SJA air 23547-01c

SUMMARY

S1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of low magnitude, as defined according to the categories set out in **Table 1** of this report.

S2. Our assessment of the impacts of the proposals on the existing trees concludes that no trees of high landscape or biodiversity value are to be removed. None of the main arboricultural features of the site are to be removed. The proposed removal of individuals and groups of trees will represent no alteration to the main arboricultural features of the site and will not have an adverse impact on the arboricultural character and appearance of the local landscape.

S3. The proposed pruning appears moderately significant but allows for the trees' retention without significantly impairing their ecosystem services or diminishing their amenity as viewed from outside the site or their screening value.

S4. The incursions into the Root Protection Areas of trees to be retained appear notable for three trees. However, these are likely to be much less than assessed and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

S5. None of the proposed apartments, private gardens or amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

S6. As the proposed development will not result in the removal of trees which are of value, it complies with the London plan, policies G1 & G7 as detailed at section 2.3 of this report.

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1. INTRODUCTION AND BACKGROUND INFORMATION

1.1. Instructions

1.1.1. SJAtrees has been instructed by Trinity International Properties Limited to visit 157 Hornsey Park Road, Wood Green and to survey the trees growing on or immediately adjacent to this site.

1.1.2. We are further asked to identify which trees are worthy of retention within a proposed re-development of the site; to assess the implications of the development proposals on these specimens, and to advise how they should be protected from unacceptable damage during demolition and construction.

1.2. Scope of report

1.2.1. This report and its appendices reflect the scope of our instructions, as set out above. It is intended to accompany a planning application to be submitted to the London Borough of Haringey Council (“the LPA”) and complies with local validation requirements.

1.2.2. It complies also with the recommendations of British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations* (‘BS 5837’). However, the British Standard is not a Code of Practice that consists of written rules outlining how actions or decision must be taken and it “should not be quoted as if it were a specification¹”; it is a set of recommendations intended to “assist decision-making with regard to existing and proposed trees in the context of design, demolition and construction²”. It doesn’t form part of planning policy; but it is a material consideration to which weight is likely to be given.

1 British Standard BS 5837:2012. Trees in relation to design, demolition and construction – Recommendations; Foreword. The British Standards Institution.

2 Ibid., p.1, Introduction.

1.2.3. The proposed development comprises the demolition of the existing site buildings and construction of two blocks that are part-4 and part-5, and part-4 and part-6 storeys in height, with associated hard and soft landscaping.

1.2.4. This report summarises and sets out the main conclusions of the baseline data collected during the tree survey and identifies those trees or groups of trees whose removal could result in a significant adverse impact on the character or appearance of the local area (Section 3). It then details and assesses the impacts of the proposed development on individual trees and groups of trees, including those to be removed (Section 4), those to be pruned (Section 5), those which might incur root damage that might threaten their viability (Section 6) and those that might become under pressure for removal after occupation because of shading (Section 7). A summary and conclusions, with regard to local planning policy, are presented in Section 8.

1.3. Site inspection

1.3.1. A site visit and tree inspection were undertaken by Nigel Kirby of SJAtrees on the 14th of November 2023. Weather conditions at the time were overcast with occasional to persistent heavy rain showers. Deciduous trees were in partial leaf.

1.4. Site description

1.4.1. The application site is 0.18ha in size and is located to the rear of properties on the northwest side of Hornsey Park Road, as shown at **Figure 1** below. The southeastern boundary adjoins the rear amenity gardens of dwellings along Hornsey Park Road. The western boundary abuts an open hard surfaced car park off Brook Road for the Iceland supermarket located to the north of the site, with the southern and northern boundaries abutting small areas of soft landscaping, rear amenity gardens and derelict 'no-man's land' sandwiched between the Iceland car park to the west, residential gardens to the east and adjacent developments to the south/southwest.



Figure 1: Site location shown on AutoCAD geolocation satellite image; note blue line represents extent of land ownership

1.4.2. The site is on ground that rises by approximately 1m from its eastern end adjacent to Hornsey Park Road to its western end adjacent to the Iceland carpark, and currently comprises a large brick warehouse unit, containers and small commercial buildings with the entire site covered in hard surfacing with a culvert running along the western boundary.

1.4.3. Historical maps and aerial photographs indicate that the site was developed commercial and residential land at least from the early twentieth century, including garages, terraced housing and small commercial units and with a lack of any significant arboricultural features.

1.5. Soil type

1.5.1. The British Geological Survey Solid and Drift Geology map of the area indicates the site overlies a bedrock of London clay.

1.5.2. The class of soil in this area is recorded on the Department for Environment, Food & Rural Affairs ('Defra') Magic website as a slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

1.6. Statutory controls

1.6.1. At the time of writing none of these trees are covered by a tree preservation order (TPO).

1.6.2. The site is not within a conservation area, and therefore there are no constraints relating to existing trees in this regard.

1.7. Non-statutory designations

1.7.1. There are no woodlands within or abutting the site that are classified as 'Ancient'. Ancient woodland is defined as "any area that's been wooded continuously since at least 1600 AD" and is considered an important and irreplaceable habitat.

1.7.2. There are no trees within or abutting the site that can be classified as 'Ancient' or 'Veteran'. Ancient and veteran trees are also considered to be irreplaceable habitats, and contribute to a site's biodiversity, cultural and heritage value, and the National Planning Policy Framework (see below) states that development resulting in the loss or deterioration of ancient or veteran trees should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists.

2. METHODOLOGY

2.1. National policy context

2.1.1. Under Section 197 of the Town and Country Planning Act 1990, local authorities have a statutory duty to consider the protection and planting of trees when considering planning applications. The effects of proposed development on trees are therefore a material consideration, and this is normally reflected in local planning policies.

2.1.2. The National Planning Policy Framework ('NPPF')³ sets out the Government's planning policies for England and how these should be applied in both plan and decision-making. Paragraph 2 makes it clear that the NPPF is itself a material consideration in the determination of planning application. Paragraph 11 states that **"Plans and decisions should apply a presumption in favour of sustainable development."**

2.1.3. In paragraph 130, within Section 12 "Achieving well-designed places" the NPPF states: **"Planning policies and decisions should ensure that developments:**

- a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;**
- b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;**
- c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);**
- d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;**

³ The National Planning Policy Framework (NPPF) (December 2023) Ministry of Housing, Communities & Local Government

e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.”

2.1.4. Paragraph 131 in this section states: **“Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.”**

2.1.5. The section titled Planning for climate change states at paragraph 153: **“Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.”**

2.1.6. In paragraph 174, within Section 15 “Conserving and enhancing the natural environment” the NPPF states: **“Planning policies and decisions should contribute to and enhance the natural and local environment by:**

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and

other benefits of the best and most versatile agricultural land, and of trees and woodland;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

2.1.7. In paragraph 180, under the ‘Habitats and biodiversity’ section, the NPPF states: “When determining planning applications, local planning authorities should apply the following principles:

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists....”

2.2. Regional policy context

2.2.1. Policy G1 ‘Green infrastructure’ of the London Plan⁴ states:

“A London’s network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.

B Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way as part of a network consistent with Part A.

C Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:

1) identify key green infrastructure assets, their function and their potential function

⁴ The London Plan (March 2021); Greater London Authority

2) identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.

D Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network."

2.2.2. Policy G7 'Trees and woodlands' of the London Plan states:

"A London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.

B In their Development Plans, boroughs should:

1) protect 'veteran' trees and ancient woodland where these are not already part of a protected site¹³⁹

2) identify opportunities for tree planting in strategic locations.

C Development proposals should ensure that, wherever possible, existing trees of value are retained.¹⁴⁰ If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.

¹⁴⁰ **Category A, B and lesser category trees where these are considered by the local planning authority to be of importance to amenity and biodiversity, as defined by BS 5837:2012".**

2.3. Local policy context

2.3.1. Local planning policies for Wood Green are currently provided for by the London plan, as set out in 2.2 above. Whilst there is an emerging Wood Green Area Action Plan, one does not currently exist, and the New Local Plan is currently under consultation as such the London Plan which requires **"...existing trees of value are retained."**, is relied upon in this instance.

2.4. Neighbourhood policy context

2.4.1. At the time of writing there is no Neighbourhood Plan covering the area within which the site is found.

2.5. Tree survey and baseline information

2.5.1. We surveyed individual trees with trunk diameters of 75mm and above⁵, trees with trunk diameters of 150mm and above growing in groups or woodlands, and shrub masses, hedges and hedgerows⁶ growing within or immediately adjacent to the site; and recorded their locations, species, dimensions, ages, condition, and visual importance in accordance with BS 5837 recommendations.

2.5.2. The baseline information collected during the site survey was recorded on site using a hand-held digital device. This information was then imported into an Excel spreadsheet and used to produce the tree survey schedule at **Appendix 2**. The numbers assigned to the trees in the tree survey schedule correspond with those shown on the appended tree protection plan.

2.5.3. We surveyed trees as groups where they have grown together to form cohesive arboricultural features, either aerodynamically (trees that provide companion shelter), visually (e.g., avenues or screens) or culturally⁷. However, where it might be necessary to differentiate between specific trees within these groups, we also surveyed these individually.

2.5.4. We inspected the trees from the ground only, aided by binoculars as appropriate, but did not climb them. We took no samples of wood, roots or fungi. We did not undertake a full hazard or risk assessment of the trees, and therefore can give no guarantee, either expressed or implied, of their safety or stability.

2.5.5. We have categorised the trees in accordance with BS 5837, and details of the criteria used for this process can be found in the notes that accompany the tree survey

⁵ BS 5837, paragraph 4.2.4 b), recommends that all trees over 75mm stem diameter should be included in a pre-planning land and tree survey.

⁶ Ibid., 4.4.2.7

⁷ Ibid., 4.4.2.3

schedule. We applied this methodology in line with the NPPF's presumption in favour of sustainable development, giving greater weighting to the contribution of a tree to the character and appearance of the local landscape, to amenity, or to biodiversity, where its removal might have a significant adverse impact on these factors.

2.6. Tree constraints

2.6.1. In line with the NPPF's presumption in favour of sustainable development, we assessed whether any trees should be retained in the context of the proposed re-development. Our assessment of which trees might have to be retained, and which can be removed, is based on:

- which trees contribute to local character and history, including to the surrounding landscape setting; which trees contribute to biodiversity; and which trees help mitigate and adapt to climate change; and whose removal would thereby be unlikely to comply with national planning policy guidance;
- which trees are important to the value of the local landscape, such that their removal would be contrary to planning policies: specifically, Policy G7 of the London Plan, as set out above;
- our assessment of the tree's' quality, value and remaining life expectancy, in accordance with BS5837:2012, as summarised in the notes that accompany the tree survey schedule.

2.6.2. As trees growing outside the boundaries of the site are in the control of others, we have assumed they will be retained, irrespective of their size, age or condition.

2.6.3. Whilst we have categorised trees in accordance with BS 5837, we have not used these categorisations as the main criterion of whether specimens might be removed or should be retained. Trees in categories 'A', 'B' and 'C' are all a material consideration in the development process; but the retention of category 'C' trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary should they impose a significant constraint on development.

2.6.4. Furthermore, BS 5837 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature **“need not necessarily be a significant constraint on the site’s potential”**⁸.

2.6.5. Moreover, BS 5837 states that **“... care should be taken to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal”**⁹.

2.6.6. The ‘Root Protection Areas’ (RPAs)¹⁰ of the trees identified for retention were calculated in accordance with Section 4.6 of BS 5837; and were assessed taking account of factors such as the likely tolerance of a tree to root disturbance or damage, the morphology and disposition of roots as influenced by existing site conditions (including the presence of existing roads or structures), as well as soil type, topography and drainage.

2.6.7. The shapes and areas of the RPAs were not modified based on these considerations, due to the historic and irregular development of the site so that they may not reflect accurately the likely root distribution of the relevant trees. In this instance the basic and ‘worse case’ circular RPA depiction has been used.

2.6.8. To assess whether the trees identified for retention would be in a sustainable relationship with the proposed development (without casting excessive shade or otherwise unreasonably interfering with incoming residents’ prospects of enjoying their properties, and thereby leading inevitably to requests for consents to fell), we plotted a segment or “shading arc” from each trunk, with a radius equal to the current height of the tree concerned, from due north-west to due east. This gave an indication of potential direct obstruction of sunlight and the shadow pattern cast through the main part of the day¹¹.

8 BS 5837, 4.5.10.

9 Ibid., 5.1.1.

10 Ibid., paragraph 3.7. “The minimum area around a retained tree “deemed to contain sufficient roots and rooting volume to maintain the tree’s viability, and where the protection of the roots and soil structure is treated as a priority.”

11 Ibid., paragraph 5.2.2 Note 1.

2.6.9. Based on these principles and recommendations, the tree survey and assessment of suitability for retention informed the production of a tree constraints plan (TCP) which indicates the most suitable trees for retention, and their associated below-ground and above-ground constraints.

2.6.10. As a design tool, the TCP also indicates how close to those trees selected for retention the proposed development could be positioned, in terms of three key criteria:

- a). avoidance of unacceptable root damage;
- b). avoidance of the necessity for unacceptable pruning works; and
- c). avoidance of future felling or pruning works to prevent unacceptable shading or apprehension on behalf of the occupants.

2.7. Arboricultural impact assessment and tree protection plan

2.7.1. Once finalised, we assessed the arboricultural impacts of the proposed layout, by overlaying it onto the TCP, and produced the tree protection plan (TPP) presented at **Appendix 3**. This is based on the proposed ground floor plan by Davy Smith Architects, drawing no. 2218-DS-01-GF-DR-A-P100 Proposed Ground Floor Plan.

2.7.2. The TPP identifies the trees and groups to be removed to accommodate the proposed development, either because they are situated within the footprints of proposed structures or surfaces, or because in our judgment they are too close to these structures or surfaces to enable them to be retained. These are shown by means of **red crosses** on the TPP.

2.7.3. The TPP also shows how trees to be retained will be protected from damage during demolition and construction, and the measures identified are set out and described at **Appendix 1** to this report. The implementation of, and adherence to, these measures can readily be secured by the imposition of appropriate planning conditions.

2.7.4. For the trees shown to be retained, all measurements for pruning specifications, percentage estimates of RPA incursions and shading issues have been calculated using AutoCAD software.

2.7.5. Details of the impacts identified within these categories, and our assessment of their respective significance, are analysed in Sections 4 to 7 below.

2.7.6. Based on these findings, we have assessed the magnitude of the overall arboricultural impact of the proposals according to the categories defined in Table 1 below.

Impact	Description
High	Total loss of or major alteration to main elements/ features/ characteristics of the baseline, post-development situation fundamentally different
Medium	Partial loss of or alteration to main elements/ features/ characteristics of the baseline, post-development situation will be partially changed
Low	Minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be discernible, but the underlying situation will remain similar to the baseline
Negligible	Very minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be barely discernible, approximating to the 'no change' situation

Table 1: Magnitude of impacts¹²

¹² Determination of magnitude based on DETR (2000) Guidance on the Methodology for Multi-Modal Studies, as modified and extended.

3. THE TREES

3.1. Survey findings

3.1.1. We surveyed 9 individual trees, and five groups of trees growing within or immediately adjacent to the site. Their details can be found in the tree survey schedule at **Appendix 2**.

3.1.2. The arboricultural quality of the site is formed by off-site trees growing within a small area of 'no-man's land' to the north or within the rear gardens of adjacent properties. The majority of trees are located adjacent to the north boundary, with the occasional and smaller individuals scattered around the other boundaries. The trees are all broadleaf and appear self-seeded.

3.1.3. The most commonly found species is sycamore which is also the most dominant species. Sizes range from 12m to 19m with the taller more dominant specimens being located off-site adjacent to the northern boundary. This is in keeping with the local area which is formed by rows of terraced housing with moderate collections of semi-mature to mature trees located along boundaries between residential and commercial buildings and within rear gardens of private dwellings.

3.2. Assessment of suitability for retention

3.2.1. As noted above in Section 2.3, local planning policies require the retention of trees that are “...**existing trees of value are retained.**” The individuals and groups of trees within or adjacent to the site, whose attributes we consider meet these criteria, are as follows:

- the individual trees and one group (nos. 7 – 9 & G4) growing adjacent to the northern boundary of the site.

3.2.2. There is another tree, hybrid black poplar (no. 5) that looks like it is within the site curtilage, but in relation to existing other on-line resources, appears to be off-site. Irrespective of actual ownership, this individual has been 'pollarded' and whilst it is only visible in glimpsed views from Brook Road to the north, this tree is set against other off-site trees further to the south (no. 4 & G3). Therefore, unlike the trees listed

above, its removal or decline, if it were to occur, would not have an adverse impact on the character of the local landscape. As shown in **Image 1** below.

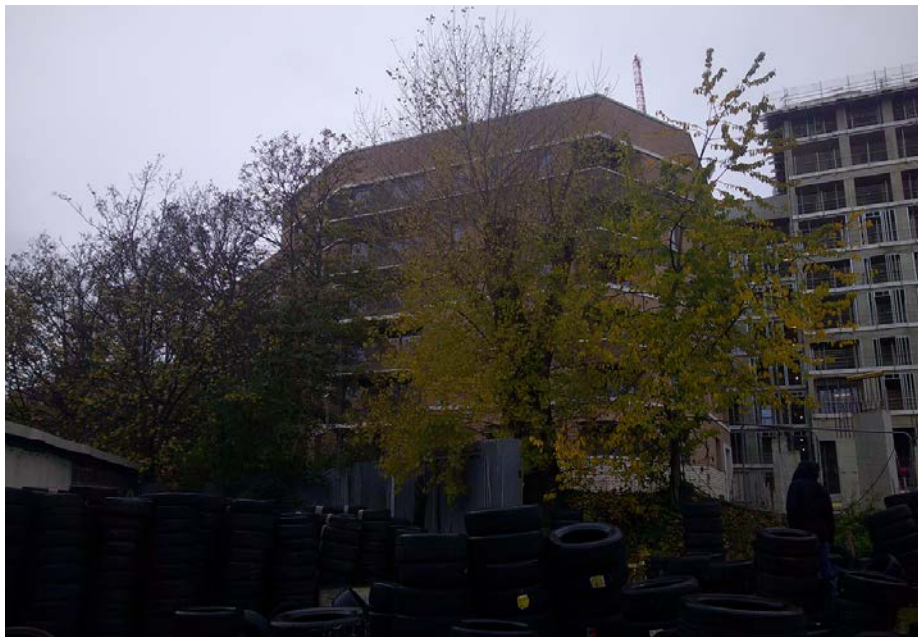


Image 1: Hybrid black poplar no. 5; view facing SW; group G4 located left side of image.

3.2.3. No individual trees or groups have been assessed as category 'U'.

3.2.4. There are no category 'A' trees and 3 category 'B' specimens (sycamores and ash nos. 7 – 9). The remaining 6 trees are assessed as category 'C' trees, being either of low quality, very limited merit, only low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or a combination of these.

3.2.5. Of the groups of trees, none have been assessed as category 'A', one (G4) as category 'B', and the remaining four as category 'C'.

4. TREES TO BE REMOVED

4.1. Details

4.1.1. To accommodate the proposed development, as shown on the proposed layout plan, two individual trees and one group of trees (nos. 2, 3 & G1) are to be removed, either because they are situated within the footprints of proposed structures or surfaces, or because they are too close to these to enable them to be retained.

4.1.2. Details of the trees to be removed, including their dimensions, age class and British Standard categorisation, are shown and listed on the TPP and at **Table 2** below.

Tree no	Species	Height	Trunk diameter	Age class	BS category
2	Sycamore	12m	315mm est.	Semi-mature	C (12)
3	Sycamore	11m	130mm est.	Semi-mature	C (1)
G1	Sycamore	4m	Max 6 stems @35mm est.	Semi-mature	C (1)

Table 2: Trees to be removed.

4.2. Assessment

4.2.1. All those trees or groups of trees that constitute the main arboricultural features of the site and which make the greatest contribution to the character and appearance of the local landscape, to amenity or to biodiversity (see paragraph 3.2.1), will be retained.

4.2.2. As there are no ancient or veteran trees on site, none will be removed.

4.2.3. None of the trees to be removed are mature specimens of species of large size: all the other trees to be cleared are young, semi-mature or of small ultimate size. The significance of this is threefold. Firstly, for obvious reasons mature trees tend to be larger in size and therefore are likely to be more visible and to make a greater contribution to the landscape. Secondly, mature trees are more likely to have formed associations with wildlife and to support other flora or fauna (for example, young trees infrequently contain splits, cracks or cavities that might provide roosting sites for bats);

and thirdly, mature trees have a significantly greater capacity than smaller trees to actively sequesterate and store carbon¹³.

4.2.4. None of the individual trees or groups to be removed are covered by a TPO (see 1.6.1 above); these are shown on the TPP and identified in **Table 2** above.

4.2.5. Two of the six category 'C' trees on site are to be removed: these are either of low quality, low value, or short-term potential. For these reasons, their removal will have no significant impact on the character or appearance of the area. No category 'A' or 'B' trees are to be removed as part of the proposals.

4.2.6. Furthermore, the proposals incorporate replacement tree planting; this is shown on the landscape general arrangement plan submitted with the application (603-TML-ZZ-00-DR-L-0200_P06_Ground Floor). This will mitigate the proposed removals, improve the age class balance of the trees on site, enhance the local landscape, and re-establish a framework for the ongoing and long-term character of the site.

4.2.7. In the light of these considerations, and taking account of the numbers, sizes and locations of the trees to be retained, including those that are off-site, the felling of the trees and groups identified for removal will represent only a no alteration to the main arboricultural features of the site.

¹³ Stephenson N. L., Das A. J., Zavala M. A. (2014) Rate of tree carbon accumulation increases continuously with tree size. *Nature*, volume 507.

5. TREES TO BE PRUNED

5.1. Details

5.1.1. Five trees to be retained are to be pruned to facilitate implementation of the proposals. These are shown at **Table 3** below.

Tree no.	Species	Proposed works
1	Sycamore	Crown reduce NW canopy by up to 3.5m, back to the boundary, leaving no closer than 1.5m from trunk
5	Hybrid black poplar	Reduce E canopy extent only back to previous pruning points on pollarded trunk removing suckering regrowth only
7	Sycamore	Crown reduce S canopy extents by up to 4.5m, back to boundary, leaving no closer than 1.25m from the trunk
8	Ash	Remove x1 sub-dominant lateral limb emanating from N codominant stem and growing to SW, back to boundary; Reduce lateral extent of remaining upper SW lateral canopy extents by up to 4m leaving no closer than 2m from centre alignment of trunk
9	Sycamore	Reduce S canopy lateral extent back to boundary by approx. 2.5m leaving it no closer than 4m from trunk

Table 3: Trees to be pruned to facilitate development

5.2. Assessment

5.2.1. To achieve development on this allocated site (site allocation SA21 of the site allocations DPD 2017) whilst maximising its potential and complying with other planning requirements including vehicular movement, refuse tracking, there is no alternative locations for Blocks A and B. Therefore, the proposals result in the requirement for the pruning of these trees. The impact of development on existing trees is not a feature within the SA21 site allocation DPD, it only mentions that '**New street trees should be provided in this area**', which are shown on the proposed landscaping plan, thereby complying with the site allocation.

5.2.2. The extent of pruning proposed to the trees listed in **Table 3** is moderately significant and will disfigure trees nos. 1, 7 and 8 when viewed from within the site. However, as it will not harm the views of these trees from outside the site, it is in line with what could already been done in line with Common Law rights and will not kill or leave the trees unsafe, we believe the non-arboricultural benefits of the proposals outweigh the pruning of these trees.

5.2.3. Following the pruning specified, the north elevation of the apartment block will lie no closer than 2.6m – 2.9m from the boundary or the extents of the retained canopies, thereby providing adequate working space for construction, and a reasonable margin of clearance for the ongoing future relationship between the building and trees.

5.2.4. Research has shown¹⁴ that whilst pruning akin to what is proposed on this site does reduce the ecosystem services provided by the trees, the retention of these large growing specimens will still result in greater ecosystem services than removing the trees and replacing them with smaller specimens. As the trees will largely remain unchanged as viewed from outside the site and will help screen the development once built, accordingly the proposals will not detract from the character or appearance of the local area.

5.2.5. In addition to this, the proposal provides new green features and street trees with the site and complies with the requirements of the SA21 site allocation. As such the benefits of the scheme including creating a new link between Wood Green and Clarendon Square may be considered to outweigh the impact of the proposed pruning.

¹⁴ 'The effects of utility wire tree pruning on ecosystem service provision of urban trees in Auckland' – Andrew Bensen (The Tree Consultancy Company) 2023.

6. ROOT PROTECTION AREA INCURSIONS

6.1. Details

6.1.1. Parts of the proposed buildings and hard surfacing will encroach within the RPAs of five of the trees to be retained. These are shown in **Table 4** below.

Tree no.	Species	Incursion	Extent of incursion	% of RPA
1	Sycamore	Proposed hard surfacing and foundations including a 1m construction offset from areas of excavation	8.2m ²	20%
5	Hybrid black poplar	Proposed hard surfacing, foundations, 1m construction off-set and landscaping	242m ²	35%
7	Sycamore	Proposed hard surfacing, foundations and 1m construction off-set	13.5m ²	11.9%
8	Ash	Proposed hard surfacing, foundations and 1m construction off-set	40.9m ²	22.3%
9	Sycamore	Proposed hard surfacing, foundations and 1m construction off-set	8.1m ²	5.9%

Table 4: Proposed incursions within RPAs

6.2. Assessment

6.2.1. It should be noted that, in most cases the extent and shape of root protection areas would be altered to reflect rooting barriers, as detailed in paragraph 2.6.6 of this report. If this were implemented, on face value, this would suggest that the existing building foundation would act as a rooting barrier and the RPA incursions to trees nos. 1, 7, 8, 9 would not be present.

6.2.2. However, whilst it was visible onsite that the north boundary is approximately 1m from the trunks of trees nos. 7 & 9, and that the topographical survey suggests that the culvert on the western edge of the site runs directly beneath the trunks of the poplar and sycamore nos. 5 & 7, the extent of RPA incursion or impact by the proposed construction of the existing buildings and culvert cannot be fully ascertained. As such, we have based the arboricultural impacts on maintaining a circular RPA with the notion that the actual incursion will very likely be less than what is stated in **Table 4** above.

6.2.3. The incursions by parts of the proposed buildings and areas of hard surfacing into the RPAs of the five trees listed at **Table 4** extend no closer than 1.75m to the trunks, and accounts for a generous 1m construction off-set from the footprint of the

proposed ground floor footprint. However, it is likely the extents of these impacts can be minimised and reduced by works within these areas being done under the direct control and supervision of an arboricultural consultant thereby minimising the extent of over dig required and treating any roots discovered.

6.2.4. Whilst three of the RPA incursions equate to 20% or more of individual RPAs, as detailed in **Table 4** above, the extent of the RPAs and thus the impacts proposed by the layout are likely to be less than detailed. Potential adverse impacts can be satisfactorily mitigated as set out below and shown at **Table 5** below.

Tree no.	Species	Incursion	Proposed mitigation
1	Sycamore	Proposed foundations and hard surfacing	Excavation within or directly adjacent to RPAs for demolition, foundations and hard surfacing to be undertaken under direct on-site supervision of arboricultural consultant
5	Hybrid black poplar	Proposed foundations	Excavation within or directly adjacent to RPAs for foundations to be undertaken under direct on-site supervision of arboricultural consultant
7	Sycamore	Proposed foundations and hard surfacing	Excavation within or directly adjacent to RPAs for demolition, foundations, and hard surfacing to be undertaken under direct on-site supervision of arboricultural consultant
8	Ash		
9	Sycamore		Proposed new and replacement hard surfacing to be constructed above existing soil surface, to include a cellular confinement system to minimise soil compaction and be founded no deeper than existing sub-base of hard surfaces it is replacing To be constructed above existing soil surface and to include a cellular confinement system to minimise soil compaction

Table 5: Proposed mitigation of RPA incursions

6.2.5. The incursions into the RPAs of trees nos. 1, 5, & 7 - 9 are by proposed foundations, footpaths and areas of hard surfacing and subject to proposed levels, some degree of excavation will be required. To minimise impacts on these specimens, excavation within these RPAs will be undertaken manually, under the direct control and supervision of an appointed arboricultural consultant, so that any over dig into the RPAs is avoided, and any roots encountered can be treated appropriately.

6.2.6. As detailed in 6.2.4, in the case of two trees, sycamore and ash nos. 1 & 8, the unmodified RPA incursions equate to 20% and 22.3% respectively. Whilst these incursions appear large, subject to supervised demolition of the existing building foundations and surfaces and any additional required excavation works for construction, the impact on these trees in regard to RPA incursions, are likely to be

much less than what has been calculated in **Table 4** above. As such the trees are much more likely to tolerate these incursions as detailed further below, and the timing, sequencing and level of supervision required for demolition could be secured by a suitably worded condition.

6.2.7. The tree species impacted by incursions into their RPAs have been identified as good to moderate at tolerating root pruning and disturbance¹⁵, as shown in **Table 7**. As all these specimens are of average physiological condition, there is no reason to suggest that they will not be able to tolerate the cutting of roots within these sections of their RPAs.

Species	Tolerance
Sycamore	Moderate
Hybrid black poplar	Good
Ash	Moderate

Table 7: Species tolerance to root pruning and disturbance

6.2.8. In the case Hybrid black poplar no. 5, the incursion into the RPA is calculated at 35%. Whilst this appears significant, there are a few considerations in relation to this tree.

6.2.9. Firstly, this tree has been recently pollarded (no earlier than 2017) and has evidently put on a less substantial growth than would be expected for a tree of this species and as such has resulted in a poor-quality specimen of ultimately short-term potential and thus of limited value.

6.2.10. Secondly, the tree is an inessential component of the wider landscape being of only low-level screening value and set against a row of off-site trees (nos. 4 & G3) to the south. The tree is only readily visible in short views from Brook Road to the north and its decline or removal, if it were to occur would not result in significant detrimental impact on the character of the site and local area. As see in **Images 6 & 7** below.

15 MATHENY, N. P. and CLARK, J. R. (1998). Trees and Development. International Society of Arboriculture.



Images 6 - 7: Left - Hybrid black poplar no. 5; Right – no.5 set in front of row of trees group G4 further to south – indicative outline in green.

6.2.11. Thirdly, the tree appears outside of the existing ownership boundaries as detailed at 3.2.2. However, inspection of the adjacent development planning application (ref: HGY/2017/3117), the arboricultural report for that application identifies the poplar on its parameter plan as a tree which is not to be removed. It doesn't specifically state this, but it is not highlighted within the key to that document (Parameter Plan 2: Buildings to be demolished and Groundworks infill) which shows trees to be removed by a red circle, which this tree is not.

6.2.12. However, the arboricultural report submitted in support of the adjacent application suggests that the tree is 'off-site' and not within their control, nor is the tree shown retained in the landscaping plans for that application. Furthermore, the tree has not been shown as having tree protection measures as part of the adjacent development which has significantly impacted the RPA of this tree on the north-west side.

6.2.13. Whilst the RPA impact to tree no. 5, proposed by this application appears significant, this tree is of limited arboricultural value and does not contribute significantly to the character of the site or local area. In the event the tree declines or requires subsequent removal this should be seen as a civil matter rather than a planning consideration and as such the extent of RPA incursion into this tree should not be seen as a significant constraint upon development. To minimise the impact upon this tree the proposed excavation of the foundations for Block A, will be

undertaken manually, under the direct control and supervision of an arboricultural consultant to treat any roots discovered.

6.2.14. The areas lost to encroachment within the RPAs of the trees nos. 1 & 7 - 9 can be compensated for in the areas to the north and east of the trees, where there are areas of soft landscaping suitable for root growth, contiguous to the RPAs. There is likely to already be significant rooting within these areas, and as they are to remain as soft landscape, root growth can continue in the future. Therefore, there will be no net loss of suitable rooting area, and no foreseeable risk of future cumulative impacts, so there is no reason to suggest that they will not be able to tolerate the cutting of roots within these sections of their RPAs or that they will not remain viable.

6.2.15. There are incursions into the RPAs of trees nos. 1, 7, 8 & 9 by areas of replacement hard surfacing. These incursions and their extents are included within the total RPA incursions as seen in **Table 4**, and as detailed above, including the likely reduced rooting propensity within the stie boundaries these do not exceed the 20% maximum incursion into currently unsurfaced ground recommended in BS 5837¹⁶.

6.2.16. Taking account of existing ground levels and likely proposed levels of these areas these will allow for design and construction of the replacement surfaces to be entirely above existing soil level, and accordingly no excavation will be required. Furthermore, where appropriate, replacement surfaces could incorporate an appropriate cellular confinement system, filled and finished with suitable porous materials, to minimise soil compaction. To ensure no damage occurs to the roots or rooting environments of the relevant trees, installation will be undertaken under the control and supervision of the arboricultural consultant.

6.2.17. In addition, the proposed development has been moved south, into the site, moving the northern elevation of Block B up to 2.6m south and away from the existing north boundary and returning an approximate 1.2m strip into soft landscaping into which the trees can root.

¹⁶ BS 5837, paragraph 7.4.2.3.

6.2.18. Moreover, both sycamore and ash in our experience have been shown to be more tolerant of soil compaction than other tree species, based on their effectiveness in reacting to mechanical damage quickly, in surviving anaerobic soil conditions, and in adjusting their root systems to new conditions. Coupled with the small areas of the RPAs to be re-surfaced, the semi-mature age of the trees and their average physiological condition there is no evidence to suggest that they will not be able to tolerate any soil compaction caused by the installation or use of these re-surfaced areas.

6.2.19. Implementation of measures to prevent other incursions into the RPAs of retained trees and to protect them during demolition and construction can be assured by the erection of appropriate protective fencing, trunk wrapping, installation of ground protection, and all works including demolition, excavation, or above soil surfacing being undertaken or installed under the direct on-site control and supervision of an arboricultural consultant as shown on the TPP at **Appendix 3**.

6.2.20. Accordingly, subject to implementation of the above measures, and considering the ages, current physiological condition and tolerance of disturbance of these retained trees, no significant or long-term damage to their root systems or environments will occur as a result of the proposed development.

7. RELATIONSHIP OF RETAINED TREES TO NEW DWELLINGS

7.1. Details

7.1.1. The fenestration of the main habitable rooms (living rooms, kitchens) of three proposed apartments on the southwest corner of Block A, are within the shadow patterns of trees to be retained; that is, they are sited in an arc between the north-west and the east of these trees and are closer to them than the current heights of these specimens.

7.1.2. These three dwellings are located on the ground, first and second floor of Block A and are within the shadow pattern of the off-site sycamore tree no. 4 to the south-west.

7.2. Assessment

7.2.1. All but three of the proposed apartments within Block A lie outside the shadow patterns of the nearest retained trees. Whilst the south and west facing windows of these apartments are within the shadow pattern of this trees, they do not directly face the sycamore tree and as this is located directly southwest of the apartment block. In addition to this, whilst the rooms within the shadow pattern of the tree are of living rooms, these have dual aspect fenestration, with windows facing both west and south.

7.2.2. Furthermore, the proposed living room windows have been designed to be as large as possible, which will allow added light to access the interior. The sycamore (no. 4) is also a relatively high-crowned specimens, thereby enabling penetration of daylight and sunlight beneath the lower limits of its canopy to both the ground and first floor apartments. Moreover, this is a deciduous specimen, and therefore will not cause significant shading during the winter months when out of leaf.

7.2.3. Consideration of the orientation of the living room windows to the positions of this tree on the spring and autumn equinoxes¹⁷ indicates that whilst some shading and

¹⁷ www.suncalc.org

reduction of light to the windows may be experienced during the early and late afternoon when the tree is in leaf, the windows will have full access to sunlight and daylight for the remainder parts of the morning and afternoon. At the summer solstice when the sun is at its highest in the sky, the extent of shading will be reduced significantly.

7.2.4. For these reasons, despite the relative proximity of the southwestern apartments of Block A, none of the proposed apartments are likely to be shaded to the extent that this will interfere with incoming occupiers' reasonable use or enjoyment of these units, thereby leading inevitably to pressure to permit felling or severe pruning, which the LPA could not reasonably resist.

7.2.5. The sizes and dispositions of the proposed private gardens and amenity space is such that in our assessment they will not be unduly shaded and will receive reasonable sunlight and daylight. Their use is thus unlikely to lead to demands for felling or severe pruning of trees that the LPA would find difficult to resist.

8. CONCLUSIONS

8.1. Summary

8.1.1. Our assessment of the impacts of the proposals on the existing trees concludes that no trees of high landscape or biodiversity value are to be removed. None of the main arboricultural features of the site are to be removed. The proposed removal of individuals and groups of trees will represent no alteration to the main arboricultural features of the site, and will not have an adverse impact on the arboricultural character and appearance of the local landscape.

8.1.2. The proposed pruning appears moderately significant but allows for the trees' retention without significantly impairing their ecosystem services or diminishing their amenity as viewed from outside the site or their screening value.

8.1.3. The incursions into the Root Protection Areas of trees to be retained appear notable for three trees. However, these are likely to be much less than assessed and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

8.1.4. None of the proposed apartments, private gardens or amenity space are likely to be shaded by retained trees to the extent that this will interfere with their reasonable use or enjoyment by incoming occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

8.2. Compliance with national planning policy

8.2.1. As the proposals will retain all the main arboricultural features of the site, its arboricultural attractiveness, history and landscape character and setting will be maintained, thereby complying with Paragraph 130 of the National Planning Policy Framework.

8.2.2. Whilst two trees and two small groups are to be removed, there is no duty in planning policy to retain all existing trees in all circumstances. Paragraph 131 of the

NPPF states (*italics added for emphasis*): “**Planning policies and decisions should ensure... that existing trees are retained *wherever possible***”; and thereby recognises circumstances in which it might not be possible to retain every tree. Accordingly, the proposed removal of trees does not mean that this application must thereby be refused; and does not mean it conflicts with Paragraph 131 of the NPPF.

8.2.3. The proposals do not necessitate the removal of any mature trees of large ultimate size, which make the greatest contribution to carbon sequestration and storage, surface water run-off, biodiversity and landscape and air temperature and cleanliness; for all of which, appropriate space for their retention is provided. Accordingly, insofar as this relates to existing trees, the scheme can be seen to have taken a proactive approach to mitigating climate change and thereby complies with Paragraph 153 of the National Planning Policy Framework.

8.2.4. As the proposals will not result in the loss or deterioration of any ancient woodland or any ancient or veteran trees, they comply with paragraph 180 (c) of the NPPF.

8.3. Compliance with regional planning policy

8.3.1. As all the existing trees assessed as being features in the existing built environment will be retained, in arboricultural terms the proposed development complies with Policy G1 ‘Green infrastructure’ of the London Plan.

8.3.2. As all trees of significant value and importance to amenity will be retained, and space exists within the proposed layout for replacement planting, the proposed development will protect, maintain and enhance the main arboricultural features of the site. As such, it complies with Policy G7 ‘Trees and woodlands’ of the London Plan.

8.4. Compliance with local planning policy

8.4.1. As the proposed development will not result in the removal of trees which are of value, it complies with the London plan, policies G1 & G7 as detailed at section 2.3 of this report.

8.5. Conclusion

8.5.1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of low magnitude, as defined according to the categories set out in **Table 1** of this report.

APPENDIX 1

Outline Arboricultural Method Statement

Outline arboricultural method statement

A1.1. Tree Protection Plan

A1.1.1. The TPP at **Appendix 3** shows the general and specific provisions to be taken during construction of the proposed development, to ensure that no unacceptable damage is caused to the root systems, trunks or crowns of the trees identified for retention. These measures are indicated by coloured notations in areas where construction activities are to occur either within, or in proximity to, retained trees, as described in the relevant panels on the drawing.

A1.2. Pre-start meeting

A1.2.1. Due to the industrial and developed nature of this site, it is initially impractical to undertake a pre-start meeting prior to removal of the above ground parts of the existing buildings to be demolished, outside of the extents of the retained trees (roof, walls, floors) and expose those parts to be demolished (ground floor slab, north and east warehouse boundary walls) within or directly adjacent to the RPAs of retained trees (nos. 1 & 7 – 9). As such, subject to granted planning permission, all parts of the existing site to be demolished (walls, foundations ect.) that are within the RPAs of retained trees, or within 1m of the edge of the RPAs of retained trees, shall be retained in place until a pre-start meeting has been arranged and undertaken as detailed below, the sequencing and details of which could be secured by a suitably worded condition. All parts of the existing site that are outside of the RPAs or 1m from abutting the RPAs of retained trees, may be demolished without arboricultural supervision.

A1.2.2. Prior to the commencement of any works (ground preparation, demolition or construction) within or directly adjacent (within 1m) to the RPAs of retained trees (nos. 1 & 7 – 9) the developer will convene a pre-start site meeting. This shall be attended by the developer's contract manager or site manager, the demolition contractor, the fencing/boarding contractor, the groundwork contractor(s) and the arboricultural consultant. The LPA tree officer will be invited to attend. If appropriate, the tree felling/surgery contractor should also attend. At that meeting contact numbers will be exchanged, and the methods of tree protection shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any

clarifications or modifications to the TPP required as a result of the meeting shall be circulated to all attendees.

A1.3. Site clearance

A1.3.1. Clearance and removal of trees or other vegetation, as detailed and shown on the TPP at **Appendix 3** shall be undertaken at the same time as the demolition and removal of the above ground parts of the existing site infrastructure, located outside the RPAs of retained trees has been undertaken, at which point the arboricultural pre-start meeting will be arranged.

A1.3.2. Except where within the RPAs of trees to be retained, all trees and other vegetation, shown to be removed on the TPP at **Appendix 3** may be cut down or grubbed out as appropriate; but within the RPAs of trees to be retained, trees and vegetation will be cut by hand to ground level and stumps will be either left in place or ground out with a lightweight self-powered stump grinding machine. No excavators, tractors or other vehicles will enter the RPAs.

A1.4. Ground preparation and demolition

A1.4.1. No ground preparation or excavation of any kind, including topsoil stripping or ground levelling, shall be undertaken within or directly adjacent (within 1m) of the RPAs of retained trees (nos. 1, 5 & 7 – 9) until after the pre-start meeting.

A1.4.2. Demolition of existing buildings and removal of existing areas of hard surfacing that are outside the RPAs of retained trees may be undertaken without supervision. However, those areas of existing hard surfacing or wall foundation that abut or overlie RPAs of retained trees will be demolished with care, under the control and supervision of an appointed arboricultural consultant, to ensure that the adjacent soil is not unacceptably excavated, disturbed or compacted.

A1.5. Tree protection fencing

A1.5.1. Construction exclusion zones (CEZs) will be formed by erecting protective fencing around the RPAs of all on-site trees to the specification recommended in BS 5837, Section 6.2, prior to the commencement of construction. This will consist of a scaffold framework comprising a vertical and horizontal framework, well braced to

resist impacts, with vertical tubes spaced at maximum intervals of 3.5m. Onto this, welded mesh panels should be securely fixed with wire or scaffold clamps, as shown in **Figure 2** of that document. **"TREE PROTECTION ZONE - KEEP OUT"** or similar notices will be attached with cable ties to every third panel.

A1.5.2. The RPAs of the off-site trees will also be enforced by the erection of protective fencing to the same specification, prior to the commencement of construction, thereby safeguarding them from incursions by plant or machinery, storage and mixing of materials, or other construction-related activities which could have a detrimental effect on their root systems.

A1.5.3. The recommended positions of the protective fencing are shown by **bold blue lines** on the TPP. The precise positioning of the fencing around the trees will be considered in conjunction with any other protective hoarding/fencing which may be required around the site boundary.

A1.5.4. Within the CEZs safeguarded by the protective fencing, there will be no changes in ground levels, **no soil stripping**, and no plant, equipment, or materials will be stored. Oil, bitumen, diesel, and cement will not be stored or discharged within 10m of any trees. Areas for the storage or mixing of such materials will be agreed in advance and be clearly marked. No notice boards, or power or telephone cables, will be attached to any of the trees. No fires will be lit within 10m of any part of any tree.

A1.6. Trunk wrapping

A1.6.1. Protective wrappings shall be fitted to the trunks of trees nos. 7 and 8, to prevent accidental damage being caused by impacts from materials or machinery during demolition. The trunk wrappings (shown by the bold blue circles on the TPP) will consist of not less than three thicknesses of hessian around each trunk, surmounted by an outer layer of either two rounds of chestnut paling fencing, or 50mm X 25mm sawn battens arranged vertically around the trunk at intervals of no greater than 100mm, and held in place with galvanised staples and tightened 5mm multi-strand fencing wire.

A1.6.2. The trunk wrappings shall extend from as close as possible to ground level, up to a minimum height of 2m. They shall be retained in place for the duration of

demolition operations and shall not be removed until all works are completed, and all equipment and materials have been removed from the site.

A1.6.3. The hessian sacking will be extended beneath the chestnut paling where necessary, to cover and protect protruding buttress roots. The three thicknesses of sacking will entirely cover all parts of the buttress root that are above ground and will be pinned to the adjacent soil with tent pegs (or similar) to prevent movement.

A1.7. Ground protection

A1.7.1. At no point will any area of soil or soft landscaping within the RPAs of retained trees be exposed to movement of plant, vehicles or materials which might cause compaction. If any area of soft landscaping cannot be fenced off to prevent access the exposed soft ground will be protected by the installation of ground protection.

A1.7.2. To allow space for construction and protection from soil compaction where proposed structures are in close proximity to RPAs of trees to be retained, the ground between the protective fencing and the footprints of the proposed structures will be covered by appropriate ground boarding, in accordance with the guidelines of Section 6.2.3.3 of BS 5837. The locations where these measures will be required are marked by **pink hatching** on the TPP.

A1.7.3. For purely pedestrian traffic, scaffold boards (or similar) will be used. Scaffold boards will comply with British Standard BS 2482: 2009 *Specification for timber scaffold boards* and be at least 225mm in width and 38mm thickness; they will be butted up and attached to each other with wooden battens or metal tie straps, and laid either on an above-ground scaffold framework, or secured to the ground with steel pins above a compressible material (a 75mm deep layer of woodchips may be appropriate) laid on top of a geotextile membrane of an appropriate specification.

A1.7.4. For wheeled or tracked traffic, ground boarding will be designed by a structural engineer, to take account of the type of soil and the likely loadings. Temporary aluminium roadway ('Trakway' or similar), interlocking plastic tread boards ("Ground-Guards" or similar), or reinforced concrete slabs may be appropriate. These will also be laid on top of a compressible material above a geotextile membrane.

A1.8. Manual excavation within RPAs

A1.8.1. The first 750mm depth of excavations required within the RPAs of the trees to be retained (as shown by **light orange cross-hatching** on the TPP) will be dug by hand, using a compressed air soil pick if appropriate, and under on-site arboricultural supervision, to safeguard against the possibility of unacceptable root damage being caused to these specimens. Any roots encountered of over 25mm diameter will be cut back cleanly to the face of the dig nearest to the tree, using a sharp hand saw or secateurs, and their cut ends covered with hessian to prevent desiccation.

A1.9. Proposed hard surfaces within RPAs

A1.9.1. Unacceptable damage to the roots and rooting environments of the trees to be retained during the construction of proposed hard surfaces that encroach within RPAs will be avoided by building them above existing soil level, to avoid digging and thus severing of roots; and an appropriate ground covering will be used beneath the sub-base, to prevent or minimise compaction of the soil. This will be done in accordance with Section 7.4 of BS 5837. The locations where these measures will be required are marked by **dark orange hexagonal hatching** on the TPP.

APPENDIX 2

Tree Survey Schedule



ARBORICULTURAL PLANNING CONSULTANTS

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(Operations)

Preliminary Tree Survey Schedule

157 Hornsey Park Road

November 2023

SJA tss 23547-01

Tree Survey Schedule: Explanatory Notes

157 Hornsey Park Road

This schedule is based on a tree inspection undertaken by Nigel Kirby of SJATrees (the trading name of Simon Jones Associates Ltd.), on Tuesday the 14th November 2023. Weather conditions at the time were overcast with occasional shower. Deciduous trees were in partial leaf.

The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas.

The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given.

Trees are dynamic organisms and are subject to continual growth and change; therefore the dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date.

1. Tree no.

Given in sequential order, commencing at "1".

2. Species.

'Common names' are given, taken from MITCHELL, A. (1978) A Field Guide to the Trees of Britain and Northern Europe.

3. Height.

Estimated with the aid of a hypsometer, given in metres.

4. Trunk diameter.

Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork. Given in millimetres.

5. Radial crown spread.

The linear extent of branches from the base of the trunk to the main cardinal points, rounded up to the closest half metre, unless shown otherwise. For small trees with reasonably symmetrical crowns, a single averaged figure is quoted.

6. Crown break.

Height above ground and direction of growth of first significant live branch.

7. Crown clearance.

Distance from adjacent ground level to lowest part of lowest branch, in metres.

8. Age class.

Young: Seedling, sapling or recently planted tree; not yet producing flowers or seeds; strong apical dominance.

Semi-mature: Trunk often still smooth-barked; producing flowers and/or seeds; strong apical dominance, not yet achieved ultimate height.

Mature: Apical dominance lost, tree close to ultimate height.

Over-mature: Mature, but in decline, no crown retrenchment

Veteran: Mature, with a large trunk diameter for species; but showing signs of veteranisation, irrespective of actual age, with decay or hollowing, a crown showing retrenchment and a structure characteristic of the latter stages of life.

Ancient: Beyond typical age range and with a very large trunk diameter for species; with extensive decay or hollowing, a crown that has undergone retrenchment and a structure characteristic of the latter stages of life.

9. Physiology.

Health, condition and function of the tree, in comparison to a normal specimen of its species and age.

10. Structure.

Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.

Good: No significant morphological or structural defects, and an upright and reasonably symmetrical structure.

Moderate: No significant pathological defects, but a slightly impaired morphological structure; however, not to the extent that the tree is at immediate or early risk of collapse.

Indifferent: Significant morphological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.

Poor: Significant and irreparable morphological or pathological defects, such that there may be a risk of failure or collapse.

Hazardous: Significant and irreparable morphological or pathological defects, with a risk of imminent collapse.

11. Comments.

Where appropriate comments have been made relating to:

- Health and condition
- Safety, particularly close to areas of public access
- Structure and form
- Estimated life expectancy or potential
- Visibility and impact in the local landscape

12. Category.

Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012; adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to arboricultural biodiversity.

Category U: Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

- (1) Trees that have a serious, irreparable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category 'U' trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).
- (2) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.
- (3) Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.

Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.

- (1) Trees that are particularly good examples of their species, especially if rare or unusual.
- (2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
- (3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

- (1) Trees that might be included in category 'A', but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and minor storm damage) such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category 'A' designation.
- (2) Trees present in numbers, usually growing as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals; or trees present in numbers but situated so as to make little visual contribution to the wider locality.
- (3) Trees with material conservation or other cultural value.

Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

- (1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.
- (2) Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary landscape benefits.
- (3) Trees with no material limited conservation or other cultural value.

TREE SURVEY SCHEDULE

157 Hornsey Park Road

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
1	Sycamore	12m	300mm est.	5.25m	3m	3.25m	Semi-mature	Average	Indifferent	Off-site tree within private amenity garden; unable to survey base; contributes to boundary screening; upper canopy readily visible for approx. 35m above rooftop from Brook Road to NW, max distance of view 50m; hidden in all other long direct public views; inessential component of the landscape.	C (1)
2	Sycamore	12m	315mm est.	3.75m	3m	NW 2.5m	Semi-mature	Average	Indifferent	Small self-seeded specimen; many tight branch union points; above average risk of failure; contributes to boundary screening; unremarkable tree of very limited merit; inessential component of the landscape.	C (12)
3	Sycamore	11m	130mm est.	N 2m E 0.5m SE 1m S 0.5m W 2m NW 2.5m	2m	NW 2m	Semi-mature	Average	Poor	Small self-seeded specimen; decay and cavity on trunk; unremarkable tree of very limited merit; inessential component of the landscape.	C (1)
4	Sycamore	13m	285mm 300mm	3m	3m	3m	Semi-mature	Average	Poor	Off-site tree; twin stemmed from base; asymmetrical crown as suppressed by adjacent specimens; contributes to boundary screening; unremarkable tree of very limited merit.	C (12)
5	Hybrid black poplar	14m	1400mm.	3.5m	2m	1m	Mature	Average	Indifferent	Located within triangle of 'no-mans land'; trunk dia. measured at 1m; prominent buttress roots; located on rising bank of land; crown has been heavily reduced or "topped" at approx. 10m in past; large, truncated and unoccluded pruning wounds; readily visible in short and narrow view from Brook Road; unremarkable tree of very limited merit; inessential component of the wider landscape.	C (1)
6	Flowering cherry	11.5m	220mm	N 2.5m E 2m S 1.5m W 2m	1m	0.5m	Semi-mature	Average	Indifferent	Located within triangle of 'no-mans land'; small self-seeded specimen; hidden in all long direct public views; unremarkable tree of very limited merit; inessential component of the landscape.	C (1)
7	Sycamore	18m	500mm est.	N 2m E 3.5m S 6m W 5m	5m	S 6m	Semi-mature	Average	Indifferent	Off-site tree; asymmetrical crown as suppressed by adjacent specimens; readily visible from Brook Road; in keeping with the character of the area; significant component of group in which it stands.	B (12)
8	Ash	19m	2 stems @ 450mm est.	N 4m E 7m S 7m W 4m	4m	S 5m	Semi-mature	Average	Indifferent	Off-site tree; twin-stemmed from 1m; acute tensile union; in keeping with the character of the area; contributes to boundary screening; significant component of group in which it stands.	B (12)
9	Sycamore	19m	550mm est.	6m	3m	3m	Semi-mature	Average	Moderate	Off-site tree; in keeping with the character of the area; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
G1	Sycamore	4m	Max 6 stems @ 35mm est.	2m	1m	0.5m	Semi-mature	Average	Indifferent	Comprised of two historically felled stumps with resurgent epicormic growth; unremarkable specimens of very limited merit; inessential component of the landscape.	C (1)
G2	Buddleia	2m	Max 35mm	3m	0.5m	0.5m	Semi-mature	Average	Indifferent	Small area of recent secondary scrub; unremarkable group of very limited merit; inessential component of the landscape.	C (1)
G3	Sycamore	13m	Max 315mm est.	3.75m	2m	3m	Semi-mature	Average	Indifferent	Off-site group of trees; row of closely growing specimens, forming a hedge or screen within adjacent development to S; contributes to boundary screening and softening of the built form.	C (12)
G4	Various	18.5m	Max 575mm est.	6m	2m	2m	Semi-mature	Average	Moderate	Off-site group of trees; collection of established trees; aerodynamic group with meshing crowns providing companion shelter; in keeping with the character of the area; contributes to boundary screening and softening of the built form.	B (12)
G5	Various	3m	Max 45mm est.	1m	0.1m	0.5m	Semi-mature	Average	Indifferent	Off-site group of small ornamental shrubs; unable to inspect bases due to closed boundary fencing; hidden in all direct public views; of only low-level screening value; unremarkable specimens of very limited merit; inessential component of the landscape.	C (1)

Root Protection Areas (RPAs)

Root Protection Areas have been calculated in accordance with paragraph 4.6.1 of the British Standard 'Trees in relation to design, demolition and construction – Recommendations', BS 5837:2012. This is the minimum area which should be left undisturbed around each retained tree. RPAs are portrayed initially as a circle of a fixed radius from the centre of the trunk; but where there appear to be restrictions to root growth the circle is modified to reflect more accurately the likely distribution of roots.

<i>Tree No.</i>	<i>Species</i>	<i>RPA</i>	<i>RPA Radius</i>
1	Sycamore	40.7m ²	3.6m
2	Sycamore	44.9m ²	3.8m
3	Sycamore	7.6m ²	1.6m
4	Sycamore	77.5m ²	5.0m
5	Hybrid black poplar	706.9m ²	15.0m
6	Flowering cherry	21.9m ²	2.6m
7	Sycamore	113.1m ²	6.0m
8	Ash	183.2m ²	7.6m
9	Sycamore	136.8m ²	6.6m
G1	Sycamore	2.5m ²	0.9m
G2	Buddleia	0.6m ²	0.4m
G3	Sycamore	44.9m ²	3.8m
G4	Various	149.6m ²	6.9m
G5	Various	0.9m ²	0.5m

APPENDIX 3
Tree Protection Plan

Arboricultural Impacts: Summary (For details, see below)			No. of Trees
Impact			
Trees to be removed			2
Groups of trees to be removed			1
TPO trees to be removed			0
Trees to be pruned			5
Trees where supervised demolition needed within RPAs			4
Trees where manual excavation needed within RPAs			5
Trees where above soil surfacing needed within RPAs			3
Trees with proposed underground services within RPAs			0
Trees to be Removed			
No	Species		Category
2	Sycamore		C (12)
3	Sycamore		C (1)
G1	Sycamore		C (1)
Total numbers of trees to be removed			
Category	No. of trees	Category	No. of trees
A	0	B	0
C	2	U	0
Trees to be pruned			
No.	Species	Works (Outline only)*	
1	Sycamore	Crown reduce NW canopy quadrant by up to 3.5m back to the boundary, leaving no closer than 1.5m from trunk.	
5	Hybrid black poplar	Reduce E canopy extent only back to previous pruning points on pollarded trunk removing suckering regrowth only	
7	Sycamore	Crown reduce S canopy extents by up to 4.5m back to boundary, leaving no closer than 1.25m from the trunk	
8	Ash	Removed x1 sub-dominant lateral limb emanating from N codominant stem and growing to SW, back to boundary. Reduce lateral extent of remaining upper SW lateral canopy extents by up to 4m leaving no closer than 2m from centre alignment of trunk	
9	Sycamore	Reduce S canopy lateral extent back to boundary by approx. 2.5m leaving it no closer than 4m from trunk	
Pruning is to be undertaken in accordance with the British Standard Recommendations for Tree work, BS3998: 2010. Climbing irons or spikes are not to be used whilst pruning trees.			
Trees that require supervised demolition within RPAs			
No.	Species	Type of structure / surface	
1	Sycamore	Existing foundations and hard surfaces	
7	Sycamore	Existing foundations and hard surfaces	
8	Ash	Existing foundations and hard surfaces	
9	Sycamore	Existing foundations and hard surfaces	
Trees that require manual excavation within RPAs			
No.	Species	Type of structure	
1	Sycamore	Proposed piling and foundations	
5	Hybrid black poplar	Proposed piling and foundations	
7	Sycamore	Proposed piling and foundations	
8	Ash	Proposed piling and foundations	
9	Sycamore	Proposed piling and foundations	
Trees that require above soil surfacing within RPAs			
No.	Species	Type of structure	
7	Sycamore	Proposed replacement surfacing	
8	Ash	Proposed replacement surfacing	
9	Sycamore	Proposed replacement surfacing	

development on Brook Road
Planning Ref HGY/2017/2886

SJA Site boundary

Neighbouring trees appear to disregard boundary line

Flowering cherry
6
5
Hybrid black poplar
Sycamore
Sycamore
Sycamore
G3 Sycamore

G2 Various

G1 Sycamore

G5 Various

Off-site tree

Trees to be removed

Excavation of proposed foundations and piles to be undertaken manually, under on-site supervision of arboricultural consultant

Following demolition, tree protective fencing to be installed along ownership boundary; see inset panel

Temporary ground protection to be installed immediately following foundation and floor demolition; see inset panel

Trees to be pruned to specification in inset panel

Demolition of existing floor and foundations to be undertaken under on-site supervision of arboricultural consultant; see inset panel.

Protective trunk wrapping

Ground Protection

Supervised demolition

Manual Excavation

Above Soil Surfacing

Arboricultural Supervision

The arboricultural consultant will directly supervise all construction works that have to be undertaken within root protection areas. These include:

1. Location of protective fencing and ground protection.
2. Lifting/excavation of existing hard surfaces.
3. Excavation/demolition of existing foundations.
4. Construction of above-ground hard surfacings.
5. All excavations, whether for proposed foundations, hard surfacing, or underground services.

For further information refer to the SJAtrees Tree Survey Schedule

Do not scale from this drawing: please check all dimensions on site, and notify us of any discrepancies. SJAtrees (the trading name of Simon Jones Associates Ltd.) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based.

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This drawing is designed to reflect only the principles of layout and/or design insofar as these relate to the protection of trees to be retained, and should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfaces or underground services.

0 2m 4m 6m 8m 10m
METRES

1: 200 @A2

157 159 22.00 22.26 22.30 22.31 22.44 22.49

Block A Block B

Plant Room

Future Demolition Room

ASHP Plant Room

Service Store

Refuse Store

Commercial Unit 96.7 sq m

81-0-01

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