SJA trees
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ARBORICULTURAL METHOD STATEMENT

For Protection of Trees

at

12 Ingestre Road

Tufnell Park

London

March 2024

SJA ams 23326-01

CONTENTS

APPENDICES

1. Statement of purpose

1.1. The purpose of this method statement is to detail what actions need to be taken to ensure the proposed demolition of the existing building and the construction of a block of apartments at No. 12 Ingestre Road does not cause any unacceptable damage to the trees to be retained within this site and in the adjacent properties.

1.2. This method statement has been drawn up to comply with Condition no. 15 of the planning permission granted by the London Borough of Camden, (Application ref: 2018/4449/P) which states:

"15. Tree Protection - Prior to the commencement of any works, details demonstrating how trees to be retained both on and off site shall be protected during construction work shall be submitted to and approved by the Council in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction" and should include details of appropriate working processes in the vicinity of trees, a tree protection plan and details of an auditable system of site monitoring. All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details."

1.3. This method statement has also been drawn up to comply with the recommendations of British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction – Recommendations*.

1.4. Details of the trees can be found in the tree survey schedule at **Appendix 1**. Their locations are shown on the tree protection plan (SJA TPP 041) at **Appendix 2**. This plan is based on the approved site layout drawing, no. 17371-SYM-ZZ-00-DR-C-0302 REV T1.

1.5. The key words and phrases used in this statement are defined in ***Table 1*** below.

Arboricultural consultant	Arboricultural expert instructed by the developer to oversee the retention and protection of trees adjacent to the development site.
Arboricultural monitoring	Regular inspections of retained trees by the arboricultural consultant, to monitor their health and condition; and to inspect the effectiveness of the tree protection measures implemented.
Arboricultural supervision	Pre-arranged attendance on site of appointed arboricultural consultant for the duration of specific construction activities that could otherwise result in unacceptable damage to retained trees. Whilst on site the consultant will control, supervise and where appropriate assist in the undertaking of these activities.
Construction Exclusion Zone ('CEZ')	Area based on the root protection area (RPA), normally surrounded with protective fencing, from which access is prohibited during development works.
Ground boarding	Temporary ground covering, designed to prevent compaction of soil in which significant roots of retained trees are growing.
Protective fencing	Temporary fencing, erected for the duration of demolition and construction activities; designed to prevent access and disturbance to the trunks and root protection areas of trees.
Pruning	The removal of living or dead parts of a tree, especially branches, to reduce size, to maintain shape, health, safety, or to regulate growth.
Root Protection Area ('RPA')	The minimum area around a 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.
Tree Protection Plan ('TPP')	Drawing based upon the finalised proposals; showing trees for retention and illustrating the tree and landscape protection measures.

Table 1: Key words & phrases

1.6. This statement is designed to reflect the principles of the proposed layout as far as these relate to the protection of trees to be retained and should **not** be read as a definitive engineering or construction method statement for this development.[1]

2. Planning and communication

2.1. Unless otherwise agreed with the Local Planning Authority (LPA), the following actions are to be taken, in the order specified in the Sequence of Works at ***Table 2***.

2.2. The developer will appoint an arboricultural consultant to oversee all aspects of tree care and protection for the duration of demolition and construction works.

[1] Reference should be made to the architect or structural engineer over any matters of construction detail, specification, engineering performance standards or regulatory requirements, relating to structures, surfaces or underground services to be constructed. As arboricultural consultants, Simon Jones Associates Ltd. can accept no liability for any matters relating to the structural integrity or engineering performance of structures, surfaces or underground services described, proposed or eventually constructed. The responsibility for satisfying any Health & Safety requirements relating to any operations described in this method statement remains with those commissioning or undertaking the operations concerned.

2.3. Prior to the commencement of works, the project manager will send copies of any demolition or construction method statement that might have implications for existing trees to the arboricultural consultant for his comments. The arboricultural consultant will liaise with the project manager to ensure that there are no conflicts between the demolition or construction method statements and this arboricultural method statement.

2.4. Prior to the start of any site clearance, ground preparation, demolition or construction works the developer will convene a pre-commencement site meeting. This shall be attended by the developer's contract manager or site manager, the demolition contractor, the groundwork contractor(s) and the arboricultural consultant. The LPA tree officer will be invited to attend. At that meeting contact numbers will be exchanged, and the methods of tree protection outlined in this statement shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to this statement required as a result of the meeting shall be circulated to all parties in writing.

2.5. On the same occasion, the arboricultural consultant will make a brief re-inspection of the trees to be retained, to identify any risks of tree, stem or branch failure that could cause harm to contractors working on the site. Any such risks will be recorded and passed to the client and to the LPA, to enable appropriate remedial works to be undertaken in a timely manner.

2.6. The developer will immediately inform the arboricultural consultant if at any time during site clearance, demolition or construction the site manager or agent is replaced or transferred. The arboricultural consultant will convene a site meeting with the incoming/replacement site manager, to be held within five working days, to explain all outstanding tree protection measures detailed in this method statement.

2.7. A copy of this method statement shall be supplied to all site personnel who have control over works of any nature within the Root Protection Areas (RPAs) of trees to be retained, or within the footprints of their canopies. The contractor will provide adequate instruction on its implementation for all relevant staff. This instruction will be carried out by, or to the approval of, the arboricultural consultant.

Order	Works	Details at Section:	Arb. supervision required:
1	Pre-commencement site meeting	2	Yes
2	Site clearance and removal of trees	3	-
3	Pruning of trees nos. 1, 3, 4, 10 & 20	3	-
4	Installation of protective trunk wrapping for tree nos. 2,3 & 20	5	Yes
6	Ground preparation and demolition	4	Yes
8	Installation of replacement hard surfacing within RPAs of trees nos. 1, 2 & 3	7	Yes
9	Clearance of machinery/materials from site, reinstatement and landscaping	8	-
10	Removal of tree trunk wrappings	8	-

Table 2: Sequence of works (relevant to tree protection)

3. Site clearance, pruning and security

3.1. No clearance of trees or other vegetation and no installation of tree protective wrapping shall be undertaken until after the pre-start meeting.

3.2. The seven trees to be removed and one group (nos. 9, 14, 15, 17, 18, 19, 23 & G2) shall be felled and disposed of, as shown on the tree protection plan at **Appendix 2**.

3.3. Trees (nos. 1, 3, 4, 10 & 20) to be retained shall be pruned as specified in the TPP inset panel.

3.4. All tree works are to be done in accordance with British Standard BS 3998: 2010, *Tree work - Recommendations*. Climbing irons or spikes are not to be used whilst pruning trees; they may only be used for the sectional removal of trees.

3.5. Except where within the RPAs of trees to be retained, all other vegetation to be removed may be cut down or grubbed out as appropriate; but within the RPAs of trees to be retained, 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.

3.6. The erection of site security fencing or hoarding will be undertaken in a way that causes no harm to trees to be retained and no compaction of the soil in which they are growing. This encompasses:

- holes for uprights (assuming hoarding rather than Heras) to be at least 1.5m from any tree trunk and dug with one- or two-man post hole borers rather than with an excavator;
- if uprights are to be concreted into the post holes, the holes shall first be lined with heavy-duty pvc, to prevent the leaching of wet concrete into the soil;
- concrete will be mixed outside the RPAs;
- no vehicles shall access the RPAs;
- no trenches shall be dug where the ground slopes or is uneven; and
- no fence panels or any other part of the fencing or hoarding shall be nailed, screwed or otherwise attached to any part of any of the trees to be retained.

4. Ground preparation and demolition

4.1. No ground preparation or excavation of any kind shall be undertaken prior to the pre-start meeting.

4.2. The existing tarmac wearing course of Ingestre Road, will be retained in place for the duration of the main development and will only be demolished and removed immediately prior to the replacement surface being installed.

4.3. If at any point, the existing hard surface and wearing course is required for removal prior to the replacement surface being installed, the ground within the RPAs of retained trees nos. 1 – 3 will be protected by installation of suitable ground protection as detailed in **Section 5** below.

4.4. Existing areas of hard surfacing to be demolished, prior to reinstatement abut or overlay the RPAs of three trees to be retained (nos. 1-3). These are listed at ***Table 3*** below.

Tree no.	Species	Description
1	Honey locust	Removal of existing hard surfacing
2	Whitebeam	Removal of existing hard surfacing
3	London Plane	Removal of existing hard surfacing

Table 3: Demolition works that abut or are within RPAs

4.5. The sub-base of the existing hard surfacing to be demolished that is within the RPAs of trees nos. 1-3 shall be retained and left in place and will form the sub-base for the replacement wearing course.

4.6. All plant and vehicles engaged in demolition of the existing hard surfacing should either operate from outside the RPAs of retained trees or upon suitable ground protection installed above exposed areas of the RPAs of trees nos. 1 – 3, where hard surfacing has been removed.

4.7. Those parts of the existing hard surfacing that are within the RPAs of adjacent trees nos. 1 - 3 shall be removed either by hand (kerbs and the sub-base shall be broken up using a hand-held breaker, and be lifted by hand or excavated using hand tools), or by an excavator fitted with a '*toothless*' bucket standing either on the existing surface or outside the RPAs in order not to disturb tree roots that may be present beneath it. This exercise will be undertaken under the control of the arboricultural consultant to ensure that the soil beneath the hard surface is not disturbed in any way.

4.8. If any roots of less than 25mm diameter are encountered, they shall be cut cleanly by the arboricultural consultant. If roots of 25mm diameter and above are found, they shall be covered with clean dry Hessian sacking to prevent desiccation. This will be removed only directly prior to backfilling, and this will be done by surrounding roots with a minimum depth of 50mm of topsoil and sharp sand (builders' sand will not be used as it has a high salt content which is toxic to tree roots).

4.9. Where underground structures that are or will become redundant are present within RPAs, these will be sealed off where possible so that the need for excavation is avoided.

4.10. The replacement hard surfaces will be installed within 24hrs of the existing surface's removal. No plant or machinery will traverse this area, unless it is preceded by the installation of suitable ground protection, as detailed in **Section 5** below.

5. Ground protection

5.1. For the majority of the period of construction, the existing hard surfacing of Ingestre Road will act as ground protection where relevant.

5.2. To avoid soil compaction and the resulting impairment of tree root function, if the area within the RPAs of tree nos. 1-3, where existing hard surfacing is to be replaced is left uncovered, it shall be covered by appropriate ground protection, in accordance with the recommendations at Section 6.2.3 of BS 5837: 2012.

5.3. For pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards (temporary aluminium roadway such as 'Trakway' or similar, or interlocking plastic tread boards such as "Ground-Guards" or similar) will be placed above a compressible material (a 150mm depth of woodchip might be appropriate), laid onto an appropriate geotextile membrane (such as 'Terram').

5.4. For wheeled or tracked traffic exceeding 2t, ground protection will be designed by a structural engineer, in conjunction with the arboricultural consultant, to take account of the type of soil and the likely loadings to which it will be subjected. This will also be laid on top of a compressible material above a geotextile membrane.

5.5. The temporary ground protection will only be removed immediately prior to the installation of the replacement hard surface. The arboricultural consultant will be informed in advance of when this is intended to be done.

6. Trunk wrapping

6.1. Protective wrappings shall be fitted to the trunks of trees 2, 3 and 20, to prevent accidental damage being caused by impacts from materials or machinery during demolition and construction. The trunk wrappings (shown by **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.

6.2. The trunk wrappings shall extend from as close as possible to ground level, up to a minimum height of 2m on each tree. They shall be retained in place for the duration of demolition and construction operations and shall not be removed until all works are completed, and all equipment and materials have been removed from the site.

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.

7. Installation of underground services

7.1. All underground service and drainage routes shall be located so that no excavation is required within RPAs.

7.2. If their location within RPAs is unavoidable, underground services shall be installed in one of the following two ways, in accordance with NJUG guidelines[2].

7.3. **Trenchless technique**. This involves thrust boring or directional drilling of service routes to avoid all excavation and disturbance of soil in which roots are likely to be growing. The pits for starting and receiving the boring machinery shall be located outside the RPAs of any retained trees. The bore shall be made at a minimum depth of 600mm below ground level. Lubrication of the 'mole' shall be with water, rather than with oil or other lubricants which could contaminate the soil.

7.4. **Manual excavation**. This involves hand digging of a continuous trench to a depth of at least 750mm, under arboricultural supervision; with the careful retention and protection of all roots of a diameter greater than 25mm, as detailed elsewhere in this method statement. If soil conditions and/or root distribution render it appropriate, the arboricultural consultant may require hand excavation to extend to a greater depth than this.

7.5. Such an excavation will be undertaken using a pick or a hand fork to loosen the soil, which will then be cleared from roots using a compressed air soil pick and removed using shovels or trowels. All roots encountered of less than 25mm diameter will be cut cleanly with secateurs or a sharp pruning saw.

[2] National Joint Utilities Group. Volume 4, GUIDELINES FOR THE PLANNING, INSTALLATION AND MAINTENANCE OF UTILITY APPARATUS IN PROXIMITY TO TREES", Issue 2: 16th November 2007.

7.6. The faces of all excavations that contain exposed roots will be covered with hessian sacking and be kept moist at all times; they will not be left exposed to frost, wind or direct sunlight.

7.7. Protection of retained roots shall be conducted in the following way. A 50:50 mix of sharp sand and composted organic matter shall be prepared and packed around the root within a wrapping of Hessian (builders' sand will not be used as it has a high salt content and may be toxic to trees). The layer of sharp sand and compost shall be not less than 50mm in thickness around the full circumference of the root section. If concrete is to be poured or placed around these roots, they shall also be wrapped with an impermeable polythene membrane. Both the hessian wrapping, and the polythene membrane shall be secured by degradable ties, in a manner that will not constrict future growth of the root.

7.8. Excavation beneath 750mm depth (or greater if the arboricultural consultant has deemed it appropriate) may be undertaken by an excavator working from outside the RPAs, provided this is supervised to prevent any retained roots being damaged.

8. Construction of permanent hard surfaces

8.1. To prevent unacceptable root damage, the proposed replacement hard surfacing to be installed over a section of Ingestre Road within the RPAs of tree nos. 1-3 shall be constructed above the existing sub-base, avoiding any excavation into the soil beneath in accordance with the recommendations of Section 7.4 of British Standard BS 5837.

8.2. Within RPAs there shall be no lowering of existing soil level and no digging will be undertaken: all parts of proposed hard surfaces shall be constructed above existing soil level. This is to ensure that roots are not severed, soil is not compacted, and oxygen can continue to reach roots beneath the engineered surface.

8.3. The wearing courses shall be of a permeable and gas-porous nature such as cobbles or dry-jointed paviours, bricks, or blocks on a sand foundation. Permeable tarmacadam may be acceptable; concrete and binding gravels (such as hoggin) should not be used except for footpaths.

8.4. Construction should be undertaken in dry weather; ideally this should be between May and October when the soil is at its driest and least prone to compaction.

9. Landscaping, and reinstatement

9.1. Care will be taken to ensure that landscaping and reinstatement do not cause any damage to the existing trees. Prior to the commencement of any landscaping works within RPAs the developer will convene a site meeting to be attended by the site manager or agent, the landscape contractor, the fencing contractor, and the arboricultural consultant. The methods of tree protection outlined in this section of the arboricultural method statement shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to this statement shall be recorded and circulated to all parties in writing.

9.2. Within RPAs the following points shall be observed:

- Ground levels will not be changed.
- No fuels or chemicals shall be brought into or stored within these areas.
- Digging within RPAs (for fence posts etc.) shall be done by hand. Any roots of 25mm diameter and above that are encountered shall not be cut: if such sized roots are found the position of the proposed post will be re-located. Any smaller roots shall be cut cleanly. All roots exposed should be backfilled with sharp sand on the same day they are uncovered.
- No parts of any fencing shall be nailed or otherwise attached to any parts of the retained trees.
- Unwanted vegetation shall be removed manually or by using chemicals that cannot damage the roots of the trees.
- No irrigation or drainage pipes shall be installed within RPAs.
- Only after all heavy machinery has been removed from site may the trunk protective wrapping be removed.

10. Supervision and monitoring

10.1. Once the protective trunk wrappings have been installed, the arboricultural consultant will visit the site and inspect these tree protection measures. If the specification or location of these items does not comply with this method statement, the arboricultural consultant will inform the fencing contractor, and adjustments will be made. Once compliance is achieved, the arboricultural consultant will 'sign off' the tree protection measures to the contractor and copy this (in writing) to the client.

10.2. Throughout the construction process the arboricultural consultant will monitor the condition of the trees, and the integrity and effectiveness of the protective fencing. He will visit the site at appropriate intervals, as agreed with the LPA Tree Officer at the pre-commencement meeting, to ensure that the protection measures outlined in this document are adhered to; and will contact the site manager or agent on a weekly basis whilst ground works are being undertaken, and on a fortnightly basis thereafter, to ascertain what works are planned for the coming week and whether any of these require arboricultural input or supervision. Records of all monitoring and supervisory visits will be made and will be forwarded to the client and copied to the LPA.

10.3. The arboricultural consultant shall directly supervise all works that have to be undertaken within RPAs. These include:

- location of trunk protective wrapping
- Demolition of existing hard surfaces.
- Construction of above-ground replacement hard surfacing.
- Any installation of underground services with RPAs.

10.4. The project or site manager will give the arboricultural consultant at least 48 hours written notice of the date of intended construction of any proposed buildings or structures, underground service runs, or areas of hard surfacing that are within the RPAs of any of the trees, so that he/she can attend.

10.5. All drawings or revised drawings issued to the site agent or to sub-contractors, that show details of any works within or abutting RPAs or beneath the crowns of trees are to be referred in advance to the arboricultural consultant to enable him to advise

on any changes to the impact on trees that these drawings may cause, and to be able to provide solutions to avoid or minimise any further tree damage. All such drawings will be approved in writing by the arboricultural consultant before works within or abutting RPAs are proceeded with.

10.6. The arboricultural consultant will issue variation orders to the client in the case of any agreed changes to this method statement, and non-compliance notices in any cases of substantial deviation from the statement. These will be recorded in a final completion statement suitable for submission to the LPA if required.

SJAtrees

March 2024

APPENDIX 1
Tree Survey Schedule

SJA trees
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Tree Survey Schedule

12 Ingestre Road, Tufnell Park, London

SJA tss 23326-01

March 2024

Tree Survey Schedule: Explanatory Notes

12 Ingestre Road, Tufnell Park, London

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 3rd October 2017. Weather conditions at the time were clear, dry and bright. Deciduous trees were in full leaf.
A re-survey was carried out by Tom Southgate on Tuesday the 5th of March 2024, weather conditions at the time were overcast, but dry. Deciduous trees were not in 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: Age less than 1/3 life expectancy
Semi-mature: 1/3 to 2/3 life expectancy
Mature: Over 2/3 life expectancy
Over-mature: Mature, and in a state of decline
Veteran: Mature, with a large trunk diameter for the species; but showing signs of ancientness, irrespective of actual age, with decay or hollowing, and a crown that has undergone some retrenchment and has a structure characteristic of the latter stages of life.
Ancient: Beyond the typical age range and with a very large trunk diameter for species; with extensive decay or hollowing; and a crown that has undergone retrenchment and has 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.
Very good: No significant physiological or structural defects, an upright and reasonably symmetrical structure; a particularly good example of its species.
Good: No significant physiological or structural defects, and an upright and reasonably symmetrical structure.
Moderate: No significant pathological defects, but a slightly impaired physiological structure; however, not to the extent that the tree is at immediate or early risk of collapse.
Indifferent: Significant physiological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.
Poor: Significant and irremediable physiological or pathological defects, such that there may be a risk of early or premature collapse.
Hazardous: Significant and irremediable physiological 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

12. Category.
Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012, Table 1, adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to 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.
• Trees that have a serious, irremediable, 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).
• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.
• 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

12 Ingestre Road, Tufnell Park, London

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio - logy	Structure	Comments	Cate gory
1	Honey locust	22m	515mm	1m N 8.75m E 12m S 1.5m W	8m	3m S	Semi-mature	Average	Indifferent	Off-site tree; hard surfacing and concrete paving slabs located directly adjacent to the S side of the trunk approx. 300mm; prominent buttress roots; trunk leaning to SE; single trunk, tall, drawn up and suppressed; historic pruning wound on S side of trunk at approx. 8m indicative of crown lifting; lack of occlusion wood seen, estimated diameter approx. 150mm; long extended lateral limbs; canopy mostly offset from base; asymmetric crown; sheltered on N and W sides by the external walls of Grange Mill tower block; significant component in the local landscape; however, hidden in all long direct public views from the W, N, NE and E by adjacent trees and dwellings; of low quality, of low landscape value, but of medium-term potential.	B (2)
2	Whitebeam	11m	420mm	5m N 3.5m E 2.3m S 3.5m W	2.5m	2.3 E	Semi-mature	Average	Indifferent	Off-site tree; located within an enclosed street planting pit, kerbstones approx. 300mm from the side of the trunk; evidence of rooting activity within hard surface; storm water drain approx. 1.25m S of the trunk; single stem; historic limb failure/pruning wound on W side of trunk at approx. 2m; internal heartwood exposed; however, significant ribs of reaction wood present; 80mm of penetration achieved in a descending fashion; significant resistance or lack of penetration at this point; on sounding with an acoustic hammer from ground level all the way up to 2m, no significant differences denoted; drawn up co-dominant stems with evidence of historic pruning wounds indicative of crown lifting; occlusion wood seen however some wounds not fully occluded; crown reduced within approx. last 18 months, leaving wounds up to 100mm in dia. est.; asymmetric crown as suppressed and overtopped by adjacent individual; significant component of the group in which it stands; softens the built form; glimpsed in views from Ingestre Road however hidden in all other long direct public views by adjacent trees and dwellings; of moderate quality but of low landscape value, and of short-term potential only.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio -logy	Structure	Comments	Cate gory
3	London plane	18m	665mm	8.2m N 10.25m E 8.6m S 7.5m W	6m	2.5m NE	Mature	Average	Moderate	Off-site tree; essential component of the group in which it stands; kerbstones located approx. 250mm from the N and S side of trunk and approx. 500mm W of trunk; located in a narrow planting pit; evidence of rooting activity within tarmac surface directly adjacent to the NW side of the trunk; prominent buttress roots; single trunk, historic trunk wounds on N side of trunk at 0.5m and 1.5m fully occluded approx. diameter of wound 250mm; wide spreading dominant canopy; historic limb failures on the SW side of trunk; significant occlusion wood seen; readily visible in long views from the W along Ingestre Road, glimpsed in views from the NW adjacent to Fletcher Court and also in views towards the S; softens the built form; however, hidden in all other long direct public views by adjacent trees and buildings; of moderate quality and landscape value; of long-term potential.	B (12)
4	English oak	15m	555mm	5.3m N 8.4m E 9.9m SE 9.5m S 8.5m SW 8.7m W 6.5m NW	4m	2.3m S	Semi-mature	Average	Indifferent	Off-site tree; essential component of group in which it stands; prominent buttress roots; concrete retaining wall directly adjacent to and abutting W side of trunk; single stem, leans heavily towards the S at approx. 45 degrees; wide spreading asymmetric crown as historically suppressed by adjacent individual directly to the NE; historic pruning wound indicative of crown lifting fully occluded E side of trunk at 2m, approx. diameter of 80mm to 100mm; asymmetric crown to S; shorter than average shoot extents; contributes towards softening of the built form in a communal garden area; some localised evidence of rooting activity towards the E of the trees around the adjacent communal area; however, no evidence of rooting activity towards the NW or W; of low quality; of moderate landscape value; of long-term potential.	B (2)
5	English oak	8m	280mm	4.7m N 5.5m E SE 6.5 5.4m S 1m W	3m	1.5m	Semi-mature	Average	Indifferent	Off-site tree; located within a soft landscaped communal garden; single drawn up trunk; at 2m historic sub-dominant limb growing towards the NW has been pruned off; SE limb has taken over apical dominance; canopy entirely offset from base; asymmetric crown to SE; inessential component of the group in which it stands; helps soften the built form; affected by oak leaf powdery mildew; historic pruning wounds indicative of crown lifting, some appear fully occluded; estimated diameter of wound approx. 125mm; of low quality, of low landscape value, but of long-term potential.	C (12)
6	Bird cherry	4m	80mm	2m N 3m E 3m S 1m W	1.5m	2m	Young	Average	Indifferent	Off-site tree; located in soft planting area in communal garden; single trunk, drawn up and suppressed; historic pruning wounds indicative of crown lifting, fully occluded; forks into three co-dominant stems at 1.5m; historic pruning wound at crown break at 1.5m unoccluded, diameter of wound approx. 25mm; string girdling trunk at approx. 1.5m nearly fully occluded within trunk; asymmetric crown to the E; inessential component of the group in which it stands, hidden in all direct public views by adjacent trees and buildings; of low quality, of low landscape value, and of short-term potential only.	C (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio -logy	Structure	Comments	Cate gory
8	Silver birch	20m	360mm ivy	5m N 4.3m E 3m S 4.5m W	8m	2m S	Semi-mature	Average	Indifferent	Off-site tree; located within planting pit within communal garden area; reinforced concrete wall approx. 1.5m S of trunk; evidence of rooting activity within concrete paving slabs approx. 1m N around to E of trunk; concrete retaining wall approx. 4.5m W of trunk; ivy covered lower-trunk; drawn up and suppressed; historic pruning wound indicative of crown lifting; wind protected on S, W and E sides by adjacent buildings as located in a lower sunken garden; essential component of group in which it stands, softens the built form; of moderate quality and of medium-term potential; but of low landscape value.	B (1)
9	Flowering cherry	8m	245mm	3.5m N 3.5m E 3.25m S 3.5m W	4m	3m	Semi-mature	Average	Indifferent	Many surface roots damaged on upper sides; concrete paving slabs located approx. 2m W of trunk and 1.25m N of trunk; evidence of rooting activity; girdling roots; single trunk; drawn up; weeping sap exudate on S side of trunk at approx. 2.5m to 3m; located in a sunken lower garden area adjacent to footpath approx. 1m to S; hidden in all direct public views by adjacent buildings; sheltered on all sides; hidden in all long direct public views by adjacent buildings; of moderate quality and of medium-term potential; but of low landscape value.	C (1)
10	Fig	7m	265mm	4.1m N 5.5m E 4m S 4m W	2m	1.8m	Semi-mature	Average	Indifferent	Off-site tree; located in a small planting pit directly along the E boundary of the site; area of exposed sound sapwood on E side of trunk, consistent with vandalism, max. diameter 350mm, occluding; asymmetric crown; softens the built form; of moderate quality but of low landscape value, and of short-term potential only.	C (1)
11	Hawthorn	7m	295mm	2.8m N 2.2m E 2.2m S 2.9m W	2.5m	1.7m	Semi-mature	Average	Indifferent	Off-site tree; located within a planting pit, base of trunk encompassed by car tyre; drawn up mutually suppressed asymmetric crown; significant component of the group in which it stands, softens the built form; of moderate quality and of medium-term potential; but of low landscape value.	C (1)
12-13	Sycamore	11m	295mm 360mm	4.9m N 3m NE 6.1m E 5m SE 5.6m S 8m SW 6m W 4.5m NW	2.5m	2m	Semi-mature	Average	Indifferent	Off-site trees; ornamentals within planting pits; minor evidence of rooting activity within concrete paving slabs adjacent to planting pits; asymmetric crowns with meshing canopies forming an aerodynamic group; many fully occluded pruning wounds indicative of crown lifting; softens the built form; contributes towards the communal area and the community centre of Ingestre Road approx. 12m to the S; of moderate quality and of medium-term potential; but of low landscape value.	C (12)
14	Lawson cypress	11m	est. 375mm	2.5m N 2m E 2m S 2.5m W	0m	0m	Semi-mature	Average	Good	Located on lower ground level of sunken back garden within No.12 Ingestre Road; evidence of recent excavation works within rear garden area denoted by soil samples and track marks from small digger; concrete retaining wall located approx. 0.5m S of trunk and approx. 4m E of trunk; drawn up mutually suppressed asymmetric crown; hidden in direct public views from the E around through N to the W by adjacent buildings; glimpsed in views from E to W along public footpath leading to Ingestre Community Centre; of moderate quality but low value; of short-term potential only.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio -logy	Structure	Comments	Cate gory
15	Holly	5m	125mm	2.25m N 2m E 1.5m S 2.25m W	2.5m	2m	Young	Average	Moderate	Ornamental tree; concrete paving slab directly up to and adjacent to base, concrete retaining wall approx. 1m S of trunk; single trunk; drawn up mutually suppressed asymmetric crown; inessential component of group in which it stands, located within a sunken garden area on the S boundary edge of No. 12 Ingestre Road; of moderate quality and of medium-term potential; but of low landscape value.	C (1)
16	Horse chestnut	17m	670mm	5.5m N 6m E 8.6m S 7.5m W	4m	4m	Mature	Below average	Moderate	Off-site tree; located in a raised area of soft landscaping adjacent to W boundary; pedestrian foot compaction around base of trunk; concrete retaining wall approx. 5m S of trunk and 1.5m to 2m E of trunk; many surface roots damaged on upper surface; girdling roots; single trunk; trunk remains the same diameter as in 2017; drawn up wide spreading canopy; large noticeable tree within the local area, softens the built form; however, screened in long public views by adjacent trees and buildings; affected by chestnut leaf minor; of high quality and moderate landscape value; of medium term potential.	B (1)
17	Hawthorn	6.5m	120mm	2m N 2m E 1.5m S 1.5m W	3m	3m	Young	Average	Poor	Street tree located in planting pit directly adjacent to tarmac drive leading up to Hanbrook Court; single trunk, tall drawn up; many non-occluded pruning wounds indicative of crown lifting from ground level up to approx. 2.5m; trunk leans at approx. 30 degree angle to SE; asymmetric crown to E; hidden in long direct public views by adjacent buildings; helps to soften the built form; of low quality, of low landscape value, and of short-term potential only.	C (12)
18	Flowering cherry	7m	250mm	4.5m N 4m E 5m S 3m W	2m	2m	Semi-mature	Average	Moderate	Street tree planted in planting pit directly adjacent to tarmac drive leading to Hanbrook Court; minor evidence of rooting activity within concrete paving slabs directly adjacent to E side of trunk; drawn up suppressed; asymmetric crown to E; historic pruning wound indicative of crown lifting over road; significant tree in group in which it stands; contributes towards softening of the built form; hidden in long direct public views by adjacent buildings; of moderate quality and of medium-term potential; but of low landscape value.	C (1)
19	Hawthorn	6.5m	145mm	2.5m N 2m E 2m S 2m W	2.5m	2m	Young	Average	Poor	Street tree located in planting pit directly adjacent to tarmac drive leading up to Hanbrook Court; tight compression fork at crown break at 2.5m between two co-dominant stems with bark to bark contact; forks into four co-dominant stems; many pruning wounds indicative of crown lifting particularly on N side of trunk; indicative of cut-backs from lamp column approx. 2m NW of trunk; hidden in all long direct public views by adjacent buildings; however, helps to soften the built form; of low quality, of low landscape value, and of short-term potential only.	C (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio -logy	Structure	Comments	Cate gory
20	Bird cherry	10m	320mm	4.6m N 4.5m E 4.3m S 4m W	2.5m	2m	Semi-mature	Average	Indifferent	Off-site tree; located directly adjacent to tarmac drive leading up to Hanbrook Court; many surface roots; evidence of rooting activity within concrete paving slab and tarmac pavement directly adjacent to S and W of trunk; prominent buttress roots; fungal fruiting body emanating from buttress roots, consistent with *Ganoderma resinaceum*; single trunk; many fully occluded pruning wounds indicative of crown lifting over the road; has been historically topped and reduced in the past; wide spreading canopy; significant component of group in which it stands; contributes towards the softening of the built form however hidden in all long public views by adjacent buildings; of moderate quality and of medium-term potential; but of low landscape value.	C (1)
21	Aspen	15.5m	x4 stems 295mm est.	2.25m N 4.5m E 6m S 5.6m W	6m	1.5m S	Semi-mature	Average	Indifferent	Off-site tree; located in a soft landscaped area between Grange Mill block and 1-10 Ingestre Road; directly opposite 12 Ingestre Road; multi-stemmed from ground level into four co-dominant stems; surface root located 4m S of trunk descending down raised soil mound towards Ingestre Road; tight compression forks at base with bark to bark contact; trunk leans to S; tall, drawn up and suppressed; many historic pruning wounds indicative of crown lifting; recently topped at approx. 14m; significant component of group in which it stands; softens the built form; however, hidden in all long direct public views by adjacent buildings; of low quality, of low landscape value, and of short-term potential only.	C (12)
22	London plane	17m	625mm	3m N 4.5m E 3.9m S 2m W	6m	8m	Mature	Average	Indifferent	Off-site tree; essential component of group in which it stands; located in a soft landscaped area between Grange Mill and 1-10 Ingestre Road; ivy covered near ground; trunk diameter has not increased since 2017; asymmetric crown; recently "pollarded" to remove all growth; contributes towards softening the built form however hidden in long direct public views from adjacent buildings; of moderate quality and of long-term potential; but of low landscape value.	B (12)
23	Yucca	6.5m	135mm	1m	4m	2m	Young	Average	Indifferent	Individual ornamental tree; of only low level screening value; hard surfacing and concrete paving slab located up to and directly adjacent to base of trunk; many historic trunk wounds from 0.5m up to 1m; some occlusion wood seen, however, internal heartwood exposed; hidden in all direct public views by adjacent building; of moderate quality but of low landscape value, and of short-term potential only.	C (1)
G1	Various	4m to 17m	120mm to est. 600mm	5m	2m	2m	Semi-mature	Average	Indifferent	Species include hawthorn, Norway maple and hybrid black poplar; ornamental planting area in soft landscaped communal garden between Grange Mill and 1-10 Ingestre Road; helps to soften the built form however hidden in long direct public views by adjacent trees and buildings; of moderate quality and landscape value; of medium-term potential.	B (12)
G2	Various	Up to 4m	Up to est. 45mm	2m	0m	0m	Young	Average	Poor	Located within an internal courtyard of 12 Ingestre Road; comprised of self sown buddleia and low-level scrub; of only low level landscape value as hidden in all direct public views by adjacent buildings; of low quality, of low landscape value, and of short-term potential only.	C (12)

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.

Tree No.	***Species***	***RPA***	***RPA Radius***
1	Honey locust	120m^2	6.18m
2	Whitebeam	79.8m^2	5.04m
3	London plane	200.1m^2	7.98m
4	English oak	139.4m^2	6.66m
5	English oak	35.5m^2	3.36m
6	Bird cherry	7.1m^2	1.5m
8	Silver birch	58.6m^2	4.32m
9	Flowering cherry	27.2m^2	2.94m
10	Fig	31.8m^2	3.18m
11	Hawthorn	39.4m^2	3.54m
12-13	Sycamore	39.4m^2 58.6m^2	3.54m 4.32m
14	Lawson cypress	63.6m^2	4.5m
15	Holly	7.1m^2	1.5m
16	Horse chestnut	203.1m^2	8.04m
17	Hawthorn	7.1m^2	1.5m
18	Flowering cherry	28.3m^2	3.0m
19	Hawthorn	9.5m^2	1.74m
20	Bird cherry	46.3m^2	3.84m
21	Aspen	157.5m^2	7.08m
22	London plane	176.7m^2	7.5m
23	Yucca	8.2m^2	1.62m
G1	Various	162.9m^2	7.2m
G2	Various	7.1m^2	1.5m

APPENDIX 2
Tree Protection Plan

Arboricultural Impacts: Summary

(For details, see below)

Impact	No. of Trees
Trees to be removed	7
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	0
Trees where manual excavation needed within RPAs	0
Trees where replacement surfacing needed within RPAs	3
Trees with proposed underground services within RPAs	0

Trees to be Removed

No	Species	Category
9	Flowering cherry	C (1)
14	Lawson cypress	C (1)
15	Holly	C (1)
17	Hawthorn	C (123)
18	Flowering cherry	C (1)
19	Hawthorn	C (123)
23	Yucca	C (1)
G2	Various	C (123)

Total numbers of trees to be removed

Category	No. of trees	Category	No. of trees
A	0	B	0
C	7	U	0

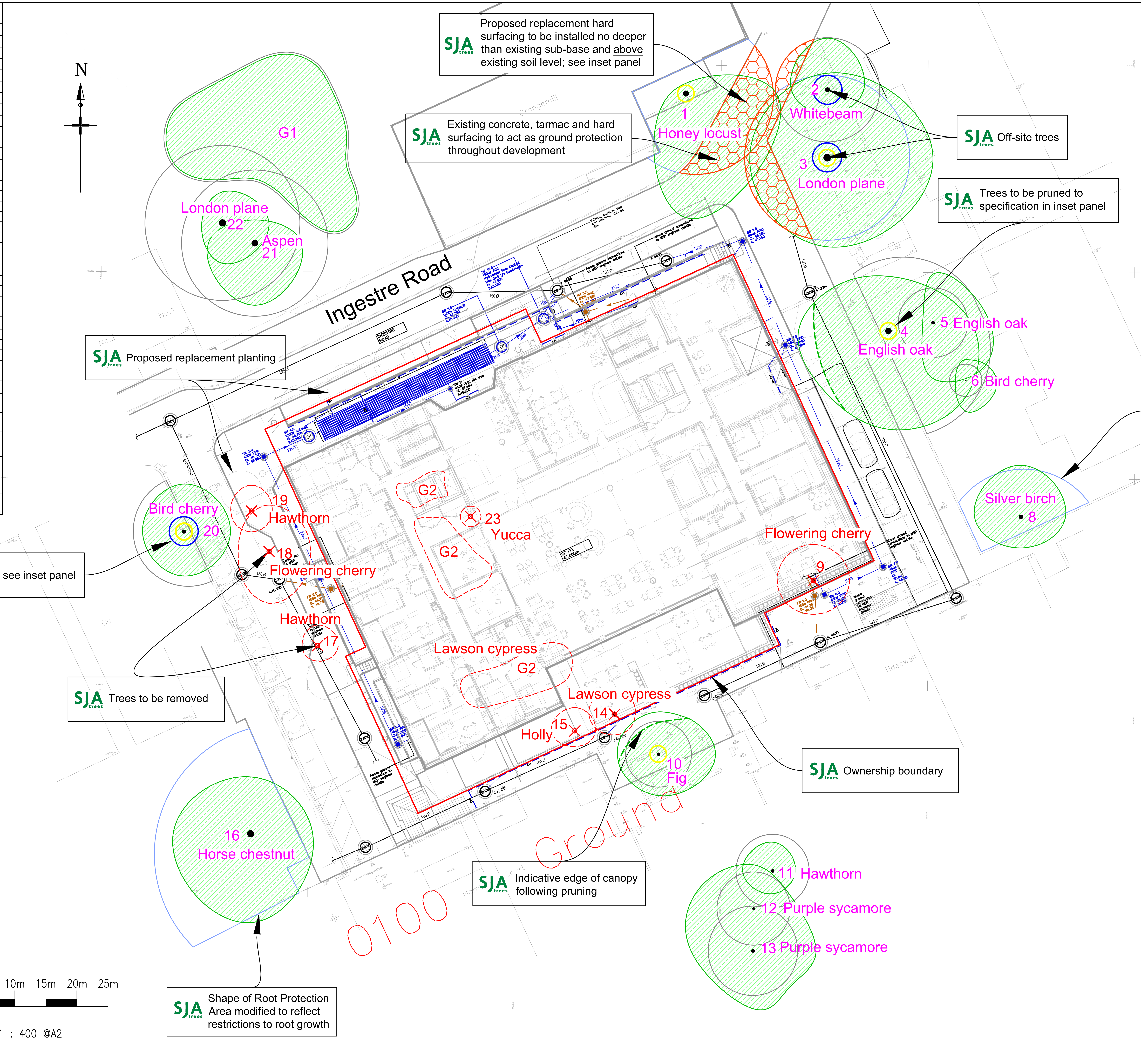
Trees that require above soil surfacing within RPAs

No.	Species	Type of structure
1	Honey locust	Proposed replacement hard surface
2	Whitebeam	Proposed replacement hard surface
3	London plane	Proposed replacement hard surface

Trees to be pruned

No.	Species	Works (Outline only)
1	Honey locust	Crown lift over road to a height of 4m above ground by reduction of small dia. pendulous limbs
3	London plane	Crown lift over road and parking spaces to a height of 4m above ground by reduction of small dia. pendulous limbs
4	English oak	Crown lift W canopy over road to a height of 4m above road and reduce western crown extents by up to 1.5m, leaving no closer than 7m from trunk
10	Fig	Crown reduce N & NW crown extents by up to 1m, to provide space for scaffolding, leaving final extent no closer than 3m from trunk centre alignment
20	Bird cherry	Crown lift E canopy extent only, over road to a height of 2.5m above ground

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.



Protective trunk wrapping

Protective wrappings shall be fitted to the trunks of tree nos. 2, 3 & 20 to prevent accidental damage by impacts from materials, deliveries or machinery during demolition/construction. The trunk wrapping (shown by a **blue circle**) shall consist of not less than three thicknesses of hessian around the 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. The trunk wrapping shall extend from as close as possible to ground level, up to a minimum height of 2m above ground on each tree. It shall be retained in place for the duration of demolition and construction operations, and shall not be removed until all works are completed, and all equipment and materials are removed from site.

Above Soil Surfacing

Replacement hard surfacing within root protection areas (RPAs) of retained tree nos. 1-3 to be constructed in accordance with section 7.4 of BS 5837:2012, Trees in relation to design, demolition and construction - Recommendations. The existing hard surface will be carefully removed under arboricultural supervision and the proposed replacement surface will be installed above existing soil level, or no deeper than the base of the existing surfacing, so that the soil is not disturbed and no roots are severed.

Arboricultural Supervision

The arboricultural consultant will directly supervise, if necessary, all construction works that have to be undertaken within root protection areas of trees to be retained. These include:

1. Location of trunk protective wrapping.
2. Demolition of existing hard surfaces.
3. Construction of above-ground replacement hard surfacing.
4. Any installation of underground services within RPAs.

SJA trees ARBORICULTURAL PLANNING CONSULTANTS

Project:	12 Ingestre Road, Tufnell Park, London		
Client:	Four Quarters Ingestre Road Ltd		
Drawing:	TREE PROTECTION PLAN		
Drawing No:	SJA TPP 23326-041	Revision No: n/a	
Based On:	Proposed plan 0302		
Drawn By: TES	Date: March 2024	Scale: 1:400 @ A2	

Tel:(01737) 813058 Fax:(01737) 816140 sja@sjatrees.co.uk

Tree nos.:	● 12	Canopies of trees to be retained:		Protective wrapping:	
Category 'B' RPA:		Trees to be removed:	18	Replace-ment surfacing:	
Category 'C' RPA:		Trees to be pruned			

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.

This drawing is based on the proposed layout plan shown and referred to above. SJAtrees authorises its reproduction, without amendment, by the Local Planning Authority (LPA), and to its posting on the LPA website, to assist in consideration of this application only.

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.