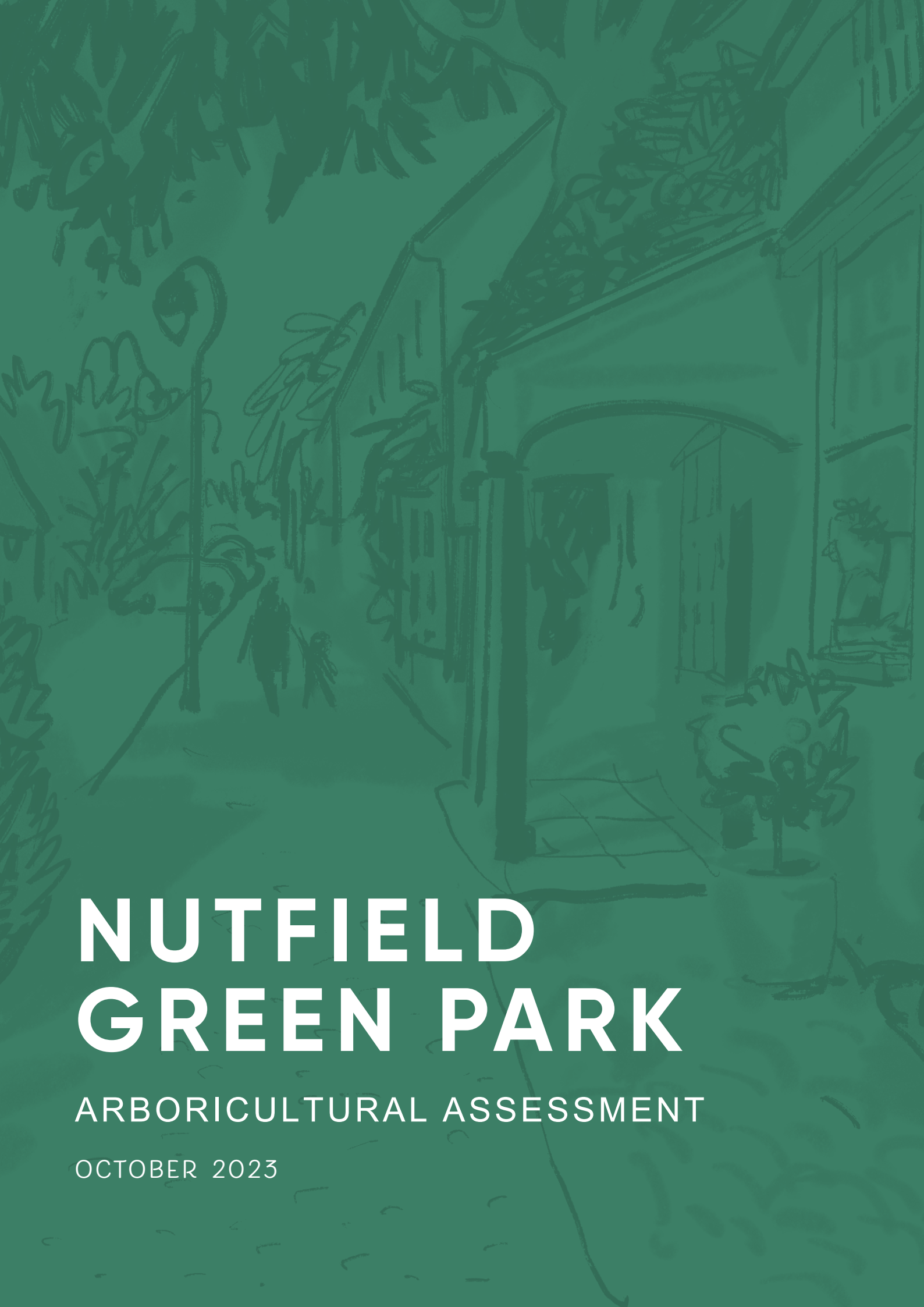

NUTFIELD GREEN PARK

ARBORICULTURAL ASSESSMENT

OCTOBER 2023

Nutfield Park Developments Limited (Ltd) (NPDL)

Nutfield Green Park

Arboricultural Assessment

October 2023

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1.0 INTRODUCTION

1.1 This report has been prepared by FPCR Environment and Design Limited on behalf of Nutfield Park Developments Limited (NPDL) to present the findings of an Arboricultural Assessment and survey of trees located at Former Laporte Works Site, Nutfield Road, Nutfield, Surrey (hereafter referred to as 'the Site'), OS Grid Ref TQ 30381 50776.

1.2 The initial high level tree survey was carried out on the 29th June 2022. An in-depth topographical survey was then carried out between the 12th September and the 10th October 2022 with support from an Arboriculturist and an Ecologist to guide where detailed survey information was required for tree locations and habitat areas. Following the topographical survey, a detailed fine scale tree survey was carried out on the 1st, 2nd, and 3rd of November 2022 to produce a comprehensive baseline of Arboricultural constraints to inform design work.

Scope of Assessment

1.3 The tree survey and assessment of existing trees has been carried out in accordance with guidance contained within British Standard 5837:2012 *'Trees in Relation to Design, Demolition and Construction - Recommendations'* (hereafter referred to as BS5837). The guidelines set out a structured assessment methodology to assist in determining which trees would be deemed either as being suitable or unsuitable for retention.

1.4 The guidance also provides recommendations for considering the relationship between existing trees and how those trees may integrate into designs for development; demolition operations and future construction processes so that a harmonious and sustainable relationship between any retained trees and built structures can be achieved.

1.5 The purpose of the report is therefore to firstly, present the results of an assessment of the existing trees' arboricultural value, based on their current condition and quality and to secondly, provide an assessment of impact arising from the proposed development of the site.

1.6 This report has been produced to accompany an outline planning application for the development of the site for new homes (Use Class C3) and Integrated Retirement Community (Use Classes C2, E(e), F2), creation of new access, landscaping and associated works to facilitate the development, in phases which are severable (Outline with all matters reserved, except for Access).Together with the Integrated Retirement Community, located within easy access of the High Street, it will promote a balanced and mixed community. This report therefore includes an assessment of any impact to the tree cover, the surveys focused on any trees present within or bordering the site that may potentially be affected by the future proposals or will pose a constraint to any proposed development.

Site description

1.7 The site is situated in Tandridge District Council in the county of Surrey with a total area of 58.8ha. To the north of the site is the junction of Nutfield Marsh Road and Chilmead Lane, with the full extent of Chilmead Lane running along the northern site boundary. To the east is Nutfield Marsh Road roading running north to south where it connects with Church Hill with associated dwellings neighbouring the eastern site boundary. To the south is the High Street (A25) which connects to Nutfield Road (A25) running west to east with properties on Hunters Gate,

Shortacres, Park Works Road, Blacklands Meadow, and Parkwood Road neighbouring the site to the south. To the west of the site is Nutfield Cemetery with a decommissioned landfill site situated north of the cemetery running to the northern site boundary.

1.8 The site itself is located on the former Laporte Works Site which was an operational mineral extraction and processing facility which was decommissioned in 1997. The site now comprises a network of individual trees, groups or trees, immature self-set woodlands, and establishing woodlands and measures 58.8ha in extent, much of which has established since cessation of works on the site. The composition of the tree cover is largely native broadleaved species dominated by English oak *Quercus robur* and common ash *Fraxinus excelsior*, along with supporting species including but not limited to field maple *Acer campestre*, hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, aspen *Populus tremula*, English elm *Ulmus procera*, wych elm *Ulmus glabra*, silver birch *Betula pendula*, goat willow *Salix caprea* and dogwood *Cornus sanguinea*.

2.0 PLANNING POLICY

National Planning Policy Framework September 2023

2.1 National Planning Policy is defined by the National Planning Policy Framework (NPPF). This sets out the Government's most current and up to date planning policies for England and how these should be applied. The current NPPF is dated September 2023.

2.2 Paragraphs 10 and 11 of the NPPF state that there is a presumption in favour of sustainable development and states that for decision making, the LPA should be '*c) approving development proposals that accord with an up-to-date development plan without delay'.* In the absence of a development plan or the development plan is out of date, the acting LPA should grant planning consent so far as the development proposals do not breach the policies and guidance outlined in the NPPF.

2.3 In relation to arboriculture, the NPPF also states that:

- *131 '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 (footnote 50), 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' (footnote 50: unless, in specific cases, there are clear, justifiable and compelling reasons why this would be inappropriate)*
- *180 (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 (footnote 63) and a suitable compensation strategy exists';*

  and provides specific guidance that:

- *180 (d) 'development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'*

2.4 With reference to paragraph 180 (c), examples of what is deemed to be *'wholly exceptional'* are included within Footnote 63 and provides the examples of '*infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat'.*

Local Planning Policy

2.5 Local planning decisions regarding all future developments are assessed against a framework to ensure that the district or county in question is developed in a well-informed and coherently systematic manner, this may include decisions to ensure that the right number and types of

houses are built and incorporating the correct type of shopping and recreation facilities, whilst protecting the local ecological resources, landscape context and intrinsic heritage value of an area.

2.6 Within the context of Tandridge District Council, there are several plan documents which contain policies relating to trees within the city confines. The following lists the relevant documents and policies.

Tandridge District Core Strategy Policy - CSP 18 (adopted 2008)

- *The Council will require that new development, within town centres, built up areas, the villages and the countryside is of a high standard of design that must reflect and respect the character, setting and local context, including those features that contribute to local distinctiveness. Development must also have regard to the topography of the site, important trees or groups of trees and other important features that need to be retained.*

Tandridge Local Plan Part 2: Detailed Policies - DP 7 (2014 -2029)

- *7.7 Trees and woodlands are highly valued in the District for their contribution to nature conservation and biodiversity, and for historic and aesthetic reasons. The presence of trees within new development can significantly enhance proposals by softening the visual impact of the development. For these reasons and for their intrinsic value, the Council places great weight on the retention of existing trees wherever possible. Where the Council considers trees to be under threat and where their removal would significantly adversely affect public amenity in rural and urban areas, a Tree Preservation Order (TPO) may be made to protect the trees. However, the Council acknowledge that there are instances where felling of trees the subject of a Tree Preservation Order is unavoidable. In such cases, the applicant will be required to provide appropriate (in terms of size and species) replacement planting as agreed by the Council.*
- *13 Trees: Where trees are present on a proposed development site, a landscaping scheme should be submitted alongside the planning application which makes provision for the retention of existing trees that are important by virtue of their significance within the local landscape. Their significance may be as a result of their size, form and maturity, or because they are rare or unusual. Younger trees that have the potential to add significant value to the landscape character in the future should also be retained where possible. Their retention should be reflected in the proposed development layout, allowing sufficient space for new and young trees to grow to maturity, both above and below ground. Where existing trees are felled prior to permission for development being sought, the Council may require replacement planting as part of any permission granted.*

2.7 In addition, the *Trees and soft landscaping Supplementary Planning Document* (Tandridge District Council, 2017) document has been consulted throughout the design process.

Statutory Considerations

2.8 Local authorities have a Duty under the Town and Country Planning Act to create Tree Preservation Orders (TPO) in order to protect and preserve specific trees and woodlands that bring significant amenity benefit to a particular site or location. Under a TPO it is a criminal offence to cut down, top, lop, uproot or wilfully destroy a tree protected by that Order, or to cause

or permit such actions, if carried out without the prior written consent of the acting LPA. Anyone found guilty of such an offence is liable and in serious cases, may result in prosecution and incur an unlimited fine.

2.9 It is understood following consultation with the Local Planning Authority, Tandridge District Council, online mapping services that there are no Tree Preservation Orders or Conservation Area designations that would apply to any trees present on, or in close proximity to the assessment site and therefore no statutory constraints would apply to the development in respect of trees.

2.10 Information provided on Tree Preservation Orders and Conservation Areas is accurate to the date of this assessment and cannot be assumed to remain unchanged. The last check was carried out on the 11th August 2023.

Non-Statutory Considerations

2.11 To compile existing baseline information on relevant arboricultural considerations information was requested from both statutory and non-statutory nature conservation organisations. The Multi Agency Geographic Information for the Countryside (MAGIC)[1] website highlighted tree cover within the site as or included within the following:

- The Priority Habitat Inventory, Deciduous Woodland
- The National Forestry Inventory

2.12 The Priority Habitat Inventory is a spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.[2]

2.13 The deciduous woodland inventory is a rolling programme designed to provide accurate information about the size, distribution, composition and condition of forests and woodlands.[3]

2.14 Priority habitat designation and inclusion within the National Forestry Inventory does not provide any statutory protection.

[1] http://magic.defra.gov.uk/
[2] Contains public sector information licensed under the Open Government Licence v3.0.
[3] https://www.forestresearch.gov.uk/tools-and-resources/national-forest-inventory/

3.0 SURVEY METHODOLOGY

BS5837 Categories

3.1 Trees have been divided into one of four categories based on Table 1 of BS5837, *'Cascade chart for tree quality assessment'*. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).

3.2 Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds. Categories A, B and C are applied to trees that should be of material considerations in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.

3.3 **Category (U) – (Red):** Trees which are unsuitable for retention and are 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 within this category are:

- Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.
- Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.
- Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.
- Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.

3.4 **Category (A) – (Green):** Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years with potential to make a lasting contribution. Such trees may comprise:

- Sub category (i) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
- Sub category (ii) trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.
- Sub category (iii) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.

3.5 **Category (B) – (Blue):** Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years with potential to make a significant contribution. Such trees may comprise:

- Sub category (i) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.

- Sub category (ii) trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.
- Sub category (iii) trees with material conservation or other cultural value.

3.6 **Category (C) – (Grey):** Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

- Sub category (i) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
- Sub category (ii) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary / transient screening benefits.
- Sub category (iii) trees with no material conservation or other cultural value.

Site Plans

3.7 The individual positions of trees and groups have been shown on the Tree Survey Plan. The positions of trees are based on a topographical / land survey, as far as possible, supplied by the client. Where topographical information has not identified the position of trees these have been plotted using a global positioning system and aerial photography to provide approximate locations. The crown spread, root protection area and shade pattern (where appropriate) are also indicated on this plan.

3.8 As part of this assessment, a Tree Retention Plan has been prepared to show the proposed layout in relation to the existing tree cover allowing an assessment of any potential conflicts. The plan also identifies which trees would be required to be removed or retained as part of the proposed development.

Tree Constraints and Root Protection Areas

3.9 Below ground constraints to future development are represented by tree roots and the soil environment in which they grow which needs to be protected if the tree is to be retained. Tree rooting systems are essential for the uptake of water and nutrients, serving the storage of carbohydrates for the future growth and function of the tree, and form structural anchorage and support for the stem and crown. The perceived rooting area of the tree; referred to as the root protection area (RPA) needs to be protected if the tree is to be retained.

3.10 The RPA is a notional area considered to be the minimum zone that must be protected to avoid any adverse impacts on retained trees. The RPA has been calculated in accordance with Annex C, D and Section 4.6 of BS5837:2012 and requires suitable protection in order for the tree to be successfully incorporated into any future scheme. As such, the RPA of existing trees is an important material consideration when considering site constraints and planning development activities.

3.11 Where applicable the shape of the Root Protection Area has been modified to consider the presence of any nearby obstacles (existing or past) which may have restricted root growth and

the likely root distribution i.e. the presence of hard standing, structures and underground apparatus. Where groups of trees have been assessed, the Root Protection Area has been shown based on the maximum sized tree in any one group and so may exceed the Root Protection Area required for some of the individual specimens within the group. Further detailed inspection of the individual trees forming a group may be required where development impacts upon the group.

3.12 Whilst it is generally accepted that a tree's roots may extend far greater distances than the notional RPA, with the distribution of the root system relating directly to the availability of suitable conditions for growth (namely oxygen, water and nutrients), with roots predominantly located in the upper 1,000 mm of the soil horizon; the RPA offers an accepted protective buffer from development.

3.13 Above ground constraints such as the current crown spread of the trees and an illustration of the shade pattern (where appropriate) have been considered and identified within the Tree Survey Plan and Tree Retention Plan indicates their potential area of shading influence.

Considerations and Limitations of the Tree Survey

3.14 The survey was completed from ground level only and from within the boundary of the site. Aerial tree inspections or an assessment of the internal condition of the stem/s or branches were not undertaken at this stage as this level of survey is beyond the scope of the initial assessment.

3.15 The statements made in this report regarding the assessed trees does not take into account the effects of extreme / adverse weather conditions, changes in land use prior to the site's development, unforeseen accidents or anti-social behaviours, such as vandalism, which occur since the date of the survey. As such, the assessment of tree condition given within applies to the date of survey and cannot be assumed to remain unchanged.

3.16 It will be necessary to review all comments and observations made within this report, in accordance with sound arboricultural practice, within two years of the date of survey (unless explicitly stated elsewhere within this report). Further review may also be necessary where site conditions change or works to trees are carried out which have not been specified in detail within this report.

3.17 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The tree survey conducted, in accordance with BS5837, does not assess hedgerows against the Hedgerow Regulations 1997 or specifically from an ecological perspective, and is outside the scope of this assessment.

3.18 It may be necessary during detailed design to undertake further assessment and accurate positioning of woody species within tree groups and hedgerows to assist structural calculations for foundation design of structures in accordance with current building regulations. The exact position of individual trees or species included as part of a tree group should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths in accordance with NHBC Chapter 4.2 Building near Trees.

3.19 The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of BS5837. The survey has been undertaken by a suitably qualified and experienced arboriculturist

and has recorded information relating to all those trees within the site and those adjacent to the site which may be of influence to any proposals. Trees were assessed for their arboricultural quality and benefits within the context of the proposed development in a transparent, understandable and systematic way.

3.20 Trees have been assessed as groups, hedgerows or woodland where it has been determined appropriate.

- The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally including biodiversity or habitat potential for example parkland or wood pasture.
- For the purposes of this assessment, a hedgerow is described as any boundary line of trees or shrubs less than 5m wide at the base and are managed under a regular pruning regime.
- For the purposes of this assessment woodland is described as a habitat where 'trees are the dominant plant form. The individual tree canopies generally overlap and interlink, often forming a more or less continuous canopy'[4]. Woodlands however, are not just formed of trees and generally include a great variety of other plants. These will include 'mosses, ferns and lichens, as well as small flowering herbs, grasses and shrubs'[5].

3.21 An assessment of individual trees within groups, hedgerows or woodland has been made where a clear need to differentiate between them, for example, in order to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

Ancient and Veteran Trees

3.22 Veteran trees and Ancient Woodland are important components of the landscape, their importance can be for a number of reasons including that of their ecological, social, cultural and historic value.

3.23 Veteran Trees and Ancient Woodlands are material considerations within the planning process and their importance is specifically recognised within the National Planning Policy Framework (NPPF) 2021, which defines the terms ancient or veteran tree as:

'A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.'[6]

3.24 Various published methodologies are currently available which, due to the complexity and subjectivity of the process of defining and assessing these trees, often have conflicting definitions. This assessment, and the criteria used for defining ancient/veteran trees and the identification of attributable ancient/veteran features, has been based on a range of currently published guidance and resources.

[4] http://www.countrysideinfo.co.uk/woodland_manage/whatis.htm
[5] http://www.countrysideinfo.co.uk/woodland_manage/whatis.htm
[6] Ministry of Housing, Communities and Local Government. (2021). *National Planning Policy Framework.* London: Ministry of Housing, Communities and Local Government.

4.0 RESULTS

4.1 A total of 226 individual trees, 38 groups of trees, 11 woodlands and one hedgerow were surveyed as part of the Arboricultural Assessment. Trees were surveyed as individual trees and groups of trees where examples are clearly present as per the description. Refer to the Tree Survey Plan and Appendix A – Tree Schedule for full details of the trees included in this assessment. The table below summarises the trees assessed.

Tree Schedule

4.2 Appendix A presents details of any individual trees, groups, hedgerows and woodlands found during the assessment including heights, diameters at 1.5m from ground level, crown spread (given as a radial measurement from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention and the root protection area.

4.3 General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

4.4 Several of the trees have been discussed in more detail following the table, owing to their physical condition or arboricultural significance.

Results Summary

Table 1: Summary of Trees by Retention Category

	Individual Trees	Total	Groups of Trees	Total
Category U - Unsuitable	T62, T99, T165, T209, T211	5	G9	1
Category A (High Quality / Value)	T1, T6, T37, T63, T70, T81, T94, T96, T102, T105, T106, T107, T108, T110, T117, T119, T120, T121, T122, T128, T151, T152, T153, T154, T161, T162, T163, T172, T173, T174, T176, T179, T180, T181, T189, T190, T196, T197, T198, T199, T200, T201, T205, T206, T207, T213, T214, T215, T216, T217, T218, T219, T223, T224, T226	55	G26, G37, W1, W3, W5, W8, W9, W10, W11	9

	Individual Trees	Total	Groups of Trees	Total
Category B (Moderate Quality / Value	T3, T4, T11, T12, T13, T14, T19, T20, T21, T22, T31, T32, T35, T38, T49, T51, T54, T56, T60, T64, T68, T69, T72, T73, T75, T78, T80, T87, T89, T91, T92, T93, T95, T97, T98, T101, T109, T111, T113, T114, T115, T116, T124, T125, T129, T130, T131, T132, T133, T134, T138, T139, T140, T141, T143, T145, T146, T147, T158, T164, T167, T168, T169, T170, T171, T175, T177, T182, T183, T184, T186, T187, T188, T191, T192, T193, T194, T195, T210, T212	80	G3, G6, G12, G18, G22, G23, G25, G31, G32, G33, G34, G35, G36, G38, W2, W4, W6, W7	18
Category C (Low Quality / Value)	T2, T5, T7, T8, T9, T10, T15, T16, T17, T18, T23, T24, T25, T26, T27, T28, T29, T30, T33, T34, T36, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T50, T52, T53, T55, T57, T58, T59, T61, T65, T66, T67, T71, T74, T76, T77, T79, T82, T83, T84, T85, T86, T88, T90, T100, T103, T104, T112, T118, T123, T126, T127, T135, T136, T137, T142, T144, T148, T149, T150, T155, T156, T157, T159, T160, T166, T178, T185, T202, T203, T204, T208, T220, T221, T222, T225	86	G1, G2, G4, G5, G7, G8, G10, G11, G13, G14, G15, G16, G17, G19, G20, G21, G24, G27, G28, G29, G30, H1	22

4.5 Tree cover associated with the site largely comprised extensive areas of high-quality Category A woodlands, which were located throughout the site and provided a wooded backdrop to the village of Nutfield. The southern portion supported almost a continuous swathe of woodland, stretching from east to west, except for a larger open grassland field in the west and smaller pockets of open grassland in the east. Beyond the halfway point, the woodlands were focused in a belt running north-south through the central part of the site and in areas that surrounded the two larger waterbodies close to the northern boundary.

4.6 The composition of woodlands was largely native broadleaved species dominated by English oak and common ash, along with supporting species including but not limited to field maple hazel, hawthorn, English elm, wych elm, silver birch, and goat willow.

4.7 Alongside the native species, were occasional non-native, but naturalised, species present including sycamore *Acer pseudoplatanus,* hybrid black poplar *Populus x canadensis* and horse chestnut *Aesculus hippocastaenum.* Within woodlands W1, W10, and W11 there are coniferous species present such as Norway spruce *Picea abies,* Sitka spruce *Picea sitchensis,* Common Larch *Larix decidua, and Scots Pine Pinus sylvestris.*

4.8 The open grassland of land to the east of the site had low density tree cover and was surrounded by woodland areas. This eastern area had a woodland edge structure to its internal boundary, this transitional zone was of mixed low and moderate quality trees comprising common ash, English oak, holly *Ilex aquifolium*, aspen, hawthorn, silver birch, sycamore, and Lawson cypress *Chamaecyparis lawsoniana.* As part of the edge of the eastern open grassland six individual Category A trees were identified, T1, T6, T37, T63, T70, and T81. Trees T1, T6, T70, and T81 were all mature English oak trees, with T37 being an early-mature example of the same species. T63 was a mature common lime *Tilia x europaea.*

4.9 The open grassland area to the west, Gore Meadow, had limited woodland edge with its internal boundaries defined more by individual standards. There was a mixture of high, moderate, and low-quality trees around the perimeter of Gore Meadow, with 24 trees recorded as high-quality Category A, T94, T96, T102, T105, T106, T07, T108, T110, T117, T119, T120, T121, T122, T128, T151, T152, T153, T154, T161, T162, T163, T205, T206, and T207. Species present included sycamore, English oak, beech *Fagus sylvatica*, and hybrid black poplar.

4.10 Category A trees T205, T206, and T207 were rooted in the rear gardens of the neighbouring properties to the site on Parkwood Road and therefore under third party ownership.

4.11 Whilst a full ash dieback *Chalara fraxinea* survey was beyond the scope of this report the effects of the fungus were noted in and around the eastern grassland area throughout the ash tree population (T2, T14, T19, T41, T42, T45, T46, T50, and G1). Ash dieback was predominantly affecting trees in the younger age classes with older trees either in the early stages of infection or showing some signs of resistance.

Ancient and Veteran Trees

4.12 None of the assessed trees were considered as ancient or veteran trees in accordance with accepted methodologies and guidance.

Woodlands

4.13 The entirety of the site, excluding T38 – T55 (inclusive), T87 – T90 (inclusive), T128 – T145 (inclusive), T168, T169, T182, T183, T184, T186, T188, T192 – T208 (inclusive), G1, G7, G8, G9, G10, G11, G13, G15, G20, G21, G22, G23, G24, G27, and H1 is classed as Priority Habitat Inventory - Deciduous Woodland (England) – '*a Lowland mixed deciduous woodland includes woodland growing on the full range of soil conditions… Quercus robur is generally the commoner oak although Quercus petraea may be abundant locally) and may occur with virtually all combinations of other locally native tree species'* [2]

4.14 The entirety of the site, excluding T210, T211, T212, G28, G30, G31, G32, G33, G35, and G36, is included in The National Forestry Inventory and is recorded as being predominantly 'Broadleaved' with two smaller sections of 'Felled' and 'Mixed mainly broadleaved' to the north of the site.

5.0 ARBORICULTURAL IMPACT ASSESSMENT

5.1 The following paragraphs present a summary of the tree survey and discussion of particular trees and groups recorded in the context of any proposed development in the form of an Arboricultural Impact Assessment in accordance with section 5.4 of BS5837. Any final tree retentions will need to be reconciled with the advice contained within this report.

5.2 The AIA has been based upon the *Illustrative Masterplan* (Adam Architecture, 2023) and seeks to outline the relationship between the proposals and the existing trees and hedgerows. An overlay of the layout has been incorporated in the Tree Retention Plan to assist in identifying the relationship and any potential conflicts between the proposals and the existing trees and hedgerows.

Table 2: Summary of Impact on Tree Stock

	Trees to be Retained	Total	Trees to be Removed in full or part	Total
Category U - Unsuitable	T62, T99, T165, T209, T211	5	G9	1
Category A (High Quality / Value)	T1, T6, T37, T63, T70, T81, T94, T96, T102, T105, T106, T107, T108, T110, T117, T119, T120, T121, T122, T128, T151, T152, T153, T154, T161, T162, T163, T172, T173, T174, T176, T179, T180, T181, T189, T190, T196, T197, T198, T199, T200, T201, T205, T206, T207, T213, T214, T215, T216, T217, T218, T219, T223, T224, T226, G26, G37, W1 (majority) W3, W5, W8 (majority), W9, W10, W11	64	W1 (partial), W8 (partial)	2

	Trees to be Retained	Total	Trees to be Removed in full or part	Total
Category B (Moderate Quality / Value	T3, T4, T11, T12, T13, T14, T19, T20, T21, T22, T31, T32, T35, T56, T60, T68, T69, T72, T73, T75, T78, T80, T89, T91, T92, T93, T95, T97, T98, T101, T109, T111, T113, T114, T115, T116, T124, T125, T129, T130, T131, T132, T133, T134, T138, T139, T140, T141, T143, T146, T147, T158, T164, T167, T170, T171, T175, T177, T187, T188, T191, T192, T193, T194, T195, T210, T212, G3, G6, G12 (partial), G22, G23, G25 (partial), G31, G32, G33, G34, G35, G36, G38, W2 (majority), W4 (partial), W6 (majority), W7 (majority)	84	T38, T49, T51, T54, T64, T87, T145, T168, T169, T182, T183, T184, T186, G12 (partial), G18, G25 (partial), W2 (partial), W4 (partial), W6 (partial), W7 (partial)	20
Category C (Low Quality / Value)	T2, T5, T7, T8, T9, T10, T15, T16, T17, T18, T23, T24, T25, T26, T27, T28, T29, T30, T33, T34, T36, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T50, T52, T53, T55, T57, T58, T59, T61, T65, T66, T67, T71, T74, T76, T77, T79, T82, T83, T84, T85, T86, T88, T90, T100, T103, T104, T112, T118, T123, T126, T127, T135, T136, T137, T142, T144, T148, T149, T150, T155, T156, T157, T159, T160, T166, T178, T185, T202, T203, T204, T208, T220, T221, T222, T225, G1, G2, G4, G5, G7, G8, G10, G11, G13, G14, G15, G16, G17 (majority), G19, G20, G21, G24, G27, G28, G29, G30, H1 (partial)	73	T40, T41, T42, T43, T44, T45, T46, T47, T48, T50, T52, T53, T55, T65, T66, T71, T84, T85, T86, T88, T90, T100, T208, T220, T221, T222, G7, G8, G10, G11, G15, G17 (partial), G19, G20, G24, G27, H1 (partial)	37

5.3 The development proposals have been underpinned by the technical work undertaken landscape, landform, arboricultural and ecological constraints, with the design of the layout being informed by these disciplines from the start of the project. The arboricultural information gathered

on site has been carried out in several stages and supported the site wide design from its inception. A high-level tree survey was first carried out to identify areas where trees would need to be retained and protected. To assist with the definition of the refined developable areas and to assess the full extent of arboricultural site constraints additional fine scale detail was then gathered. A topographical survey was therefore undertaken to form the base for the detailed tree survey, supervised by an arboriculturist along with an ecologist to map habitat areas, to obtain precise location data for individual trees and define the extent of larger groups of trees and woodland boundaries to ensure geographical definition between high and low value assets were distinguishable with a higher degree of accuracy.

Access Nutfield Road (A25)

5.4 Category C hedgerow, H1, will require a breach of approximately 25m of its 370m length to connect the site to Nutfield Road (A25). The removal of this section of hedgerow is considered acceptable due to its low quality. The design has however taken the retention of this feature into consideration as whilst the vegetation is unremarkable it adds to the linear boundary asset between the site and the A25.

5.5 Approximately 25m of Category B group G25's 230m extent will require removal to accommodate the access from the site t Nutfield Road. The removal of this section of trees is considered an overall small proportion of loss when considered in comparison to the number of trees being retained. The retention of as much of G25 as possible has featured throughout the design of the access to ensure as much continuous of this feature as possible.

Drainage

5.6 Approximately 11% of Category B woodland W6 is proposed for removal. Part of the constraints led design process was positioning the SuDs ponds in areas that would not impact the high-quality Category A trees but would still safely serve the proposed buildings. In order to retain the visually and ecologically important tree line to the east of the PRoW two of the SuDs ponds have been positioned in W6.

Development Parcels and Internal Access Road

5.7 Whilst sections of Category A woodlands W1 and W8 are proposed for removal to accommodate the construction of the access road, associated footpath, and central development parcel, these sections are minimal when considered against the overall extent of the woodland cover on the site. 1.7% of W1 is proposed for removal and 10% of W8 is proposed for removal. None of the individual Category A trees recorded during the detailed tree survey are proposed for removal.

5.8 Minimal sections of Category B woodlands W2 and W7 will require removal as part of the development, 3.5% of each, to accommodate the new access road and associated footpath. These removals are considered acceptable as they are not only minor but involve removing smaller outer southern sections that will not affect the overall shape and vitality of the woodlands.

5.9 20 individual Category B trees, and three groups G12 (partial), G18, G25 (partial) are proposed for removal to facilitate the development. This is largely due to occasional trees being located in the open spaces where development is considered appropriate, and the trees cannot be retained.

5.10 Approximately 59% of Category B woodland W4 is proposed for removal to accommodate the proposals. Whilst this seems significant the species composition of W4 was limited to early pioneer species including goat willow, silver birch, and sycamore. The stems of the trees were closely packed together, and their forms etiolated with an absence of established mature trees. W4 had landscape value internally to the site only and could not be seen from the public realm, with the trees in this woodland being individually unremarkable.

5.11 Due to the site topography cut and fill earthworks will likely be required in both development parcels and to accommodate the construction of the internal access road. Discussions around the cut and fill have been widely led by the site tree cover and ecology. Impacts to trees from the earthworks are likely to include additional pockets of tree removals from areas where removals are already anticipated, these additional pockets have been minimised where possible. Any additional tree removals will be internal to the site with high-quality trees retained and protected.

Wider site

5.12 The proposed removal and partial removal of 26 individual trees, 10 groups of trees, and one hedgerow of low-quality Category C trees is considered acceptable due to their limited life expectancies, poor structural and or physiological condition and their limited contribution to the amenity value of the site.

5.13 All tree removals on site are internal to the site, whilst a small section of removed trees from W1 will be visible where the Public Right of Way (PRoW) intersects the new access road, the PRoW will travel under the access road so that none of the on-site tree removals will be directly visible from the public realm.

5.14 There will be no impacts to the trees in the northern area of the site with G26, G30, G31, G32, G35, G36, W10, and W11 being retained, protected, and enhanced as part of the Green Infrastructure improvements in this part of the site.

Discussion

Tandridge District Core Strategy Policy - CSP 18 (adopted 2008)

5.15 The design process has been led by the existing site assets including landscape characteristics, landform, trees and woodlands, and the site ecology. Important individual trees will be retained and protected, and groups and woodlands will be impacted minimally as a result of a robust constraints led proposal which is supported by a comprehensive set of staged site surveys and studies.

Tandridge Local Plan Part 2: Detailed Policies - DP 7 (2014 -2029)

5.16 A significant number of the trees, groups, and woodlands on site are being retained and protected due to their contribution to nature conservation and biodiversity. All the existing woodland areas on site will be managed and improved as part of the proposals enhancing the habitats already present (*Landscape & Ecology Strategy Plan* (FPCR, 2023)).

5.17 All tree removals are internal to the site with the site boundary tree cover being maintained and managed to improve biodiversity and to soft the visual impact of the development. No significant adverse affect to public amenity is anticipated as a result of the proposals and tree removals.

5.18 The *Trees and soft landscaping Supplementary Planning Document* (Tandridge District Council, 2017) document has been consulted throughout the design process. Attention to detail has been imbedded in the proposals from the project inception with tree retention being a significant influencing factor in the current layout.

5.19 In conclusion for arboriculture, the proposals are considered to meet the aims and objectives of local and national policy through careful consideration of the design and retention of a high proportion of the existing tree cover. The retention of, coupled with targeted future management and enhancement of the existing and future tree cover will meet many of the individual aspirations set out in the various policies.

Tree Management

5.20 The layout of the development is currently reserved for subsequent approval. In the course of a reserved matters application pursuant to layout, a review of the relationship between the layout and the retained trees should be undertaken by a qualified arboriculturist to assess the existing tree cover and prepare a schedule of tree works.

5.21 All retained trees should be subjected to sound arboricultural management as recommended within section 8.8.3 of BS5837 *Post Development Management of Existing Trees,* where there is a potential for public access in order to satisfy the landowner's duty of care. Additionally, inspections annually and following major storms should be carried out by an experienced arboriculturist or arborist to identify any potential public safety risks and to agree remedial works as required.

5.22 All tree works undertaken should comply with British Standard 3998:2010 and should therefore be carried out by skilled tree surgeons. It would be recommended that quotations for such work be obtained from Arboricultural Association Approved Contractors as this is the recognised authority for certification of tree work contractors.

5.23 All vegetation and, particularly, woody vegetation proposed for clearance should be removed outside of the bird-breeding season (March - September inclusive) as all birds are protected under the Wildlife and Countryside Act, 1981 (as amended) whilst on the nest. Where this is not possible, vegetation should be checked for the presence of nesting birds prior to removal by an experienced ecologist.

General Design Principles in Relation to Retained Trees

5.24 In a subsequent Reserved Matters application following the final layout of the scheme, assessment of the distance of proposed development in relation to the calculated root protection area of retained trees should be made which will inform the final layout.

5.25 Ground investigation through the use of pneumatic excavation, such as an Air Spade and digging of trial pits, may be required should there be areas where it is not possible to modify the layout to avoid conflict with retained trees. Ground investigations would aim to determine the actual location of the physical roots without causing them damage in the process. Such an assessment would enable consideration of the practicality and suitability of certain 'tree friendly' construction methods and would better inform decision making for a design.

5.26 Further assessment of the impact to actual roots found during the ground investigations can then be made and solutions reached thus, greatly reducing any potential future impacts on retained trees whilst allowing the development to proceed and minimising risks to future tree health. Ultimately the aim would be to reduce conflicts between trees and buildings to achieve successful tree retention.

5.27 The use of “no-dig” construction methods should be considered prior to decisions being made as to the removal of each tree concerned, where conflicts between trees identified for retention and the layout arise. Such methods of construction and the use of industry led specialist engineering solutions i.e. three dimensional “load bearing” cellular confinement systems can be used particularly in the case of carriageways, footways and driveways in order to avoid unnecessary losses of trees.

5.28 The routing of below ground services should also be considered with regard to the retained trees. As recommended by the guidance given in section 7.7 of BS5837 services, where possible, should not encroach within the Root Protection Areas of retained trees. If below-ground services are proposed within a Root Protection Area, modifications to the alignment of the service route may need to be made in order to minimise adverse effects on root stability and overall tree health.

5.29 Consideration may also need to be given to the potential for tree roots of newly planted trees and hedgerows to affect or compromise the future services. As far as feasible, it would be preferable that proposed services near both the existing and any new planting should be ducted for ease of access and maintenance and grouped together to minimise any future disturbance.

6.0 NEW TREE AND HEDGEROW PLANTING

6.1 The *Landscape & Ecology Strategy Plan* (FPCR, 2023) shows the significant improvements proposed on site including new areas of woodland, feature planting (including trees and hedgerows), and transitional scrub planting. General recommendations are made below in respect of trees, hedgerows, and rooting environments.

Trees

6.2 When deciding upon suitable tree species, careful consideration would need to be given to the following: ultimate height and canopy spread, form, habit, density of crown, potential shading effect, colour, water demand, soil type and maintenance requirements in relation to both the built form of the new development and existing properties.

6.3 Through careful species selection, the landscape scheme shall reduce the risk of trees being removed in the future on the grounds of nuisance. Nuisance can be perceived in a number of ways and vary from person to person however most commonly, within the context of trees, low overhanging branches, excessive shading, seasonal leaf fall and the misinformed perception that trees close to buildings cause damage.

6.4 In line with the NPPF all schemes should aim to achieve a net gain in biodiversity value. Nationally recognised biodiversity metrics allow for the inclusion of, not limited to, newly planted scattered trees, woodlands and hedgerows as a means of compensating for loss of habitat as part of the development. Tree and shrub planting can therefore be used to contribute to this biodiversity gain.

6.5 To maximise biodiversity value (and contribution to net gain) native species or varieties should be specified. Such provisions can be incorporated into both the hard and soft landscaping of the scheme. It is recommended that tree and hedgerow specifications are made following consultation with guidance published by the Local Planning Authority.

Hedgerows

6.6 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Consequently, it is important that the proposed scheme delivers a net gain in terms of linear hedgerows through new planting to compensate for any losses. Species should be native, and characteristic of the locality.

6.7 Recommended species for native hedgerow planting are as follows:

- *Crataegus monogyna*
- *Prunus spinosa*
- *Cornus sanguinea*
- *Corylus avellana*
- *Acer campestre*
- *Euonymus europaeus*

Rooting Environment and Soil Volumes

6.8 The success of any landscaping scheme relies on an adequate provision of a high-quality rooting environment within which trees can thrive and reach their full potential. Planting trees with due care and consideration can, in the long term, provide a greater return on a schemes green investment and ensure trees remain healthy and grow to mature proportions. Healthy mature trees integrate well into the built environment; increase the maturity of the landscape; help provide a natural green and leafy urban environment in which people would want to reside whilst also benefiting local wildlife.

6.9 Wherever possible, following discussions with the developer and utility companies, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.

7.0 TREE PROTECTION MEASURES

7.1 Retained trees will be adequately protected during works ensuring that the calculated root protection area for all retained trees can be appropriately protected through the erection of the requisite tree protection barriers. Measures to protect trees should follow the guidance in BS5837 and will be applied where necessary for the purpose of protecting trees within the site whilst allowing sufficient access for the implementation of the proposed layout. These have been broadly summarised below.

7.2 If minor incursions are required in the RPAs of retained trees special methods could be employed including exploratory hand digging for roots, the use of pile and beam foundations, and minimal-dig cellular confinement systems for areas of new hard standing not exceeding 20% of the total RPA.

General Information and Recommendations

7.3 All trees retained on site will be protected by suitable barriers or ground protection measures around the calculated RPA, crown spread of the tree or other defined constraints of this assessment as detailed by section 6 and 7 of BS5837.

7.4 Barriers will be erected prior to commencement of any construction work and before demolition including erection of any temporary structures. Once installed, the area protected by fencing or other barriers will be regarded as a construction exclusion zone. Fencing and barriers will not be removed or altered without prior consultation with the Project Arboriculturist.

7.5 Any trees that are not to be retained as part of the proposals should be felled prior to the erection of protective barriers. Particular attention needs to be given by site contractors to minimise damage or disturbance to retained specimens.

7.6 Where it has been agreed, construction access may take place within the root protection area if suitable ground protection measures are in place. This may comprise single scaffold boards over a compressible layer laid onto a geo-textile membrane for pedestrian movements. Vehicular movements over the root protection area will require the calculation of expected loading and the use of proprietary protection systems.

7.7 Confirmation that tree protective fencing or other barriers have been set out correctly should be gained prior to the commencement of site activity.

Tree Protection Barriers

7.8 Tree protection fencing should be fit for the purpose of excluding any type of construction activity and suitable for the degree and proximity of works to retained trees. Barriers must be maintained to ensure that they remain rigid and complete for the duration of construction activities on site.

7.9 In most situations, fencing should comprise typical construction fencing panels attached to scaffold poles driven vertically into the ground. For particular areas where construction activity is anticipated to be of a more intense nature, supporting struts, acting as a brace should be added and fixed into position through the application of metal pins driven into the ground to offer additional resistance against impacts.

7.10 Where site circumstances and the risk to retained trees do not necessitate the default level of protection an alternative will be specified appropriate to the level / nature of anticipated construction activity. The recommended methods of fencing specifications for this site have been illustrated in Appendix B.

7.11 It may be appropriate on some sites to use temporary site offices, hoardings and lower level barrier protection as components of the tree protection barriers. Details of the specific protection barriers for the site can be provided should the application be approved, as part of a site specific Arboricultural Method Statement for a Reserved Matters application and in accordance with the guidance contained within BS5837.

Protection outside the exclusion zone

7.12 Once the areas around trees have been protected by the barriers, any works on the remaining site area may be commenced providing activities do not impinge on protected areas.

7.13 All weather notices should be attached to the protective fencing to indicate that construction activities are not permitted within the fenced area. The area within the protective barriers will then remain a construction exclusion zone throughout the duration of the construction phase of the proposed development. Protection fencing signs can be provided upon request.

7.14 Wide or tall loads etc should not come into contact with retained trees. Banksman should supervise transit of vehicles where they are in close proximity to retained trees.

7.15 Oil, bitumen, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10m of a tree stem. No concrete should be mixed within 10m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree.

7.16 Fires on sites should be avoided if possible. Where they are unavoidable, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction should be taken into account when determining its location, and it should be attended at all times until safe enough to leave.

7.17 Notice boards, telephone cables or other services should not be attached to any part of a retained tree.

7.18 Any trees which need to be felled adjacent to or are present within a continuous canopy of retained trees, must be removed with due care (it may be necessary to remove such trees in sections).

Protection of Trees Close to the Site

7.19 A number of trees were located on the boundaries of the site and therefore the root protection area and crown spread of these trees will need to be protected in the same way as all the retained trees within the site. All trees located outside the boundaries of the assessment site yet within close proximity to works should be adequately protected during the course of the development by barriers or ground protection around the calculated root protection area.

7.20 Any trees which are to be retained and whose Root Protection Areas may be affected by the development should be monitored, during and after construction, to identify any alterations in quality with time and to assess and undertake any remedial works required as a result.

Protection for Aerial Parts of Retained Trees

7.21 Where it is deemed necessary to operate wide or tall plant within close proximity to trees it is best advised that appropriate, but limited tree surgery, be carried out beforehand to remove any obstructive branches as any such equipment would have potential to cause damage to parts of the crown material, i.e. low branches and limbs, of retained trees within the protective barriers. This is termed as 'access facilitation pruning' within BS5837. Any such pruning should be undertaken in accordance with a specification prepared by an arboriculturist.

7.22 A pre-commencement site meeting with contractors who are responsible for operating machinery is advised to firstly highlight the potential for damage occurring to tree crowns and to ensure that extra care is applied when manoeuvring machinery during such operations within close proximity to retained trees to avoid any contact.

7.23 In the event of having caused any branch or limb damage to retained trees it is strongly recommended that suitable tree surgery be carried out, in accordance with British Standard 3998:2010 and in agreement with the Local Planning Authority prior to correcting the damage, upon completion of development.

8.0 CONCLUSION

8.1 The site consists of a former mineral extraction and processing site.

8.2 There are no Tree Preservation Orders or Conservation Area restrictions covering the trees on site.

8.3 Tree cover across the site was a mix of individuals, groups of trees, woodlands, and a hedgerow and varied in quality and age, with most having been established since the cessation of quarrying activities on the site c. 50 years ago. The composition of the tree cover is largely native broadleaved species dominated by English oak and common ash, along with supporting species including but not limited to field maple, hazel, hawthorn, aspen, English elm, wych elm, silver birch, goat willow and dogwood.

8.4 Two areas were identified where tree cover was minimal, one to the west, and one to the east of the site and as such these have provided the main developable areas. The extent of these areas were informed by the fine scale tree survey, with high quality individual trees around both areas identified and retained, confirming built development to the central portions.

8.5 A third smaller central development parcel is proposed with a connecting access road through the site, which will inevitably require loss of trees. Both the central development parcel and the road have however been best positioned, where their placement will minimise impacts to the site tree cover.

8.6 Although some of the existing tree cover will inevitably need to be removed to facilitate the proposals, especially to provide a connecting link road between the two main areas of development, the overall proportion of loss is considered to be low in comparison to the amount of high and moderate quality trees being retained. Minimal areas of Category A woodland are proposed for removal to facilitate essential infrastructure and the smaller central development parcel.

8.7 The aim of the proposed design has been to retain as much of the existing high-quality tree cover on site as possible and as such will retain much of the existing character of the site. The development also provides a meaningful opportunity, in terms of arboriculture, to improve and manage the existing tree cover in the local area through appropriately applied work without the loss of any arboriculturally significant trees.

8.8 The projected impacts to retained trees and the proposed tree removals necessary to facilitate construction of the housing scheme are not considered to arboriculturally unacceptable if developing the site for residential use.

N

For details see: 10973-T-07

For details see: 10973-T-08

For details see: 10973-T-03

For details see: 10973-T-05

For details see: 10973-T-06

For details see: 10973-T-02

For details see: 10973-T-04

KEY

- Category U - Trees / Groups Unsuitable for Retention (BS 5837:2012)
- Category A - Trees / Groups of High Quality (BS 5837:2012)
- Category B - Trees / Groups of Moderate Quality (BS 5837:2012)
- Category C - Trees / Groups of Low Quality (BS 5837:2012)
- Hedgerow Hatching (Colour Indicates BS5837:2012 Category)
- Root Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
- T1 (A) G1 (A) — Individual / Group Number and BS5837:2012 Category
- Indicative Shade Pattern (in accordance with BS5837:2012 where appropriate)
- Woodland Colour Indicates BS5837:2012 Category

Scale 1:2000 @ A1

0 50 100 150 200m

NOTES

All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with project Arboriculturalist. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule.

Drawing has been produced in colour and is based on digital information in .dwg format, aerial images and/or GPS location where appropriate. A monochrome copy should not be relied upon. The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths.

Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the project Arboriculturalist should works commence 12 months after the date of this survey.

SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

rev	date	description	drawn
–	10/11/2022	Final	TEP
A	01/12/2022	E2 parcel update & access option	NC
B	02/12/2022	Adjustment to access option	NC

fpcr

masterplanning
environmental assessment
landscape design
urban design
ecology
architecture
arboriculture

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client
Nutfield Park Developments Limited

project
Nutfield Green Park
Tandridge

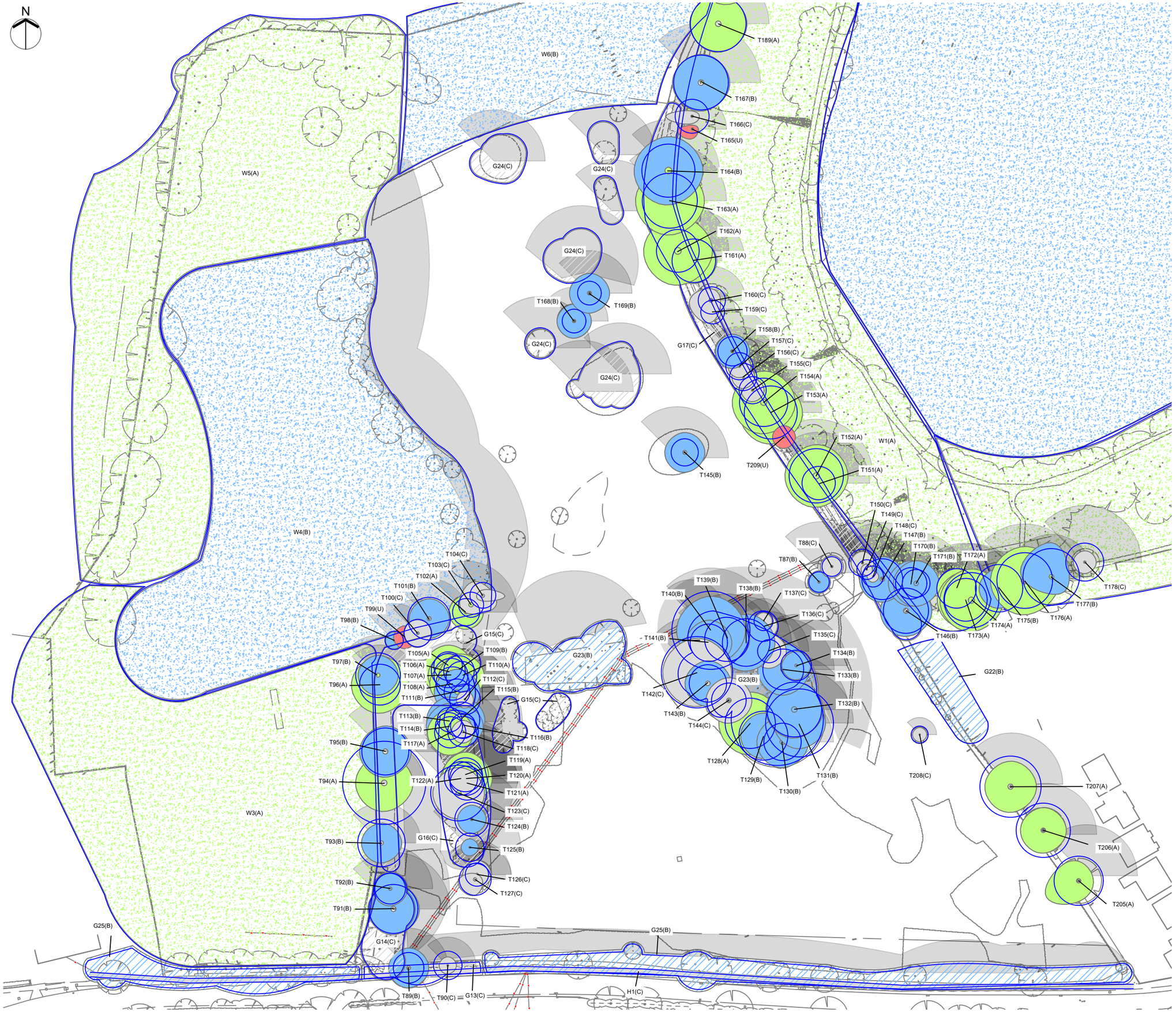
drawing title
TREE SURVEY PLAN

scale	drawn/checked	date
1:2000@ A1	TEP/HCK	December 2022

drawing number
10973-T-01

rev
B

CAD file: L:\10900\10973\ARB\Plans\10973_Tree Survey Plan.dwg



KEY

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- Category A - Trees / Groups of High Quality (BS 5837:2012)
- Category B - Trees / Groups of Moderate Quality (BS 5837:2012)
- Category C - Trees / Groups of Low Quality (BS 5837:2012)
- Hedgerow (Colour indicates BS5837:2012 Category)
- Root Protection Area (The RPA has been altered where appropriate to reflect underground constraints)
- T1 (A) G1 (A) — Individual / Group Number and BS5837:2012 Category
- Indicative Shade Pattern (in accordance with BS5837:2012 where appropriate)
- Woodland (Colour Indicates BS5837:2012 Category)

Scale 1:1250 @ A3

0 25 50 75m

NOTES

All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with project Arboriculturalist. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule.

Drawing has been produced in colour and is based on digital information in .dwg format, aerial images and/or GPS location where appropriate. A monochrome copy should not be relied upon. The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths.

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rev	date	description	by
---	10/11/2022	Final	TEP
A	01/12/2022	E2 parcel update & access option	NC
B	02/12/2022	Adjustment to access option	NC

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masterplanning
environmental assessment
landscape design
urban design
ecology
architecture
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client
Nutfield Park Developments Limited

project
Nutfield Green Park
Tandrige

drawing title
TREE SURVEY PLAN

scale	drawn/checked	date
1:1250 @ A3	TEP/HCK	December 2022

drawing number
10973-T-02

rev
B

CAD file: L:\10900\10973\ARB\Plans\10973_Tree Survey Plan.dwg