

ARBORICULTURAL METHOD STATEMENT

**To discharge planning conditions at
Land at St. Columba's Close, Gravesend, Kent**

Prepared For:	Oakwood Building Contractors
Local Authority:	Gravesend Borough Council
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15 Windsor Close
Southwater
West Sussex
RH13 9XH

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1 INTRODUCTION

1.1 INSTRUCTION

1.1.1 This Arboricultural Method Statement (AMS) has been instructed by Oakwood Building Contractors; the principal contractor appointed to implement the extant planning consent at the land at St. Columba's Close, Gravesend, Kent.

1.2 TERMS OF REFERENCE (ToR)

1.2.1 This report is intended to be submitted to Gravesham Borough Council as part of the supporting technical information to permit the discharging of the below planning condition (application ref. 2022/1179) relating to the protection of existing trees, and has been prepared in accordance with British Standard BS5837:2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

1.2.2 Condition 8 of the consent states:

'Prior to the commencement of the development hereby approved (including demolition and all preparatory work), a scheme for the protection of the retained trees, in accordance with BS 5837:2012, including a tree protection plan(s) (TPP) and an arboricultural method statement (AMS) shall be submitted to and approved in writing by the Local Planning Authority.

Specific issues to be dealt with in the TPP and AMS:

- a) Location and installation of services/ utilities/ drainage.***
- b) Methods of demolition within the root protection area (RPA as defined in BS 5837: 2012) of the retained trees.***
- c) Details of construction within the RPA or that may impact on the retained trees.***
- d) A full specification for the installation of boundary treatment works.***
- e) A full specification for the construction of any roads, parking areas and driveways, including details of the no-dig specification and extent of the areas of the roads, parking areas and driveways to be constructed using a no-dig specification. Details shall include relevant sections through them.***
- f) Detailed levels and cross-sections to show that the raised levels of surfacing, where the installation of no-dig surfacing within Root Protection Areas is proposed, demonstrating that they can be accommodated where they meet with any adjacent building damp proof courses.***
- g) A specification for protective fencing to safeguard trees during both demolition and construction phases and a plan indicating the alignment of the protective fencing.***
- h) a specification for scaffolding and ground protection within tree protection zones.***
- i) Tree protection during construction indicated on a TPP and construction activities clearly identified as prohibited in this area.***
- j) details of site access, temporary parking, on site welfare facilities, loading, unloading and storage of equipment, materials, fuels and waste as well concrete mixing and use of fires.***

k) Boundary treatments within the RPA.

l) Methodology and detailed assessment of root pruning.

m) Arboricultural supervision and inspection by a suitably qualified tree specialist.

n) Reporting of inspection and supervision.

o) Methods to improve the rooting environment for retained and proposed trees and landscaping.

The development thereafter shall be implemented in strict accordance with the approved details.'

1.2.3 The agreed scope of work is outlined below:

1. To undertake a site visit and updated tree inspection of the trees within influencing distance of the proposals, in accordance with BS5837:2012; and
2. To produce this arboricultural method statement; identifying what working methodologies or protection measures should be adhered to, to ensure successful integration of the proposals into the existing landscape.

1.2.4 This report should be read in conjunction with the documents and plans listed below for context:

- The tree survey schedule (ref. MDJAC-24.018-TSS-01) [**Appendix 1**];
- The tree removals plan (ref. MDJAC-24.018-TRP-01) [**Appendix 2**]; and
- The tree protection plan (ref. MDJAC-24.018-TPP-01) [**Appendix 3**].

1.3 AUTHOR

1.3.1 I am Matthew Jones BSc (Hons), MArborA, the Director and Principal Arboriculturist of MDJ Arboricultural Consultancy Limited.

1.3.2 I hold a Bachelor of Science Degree with Honours in Arboriculture and Urban Forestry, awarded by The University of Central Lancashire (UCLan) in 2022. This is a top up degree following successful completion of a Foundation Degree in Arboriculture, also awarded by UCLan in 2020. I have also completed the National Diploma (RQF Level 3) in Arboriculture and Forestry at Merrist Wood College, Guildford in 2009.

1.3.3 During the course of my career I have attended various CPD events and courses. I hold the Professional Tree Inspection accreditation awarded by LANTRA and I am a registered user of The International Society of Arboriculture (ISA) Tree Risk Assessment Qualification (TRAQ) methodology.

1.3.4 I am a Professional Member of the Arboricultural Association (The AA) and an Associate Member of The Institute of Chartered Foresters (The ICF). I am therefore bound by the code of ethics and required to uphold the professional standards expected of both professional bodies.

1.3.5 I am regularly instructed to carry out appraisals of various sizes of tree stocks in relation to development, health and safety considerations, and the potential impact of trees on the built environment;

and I am required to provide considered tree management recommendations as necessary during the course of these instructions.

2 ARBORICULTURAL METHOD STATEMENT (AMS)

2.1 KEY PERSONNEL

2.1.1 This AMS sets out the specific requirements and protection measures necessary to ensure that the retained tree stock is adequately protected as part of the consented development and provides the arboricultural framework for all tree-related matters throughout construction. A list of the key personnel involved in the erection, maintenance and overall effectiveness of the tree protection strategy is set out below.

Table 1: key personnel.

Name(s)	Role(s)	Company	Contact details
Sam Duckett	Client	Oakwood Building Contractors	info@oakwoodbc.co.uk
	Principal contractor		
	Site Manager		
Philip Crowther	Drainage Engineer	Gurney Consulting Engineers	gce@gurneyce.com
TBC	Structural Engineer	Ridge and Partners LLP	01962 834400
TBC	Project Architect	BPTW	marketing@bptw.co.uk
Matt Jones	Project Arboriculturist	MDJ Arboricultural Consultancy Ltd	matt@mdjac.co.uk
TBC	Local Authority Tree Officer	Gravesham Borough Council	TBC

Responsibilities

2.1.2 The incoming Site Manager and Principal Contractor will familiarise themselves with the content of this report. Prior to commencement, the project arboriculturist will oversee the initial erection of the protection measures in compliance with this document. A pre-commencement meeting will be held on site to discuss, refine and finalise the tree protection measures; any deviation from this document will require an updated document to be produced to reflect any amendments, and the updated document will be forwarded to the local planning authority for approval prior to any amendments taking place on site. Once the protection measures have been installed, and if necessary, the arboriculturist will attend a subsequent pre-commencement meeting with all personnel with control and influence over works in proximity to the retained trees.

2.1.3 Following implementation of the protection measures, the Site Manager will assume the day-to-day responsibility of overseeing tree protection matters on site. To aid this process, a full colour copy of this report and the appended documents will be retained by the Site Manager. A full colour and scaled

print out of the appended TPP will be retained on display within the site office, so that it can be referred to easily by all personnel on site.

2.1.4 The project arboriculturist will be retained and called upon to answer any technical queries. Where possible, these will be discussed over the phone or by email; however, if queries are technical in nature it may be more prudent for the arboriculturist to make an additional site visit to discuss the matters in person.

Awareness of arboricultural matters

2.1.5 As part of the Site Manager's responsibilities, they will ensure that all personnel are briefed on the importance of robust tree protection; this will form part of the initial site induction process to be undertaken by all staff and operatives.

2.1.6 Additional signage will be attached to the temporary tree protection fencing (see Section 2.5 for details) to ensure operatives remain mindful of their responsibilities with regard to tree protection throughout their daily duties.

2.2 GENERAL PHASING OF TREE PROTECTION STRATEGY

2.2.1 To prevent unacceptable damage occurring to trees identified for retention, the phasing of works in relation to tree protection will be undertaken in the sequence set out at **Table 2** below.

Table 2: phasing of tree protection strategy.

Item no.	Description	Arb supervision timing/frequency
1	Tree removal and pruning, as shown on the appended tree protection plan	No
2	Accurate setting out of temporary tree protection fencing (TPF) by a qualified engineer, in accordance with the attached tree protection plan. Setting out of protective ground boarding. Project arboriculturist to verify and sign off	1 visit to sign off
3	Pre-commencement meeting to be held on site. Project arboriculturist, LPA Tree Officer and incoming Site Manager required to attend	1 visit to attend pre-commencement meeting
4	Demolition of existing buildings	1 visit + supplementary visits as required
5	Installation of new underground services	1 visit + supplementary visits as required
6	Construction of replacement buildings	1 visit + supplementary visits as required
7	Main construction phase	Monthly monitoring visits throughout
8	Construction of new permanent hard surfaces, ancillary structures, play equipment and associated landscaping	1 visit + supplementary visits as required
9	Clearance of plant and machinery from site immediately prior to landscaping phase	No
10	Break down and removal of protection measures	No
11	Assessment of tree condition by arboriculturist. Remedial tree surgery works specified and undertaken (if required)	1 visit to sign off

2.3 ARBORICULTURAL SUPERVISION AND MONITORING OVERVIEW

2.3.1 The project arboriculturist will liaise with the Site Manager and provide technical input at crucial stages of the construction process as necessary, as detailed at **Table 2** above.

2.3.2 Following the initial pre-commencement meeting where the project arboriculturist will outline all aspects of tree protection to the relevant personnel, arboricultural monitoring visits will take place monthly during intensive demolition and groundworks. However, following completion of the initial groundworks, it is likely that frequency of monitoring visits could be reduced to six-weekly without resulting in an increased risk to retained trees.

2.3.3 The purpose of the monitoring visits will be to ensure that the tree protection measures specified within this report and shown on the accompanying tree protection plan remain commensurate with the level of works taking place on the site and to minimise the likelihood of damage occurring to the retained tree stock. On completion of each monitoring or supervisory visit, the project arboriculturist will complete a short record of the works completed, and any matters of relevance to tree protection. This document will be forwarded to the LPA Tree Officer within ten working days of the monitoring visit.

2.4 TREE REMOVAL AND STUMP MANAGEMENT

2.4.1 Trees identified for removal on the tree protection plan will be removed prior to site set up; these are shown as **red canopies** on the appended Tree Removal Plan (TRP), and as numbered stumps on the Tree Protection Plan (TPP).

2.4.2 The stumps of removed trees within the construction exclusion zones (CEZs) defined by the tree protection fencing will be either cut to as close to ground level as practicable and left in situ or ground out using a stump grinder. Stumps within the construction exclusion zone will not be winched, pulled or dug out with the use of an excavator.

2.4.3 Stumps located outside of the RPAs of retained trees and associated construction exclusion zones, may be removed with heavy plant or machinery if required.

2.5 PRE-COMMENCEMENT MEETING AND SITE SET UP

2.5.1 Prior to the commencement of works, the tree protection measures will be implemented and signed off during a formal pre-commencement meeting attended by the project arboriculturist, site manager and any operatives who have direct responsibility for the works adjacent to retained trees. The LPA Tree Officer will be invited to attend.

2.5.2 The purpose of the pre-commencement meeting will be to ensure that all site operatives are clear on the tree protection strategy in general, and the specific requirements when working close to retained trees. On completion of the meeting, the project arboriculturist will provide a short summary of the meeting, and provide this to the LPA Tree Officer within ten working days.

Logistics

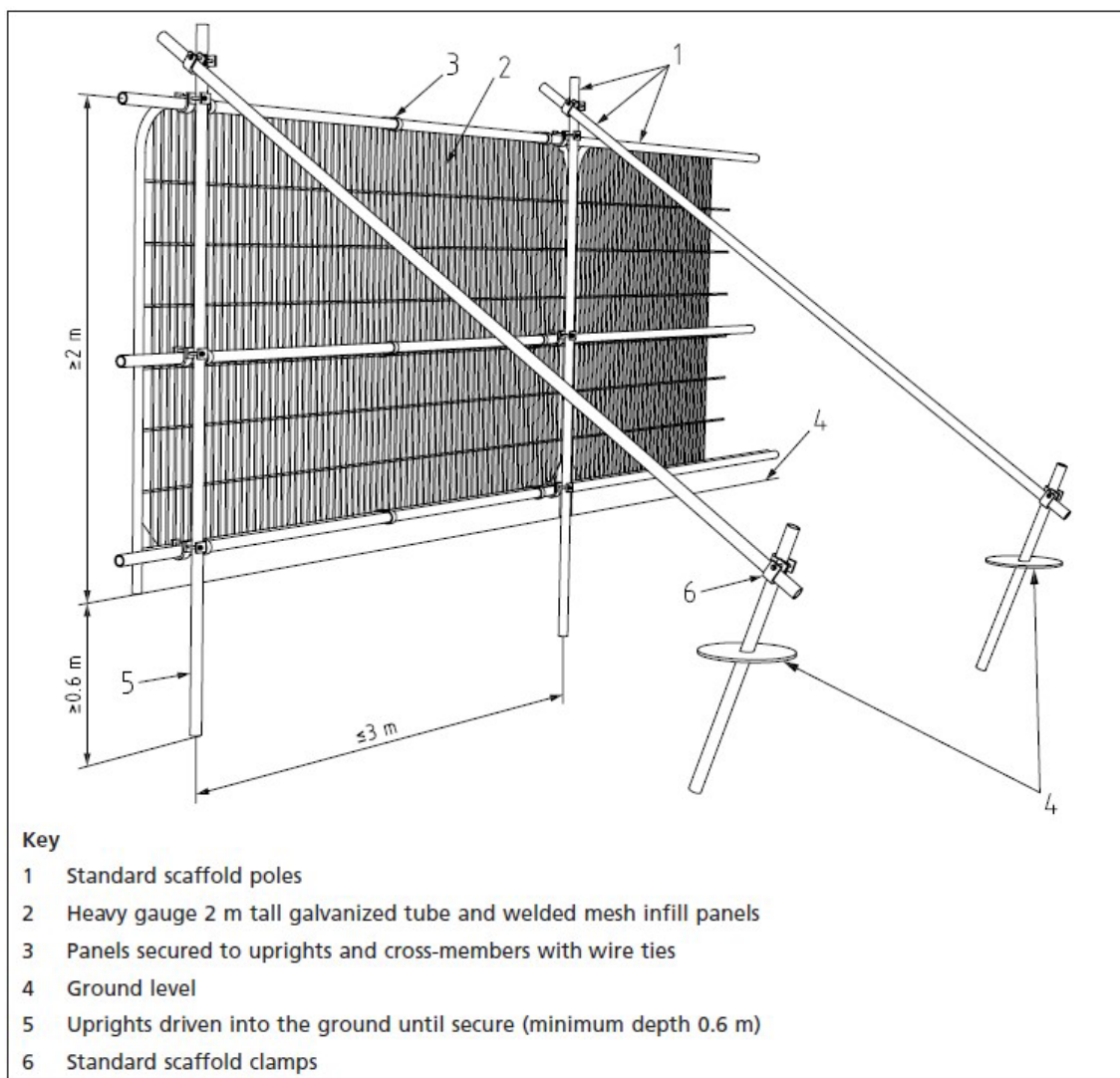
2.5.3 The primary access point for vehicles, machinery, operatives and material deliveries will be from Valley Road to the west of the site. This entrance has already been established and is currently in place in anticipation for the start of works.

2.5.4 The tracking of vehicles, plant and operatives within the site will be in accordance with a suitable logistics or traffic construction management plan (CTMP) to be provided separately. In any event, no such routes will exist on the tree-side of the temporary fencing detailed below.

Tree Protection Fencing (TPF)

2.5.5 Prior to the commencement of works, including demolition, the rooting environments of trees identified for retention will be safeguarded by the erection of temporary tree protection fencing to the default specification provided in BS5837:2012 (The British Standards Institution, 2012) and set out below. These locations are denoted by **bold red lines** on the appended TPP.

Figure 1: default fencing specification for protective barrier (The British Standards Institution, 2012).



2.5.6 The default specification comprises a scaffold framework onto which 2m tall, welded mesh panels such as 'heras' panels will be secured to uprights and crossmembers with suitable anti-tamper couplers. The scaffold framework will be driven into the ground to a minimum depth of 600mm below existing ground levels, ensuring that care is taken to avoid damage to existing roots.

2.5.7 The anti-tamper couplers will be secured in place in such a way as to ensure that they cannot be easily removed from outside the construction exclusion zone; such as by them facing the trees they are designed to protect.

2.5.8 Existing vegetation will be removed by hand to enable the location of the TPF to be accurately set out by an appropriately qualified engineer.

2.5.9 The TPF will remain in place to serve as physical protection for retained trees for the duration of the demolition and construction activities and will only be removed immediately prior to the landscaping phase once all large plant and machinery have been removed from site.

2.5.10 Temporary signage will be secured to the fencing at appropriate intervals to inform site operatives of the purpose of the fencing. Signage will read '**TREE PROTECTION FENCING – KEEP OUT**' or similar, as shown below.

Figure 2: example protective fencing signage.



Construction Exclusion Zones (CEZs)

2.5.11 Construction exclusion zones will be formed by the erection of the tree protection fencing to the specification set out above. Within the CEZs, the following principles will be observed for the duration of the project:

- No plant or machinery will access the CEZ;
- No mechanical excavation will take place;
- Unplanned excavations will be limited to hand-digging and will be considered by the project arboriculturist before commencement;
- Existing soil levels will not be altered in any way, unless for the removal of existing turf layers, which will be undertaken using hand tools only;
- No machinery or materials of any kind will be stored;
- No liquids or chemicals including fuels, oils, builders' sand or concrete mix will be stored; and
- No fires will be permitted.

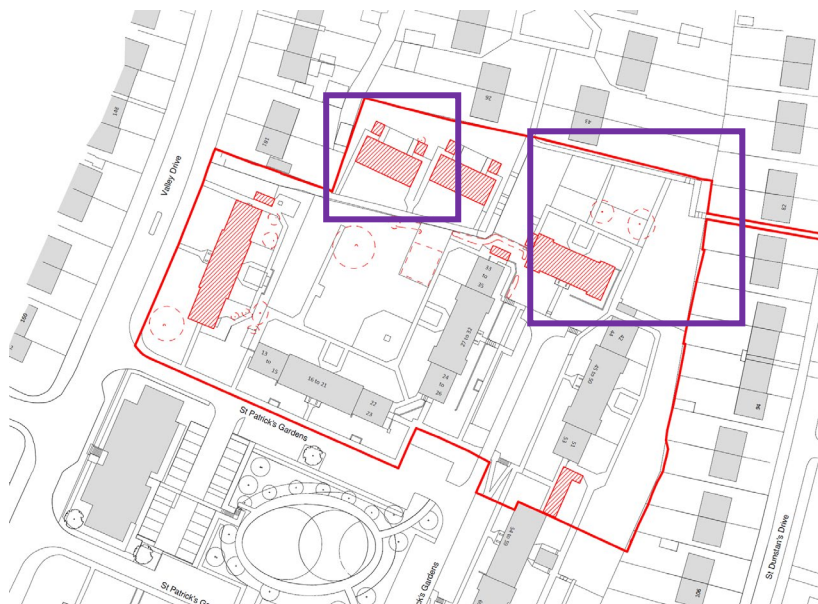
2.5.12 If necessary, a supplementary pre-commencement meeting will be held on site, to enable the project arboriculturist to verify and sign off the location and efficacy of the tree protection fencing. An updated summary will be sent to the LPA Tree Officer if necessary.

2.6 DEMOLITION IN PROXIMITY TO TREES

2.6.1 Demolition of the existing buildings, the locations of which are shown below, will be undertaken with due regard for the retained trees. The majority of demolition will not affect the retained trees and can be carried out without the need for specialist arboricultural measures.

2.6.2 In the case of the north-western and north-eastern buildings, identified by the purple boxes below, nearby trees will be protected by ensuring that demolition machinery works from the far side of the building and within the existing footprints; so as to avoid any additional compaction to the rooting environment of the off-site trees.

Figure 3: showing the areas of demolition across the site. Purple square denotes the area of sensitive demolition.



2.6.3 Demolition of the flank walls will be carried out by pulling the walls towards the inside of the buildings, referred to as 'top down, pull back' (The British Standards Institution, 2012). The existing foundations of the western flank wall of the north-westernmost building will be broken out using hand tools such as compressed air concrete breakers and alike, only. Under no circumstances will heavy plant or machinery such as 360 excavators, be used in the removal of existing foundations in this location.

2.7 INSTALLATION OF UNDERGROUND SERVICES

2.7.1 The proposed underground service routes, including surface and foul water drainage runs and associated man holes, as well as the existing infrastructure, as shown on the appended tree protection plan.

2.7.2 With the exception of a small section of proposed foul and surface water infrastructure within the RPAs of the off-site birch trees (T23 and T24), the drainage strategy avoids the root protection areas of retained trees and as such, no specialist protection measures are required to facilitate their implementation.

2.7.3 Within the RPAs of T23 and T24, the following hand dig method will be implemented under the supervision of the retained arboriculturist, to minimise damage to their rooting environments:

- i. Route of services to be accurately marked out prior to commencement by an engineer using biodegradable spray paint;
- ii. The upper 1.2m of excavation (where required) will be carried out manually, using hand tools only;
- iii. All roots with a diameter of 25mm or less will be cut back cleanly to the face of the excavation, or to a suitable growth point where possible;
- iv. If roots with diameters of 25mm – 75mm are encountered, they will be temporarily retained in situ and protected using hessian sacking to prevent desiccation. Once the total number, sizes and depths of such roots becomes clear, their importance to tree health and stability will be assessed by the project arboriculturist. If the pruning of such roots is deemed to be of negligible impact to the tree, roots will be pruned as necessary;
- v. All roots with a diameter of 75mm or more, which are likely to be of a structural function and contribute significantly to the trees' anchorage, will be retained and protected. If necessary, alternative working methodologies will be proposed to the LPA for sign off; and
- vi. Where roots are to be incorporated into an excavation, a suitable and flexible void former, such as a section of utility pipe cut lengthways and placed over the subject root, will be incorporated to protect the root(s) from abrasion.

2.8 CONSTRUCTION OF BUILDING FOUNDATIONS

2.8.1 The above methodology will also be implemented during excavation for the proposed strip foundations for the new buildings, which I understand are to be 700mm wide by 700mm deep. As the

majority of roots are likely to be within the upper 1m of soil (e.g. Roberts, et al., 2006; Urban, 2008), it will be possible for any deeper lying roots lower than 700mm to be retained. Accordingly, total severance of the rooting profiles will likely be avoided.

Photograph 1: (below left), showing large roots retained within an underground service trench; and

Photograph 2: (below right), showing the same roots retained and protected with hessian sacking prior to pipework installation.



Figure 4: showing proposed sections of building 19.

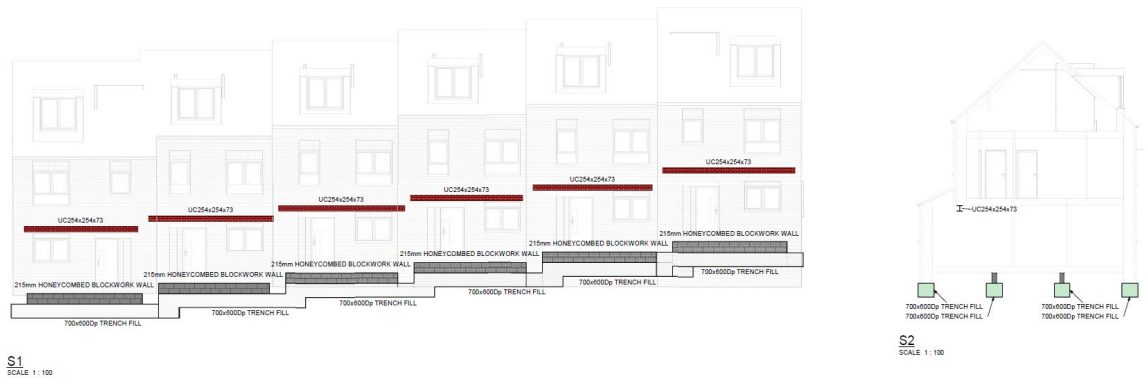


Figure 5: showing proposed sections of building 20.



Figure 10 consists of two architectural drawings. The left drawing is a sectional elevation of the building, showing levels 04 to 00. It includes structural details such as 100mm blockwork walls, 100mm blockwork walls, and 100mm blockwork walls. The roof is shown with a pitch of 1:12. The right drawing is a floor plan of the building, showing levels 02 to 00. It includes structural details such as 100mm blockwork walls, 100mm blockwork walls, and 100mm blockwork walls. The plan shows a grid of columns and beams, with a central area labeled '300mm PC BEAM'.

2.9 CONSTRUCTION OF PERMANENT HARD SURFACES

2.9.1 The scheme includes a provision for upgrading the existing surface of St Patrick's Gardens which lies to the south of the main body of the site. The section of new, replacement hard surfacing will encroach

into the notional, two-dimensional root protection area of a prominent lime tree (T2), as shown by the **purple hatching on the TPP**, and below.

2.9.2 The new surface will be tarmac, and will be laid on top of the existing surface. Accordingly, there will be no requirement for significant excavation to install the upgraded surface and therefore, potentially damaging impacts can be reduced to almost zero.

2.9.3 Care will be taken by operatives to ensure that there is no overflow of hot tarmac or other materials into the adjacent construction exclusion zone around the RPA of T2. To provide further protection, it would be prudent to erect temporary netting or screening on the outside of the TPF for the duration of the resurfacing works.

Photograph 3: showing an indicative area of replacement hard surfacing within the RPA of T2.



Footpaths and play surfaces

2.9.4 Pedestrian footpaths and areas of play surfacing will be constructed within the RPA of the large category 'B' cherry to be retained in the north-east corner of the site (T12). These will be installed with a minimum dig philosophy, to reduce impacts. However, where excavation is required, the sensitive hand dig methodology set out at Section 2.7 will be implemented.

2.10 MANAGEMENT OF VARIATIONS AND INCIDENTS

Variations to approved documents

2.10.1 There will be no variation to the tree protection measures set out within this report without the prior authorisation by the local planning authority.

2.10.2 Should variations become necessary for unforeseeable reasons, they will be dealt with in the following way:

- i. Site Manager to contact arboriculturist to explain the need for variation;
- ii. Arboriculturist to provide preliminary advice on technical aspects where necessary;
- iii. Arboriculturist to visit the site as necessary to collect the relevant information to enable a revised method statement or protection strategy to be drawn up;
- iv. Production of updated method statement and tree protection plan;
- v. Updated package of document to be sent to the local authority for approval;
- vi. Consent received; and
- vii. Variations to be implemented on site.

2.10.3 Under no circumstances will varied protection measures, whether pertaining to the specification for temporary trunk or ground protection, or the frequency of arboricultural monitoring visits, proceed without the prior approval from the local planning authority.

Accidents and incidents

2.10.4 Where accidents or incidents result in damage to the protective measures prescribed above, the project arboriculturist will be informed within 48 hours. The Site Manager will compile a brief record of the incident and the extent of damage, together with any adverse impacts on the retained tree stock and send this via email to the project arboriculturist. The arboriculturist will review and advise as necessary.

2.10.5 Should the temporary trunk or ground protection measures become damaged, they will be repaired or replaced within 48 hours of the incident.

2.10.6 The project arboriculturist will forward the Site Manager's record, together with a detailed list of actions taken to minimise damage and remedial works (where necessary) to the local authority.

Matthew Jones

Matthew Jones, BSc (Hons), MArborA
Director & Arboriculturist

19 April 2024

3 REFERENCES

- Matheny, N., & Clark, J. R. (1998). *Trees and Development: a technical guide to preservation of trees during land development*. Champaign, Illinois, USA: International Society of Arboriculture.
- Roberts, J., Jackson, N., & Smith, M. (2006). *Tree roots in the built environment* (Fourth impression ed.). Arboricultural Association.
- The British Standards Institution. (2012). BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations. London: BSI Standards Limited.
- Urban, J. (2008). *Up by roots. Healthy soils and trees in the built environment*. International Society of Arboriculture.

APPENDIX 1: TREE SURVEY SCHEDULE

15 Windsor Close
Southwater
West Sussex
RH13 9XH

TREE SURVEY SCHEDULE

Site Address: Land at St Columbas Close, Gravesend, Kent

Prepared For: Oakwood Building Contractors Ltd

Reference: MDJAC-24.018-TSS-01

Survey date: 28/03/2024

15 Windsor Close
Southwater
West Sussex
RH13 9XH

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Company Registration No.
(England & Wales): 13900533

BS5837:2012 Tree Survey Schedule - Explanatory Notes

This document is based on a site visit and inspection undertaken by Matt Jones of MDJ Arboricultural Consultancy Ltd on Thursday 28 March 2024; deciduous trees were in partial leaf.

The dimensions and assessments of the trees contained within this document reflect their condition at the time of the survey. I surveyed the trees from within the boundaries of the site only. The presence of additional physiological or structural defects that are only visible from restricted-access viewpoints cannot be discounted.

All trees were surveyed from ground level only, aided by the use of binoculars where considered necessary. The information contained within this document does not constitute a full hazard or risk assessment, and therefore MDJ Arboricultural Consultancy Ltd makes no guarantee of their stability of safety.

1. Tree no.

Individual number assigned to the tree for identification, commencing at 1.

2. Species

Common and botanical names are provided. Botanical names are shown in italics.

3. Height

Measured using a clinometer or laser rangefinder, given in metres.

4. Trunk diameter

Trunk diameter measured at 1.5m, unless stated otherwise, in accordance with Figure C.1 of British Standard BS 5837:2012 "*Trees in relation to design, demolition and construction - Recommendations*".

5. Radial crown spread

Extent of branches from the centre of the trunk to the tips in the principal cardinal directions, rounded up to the closest half metre. For trees with symmetrical canopies, an average measurement is provided.

6. Crown clearance

Height above ground level of the lowest live branch, in metres.

7. Height to first branch

Height above ground level of the origin of the lowest branch, in metres.

8. Age class

Young: recently planted, or yet-to-be established specimen, usually below 10m in height, subject to species characteristics;

Semi-mature: a recently established specimen, usually with excurrent morphology, and yet-to-reach its ultimate proportions, subject to species characteristics;

Mature: fully established, complex, decurrent or broad branching structure, and has achieved or is nearing its ultimate proportions, subject to environmental conditions and species characteristics;

Over-mature: has reached maturity, but is showing symptoms of minor decline within its canopy;

Veteran: has a large trunk diameter for its species, but displays evidence of veteranisation such as fungal colonisation, decay, hollowing, and has commenced retrenchment within its canopy;

Ancient: exceeds the typical size and age of the species, with a very large trunk diameter; with extensive fungal

9. Physiology

General health and biological function, taking into account a healthy specimen of its size, age, species and location.

10. Structure

Structural condition of the tree, based on root (visible portions only), basal, trunk, stem and branch morphology.

Good: No morphological defects and no fungal or bacterial colonisation;

Fair: only minor morphological defects and a very low likelihood of failure; no pathological colonisation;

Poor: irremediable and significant morphological defects, leading to an increased likelihood of failure.

11. Comments

Comments have been made where appropriate.

12. BS5837:2012 Category

Category assigned to the tree, based on its arboricultural quality, arboricultural landscape value and potential, in accordance with Table 1 of British Standard BS 5837:2012 "*Trees in relation to design, demolition and construction -*

13. RPA radius

Radius of the root protection area, based on the trunk diameter of the tree, in accordance with Section 4.6 of British Standard BS 5837:2012 "*Trees in relation to design, demolition and construction - Recommendations*".

Table 1: Cascade chart for tree quality assessment

Category and definition	Criteria			Identification on plan
Trees unsuitable for retention				
Category U Those 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 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			Red
Trees to be considered for retention				
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	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 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	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	Trees with material conservation or other cultural value	Blue
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	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	Grey

Client name: Oakwood Building Contractors Ltd
 Site: Land at St. Columbas Close
 Reference: MDJAC-224.018-TSS-01
 Survey date: 28/03/2024

Tree Survey Schedule



No.	Common name	Height [m]	Trunk diameter [mm]	Radial Crown Spread [m]	Height to 1st Branch [m]	Crown Clearance [m]	Age class	Physiology	Structure	Comments	Category	RPA Radius [m]
T1	Chanticleer pear	4	50	N0.5m E0.5m S0.5m W0.5m	2	2	Young	Fair	Fair	Recently established planting. Only remaining tree of four planted in the area.	C (1)	0.6
T2	Common lime	14	490	N5.75m E5m S5.75m W5.75m	2	2	Mature	Good	Fair	Surface roots, particularly on W aspect. Pollarded to 8m x 2.5m in the past. Of moderate quality and landscape value.	B (1)	5.88
T3	Wild cherry	8	250	N4m E3m S3m W4m	3	3	Early-mature	Fair	Fair	Located at top of bank. Established tree within boundary group of trees. Appears to be of moderate quality but of low landscape value.	C (1)	3
G4	Elder	1-5	100 (max.)	N2.5m E2.5m S2.5m W2.5m	0.5	0.5	Semi-mature	Fair	Fair	Group of self-seeded trees growing along the top of a bank. Provides effective boundary screening but is generally of low arboricultural value.	C (1)	1.2
T5	Elder	5	100	N1.5m E1.5m S1.5m W1.5m	1	1	Semi-mature	Good	Fair	Off-site. Small self-seeded tree. Of moderate quality but of low landscape value.	C (1)	1.2
G6	Flowering cherry	5-6	200	N3.5m E3.5m S3.5m W3.5m	1	1	Semi-mature	Fair	Fair	Off-site group of trees. Heavily ivy covered. Effective boundary screening. Of moderate quality but of low landscape value.	C (1)	2.4
G7	Leyland cypress	10-12	450 (max.)	N5m E4m S5m W4m	2	2	Early-mature	Fair	Fair	Off-site group of trees. Central tree suppressed by terminal constituents. Chlorotic foliage in places, likely caused by fungal association with <i>Seiridium cardinale</i> . Of moderate quality and landscape value.	B (2)	5.4
T8	Wild cherry	10	250	N4m E1m S4m W4m	2	1	Early-mature	Poor	Poor	Moribund specimen.	U	3

Client name: Oakwood Building Contractors Ltd
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 Reference: MDJAC-224.018-TSS-01
 Survey date: 28/03/2024

Tree Survey Schedule



No.	Common name	Height [m]	Trunk diameter [mm]	Radial Crown Spread [m]	Height to 1st Branch [m]	Crown Clearance [m]	Age class	Physiology	Structure	Comments	Category	RPA Radius [m]
T9	Whitebeam	9	335	N6m E4.5m S2.25m W3.75m	1	1	Mature	Fair	Fair	Heavily leaning. Of moderate quality but of low landscape value.	C (1)	4.02
T10	Elder	5	150	N2m E3m S1m W1m	0	1	Early-mature	Good	Fair	Off-site tree. Access to base restricted by fencing. Appears typical of species. Of moderate quality but of low landscape value.	C (1)	1.8
T11	Flowering cherry	9	250	N3m E3m S3m W3m	2	2	Semi-mature	Fair	Poor	Significant stem wound to 1.5m; decay. Growing from, and damaging, edge of concrete path.	U	3
T12	Flowering cherry	11	400 480	N6.5m E4.5m S6m W6.5m	2	2	Mature	Good	Fair	Twin-stemmed. Strip canker. Aerial decay. Previously crown lifted. Of moderate quality and landscape value.	B (2)	7.5
T13	Himalayan cotoneaster	5	200 200 200	N4m E4m S4m W4m	1	0	Mature	Good	Fair	Ivy-covered ornamental tree. Appears to be multi-stemmed but access to base restricted. Of moderate quality but of low landscape value.	C (1)	4.16
T14	Elder	6	11x 70	N3m E3m S3m W3m	2	1	Mature	Good	Fair	Multi-stemmed. Likely self-seeded. Of limited arboricultural value or landscape merit.	C (1)	2.79
T15	Norway maple	12	630	N5.75m E5.25m S4.75m W5.5m	3	2	Mature	Good	Fair	Lapsed pollard. Aerial decay. Readily visible in views from Valley Drive. Of moderate quality and landscape value.	B (2)	7.56
T16	Norway maple	10	430	N5m E4.75m S5.5m W5.25m	2	2	Mature	Good	Fair	Lapsed pollard. Aerial decay with jelly ear fungus (<i>Auricularia auricula-judae</i>) on historical wounds. Of moderate quality and landscape value.	B (2)	5.16

Client name: Oakwood Building Contractors Ltd
 Site: Land at St. Columbas Close
 Reference: MDJAC-224.018-TSS-01
 Survey date: 28/03/2024

Tree Survey Schedule



No.	Common name	Height [m]	Trunk diameter [mm]	Radial Crown Spread [m]	Height to 1st Branch [m]	Crown Clearance [m]	Age class	Physiology	Structure	Comments	Category	RPA Radius [m]
T17	Elder	4	200	N1m E1m S1m W2m	1	0	Early-mature	Good	Fair	Multi-stemmed. Typical example of species. Reduced from path to east.	C (1)	2.4
T18	Norway maple	7	240	N3m E2m S3m W2m	1	0	Semi-mature	Good	Poor	Former coppice. Likely self-seeded. Close to retaining wall. Of moderate quality but of low landscape value.	C (1)	2.88
G19	Lawson cypress	3-4	100 (Avg.)	N1m E1m S1m W1m	1	1	Young	Good	Fair	Pair of small ornamental conifers. Of moderate quality but of low landscape value.	C (1)	1.2
T20	Elder	5	150	N2m E1m S2m W3m	2	1	Early-mature	Good	Fair	Self-seeded rear garden specimen.	C (1)	1.8
T21	Buddleia	4	100	N1.5m E2m S2m W2m	0	0	Semi-mature	Fair	Fair	Self-seeded shrub.	C (1)	1.2
G22	Elder and Norway maple	2-5	75 (Avg.)	N2m E2m S2m W2m	1	1	Young	Good	Fair	Off-site trees. Self-seeded. Of limited arboricultural quality or landscape value.	C (1)	0.9
T23	Silver birch	8	350	N2m E2m S3m W3m	2	2	Mature	Good	Fair	Off-site. Heavily ivy-covered tree. Obscures lower trunk. Appears to be of moderate quality and landscape value.	B (2)	4.2
T24	Silver birch	9	300	N3m E1m S2m W3m	3	2	Mature	Fair	Fair	Off-site. Heavily ivy-covered tree. Obscures lower trunk. Previously cut back from building. Appears to be of moderate quality and landscape value.	B (2)	3.6

Client name: Oakwood Building Contractors Ltd
 Site: Land at St. Columbas Close
 Reference: MDJAC-224.018-TSS-01
 Survey date: 28/03/2024

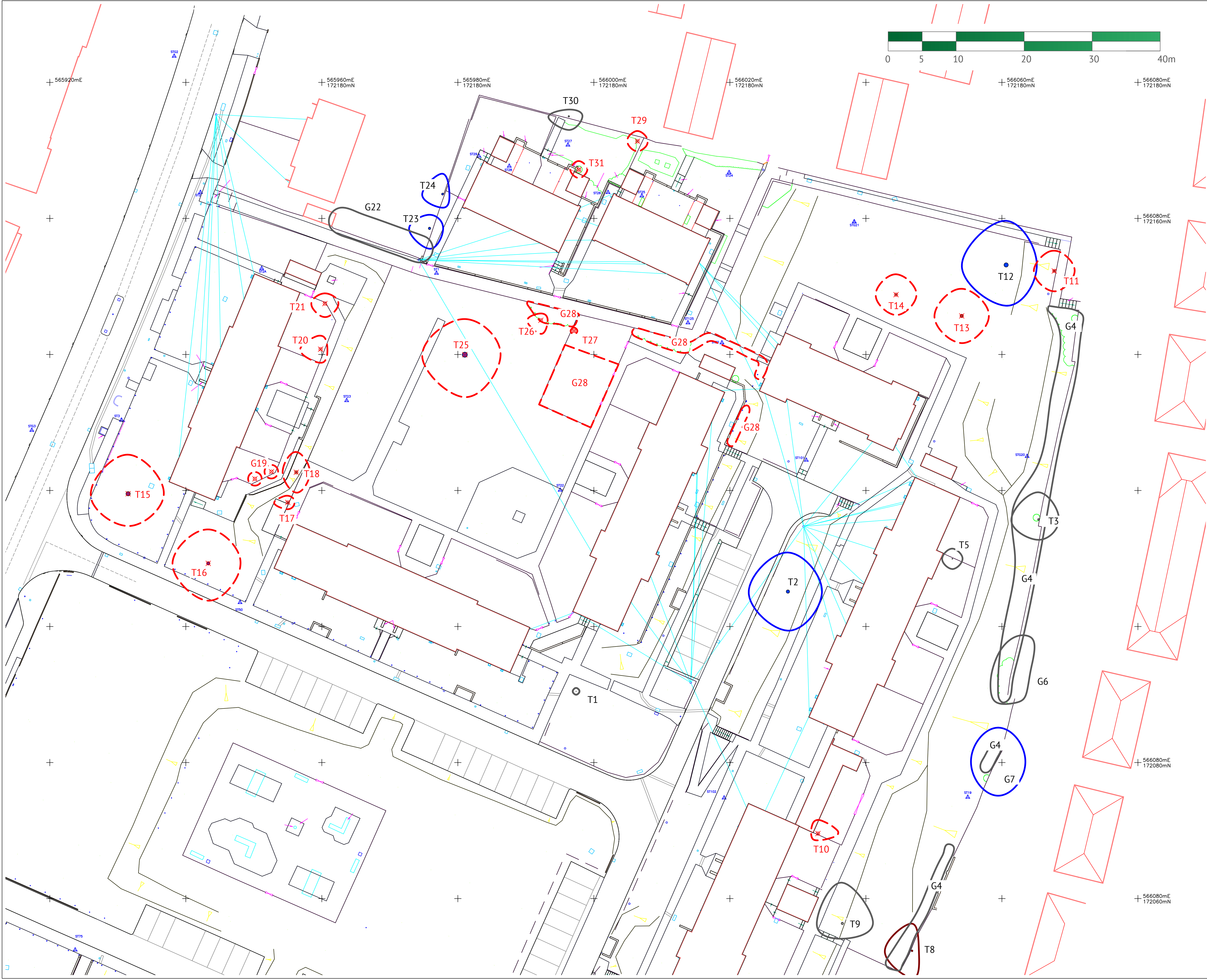
Tree Survey Schedule



No.	Common name	Height [m]	Trunk diameter [mm]	Radial Crown Spread [m]	Height to 1st Branch [m]	Crown Clearance [m]	Age class	Physiology	Structure	Comments	Category	RPA Radius [m]
T25	Wild cherry	13	470 600	N5.25m E5.25m S6.25m W6.25m	1	3	Mature	Good	Fair	Surveyed from distance due to lack of access. Twin-stemmed. Focal tree of visual prominence. Bacterial canker. Of moderate quality and landscape value.	B (1, 2)	9.15
T26	Apple	4	110	N1m E1m S2m W2m	1	1	Young	Good	Fair	Small fruit tree. Of moderate quality but of low landscape value.	C (1)	1.32
T27	Dwarf cypress	3	100	N0.5m E0.5m S0.5m W0.5m	0	0	Semi-mature	Fair	Fair	Small ornamental conifer. Of limited arboricultural quality or landscape merit.	C (1)	1.2
G28	Elder and dogwood	1-3	75 (max.)	N1.5m E1.5m S1.5m W1.5m	0.25	0.25	Semi-mature	Fair	Poor	Unmanaged, self-seeded vegetation. Of low quality and landscape value.	C (1)	0.9
T29	Hybrid poplar	9	150	N1.5m E1.5m S1.5m W1.5m	1	1	Semi-mature	Good	Good	Surveyed from distance. Appears to be of moderate quality but currently of low landscape value due to small size. Insufficient space for future development into maturity.	C (1)	1.8
T30	Elder	4	200	N1m E2m S2m W3m	1	2	Mature	Fair	Fair	Self-seeded. Typical of species. Of limited arboricultural quality or landscape merit.	C (1)	2.4
T31	Common holly	3	100	N1.25m E1.25m S1.25m W1.25m	0	0	Young	Fair	Fair	Self-seeded. Of moderate quality but of low landscape value.	C (1)	1.2

APPENDIX 2: TREE REMOVAL PLAN

15 Windsor Close
Southwater
West Sussex
RH13 9XH



- Trees to be removed
- Category 'A' tree
- Category 'B' tree
- Category 'C' tree
- Category 'U' tree



Drawing History		
Rev	Date	Comments

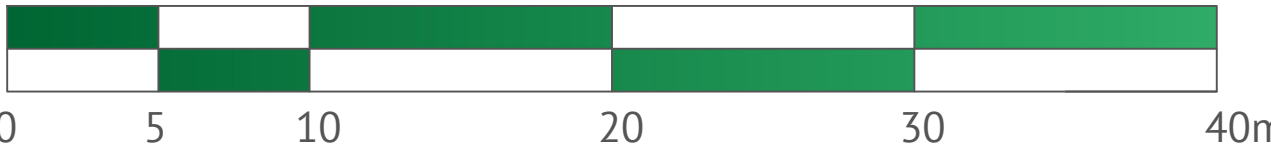
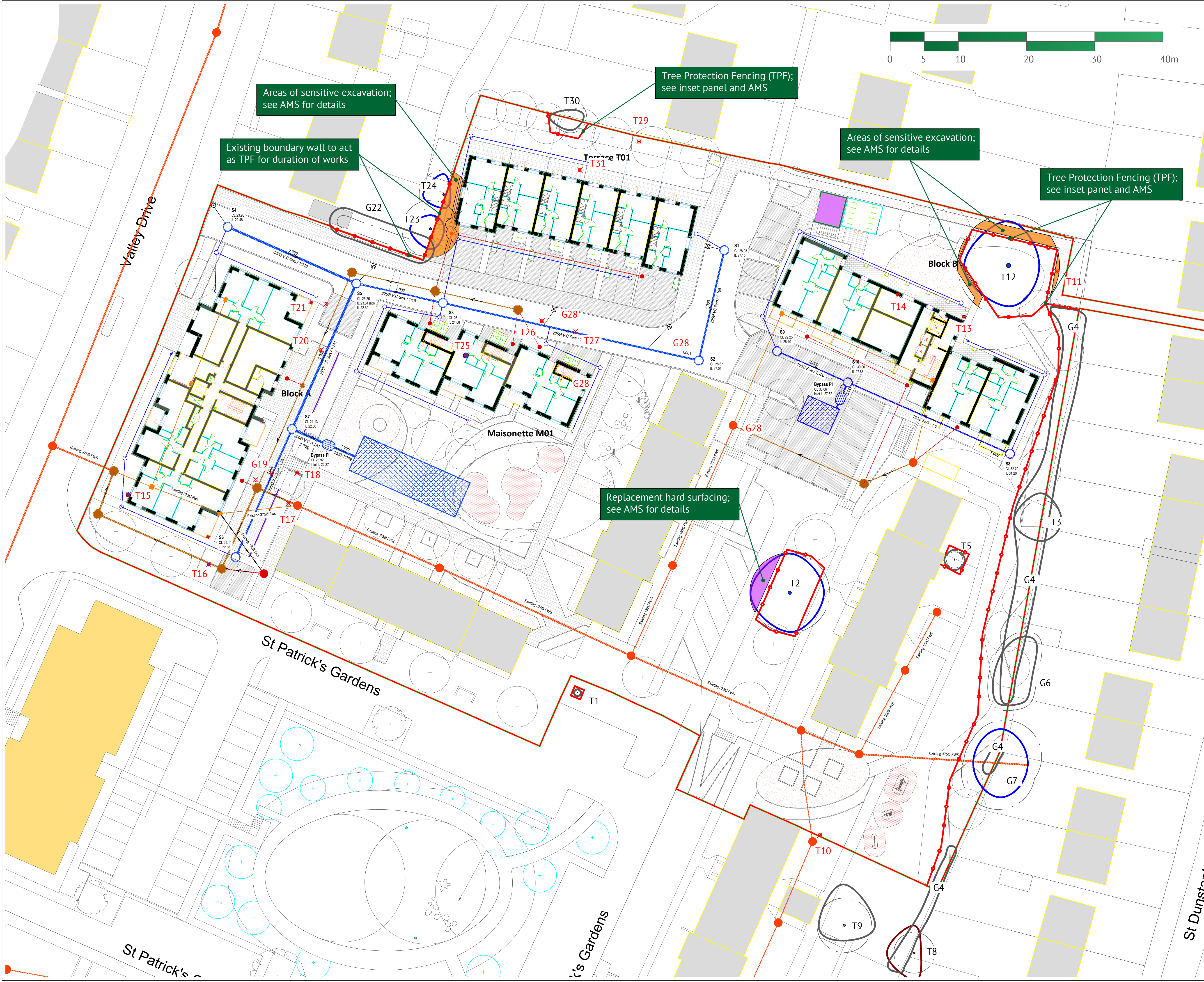


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Site:	Land at St. Columba's Close, Gravesend, Kent
Client:	Oakwood Building Contractors
Title:	Tree Removal Plan (TRP)
Date:	April 2024
Dwg No:	MDJAC-24.018-TRP-01
Scale:	1:250 @ A1

APPENDIX 3: TREE PROTECTION PLAN

15 Windsor Close
Southwater
West Sussex
RH13 9XH



Tree Protection Fencing (TPF)

The default specification comprises a scaffold framework, onto which 2m tall, welded mesh panels such as 'heras' panels will be secured to uprights and cross-members with suitable wire ties. Upright scaffold posts will be driven into the ground to a minimum depth of 600mm, taking care to avoid damage to the roots of retained trees.

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

	Trees to be removed		Tree Protection Fencing (TPF)
	Category 'A' tree		Sensitive Excavation
	Category 'B' tree		Replacement Hard Surfacing
	Category 'C' tree		
	Category 'U' tree		
	Root Protection Areas (RPAs)		

Drawing History

Rev	Date	Comments

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Site:	Land at St. Columba's Close, Gravesend, Kent
Client:	Oakwood Building Contractors
Title:	Tree Protection Plan (TPP)
Date:	April 2024
Dwg No:	MDJAC-24.018-TPP-01
Scale:	1:250 @ A1