RMTTree Consultancy Ltd

BS5837:2012
Arboricultural Survey
Implications Assessment
&
Arboricultural Method Statement

Site Address:
Windlesham Plant Centre
Church Road
Windlesham
GU20 6BL

Robert Toll
HND Urban Forestry - ND Forestry - MArborA

Ref: RMT519
Site Inspection Date: 23rd September 2020
Date Report Published: 17th November 2020

Arboricultural ASSOCIATION Professional Member
PRO2239

Contents

1. Direction

1.1 To undertake an inspection of trees that are on or adjacent to Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL in accordance with British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations.

Figure 1 – Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL

Image courtesy of Google Map Data © 2019

2. Purpose of this report

2.1 This report provides clarification of the above and below ground arboricultural constraints in order to inform the site layout design relating to the proposed development on land at Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL.

3 Limitations

3.1 The survey was carried out from ground level using my observations of the trees.

3.2 A topographical survey showing the location of some of the trees present on or immediately adjacent to the site has been supplied prior to the survey being undertaken. The locations of trees and groups G3, T4, G11, T14, T15, G18 and G19 have been plotted by the appointed arboriculturist to the best of his ability.

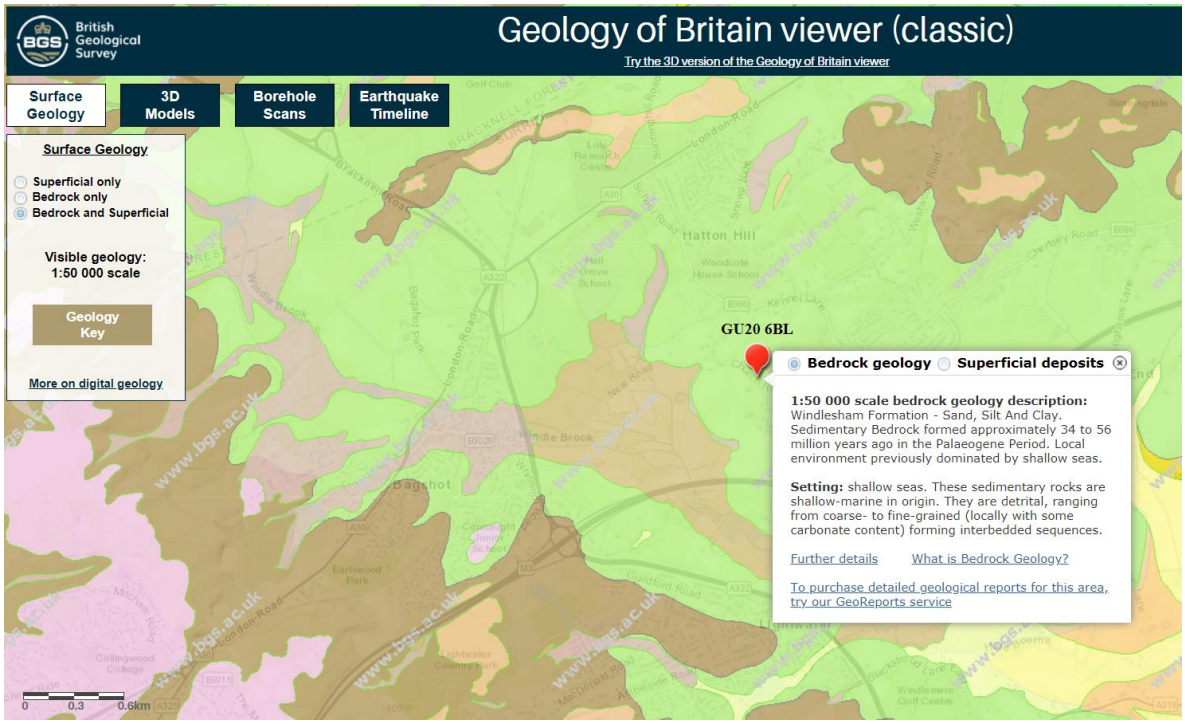
3.3 All measurements taken to calculate root protection areas and canopy spreads have been measured wherever possible. Where it has not been possible to access certain areas, dimensions have been estimated.

3.4 This report does not constitute a safety survey of the trees included within it. It is advised that if there are concerns regarding the risk posed by trees to persons and property then a tree condition survey should be commissioned.

4 Soil Assessment

4.1 No soil assessments have been undertaken however a check the British Geological Survey gives the soil type as Windlesham Formation - Sand, Silt and Clay. This means that the underlying soil is shrinkable and as such foundations will need to be deepened. If further assessments are undertaken that show that there is shrinkable clay, then foundations to must be designed in accordance with the guidance within the National House Building Council's Standards Chapter 4.2 Building near trees.

Figure 2 – The British Geological Survey indicates that the soil make up at Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL is shrinkable Windlesham Formation - Sand, Silt and Clay.



5 Site Description

5.1 The site is a plant nursery with small buildings, glass houses and hardsurfacing in the western half. The site access is located midway along the southern boundary and provides access from Church Road. The eastern half of the site consists of an area formerly used for the growing of plants.

6 Legal Restrictions

6.1 The local planning authority (LPA) has not been contacted to ascertain whether the trees on or adjacent to the site are protected by Tree Preservation Orders (TPO) or if they are within a Conservation Order.

6.2 A check on the Surrey Heath Borough Council online protected tree checking facility indicates that the site is within the Church Road, Windlesham Conservation Area.

6.3 Trees protected by a Conservation Area benefit from statutory protection and no work can be carried out to them (including cutting roots, branches or felling) without the written consent of the LPA. In the event that planning permission is granted and trees are shown as removed or requiring works to facilitate development then this overrides the protection afforded by a TPO or Conservation Area.

7 Proposal

7.1 Construction of dwelling following demolition of the plant centre buildings.

8 Background

Tree categorisation

8.1 A total of eleven trees and ten groups have been surveyed. At the time of inspection one tree was considered to category A and high value and three trees and one group were considered to be category B and moderate value. The remaining trees and groups were considered to be category C and of low value.

8.2 All trees were categorised in accordance with British Standard 5837:2012 as shown at **Appendix 1**.

8.3 In general category C category trees and groups should not be considered a material constraint to development.

8.4 It was noted that there are other trees that are located on or adjacent to Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL but they have not been included within this report. This is because it is deemed that they are:

- far enough from the area proposed for development that they will not be affected;
- they will be adequately protected by the tree protection measures afforded to the surveyed trees;
- they are specimens of limited significance;

Root protection area (RPA) definition

8.5 Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure are treated as a priority.

(*British Standard 5837:2012 – Trees in relation to design, demolition and construction – Recommendations – The British Standard Institute 2012).*

Canopy spreads

8.6 The canopy spreads have been measured from ground level using a laser measure and visual assessment.

Measurements

8.7 Wherever possible all diameter at breast height measurements have been measured using a DBH tape. Where it has not been possible access the stems at 1.5m above ground level due such things as dense Ivy, trees being offsite or the tree being inaccessible, an estimated measurement has been taken. All estimated measurements include the word "estimated" or the abbreviation "est".

9 Arboricultural Implications Assessment

Access facilitation works

9.1 To facilitate development it will be necessary to reduce the southern canopy of T4 Laurel back to the common law boundary. Tree T4 Laurel is considered to be an insignificant specimen of low quality. As such it is considered that on this occasion the works are reasonable.

Tree protection fencing

9.2 Tree protection fencing will be required throughout the construction process to restrict construction access within the RPAs of tree T1 Birch and group G20. Additionally a section of temporary fencing will be erected in front of the access gate to the eastern field. The areas to be protected by the tree protection fencing can be seen as blue lines on the accompanying Tree Protection Plan at **Appendix 4**.

9.3 Tree protection fencing will consist of a scaffold framework, well braced to resist impacts, with vertical tubes spaced at a maximum intervals of 3m. Onto this, weld mesh panels or 2m high shuttering board will be securely fixed with wire or scaffold clamps.

9.4 Un-braced weld mesh panels on unsecured rubber or concrete feet will not be used as these are not resistant to impact and are too easily removed by site operatives. An alternative system of bracing which does not require a scaffold framework may be practical however this will need the written consent of the LPA. A notice will be attached to the fencing which says ‘Tree Protection Area. Keep Out!’

Demolition of structures and surfaces within RPAs

9.5 The demolition of the sheds within the RPA T4 Laurel should be undertaken using the top down, pull back method. This method means that the structures are pulled inwards on themselves so that any vehicles and debris do not fall or encroach into RPA and lessens the risk of direct damage to the trees occurring.

9.6 The existing concrete hardstanding and shingle surface within the RPAs of tree T4 Laurel and group G3, will need to be demolished sensitively to avoid damaging roots that may be present. To avoid damaging roots it will be necessary for the concrete slab to be broken up using hand or pneumatic tools.

Services

2.1 The proposed layout of incoming services is not yet established but they should be installed outside root protection areas. If it is necessary for a trench to be dug through an RPA a specific method statement will be required which will need to specify that the trench will be hand dug and that care will be taken to preserve all roots encountered which are larger than 25mm diameter.

2.2 It is considered that there is adequate space for new service trenches to be routed into the site without having to pass through the RPAs of retained trees.

3 Arboricultural Method Statement

Access facilitation works

3.1 The agreed pruning works to tree T4 Laurel will be carried out as preliminary works as detailed at **Appendix 2**. These works will be carried out by suitably qualified arborists to the standards set out in BS3998: 2010 Tree works – recommendations. Heavy machinery must not be used on unprotected ground.

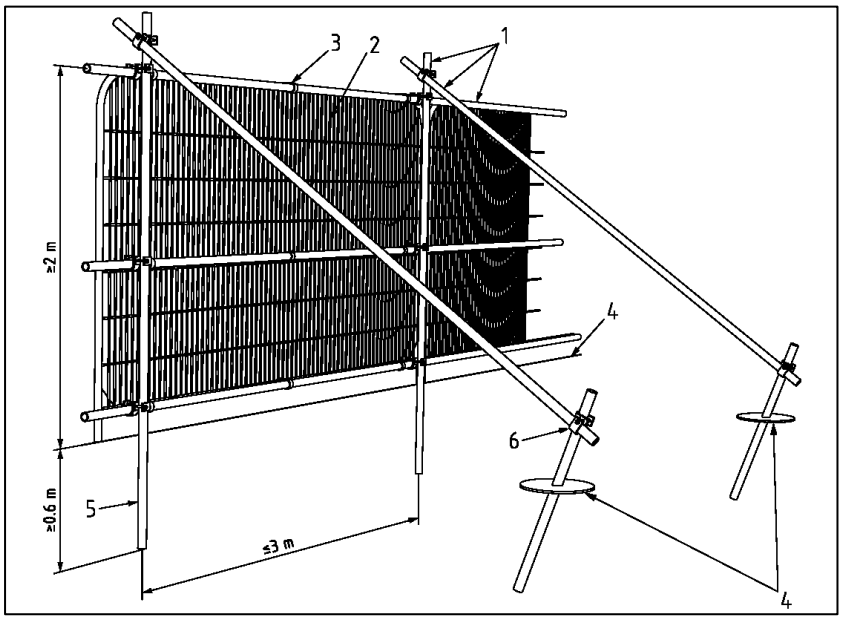
Pre-commencement meeting

3.2 Prior to the commencement of development all tree protection will be erected and a site meeting will be held between the appointed building contractors, the appointed arboriculturalist and local planning authority Tree Officer as detailed at **Appendix 5**. This meeting will ensure that the position of the tree protection is correct and methods of protecting trees is understood.

Protective barriers/fencing

3.3 All tree protection barriers will be erected in the positions shown at **Appendix 4** and in accordance with the specifications detailed in figures 3, 4 and 5.

Figure 3. Default specification for protective barrier

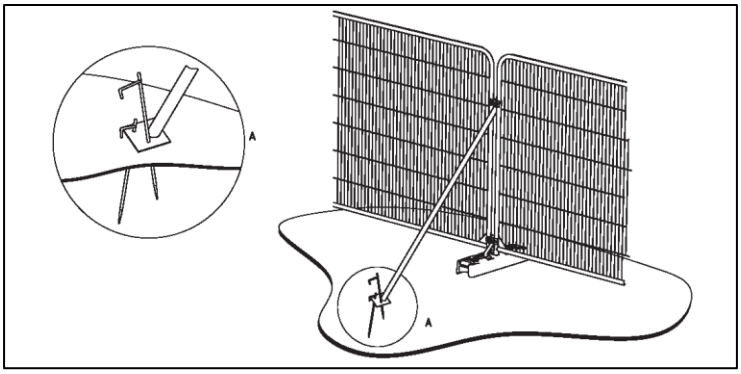


Key

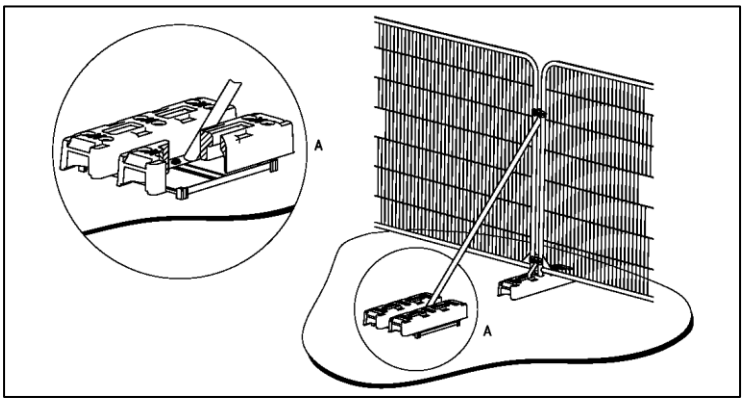
1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to uprights and cross-members with wire ties
4. Ground level
5. Uprights driven into the ground until secure (minimum depth 0.6m)
6. Standard scaffold clamps

Image taken from British Standard 5837:2012 – Trees in relation to design, demolition and construction – Recommendations

Figure 4 and 5. Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Image taken from British Standard 5837:2012 – Trees in relation to design, demolition and construction – Recommendations.

Warning signs

3.4 All weather notices will be attached to the tree protection fencing.

Figure 6. Examples of tree protection warning sign.

3.5 Development can commence in accordance with the planning consent.

3.6 Following completion of all development the tree protection can be dismantled to allow landscaping works to take place.

Burning of waste

3.7 No fires will be lit on site within 3m of root protection areas, due to the danger of scorching of leaves and branches of overhanging trees.

Space for machinery, parking of vehicles, storage of materials and site huts

3.8 No fires will be lit on site within 3m of root protection areas, due to the danger of scorching of leaves and branches of overhanging trees.

3.9 All machinery required on site will operate outside of root protection areas or from the ground protection. Site huts and accommodation, if required, will be located outside root protection areas.

3.10 Delivery vehicles will park in unprotected areas of the site and at least 2m from tree protection barriers.

Landscaping

3.11 Once construction has demonstrably finished (to the satisfaction of the appointed arboriculturist) fencing may be removed in order to allow final landscaping to be undertaken. Landscaping plans have been/will be prepared by others and will not/do not involve any changes in soil levels, digging of any trenches or construction of masonry or retaining walls within root protection areas.

Arboricultural supervision

3.12 It is recommended that an appointed arboriculturalist is instructed to oversee tree protection for the duration of the construction/landscaping contract(s). Alternatively, a designated person (site foreman or site owner) should take on the responsibility of overseeing tree protection. If appointed, the appointed arboriculturist will be consulted on any issues that may arise concerning trees and will visit the site as often as necessary to ensure that trees are protected and/or at the following key stages:

- Prior to contractors commencing works on site in order to meet with the supervising architect and/or the contractor's nominated site manager and Tree Officer to ensure that the principles of tree protection are understood and the procedure, timescale and materials for installation of tree protection are agreed;
- Following installation of tree protection but prior to any works commencing on site to confirm that it is fit for purpose;
- At any time that there are potential conflicts with tree protection;
- At the completion of construction works to confirm that tree protection may be removed to enable final landscaping;

3.13 A pre-start meeting should be held on site with the appointed arboriculturist and the contractor's representative(s) so that the precise details of the schedule of works together with details of installation of tree protection can be agreed and personnel induction carried out. The site manager/foreman will be fully briefed on tree protection measures and procedures before any workers or sub-contractors are permitted onto the site. Following induction, a copy of the Induction Sheet (**Appendix 7**) will be provided to and be signed by the site manager/foreman in recognition of acceptance of their role in enforcing day to day tree protection.

3.14 All contractors involved in the project have a duty to comply with all the specified tree protection measures and all workers will be provided with induction by the site manager/foreman and be required to sign an Induction Sheet confirming they have understood the protection measures. Signed sheets will be kept on site for inspection.

3.15 No enabling works will take place until after the meeting has been held and tree protection has been installed, inspected and approved as fit for purpose.

3.16 Fencing and ground protection will not be removed under any circumstances during construction unless with the express approval of the local planning authority. If in any doubt the site manager must contact the appointed arboricultural consultant.

4 Conclusions

4.1 A BS5837: 2012 survey of eleven trees and ten groups have been carried out on land at or to adjacent Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL.

4.2 At the time of inspection one tree was considered to be category A and high value, three trees and one group were considered to be category B and moderate value. The remaining trees and groups were considered to be category C and low value.

4.3 The proposed development requires pruning works to one category C tree T4 Laurel.

4.4 The trees to be retained will be protected during development and methods for ensuring their protection have been described.

4.5 The development is sympathetic to the leafy character of the area.

Appendix 1 – British Standard 5837:2012 tree categorisation chart

TREES UNSUITABLE FOR RETENTION				
CATEGORY AND DEFINITIONS	CRITERIA			IDENTIFICATION ON PLAN
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 a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5 of BS5837:2012***			RED RGB 127.000.000
TREES TO BE CONSIDERED FOR RETENTION				
CATEGORY AND DEFINITIONS	CRITERIA - SUBCATEGORIES			IDENTIFICATION ON PLAN
	1 Mainly arboricultural values	2 Mainly landscape values	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)	LIGHT GREEN RGB 000.255.000
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	MID BLUE RGB 000.000.255
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 150 mm	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 this 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 RGB 091.091.091

Appendix 2 - Tree survey schedule

Tree No.	Species	Height (m)	Trunk dia. at 1.5m	Canopy Spread	Crown Height (m)	Age Class	Physiological Condition	Structural Condition	Comments/ Recommendations	Useful Life Expect	BS5837 grade	Root Protection Area	
												Radius	RPA Area
T1	Silver Birch *(Betula pendula)*	18m	400mm	N3m E5m S6m W5m	5m	Mature	Fair	Good	Off-site tree. Distal dieback within upper canopy.	20+	C	4.8m	72.4m²
T2	Smooth Arizona Cypress *(Cupressus glabra)*	16m	300mm est	N3m E4m S5m W3m	5m	Early mature	Fair	Good	Off-site tree.	20+	C	3.6m	40.7m²
G3	Group of Ginkgo biloba	17m	Max 400mm 300mm est	N4m E4m S4m W4m	7m	Early mature	Good	Fair	Off-site group.	40+	B	4.8m	72.4m²
T4	Portuguese Laurel *(Prunus lusitanica)*	8m	400mm est	N2m E3.5m S2.5m W3.5m	1.5m	Mature	Good	Fair	Off-site tree. Crown has been previously reduced. **Works required for development:** Reduce southern canopy back to common law boundary.	20+	C	4.8m	72.4m²
G5	Group of Common Holly Box Hazel Hawthorn Common Oak Common Yew Leyland cypress Dogwood	3.5m	Max 75mm	N1m E1m S1m W1m	0m	Mature	Good	Good	Hedge.	40+	C	0.9m	2.5m²
T6	Common Oak *(Quercus robur)*	17m	1600mm est	N7m E8m S7m W7m	4m	Mature	Good	Good	Off-site tree.	40+	A	15.0m	706.9m²

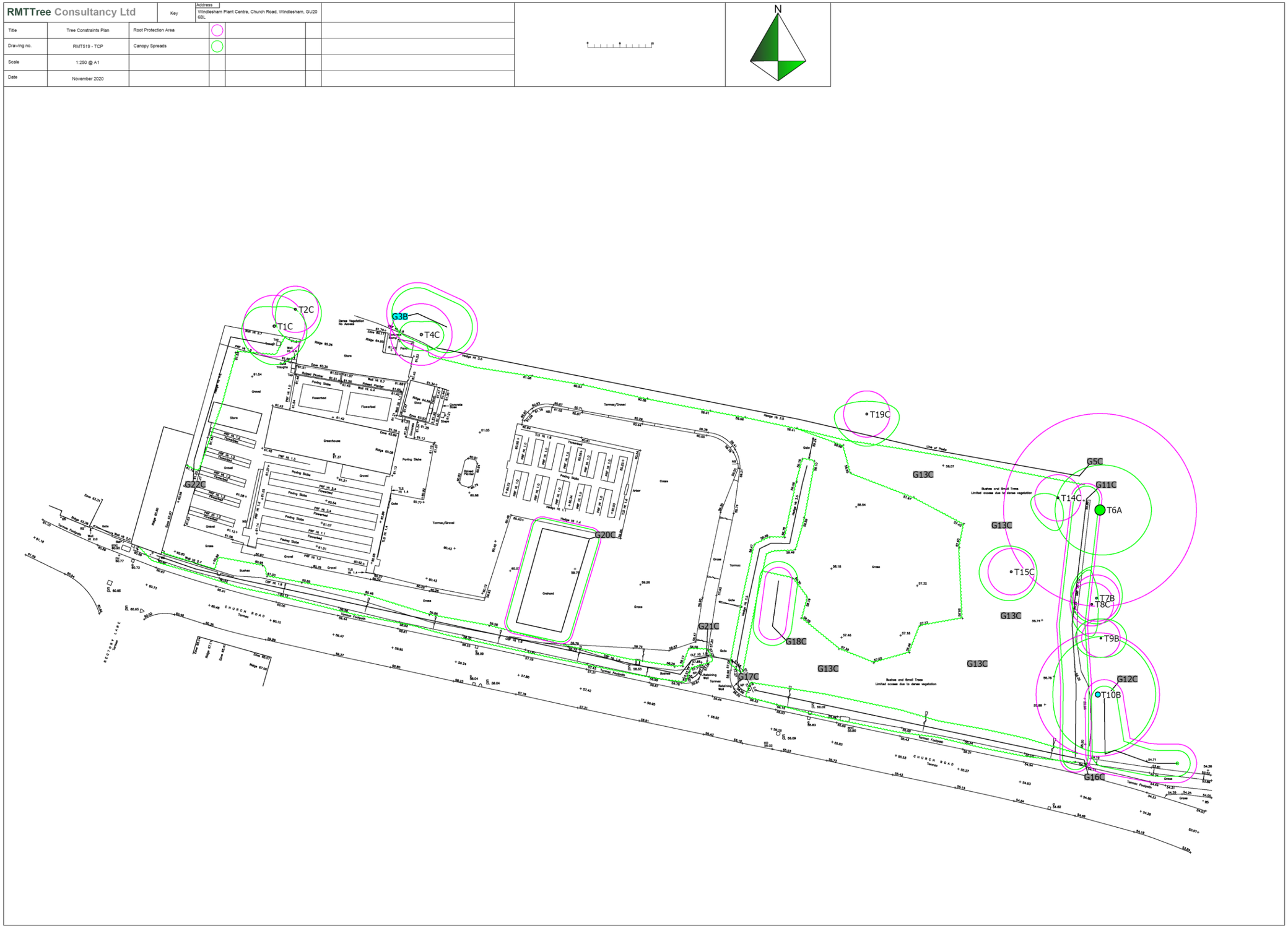
Tree No.	Species	Height (m)	Trunk dia. at 1.5m	Canopy Spread	Crown Height (m)	Age Class	Physiological Condition	Structural Condition	Comments/ Recommendations	Useful Life Expect	BS5837 grade	Root Protection Area	
												Radius	RPA Area
T7	Sycamore *(Acer pseudoplatanus)*	11m	300mm est	N5m E4m S4m W4m	5m	Semi mature	Good	Good	Off-site tree.	40+	B	3.6m	40.7m²
T8	Goat Willow *(Salix caprea)*	8m	200mm 200mm est	N5m E1m S5m W3m	4m	Semi mature	Good	Fair	Off-site tree.	20+	C	3.4m	36.2m²
T9	Sycamore *(Acer pseudoplatanus)*	1m	250mm est	N3m E4m S3m W4m	7m	Semi mature	Good	Good	Off-site tree.	40+	B	3.0m	28.3m²
T10	Common Oak *(Quercus robur)*	20m	800mm est	N9m E9m S9m W7m	3m	Mature	Fair	Good	Off-site tree. Ivy restricts view of main unions and lower stem.	40+	B	9.6m	289.5m²
G11	Common Hazel *(Corylus avellana)*	7m	Max 200mm est	N2m E2m S2m W2m	1m	Mature	Good	Fair	Multi-stemmed coppice.	40+	C	2.4m	18.1m²
G12	Group of Common Holly Sycamore Field Maple	12m	Max 250mm est	N2m E2m S2m W2m	8m	Semi mature	Good	Fair	Off-site group. Etiolated specimens.	20+	C	3.0m	28.3m²
G13	Group of Common Oak Goat willow	7m	Max 100mm est	N2m E2m S2m W2m	1m	Young	Good	Fair	Small self-seeded trees of little merit and previously coppiced.	10+	C	1.2m	4.5m²
T14	Myrobalan Plum *(Prunus cerasifera)*	5m	300mm est	N0m E0m S5m W4m	1.5m	Over mature	Fair	Poor	Suppressed as overtopped by adjacent tree. Medium deadwood.	10+	C	3.6m	40.7m²
T15	Goat Willow *(Salix caprea)*	7m	300mm @750mm est	N4m E4m S4.5m W5m	0m	Semi mature	Good	Fair		10+	C	3.6m	40.7m²

Tree No.	Species	Height (m)	Trunk dia. at 1.5m	Canopy Spread	Crown Height (m)	Age Class	Physiological Condition	Structural Condition	Comments/ Recommendations	Useful Life Expect	BS5837 grade	Root Protection Area	
												Radius	RPA Area
G16	Group of Common Holly Common Hazel Sycamore Leyland Cypress	2.5m	Max 75mm	N0.5m E0.5m S0.5m W0.5m	0m	Mature	Good	Good	Hedge.	40+	C	0.9m	2.5m²
G17	Group of Leyland Cypress	3.5m	Max 75mm	N0.5m E0.5m S0.5m W0.5m	0m	Early mature	Good	Good	Hedge.	40+	C	0.9m	2.5m²
G18	Group of Norway Spruce	10m	Max 175mm est	N3m E3m S3m W3m	0m	Semi mature	Good	Good		40+	C	2.1m	13.9m²
T19	Field Maple *(Acer campestre)*	16m	300mm est	N5m E5m S5m W5m	5m	Early mature	Good	Good	Off-site tree. Suppressed as overtopped by adjacent trees.	40+	C	3.6m	40.7m²
G20	Group of Apple	3m	Max 150mm est	N1.5m E1.5m S1.5m W1.5m	0.5m	Early mature	Fair	Fair		10+	C	1.8m	10.2m²
G21	Group of Common Holly Common Hazel Field maple	2m	Max 75mm est	N0.5m E0.5m S0.5m W0.5m	0m	Early mature	Good	Good	Hedge.	40+	C	0.9m	2.5m²

Appendix 3 – Tree Constraints Plan – RMT519 - TCP

Tree constraints plan (TCP) showing retained trees, tree numbers, root protection areas (magenta circles/polygons) and canopy spreads (green lines). The plan has been provided separately as a PDF at a scale of 1: 200 @ A1.

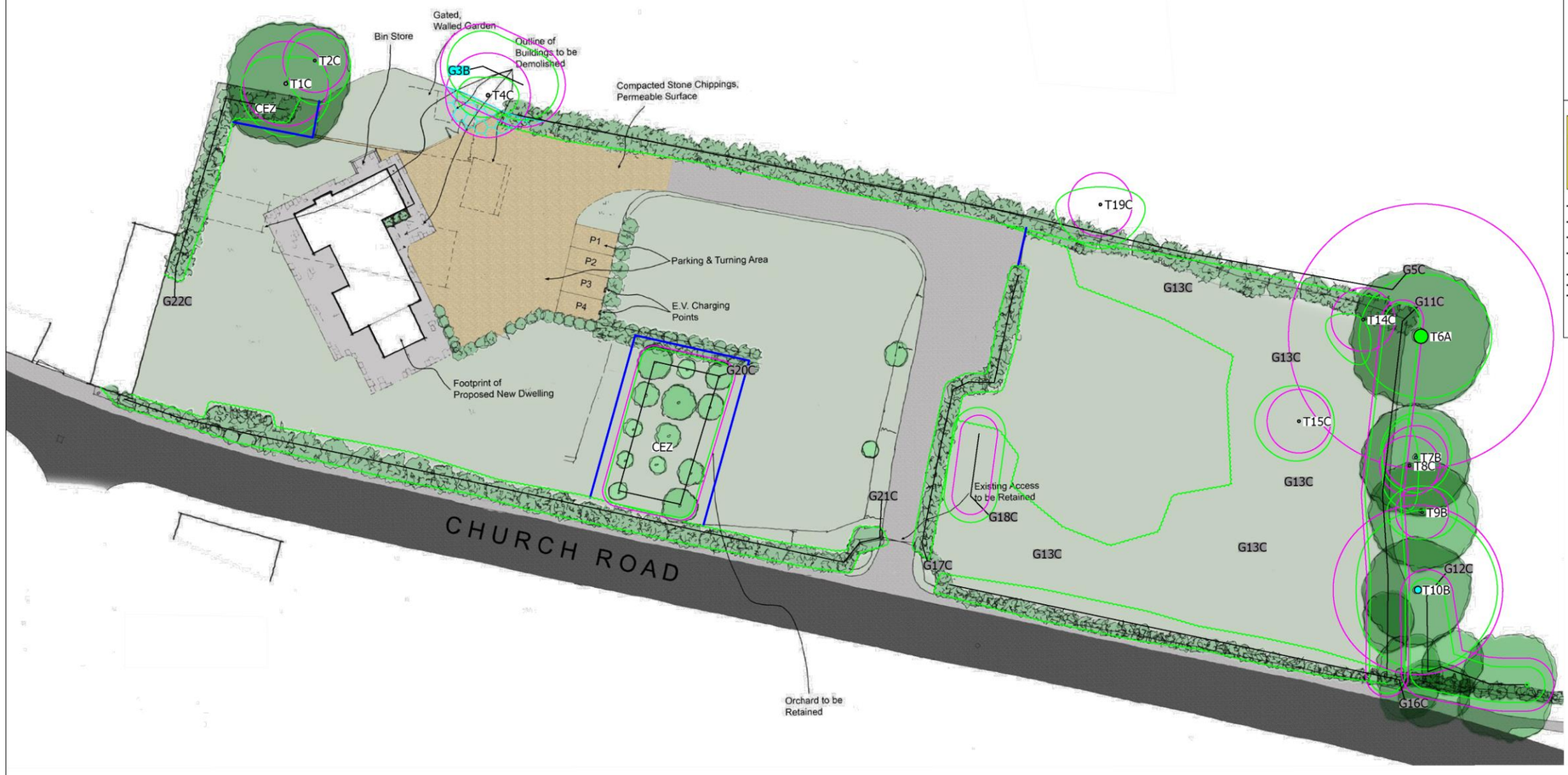
RMTTree Consultancy Ltd		Key	Address: Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL
Title	Tree Constraints Plan	Root Protection Area	
Drawing no.	RMT519 - TCP	Canopy Spreads	
Scale	1:250 @ A1		
Date	November 2020		



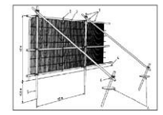
Appendix 4 – Tree Protection Plan – RMT519 – TPP

Tree protection plan (TPP) showing retained trees, tree numbers, root protection areas (magenta circles/polygons) and canopy spreads (green lines). The location of protective fencing is shown as blue lines and sensitive demolition as light blue hatching. The plan has been provided separately as a PDF at a scale of 1: 200 @ A1.

RMTTree Consultancy Ltd		Key	Address: Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL		
Title	Tree Protection Plan	Root Protection Area		Construction Exclusion Zone	CEZ
Drawing no.	RMT519 - TPP	Canopy Spreads			
Scale	1:250 @ A1	Tree Protection Fencing			
Date	November 2020	Sensitive Demolition			



Default specification for protective barrier

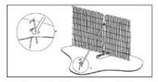


Key

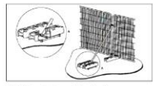
1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to uprights and cross-members with wire ties
4. Ground level
5. Uprights driven into the ground until secure (minimum depth 0.6m)
6. Standard scaffold clamps

Image taken from British Standard 5837:2012 – Trees in relation to design, demolition and construction - Recommendations

Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Image taken from British Standard 5837:2012 – Trees in relation to design, demolition and construction – Recommendations

Example of tree protection warning sign

TREE PROTECTION AREA
KEEP OUT!

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS
THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:
- PROTECTIVE FENCING IS NOT TO BE MOVED
- NO PERSON SHALL ENTER THE PROTECTED AREA
- NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA
- NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
- NO SPOIL SHALL BE DEPOSITED IN THE PROTECTED AREA
- NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA

Root Protection Area and Construction Exclusion Zones

- All tree protection measures will be erected as agreed within the BS5837:2012 Arboricultural Survey, Implications Assessment and Arboricultural Method Statement;
- There will be access to foot or vehicular traffic within fenced off areas once development (including demolition) has commenced;
- Once development (including demolition) has commenced the tree protection must not be moved for any reason without the written consent of the local planning authority;
- There will be no excavations, storage of materials, mixing of materials or dumping of spoil within construction exclusions zones (CEZ) unless agreed in writing with the local planning authority;
- All caustic substances e.g. oil, diesel, cement etc will not be stored within 2m of CEZs;
- No fires will be lit within 10m of CEZs or tree canopies;
- Protection area signage will be displayed on protective barriers for the duration of development.

PLEASE BE AWARE – The tree protection specified on this tree protection plan and within the Arboricultural Survey, Implications Assessment and Arboricultural Method Statement must be adhered to and cannot be amended. Failure to protect trees in full accordance with the agreed specification is likely to result in local planning authority taking enforcement action, including prosecution.

Appendix 5 – Arboricultural site supervision schedule

Activity	Supervision Required
Pre-commencement meeting between the local authority arboricultural officer, the appointed arboricultural consultant and the appointed building contractor.	✓
At any time that there are conflict issues with the agreed tree protection.	✓

Following every visit the appointed arboriculturalist will fill out the site monitoring form which is shown at **Appendix 6** and this will be forwarded to the LPA.

Appendix 6 – Site monitoring form

RMTTree Consultancy Ltd			
Site Monitoring Form			
Date of Visit		**Site**	
Consultant in Attendance			
Observations/Status of Tree Protection/Comments:			
Recommendations (if necessary):			
Date of Next Visit		**Signature**	

Appendix 7 – Tree Awareness – Site induction Sheet

SITE NAME: Windlesham Plant Centre, Church Road, Windlesham, GU20 6BL

Trees are an important part of this development and they must not be damaged in any way, including indirectly through compaction/contamination of soil, so that they can fully integrate into the finished project and stay healthy well into the future. All persons working on this site have a responsibility to be aware of trees and to abide by tree protection procedures.

How can trees can be damaged?

Above the ground – contacts and impacts with branches and trunk (for example by machine operations: piling rigs, high-sided vehicles, crane use, fixings to trunk, unauthorised cutting back of branches). Make sure there is adequate clearance under the tree canopy and don't stray close to the trunk. Damage to bark allows infections to enter the tree.

Below the ground – roots spread out from the trunk horizontally at shallow depth and are therefore easily damaged. Vehicle and pedestrian movements and storage of materials on unprotected ground causes compaction, especially in wet weather, and must be avoided. Soil stripping during site clearance or landscaping is prohibited in root protection areas. The effects of root damage may take some time to become obvious, but can result in disfiguring dieback of leaves and branches, or even death.

Tree protection procedures

Provided that the simple steps below are followed most tree protection is straightforward:

- Stay out of tree Construction Exclusion Zones (CEZs). These are the areas of ground surrounding retained trees that are protected by barriers and/or ground protection. If you need to go into a CEZ, you must first gain authorisation from the Site Manager.
- No construction activity of any description within CEZs, e.g. soil stripping, cement mixing, services installation, storage of materials etc.
- No fires within 20m of trunk of any retained tree.
- If authorised to work within a CEZ you must follow the procedures set out in the **Arboricultural Method Statement.**
- If damage occurs, you must inform the Site Manager who must, in turn, inform the appointed arboriculturist.

Planning Authority enforcement action needs to be avoided:

- 'Breach of Conditions' notices can prevent a site from being signed-off.
- 'Temporary Stop Notices' halt site operations and result in associated high costs.
- Wilful damage/destruction of TPO/Conservation Area trees can result in company and/or individual prosecutions - fines can me anything up to £20,000 (County Court fines are unlimited). Remember that fines may apply to the person committing the offence as well as the site owner and main contractors!

I have received site induction in tree awareness and tree protection procedures

PRINT NAME

SIGN

DATE

Appendix 8 – Qualifications and experience

Robert Toll has been working with trees since 2004 when he completed his studies.

In 2000 he began his studies at Riseholme College, Lincoln where achieved a pass with merit in Forestry at National Diploma level. In 2002 he attended Moulton College in Northampton where he gained a Level Five Higher National Diploma in Urban Forestry with merit.

In 2004 Robert began work as a temporary tree inspector at Northampton Borough Council, undertaking inspections of trees in response to enquiries from the public. After 4 months Robert took up a permanent tree inspector role at Coventry City Council which predominantly involved undertaking safety inspections of trees on school sites.

In 2006 Robert moved to Warwick District Council to take up a temporary post of Tree Protection Officer which involved reviewing old area tree preservation orders and identifying those trees which were considered worthy of protection under new specific orders. He also streamlined the council procedure for making new tree preservations orders, cutting the time from making to serving from up to 2 weeks to within 2 hours.

In 2008 Robert moved to Hart District Council, Hampshire to take up the role of Tree Officer within the planning department. This role included determining works trees applications, commenting on planning proposals, liaising with the public and providing arboricultural advice to other departments within the Council.

Between 2014 and 2016 Robert took up the role of Tree Officer at Elmbridge Borough Council, Surrey, once again carrying out tasks such as determining works trees applications, commenting on planning proposals and liaising with the public. While at Elmbridge Borough Council he passed the Arboricultural Association's Professional Tree Inspection course.

Robert is a professional member of the Arboricultural Association.