Arboricultural Method Statement

Site: 33 Harmood Street, NW1 8DW CROWN Date: 01/07/2019 Revision: 1 CCL ref No: 10344 08000 14 13 30

Ground Protection Measures

construction activity (including pedestrian activity and use of plant machinery). In order to minimise ground protection measures are installed to the satisfaction of the local authority. compaction, it is proposed to ensure that a suitable load-spreading surface is in place at all times. Any existing hard surfacing may be retained and reinforced (where applicable and adequate), Fires otherwise suitable new ground protection measures shall be installed. The ground protection shall No fires shall be permitted beneath any tree canopy or within 5m of any tree stem, branch or foliage. need to be able to adequately spread the load of construction traffic. Where existing hard surfacing No fires shall be permitted within any Construction Exclusion Zone or Restricted Activity Zone. No is to be retained, it shall not be necessary to install additional ground protection measures. However, fires shall be permitted in the vicinity of any exposed tree roots. the hard surfacing must be firm enough to spread the load of any traffic passing overhead.

Where only pedestrian traffic will occur, the ground protection measures may be as simple as timber Canopy Protection boards, or scaffold planks installed directly onto a geotextile fabric on the ground. The ground In order to protect tree canopies the following restrictions shall apply throughout the site: should first be made even by raking, or by adding a few centimetres of sand or woodchip. Alternatively the boards may be supported by a scaffold framework. The scaffold may be founded on poles driven into the ground and/or onto blocks (to raise the scaffold) with additional couplings to If materials require installation or delivery beneath tree canopies, this shall be done without the make the framework secure

Where only light vehicles are to operate (e.g. barrows, trollevs or occasional cars), thick wooden • If materials are to be installed or delivered close to tree canopies (but not beneath them) and a boards or scaffold planks should also suffice, though at least 150m of compressible woodchip will need to be installed first to help spread the load. Sturdier systems are specified below:

Where cars will regularly park or heavier vehicles/plant machinery will occasionally operate, sturdier ground protection measures will be required such as metal road plates, or purpose built synthetic Storage of Spoil and Materials road mats over a compression resistant layer such as 150mm of woodchip or 100mm of a 3D cellular Storage of materials and spoil shall be avoided in any Construction Exclusion Zones and Restricted confinement system in-filled with 7–40mm angular gravel (e.g. CellwebTM).

A temporary concrete slab may also be considered as a suitable load spreading platform. Where a pile driver needs to operate, a concrete slab may be the preferred option. Where existing structures need to be removed, this shall be done with temporary ground protection

measures in place to enable this to be achieved without compacting soils. The ground protection measures shall be installed and approved before commencement of demolition and construction activity and before the arrival of plant machinery or materials. They shall outside the Construction remain in place until all heavy construction activity is complete or until they are due to be replaced Exclusion Zones and Restricted with a new hard surface.

Construction Exclusion Zones

- Within Construction Exclusion Zones the following restrictions shall apply: Tree Protection Barriers shall be erected and maintained throughout the entire shall be made to ensure that
 the shall be shall be the s project as indicated on the Tree Protection Plan and under the header -Tree
 - Protection Barriers. • These shall remain in place at all times except when authorised landscaping works the Root Protection Area of any trees (see diagram for example). Mixers and barrows shall be are being undertaken. At such times, all restrictions that apply to the Restricted cleaned within this area. Activity Zone shall apply. Furthermore, the project arborist shall be informed prior to any works being undertaken in these zones.
 - No construction activity or excavation shall occur unless agreed otherwise by the containers as specified by current COSHH Regulations, and kept away from Root Protection Areas. project arborist and local authority. No vehicles or plant machinery shall be driven or parked. • No tree works, other than those specified in this report shall be undertaken.
 - No alterations of ground levels or conditions shall occur. No chemicals or cement washings permitted
 - No temporary structures shall be installed. • No spoil shall be stored.
 - No fires shall be permitted.

 All hazardous materials (including non-essential cement products) shall be forbidden • Removal of hard surfaces, structures or turf shall be done using hand operated tools only and supervised by the project arborist.

Tree Works Specification

Restrictions in Specific Zones

construction. The following restrictions shall apply:

suitable load spreading surface.

where new surfacing is proposed.

cement products) shall be forbidden.

Activity within the site shall be phased according to the following chronology

No fires shall be permitted.

Postricted Activity Zone A

arborist.

secateurs.

Timing of Operations

construction activity:

The following table specifies the tree works which will be required prior to the commencement of

Tree Reference	Action Required	Notes
T4, 2m tall shrub, 3m tall Crab Apple and 2m tall Dogwood	Remove.	Stumps of trees within the RPAs of retained trees shall be removed with a stump grinder NOT a mechanical excavator.
T1 and T2	Prune canopy back to the boundary.	Branches to be pruned back to a secondary branch junction or the branch collar wherever possible.

is installed. Any pedestrian activity other than very occasional shall also require a

applicable) shall be undertaken using hand tools or a mechanical excavator operating

from outside the Restricted Activity Zone and carefully marshalled by the project

• No excavation shall occur beneath any existing hard surfacing and its sub-base or

• No further excavation shall occur in this zone without consulting the project arborist

· Existing ground levels shall be retained undisturbed or raised by no more than 150mm. Ground levels may only be raised using granular topsoil (not rich in clay) or

 No new permanent or temporary structures shall be erected other than those shown on the planning application documents unless approved by the local authority. · Underground services shall not be installed in this area without prior consultation

with the project arborist and a methodology agreed and approved by the local

• If roots are encountered in excess of 25mm diameter, they shall be retained wherever possible and protected with damp sacking during times that they are unearthed. Any roots in excess of 10mm that need to be severed shall be pruned with

 Storage of materials and spoil shall be avoided unless it has been agreed with the project arborist that the ground protection measures are adequate to ensure no soil

compaction or contamination occurs. All hazardous materials (including non-essential

beneath the foundations of any structure such as wall, steps or patio.

and obtaining approval from the local authority.

Client: Belsize Architects

Author: ^{Joe Taylor} FdSc (Arboriculture), M. Arbor A

General Restrictions - Throughout the Site

Preparatory Works Within Restricted Activity Zones, soils containing roots may be subject to compaction due to general No demolition, removal of surfaces, or soil stripping shall commence until the protective fencing and

- marshalled in order to ensure that no branches are damaged. use of overhead cranes. crane is required, they shall be carefully marshalled in order to ensure that branches are not

accidentally damaged.

Activity Zones unless it has been agreed with the project arborist that the ground protection measures are adequate to ensure no soil compaction or contamination occurs. All hazardous materials (including non-essential cement products) shall be forbidden.

Any mixing of cement based materials shall take place Activity Zones. Where cement is to be mixed at considerable distances from trees and water run-off cannot enter Root Protection Areas, then no further special measures are the mixing area is contained so

Sturdy plasic sheet e.g 1200 guage DPN over plastic sheet

All other chemicals hazardous to tree health, including petrol and diesel, shall be stored in suitable

Underground Services

No underground services (including soak-aways) shall be located in any part of the Construction Exclusion Zones or Restricted Activity Zones unless done so in a manner detailed in a specific Method Statement and approved by the local authority.

Site Hoarding

- If site hoarding shall be installed over the Root Protection Area of any tree, the following restrictions shall apply:
- Ground levels shall be maintained as existing. Post holes shall not exceed 300mm x 300mm
- No post hole shall be excavated within 1.5m of any tree stem
- Post holes shall be excavated using hand tools or by a post-hole auger attached to plant machinery sited outside of Root Protection Areas. Roots in excess of 25mm shall be retained wherever possible.
- Roots in excess of 10mm shall be pruned with sharp secateurs. Pruning shall be minimal and only undertaken where absolutely necessary to facilitate the site
- hoarding. It shall be undertaken by a reputable tree surgeon working to BS 3998 (2010). Site hoarding may be installed in place of the specified tree protection measures subject to the approval of the local authority with regard to its location and specification.

Siting of Cabins

Cabins shall be located outside of Construction Exclusion Zones and Restricted Activity Zones unless agreed otherwise by the project arborist. Where this is being considered, the project arborist shall be consulted and specific tree protection measures agreed. The following general restrictions will apply: • All services to and from site cabins shall be installed above ground through any Root Protection

• No excavation shall occur within Root Protection Areas to enable cabins to be installed. • The cabins shall be founded on a suitable load spreading surface.

Scaffolding

If scaffolding is required in areas containing ground protection measures, the protective boards shall need to remain in-situ and be strengthened and stabilised to bear the weight of scaffold poles. Prior to the installation of any scaffolding within 0.5m of any tree branches, the project arborist shall be consulted to specify any pruning works that may be required.

Restrictions in Specific Zones Continued

Restricted Activity Zone B

Within this zone it is proposed to excavate for the lower ground floor. Either contiguous piling (or Within this zone trees roots are likely to be present where access will be required to facilitate sheet piling) shall be installed along the edge of the lower ground floor, or an alternative method shall be adopted which does not disturb soils beyond the footprint of the lower ground floor (e.g. pinning). A typical method of pinning would be to excavate to a specified depth (e.g. 1m), install shuttering and • No vehicles or plant machinery shall park or operate unless a suitable load spreading then cast the concrete lower ground floor walls. Then to excavate short sections beneath this wall and surface is in place. The load spreading surface shall be installed and/or maintained as cast deeper concrete. Then to excavate in between these deeper sections and infill with concrete. In specified under the heading Ground Protection Measures. This shall remain in place this manner excavation may continue to any specified depth without disturbing soils beyond the throughout the entire construction phase or until any new permanent hard surfacing footprint of the build.

The specific method adopted will vary between contractors. However, the following restrictions will • Removal of existing structures such as, walls, steps and hard surfaces (where apply and must be adhered to: No excavation or ground disturbance shall occur beyond the footprint of the lower ground floor or the site boundary. Where a small excavator is used, it shall operate from within the footprint of the

lower ground floor. • The excavator or piling rig shall be marshalled to ensure no contact is made with any tree canopy.



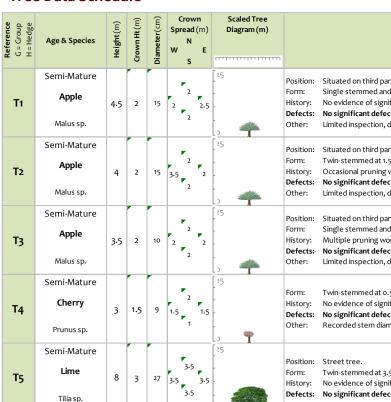
	Phase	Activity
1st.	Pre- Construction Phase	Planning conditions relating to trees to be identified and discussed with the Project arborist and site manager.
2nd.		All specified tree removal and pruning to be undertaken (see Header -Tree Works Schedule).
3rd.		Install the ground protection boards where applicable (ground protection boards - see Header - Ground Protection <i>Measures</i>).
4th.		Pre-Commencement site meeting: Tree protection measures inspected. Additional protection measures to be agreed. Variances to be agreed. Location of underground services to be agreed. Boundary treatments to be agreed. Extents of excavation to be agreed. Scaffold restrictions to be agreed. Scope of future inspections / monitoring to be agreed.
5th.		Arboricultural Method Statement to be revised and approved.
		Protection measures confirmed acceptable by the local authority
6th.	Construction	Demolish existing structures and remove existing surfaces where applicable.
7th.	Phase	Install new buildings, hard surfaces and services taking into account restricted activities as specified in this Arboricultural Method Statement.
8th.	Post- Construction Phase	Remove the ground protection boards where applicable.

Tree Data Schedule

Å

CROWN

08000 14 13 30



Tree Removal

Retention Category C: It is proposed to remove the following Retention Category C trees/shrubs: T4, 2m tall dogwood, 3m tall apple and the 2m tall shrub. These trees/shrubs are located within the footprint of the proposal or grow so close to the access into the site, that their retention is not possible.

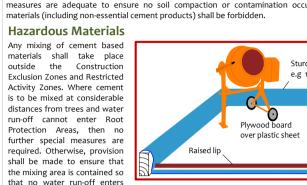
These are all relatively small trees/shrubs (maximum height 3m, maximum diameter 9cm). They are located within a rear garden and are not visible from public vantage points. Consequently they are considered to have a low amenity value. Their removal shall not have a significant impact on the visual amenity of the locality and they are not considered to be a material planning consideration. The four below photographs show the vegetation within the rear garden.



Site Monitoring Schedule						
Site Attendees	Comments					
N/A.	Project Manager and Site manager to study this Method Statement & contact the Project Arborist to agree all protection measures.					
Site manager, project arborist. Tree Officer invited.	Tree protection fencing locations & specification checked. Additional ground protection measures checked. Further protection measures / restrictions agreed.					
Site manager and project arborist.*	Project manager, site manager and project arborist to liaise regarding any issues which may affect trees. To occur at least once per month.					
	N/A. Site manager, project arborist. Tree Officer invited. Site manager and project					

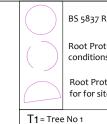
* Where agreed with the L.A. it may be acceptable to supply photographs of the fencing to avoid the necessity for a site visit.

Position	Name	Contact Phone & email	Roles
Project Manager	Insert Details	Insert Details	Liaising with site manager & project arborist regarding any potential issues relating to trees. Oversight of this monitoring schedule. Instructing the project arborist and arranging access. Liaising with local authority regarding discharge of planning conditions and variances to the Arboricultural Method Statement.
Site Manager	Insert Details	Insert Details	Familiarity with Arboricultural Method Statement. Implementation of the tree protection measures. Day-to-day compliance with Tree Protection Measures. Informing the Project Manager of Tree Protection variances & issues affecting trees.
Project Arborist	Crown Tree alls Consultancy	08000 14 13 30 0203 797 7449 Info@crowntrees.co.uk	 Inspect tree works and report to the project manager. Inspect tree protection measures and report to Project Manager. Oversee excavations in RPAs, provide mitigation advice, undertake root pruning. Monthly site monitoring and reporting to the Project Manager on tree protection and variances.
Local Authority	London Borough of Camden	Tree Team 020 7974 4444 planning@camden.gov.uk	Liaising with the project arborist and project manager regarding tree protection issues relating to planning conditions. Advice and assistance with the discharge of planning conditions relating to trees.
Additional Contact	Insert Details	Insert Details	Insert Details
Additional Contact	Insert Details	Insert Details	Insert Details

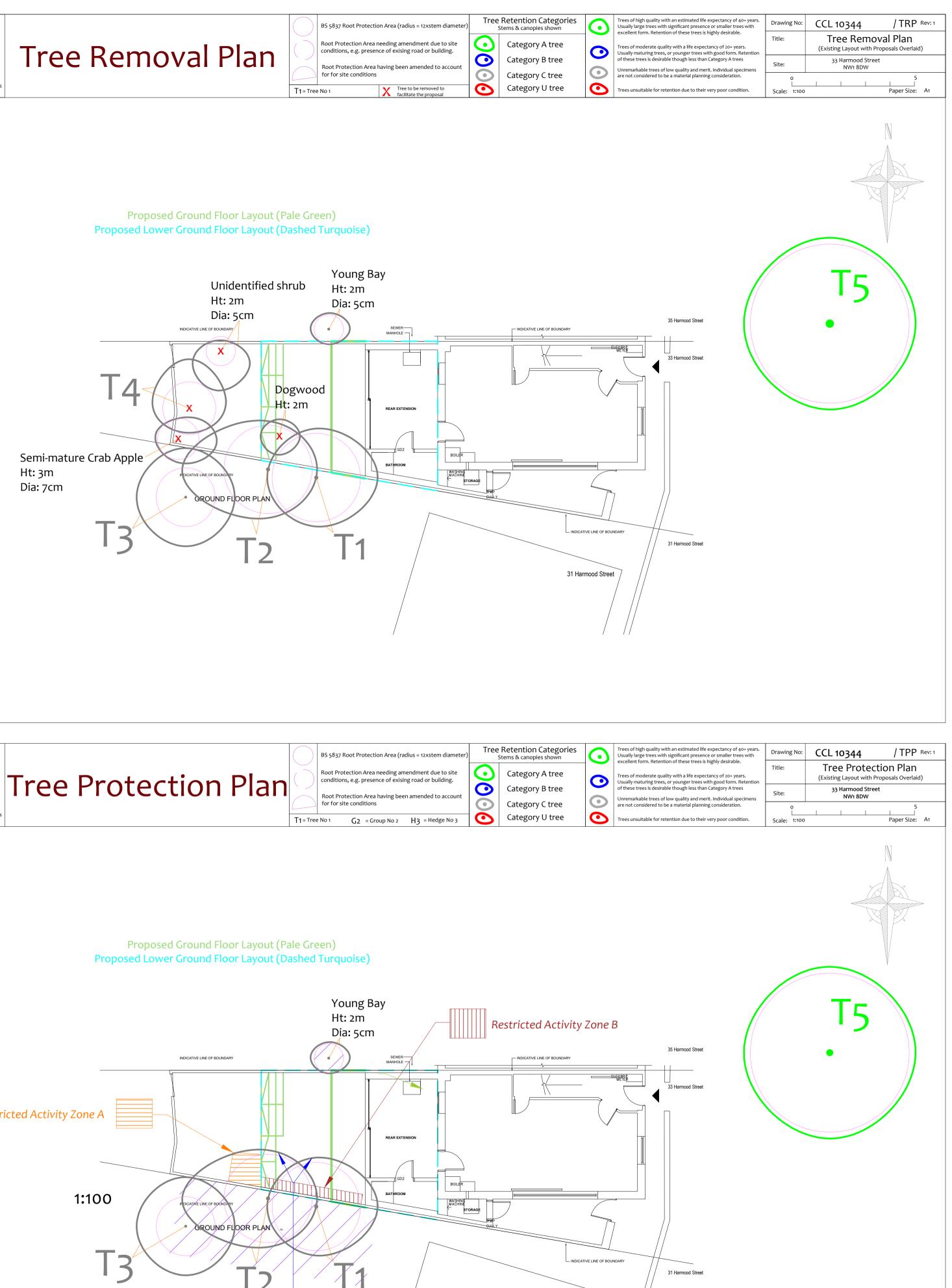


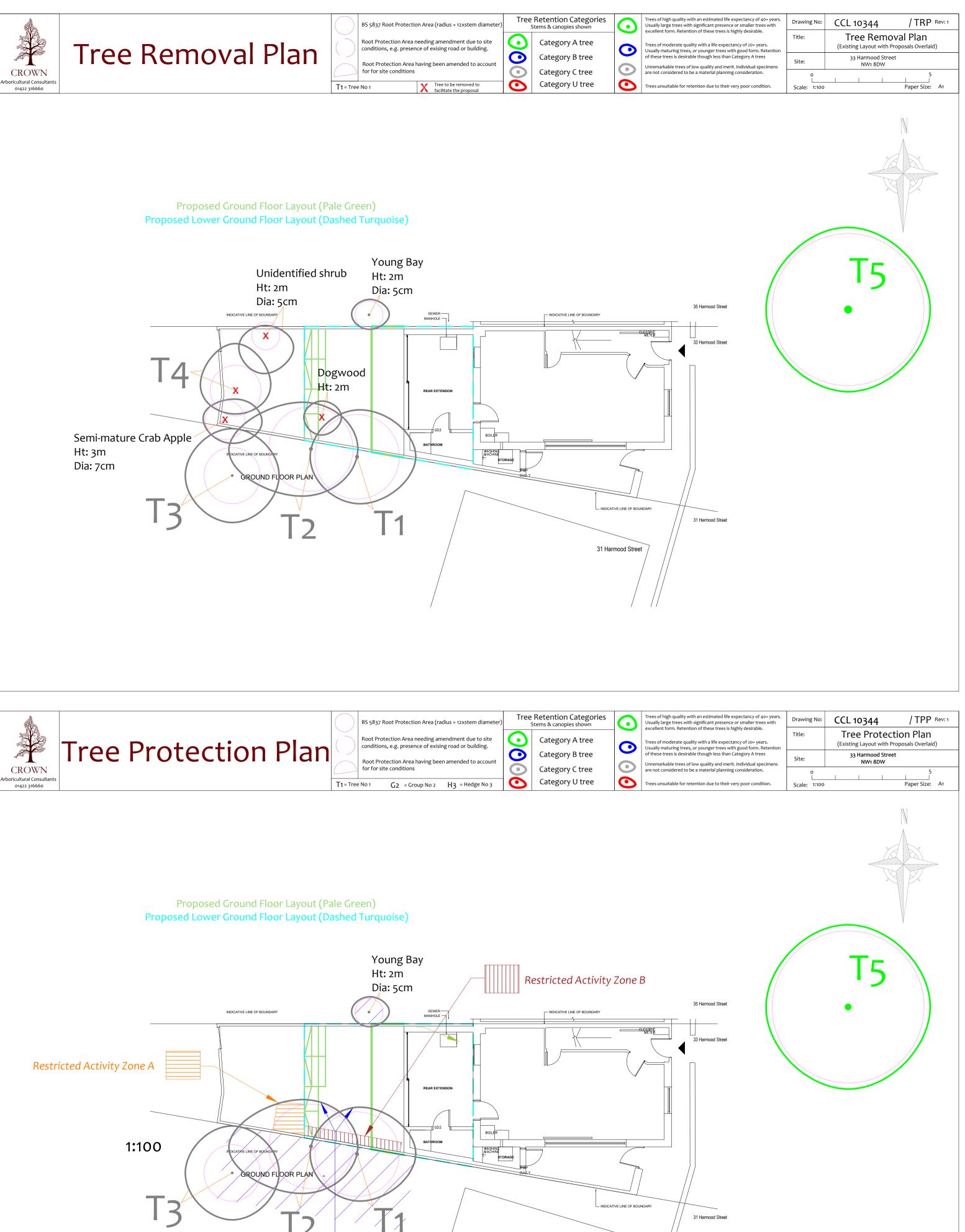
	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
Notes			Physiological Condition	Life Expectancy (yrs)
	Priority	Inspect Freq (yrs)	Structural Condition	Retention Category
arty land. Id vertical with a balanced crown. nificant pruning. acts observed.	No action r	equired.	High Good	Low 20-40
dimensions estimated.	n/a	3	Good	C
arty land. .5m with a slightly unbalanced crown.	No action required.		High	Low
g wounds due to crown reduction. ects observed.			Good	20-40
dimensions estimated.	n/a	3	Good	С
arty land. Id vertical with a balanced crown.	No action required.		High	Low
ounds due to crown reduction. e cts observed .			Good	20-40
dimensions estimated.	n/a	3	Good	C
0.5m with a slightly unbalanced crown.	No action required.		High	Low
ant pruning. • observed. ter is equivalent for 2 stems (7cm, 6cm).			Good	20-40
	n/a	3	Good	С
	,a	,		
3.5m with a balanced crown. nificant pruning.	No action required.		High Good	High 40+
ects observed.			Good	A

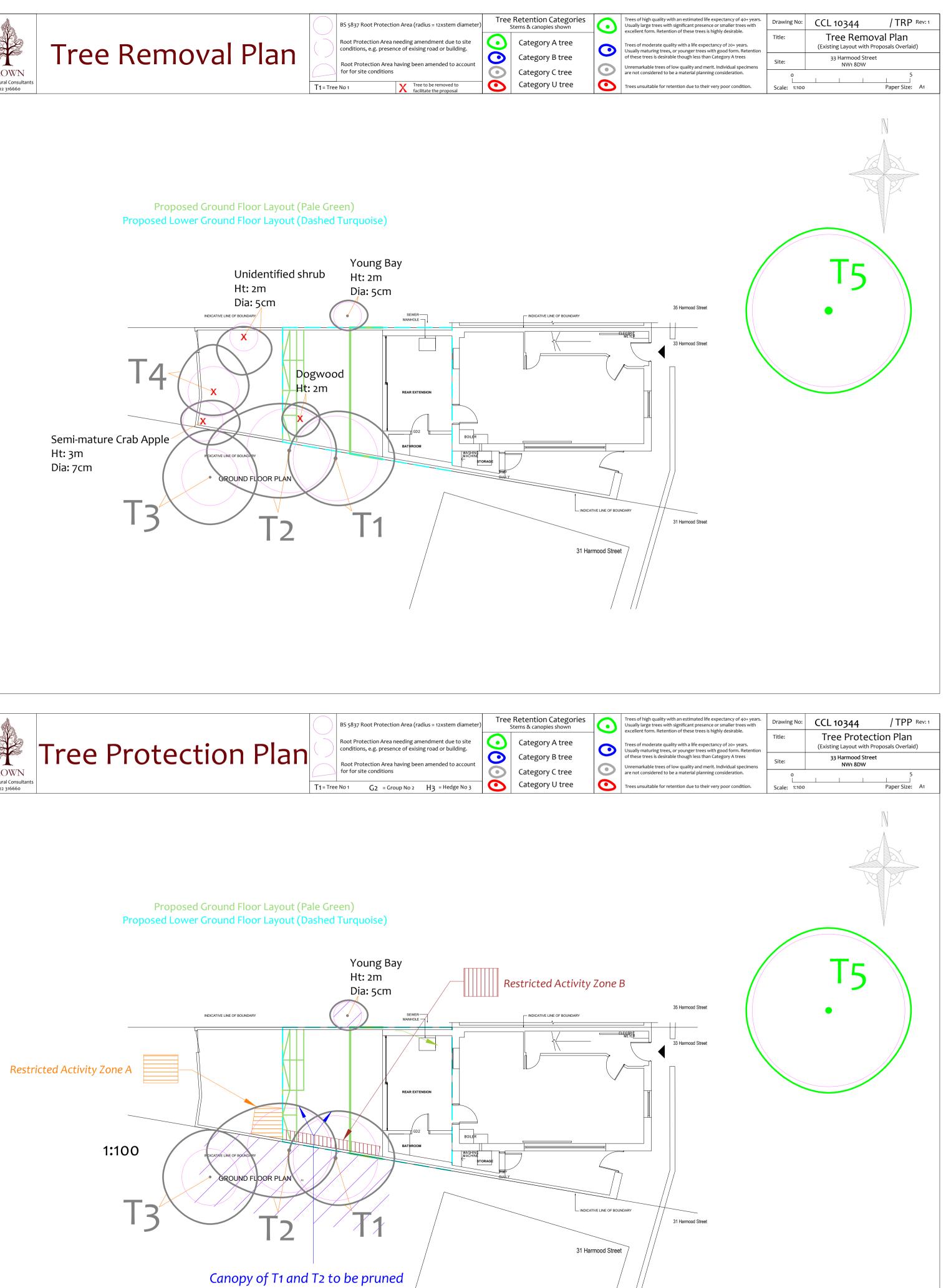




Proposed Ground Floor Layout (Pale Green)







back to the boundary.