

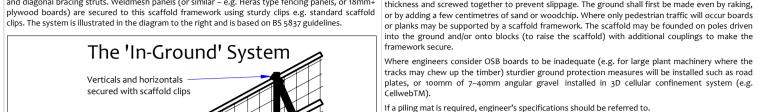
Arboricultural Method Statement

Site: Flat 1, 26 Belsize Avenue Date: 29/11/2022 Revision: 1 CCL ref No: 11342

Tree Protection Barriers

The purpose of tree protection barriers is to keep construction activity away from Restricted Activity Zones or Construction Exclusion Zones. They should be appropriate to the nature and proximity of activity within the site. The barriers should be erected prior to the commencement of all activity including demolition, soil stripping and delivery of materials and demolition (except where existing **Ground Protection Measures** structures require demolition to enable the barriers to be installed). Barrier systems are specified below and should be installed according to the legend on the Tree Protection Plan.

The In-Ground System This system may be installed where indicated by a solid purple line on the Tree Protection Plan. It Any existing hard surfacing may be retained where engineers consider it adequate to spread the load should be robust enough to withstand occasional knocks by plant machinery and, once installed, of construction traffic. Otherwise it shall be reinforced or replaced with adequate ground protection shall remain in place throughout the entire construction phase.



Anti-climb weldmesh pane (or metal / 18mm ply sheets) firmly secured tandard scaffold poles driven 0.6m into the ground (100mm timber posts in oncrete foundations may be used outside of RPAs) caffold pegs secured into the ground

The Back-Stay System — — This system may be installed where indicated by a solid or dashed purple line on the Tree Protection Plan. It is more practical over existing hard surfaces or where the fencing needs to be moved to enable permitted activities within a Restricted Activity Zone. This system should be able to withstand occasional knocks by machinery and should not be relocated except with the consent of the site manager and the approval of the local authority. Within this system, weldmesh fencing panels (minimum height 2m) are affixed into rubber or

concrete feet and clipped together with anti-tamper couplers. Two couplers should be used, spaced at least 1m apart. Alternate panels should be attached to a diagonal back stay connected to an additional foot or baseplate secured with ground pins or additional ballast. Where ground pins are not used, the total weight of the foot/plate plus ballast should total not less than 32kg. Where it is not possible to install diagonal struts (such as very close to a hedge) then the front feet shall be secured using ground pins or ballast.

The 'Back Stay System' 2m X 3.5m weldmesh (or sheet metal) panels linked with anti-

tamper couplings Each panel attached to a back stay which is founded in an additional foot or mesh tray as illustrated Minimum 32kg ballast to retain rear foot or tray (including the weight of the foot/tray) Alternate front feet to be secured with ground pins or additional ballast

Notices

Suitable weather-proof notices should be displayed to identify tree protection zones. They should state the purpose of the fencing and that it should not be moved, or traversed, other than by authorised personnel.

Restrictions in Specific Zones

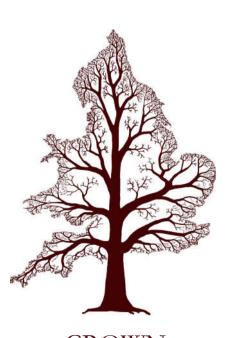
Restricted Activity Zone A

Within this zone, tree roots are likely to be present where access and loading will be required. The following restrictions shall apply:

- entirety of the project.
- No excavation shall occur in this zone. Storage of materials and spoil shall be permitted so long as it is retained within the
- hard surface and not permitted to spill over onto the adjacent soft surface. No fires shall be permitted.

Restricted Activity Zone B

- The following additional restrictions shall apply when removing the existing hard surface and reinstating soft ground:
 - Hand-operated tools shall be used to lift the existing surface. • Excavation shall be limited to the existing surface and its sub-base. After removal of the hard surface and sub-base, no vehicles or driven machinery shall
 Storage of Spoil and Materials
 - treated as a Construction Exclusion Zone. Any soils used to raise ground levels back to the original level shall be fertile granular topsoil. Ground levels shall not be raised above the original level of the hard surface. Hazardous Materials



CROWN Tree Consultancy 01422 316660

Author: Carl Lothian BSc (Hons) Client: Roar Architects

Removal of Tree Protection Barriers Removal of protective fencing or ground protection measures shall be done after all major

Within Restricted Activity Zones, soils containing roots may be subject to compaction due to general construction activity (including pedestrian activity and use of plant machinery). In order to minimise compaction, it is proposed to ensure that a suitable load-spreading surface is in place at all times.

construction work is complete and their removal has been approved by the appointed arborist.

Vertical scaffold poles are driven into the ground, onto which are affixed horizontal scaffold poles Unless specified otherwise, ground protection shall consist of 24mm OSB boards laid at double and diagonal bracing struts. Weldmesh panels (or similar – e.g. Heras type fencing panels, or 18mm+ thickness and screwed together to prevent slippage. The ground shall first be made even by raking,

or planks 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 make the framework secure.

Where engineers consider OSB boards to be inadequate (e.g. for large plant machinery where the tracks may chew up the timber) sturdier ground protection measures will be installed such as road plates, or 100mm of 7–40mm angular gravel installed in 3D cellular confinement system (e.g. CellwebTM).

If a piling mat is required, engineer's specifications should be referred to. 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 remain in place until all heavy construction activity is complete or until they are due to be replaced 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 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 are being undertaken. At such times, adequate ground protection measures shall be installed, and excavation shall be limited to that required for new planting. Furthermore, the project arborist shall be consulted prior to any works being undertaken in these zones. • No construction activity or excavation shall occur unless agreed otherwise by the
 - project arborist and local authority. • No vehicles or plant machinery shall be driven or parked. No tree works, other than those specified on this document 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

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

Action Required	Notes
Remove	As illustrated on the Impact Assessment Plan
	Action Required

General Restrictions - Throughout the Site

Preparatory Works

o demolition, removal of surfaces, or soil stripping shall commence until the protective fencing and ground protection measures are installed to the satisfaction of the local authority. Fires

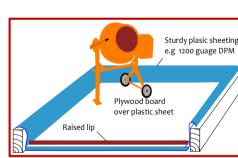
• The existing hard surface shall be retained intact and undisturbed throughout the No fires shall be permitted beneath any tree canopy or within 5m of any tree stem, branch or foliage. No fires shall be permitted within any Construction Exclusion Zone or Restricted Activity Zone. No fires shall be permitted in the vicinity of any exposed tree roots.

Canopy Protection

- In order to protect tree canopies the following restrictions shall apply throughout the site: • No machinery in excess of 2m shall pass beneath the canopy of any tree without being carefully marshalled in order to ensure that no branches are damaged. • If materials require installation or delivery beneath tree canopies, this shall be done without the
- use of overhead cranes. accidentally damaged.

be permitted to enter this zone unless adequate ground protection measures have Storage of materials and spoil shall be avoided in any Construction Exclusion Zones and Restricted been installed as specified under the heading Ground Protection Measures. In the Activity Zones unless it has been agreed with the project arborist that the ground protection absence of such ground protection, the area shall be adequately fenced off and 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 outside the Construction Exclusion Zones and Restricted Activity Zones, Where cemen is to be mixed at considerable distances from trees and water run-off cannot enter Roo Protection Areas, then no further special measures are required. Otherwise, provision shall be made to ensure that the mixing area is contained so that no water run-off enters



the Root Protection Area of any trees (see diagram for example). Mixers and barrows shall be cleaned within this area. All other chemicals hazardous to tree health, including petrol and diesel, shall be stored in suitable

containers as specified by current COSHH Regulations, and kept away from Root Protection Areas.

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 0.5m 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 onsulted 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. Fence Posts or Decking Posts

If permanent fencing or decking is to be installed within Root Protection Areas, the following restrictions shall apply:

- All post holes shall be excavated by hand and kept as narrow as possible (maximum diameter 300mm). • Exploratory post holes shall be dug before committing to post / panel positions. If any roots in
- excess of 25mm are encountered they are to remain intact and the post hole shall be relocated slightly. The fencing system must permit such flexibility (i.e. where fixed panel widths are used, all post holes must be excavated before committing to the final location). • Any roots in excess of 10mm which are severed shall be neatly pruned back with secateurs. This

will encourage healing and reduce the likelihood of infection. Walls shall be avoided over Root Protection Areas unless their foundations may be spanned over roots using a beam system. Hedges may be planted within Root Protection Areas using hand tools to minimise excavation.

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Tim Activity

ming of Operations vity within the site shall be phased according to the following chronology							
Order	Phase	Activity					
st.		Planning conditions relating to trees to be identified and discussed with the Project arborist and site manager.					
2nd.		Shrubs and hedges to be removed as illustrated on the Arboricultural Impact Assessment Plan.					
3rd.	Pre- Construction	Install the tree protection fencing (see header -Tree Protection Barriers).					
ļth.	Phase	Pre-Commencement site meeting: Tree protection barriers inspected. Additional protection measures to be agreed. Variances to be agreed. Boundary treatments to be agreed. Extents of excavation to be agreed. Scaffold restrictions to agreed. Scope of future inspections / monitoring to be agreed.					
sth.		Arboricultural Method Statement to be revised and approved if necessary.					
		Protection measures confirmed acceptable by the project arborist					
5th.	Demolition and	Demolish existing structures (conservatory and low garden walls) and remove existing hard surfaces where applicable.					
νth.	Construction Phase	Install new buildings and pedestrian paving.					
8th.	Post-	Remove protective barriers (fencing and ground protection measures as applicable).					
)th.	Construction Phase	Undertake restricted landscaping operations within Root Protection Areas, including (where applicable) boundary treatments, pedestrian surfaces, decking and any proposed tree planting.					
Percennel and Accountability							

Personnel and Accountability This table should be completed at the Pre-Start Meeting or earlier

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. Scheduling of meeting, excavations and inspections. Overseeing 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	Day to day monitoring of tree protection measures. Fortnightly supply of site photographs showing all tree protection measures. Induction of all contractors. Reporting to the Appointed Arborist of any incidents or potential variations to the agreed tree protection measures.
Project Arborist	Crown Tree Consultancy	08000 14 13 30 0203 797 7449 Info@crowntrees.co.uk	Liaising with LPA Tree Officer over all arboricultural matters. Initial inspection and signing off of tree protection barriers including ground protection measures. Monthly site visits and inspections. Reporting to the local authority following site inspections and any variation or incidents.
Local Authority	London Borough of Camden	insert Details	Receipt of reports from the appointed arborist. Liaising with the appointed arborist to agree suitability of tree protection measures and any variations. Enforcement. 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

Site Monitoring Schedule

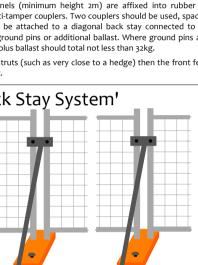
Inspection	Site Attendees	Comments
Pre- Start Desk-top To occur prior to any works taking place on the site.	N/A.	Project Manager and Site manager to study this Method Statement & contact the Project Arborist to agree all protection measures.
Pre-Start Meeting	Site manager, project arborist.	Tree protection fencing locations & specification checked.
After vegetation clearance & tree protection barriers installed. Prior to any other activity, inc. demolition & soil stripping.	Tree Officer invited.	Contractors to be inducted to all relevant aspects of the Arboricultural Method Statement. Responsibilities checked and acknowledged. Adherence to the Arboricultural Method Statement to be discussed and agreed.
Monthly Inspection and Reporting To occur once per calendar month throughout the entirety of the project until the local authority agree that tree protection measures may be removed	Site manager and project arborist.*	Tree protection fencing locations & specification checked. Past month, present and future month – activities and adherence to Arboricultural Method Statement discussed and checked.

Tree Schedule

Reference G= Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)		row read (N S		Scaled Tree Diagram (m)		
T1	Early-Mature Tree Of Heaven Ailanthus altissima.	14	5	40	5	5.5 6	6.5	25	Position: Form: History: Defects: Other:	Situated on third part Twin-stemmed at 3m No evidence of signific No significant defects Limited inspection, dir
T2	Semi-Mature Lawson Cypress Chamaecyparis lawsoniana.	6.5	2	22	2.5	2.5 2.5	2.5		Position: Form: History: Defects: Other:	Situated on third part Single stemmed and v Previously topped at (No significant defects Limited inspection, dir
S3	Semi-Mature Cherry Laurel Prunus laurocerasus.	3.5	0	14	2.5	2	1	25	Form: History: Defects: Other:	Shrub. Managed through cyc No significant defects Recorded stem diame
Т4	Semi-Mature Lime Tilia sp.	16	2.5	32	3.5	3.5 4	3.5		Position: Form: History: Defects:	Adjacent street. Single stemmed and v No evidence of signific No significant defects
T5	Semi-Mature Lime Tilia sp.	16	2.5	24	4	4	4	15	Position: Form: History: Defects:	Situated on third part Single stemmed and v No evidence of signific No significant defect

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





	Recommer (Independer		Vigour	Amenity Value
Notes	development		Physiological Condition	Life Expectancy (yrs)
	Priority	Inspect Freg (yrs)	Structural Condition	Retention Category
n third party land. ned at 3m with a balanced crown. e of significant pruning. ant defects.	No action r	equired.	Moderate Good	Moderate 40+
pection, dimensions estimated.	n/a	3	Good	B -
n third party land. Inmed and vertical with a balanced crown.	No action required.		Moderate	Low
topped at 6.5m. ant defects observed.			Good	40+
pection, dimensions estimated.	n/a	3	Good	C
hrough cyclical trimming. ant defects observed. tem diameter is equivalent for two stems (11cm, 9cm).	No action r	equired.	Moderate Good Good	Low 20-40
	n/a	3	GOOD	C
reet. med and vertical with a balanced crown. e of significant pruning. ant defects .	No action r	equired.	Moderate Good	Moderate 40+
	n/a	3	Good	В
n third party land. Imed and vertical with a balanced crown. e of significant pruning. ant defects .	No action r	equired.	Moderate Good Good	Moderate 40+ B
	n/a	3	0000	D



