



MICHAEL COOPER M.ARB. Dip. P.R.A.
ARBORICULTURAL CONSULTANT



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Tree Surveys
Mortgage Tree Surveys
Planning Applications
Planning Appeals
Public Enquiries
Expert Legal Witness

Our Ref MC

3rd May 2010.

Dear Mr Wainwright,

ARBORICULTURAL SURVEY, AYTON WOOD COTTAGE, CRANE MOOR.

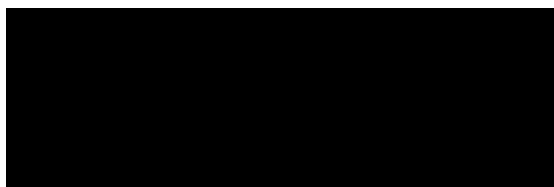
I refer to your recent instruction to carry out an Arboricultural survey at the above site. The following points are now outlined for your attention but should be read in conjunction with the attached Tree Survey Schedule, Tree Protection zones and the method statement/tree constraints document. These should be sufficient for the purpose of supporting your planning application. It is however sometimes the case that individual local authority Arboricultural staff may require additional information or modification to these documents. In the event of further information being sought I would be pleased to discuss this on your behalf with the respective Arboricultural personnel

- 1 The work that has been carried out to date on the removal of the outer brick work has led to some degree of encroachment on the rooting area of the Sycamore. Whilst the new build is on the same blueprint of the existing building, and will not require additional deep excavations, there is a need to avoid wholesale encroachment into the Root Protection Area (**RPA**) which is defined in the attached documents.
- 2 Given the proximity of the Sycamore to the dwelling and the need to erect scaffolding my recommendation is that it will not be possible to entirely avoid encroachment into the **RPA** but that any encroachment has to be strictly controlled by the correct positioning of protective fencing. I believe if this is adhered to all of the trees on this site can be retained successfully.

- 3 We discussed on site your desire to reduce the height of the Sycamore and that you had discussed this with a previous representative of Barnsley Council's Arboricultural staff who at the time had no objection to this work. I believe this was not confirmed in writing. My own view is, that to crown reduce the tree would result in vigorous regrowth in the future and would create you numerous problems with the density of the new crown. I would recommend that you apply to have the crown of this tree thinned by 20%. This would allow for increased light transmission to the dwelling and the tree will also cope with this work far better then the severity of a crown reduction.
- 4 The Sycamore tree will also require crown lifting over the corner of the dwelling where it is to be increased in height. This should be pruning work that is sufficient to clear the roof and allow for any movement of the remaining lower branches in so far as to prevent them hitting the new roof in windy periods. It is not necessary to repeat this crown lifting all around the tree as this is purely cosmetic and the removal of additional branches will simply rob the tree of additional energy.
- 5 On the aspect of tree retention all development on site should comply with the requirements of **British Standard Institute Specification 5837 Trees in relation to construction; 2005.**
- 6 Any new tree/shrub planting should comply with **British Standards 4043:1989, Transplanting root-balled trees and British Standard Institute Specification 3936: 1992, Nursery Stock Part 1. Specification for Trees and Shrubs**
- 7 All tree surgery work should be carried in accordance with **British Standard Institute Specification 3998, Tree Surgery work**
- 8 The site should be checked for the existence of any **Tree Preservation orders, Conservation areas, Sites of Scientific Interest, Areas of Outstanding Natural Beauty, any deeds of covenant or/and other statutory instruments that may apply**

Should you require further assistance with this site, please do not hesitate to contact me.

Yours sincerely,

A large black rectangular box redacting the signature of M Cooper.

M Cooper



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Our Ref MC

3rd May 2010.

Dear Mr Wainwright,

**ARBORICULTURAL METHOD STATEMENT, AYTON WOOD COTTAGE,
CRANE MOOR.**

I refer to the recent instruction to prepare an Arboricultural method statement for the above site.

- 1 The aim of this method statement is to raise the awareness of procedures and protocols as applied to Arboricultural matters on site. These are tailored to allow for the safe and successful improvements on the existing dwelling whilst taking into account the need for tree protection on site.
- 2 All matters raised within this statement relate to '**Ayton Wood Cottage**' and are to be read in conjunction with the Arboricultural survey of **May 2010** and the accompanying plan. The information provided in the survey is in accordance with **British Standard Institute Specification 5837, 2005, Trees in Relation to Construction**
- 3 The trees have all been identified and numbered on the plan attached as part of the Tree Survey.

- 4 The trunk diameters have been measured at 1.5m from ground level. This is the most important measurement as required by the **British Standard Institute Specification 5837 Trees in relation to construction; 2005**. This is a pre-requisite for the production of the root protection area as required by the Local Planning Authorities on planning applications.

ROOT PROTECTION AREA (RPA)

- 5 **BS 5837** now includes a formula which, by utilising tree diameters when measured at 1.5 from ground level, provides the measurements necessary for the **Root Protection Area. (RPA)**.
- 6 The **RPA** is the area to be provided around the trunk and crown of a tree beyond which no one or any machinery is permitted. The table I have provided as part of the tree survey includes the data for all of the trees.
- 7 All trees shall be protected with suitable fencing as required by the **BS 5837. See Figure 2 attached as a separate sheet**. Fencing shall consist of a scaffold framework able to resist impacts. It should be of a construction with vertical tubes spaced at a maximum interval of 3m. Weldmesh panels shall be securely fixed to the tubing with wire or scaffold clamps. On no account shall panels on rubber or concrete feet be introduced to act as the required protective fencing. This type of fencing is not resistant to impact. The barriers shall be constructed and erected in a manner that will allow them to be fit for purpose and remain rigid throughout the development period.
- 8 This fencing will be erected to the distance from the tree trunks as required in the **RPA** table provided or such distance as approved by the Local authority. In the case of the **Sycamore T7**, I recommend that the fencing be erected 1m from the north east corner and eastern side of the dwelling. The **RPA actually** extends over the roof of the dwelling but as discussed on site, you feel that the 1m distance around the edge will be sufficient to facilitate your work operations. This fencing can then be widened out beyond the buildings edge to comply with the required measurement. Any scaffolding erected within the **RPA** should comply with **figure 3 attached as a separate sheet**.
- 9 With regard to **G1**, this is a nice group of mainly evergreen features which act as a buffer with the adjacent dwelling. Whilst not of great value individually they are nevertheless a valuable screen. I recommend that these be fenced off to a distance of at least 0.5m from the extremity of the outer crown or to the edge of the existing footpath at the northern side of the dwelling. No encroachment or storage of material should be allowed to take place under the crowns of these conifers,
- 10 The soil level within the **RPA** shall not be increased or decreased without this being approved by the planning authority. If such matters can be accommodated and listed at the original planning application stage then this will avoid the need for future site meetings and delays.

- 11 If machinery access is to be permitted i.e. tracked, wheeled or towed equipment then more advanced methods of ground protection will be required. These will have to be designed by suitably qualified engineers who are equipped with the overall weight of the respective vehicles/equipment. There may be systems that are ready and available to install or they may have to be purpose designed/ supplied.
- 12 The Development design stage shall take into account the need to provide and agree with the planning authority routes for vehicular and pedestrian access.
- 13 No machinery access, delivery of plant, materials, site buildings excavation works inclusive of any trial holes that are in the vicinity of any tree crowns, shall be permitted until such time as the protective fencing as been erected. The fencing shall be examined and approved by the Local Authority tree officer and his/her satisfaction or otherwise with this shall be confirmed in writing. This fencing shall remain in place for the duration of the development and shall not be removed or modified without approval in writing from the Planning authority.

STORAGE OF EQUIPMENT, SPOIL, BUILDINGS AND BUILDING MATERIALS

- 14 As part of the planning application, suitable areas for all of the above shall be designated and agreed with the planning authority. These should not be within any tree **RPA** and shall be outside the crown spreads of any trees on or outside the site. Should any site office require to be re-sited during a construction period, the movement of this shall be agreed prior to its movement with the Local Planning Authority.

LOCATION OF SERVICES, UNDERGROUND OR OVERHEAD.

- 15 I understand that the existing underground service on site ate sufficient for the purpose of servicing the dwelling in its newly proposed form. I have however included the following in case any unforeseen works on such service are required during the development period.
- 16 No services shall be placed within the crown spread of the trees unless agreed with the Local Planning authority.
- 17 If underground services are to be positioned within the crown spreads then the section of service within the **RPA** shall be hand dug in accordance with **broken trenches, NJUG 10, paragraph 4.6.1**. If root pruning is necessary during this work, then this will be agreed with the Local Planning Authority prior to any work being carried out. Such work shall be carried out in accordance with **British Standard Institute Specification 3998, 1989, Tree Surgery Work**.

- 18 The route(s) of any overhead services shall be designed to avoid the crown spread of any retained trees. If this is entirely unavoidable, then the routing of these shall be agreed with the Local Planning Authority prior to any works being undertaken.
- 19 The statutory authorities which provide the services shall all be consulted in the planning stages to ensure that such works are kept to a minimum and avoid the need for excessive trenching.

WORK PROGRAMMING

- 20 Accidents do happen on development sites and in the case of such occurrence(s) causing tree damage; the Local Planning Authority shall be notified at the earliest opportunity in order for them to approve any necessary remedial works. Any reputable tree surgery company will be able to carry work out in accordance with **British Standard Institute Specification 3998, Tree Surgery work.**
- 21 Upon completion of on-site works, a final inspection of the trees is recommended to list any remedial works that may be necessary.

ON SITE TREE MANAGEMENT-CONSTRUCTION PERIOD

- 22 For the duration of the development, a named officer shall be designated by the developer as the point of contact regarding all tree matters on or adjacent to the site. This is to allow for all Arboricultural matters to be dealt with efficiently during the development period.
- 23 Following any inspections the named officer shall prepare a report to record the outcome of any tree related issue and this shall be copied to the Local Planning Authority.
- 24 The development site shall be inspected and monitored by the named officer to ensure that all planning requirements and conditions are adhered to. He/she will advise the Development Manager of any on site problems relating to the trees and if appropriate the Manager will report this to the Local Planning Authority.

POST CONSTRUCTION PERIOD.

- 25 Any new tree planting should comply with **British Standards 4043:1989, Transplanting root-balled trees and British Standard Institute Specification 3936: 1992, Nursery Stock Part 1. Specification for Trees and Shrub.**

I trust that the information supplied is satisfactory for the Local authority Planning Officers but in the event of further information being required I would be pleased to respond to any such request.

Yours sincerely,

A solid black rectangular box used to redact the signature of the sender.

M-Cooper

KEY TO M. COOPER TREE SURVEY

HEADINGS

TR NO = TREE NUMBER

SPECIES= TREE SPECIES

HGT= OVERALL HEIGHT

STEM DIAM=TRUNK DIAMETER WHEN MEASURED AT 1.5 METRES
FROM GROUND LEVEL

BR SPREAD = BRANCH SPREAD IN METRES ON ALL DIRECTIONS

HGT OF CRN CLRN= HEIGHT OF CROWN CLEARANCE TO THE
BOTTOM BRANCH

AGE = YT= YOUNG TREE, SM = SEMI MATURE, M =MATURE, OM =
OVER MATURE, VT = VETERAN

PHYS COND=PHYSIOLOGICAL CONDITION IE GOOD, FAIR, POOR,
DEAD

STRUCTURAL CONDITION=OVERALL CONDITION, WEAKNESSES,
DEFECTS ETC

PRELIMINARY MANAGEMENT RECOMMENDATIONS=SUGGESTED
TREE SURGERY WORK

CAT = CATEGORY IN ACCORDANCE WITH BRITISH STANDARD
INSTITUTE SPECIFICATION 5837 2005 FOR TREES IN RELATION TO
CONSTRUCTION; RECOMMENDATIONS.

SS=SINGLE STEM TREE

MS= MULTI-STEM TREE

S=SHRUB OR SHRUBBERY

W=WOODLAND AREA OR WOODED PERIMIETER/SCREEN

H=HEDGELINE

G=GROUP

NB. WHEN ANY REFERENCE IS MADE IN THE REPORT ON WOUNDS
OR A HEIGHT MEASUREMENT, THIS IS TAKEN AS BEING FROM
GROUND LEVEL

Survey carried out in May 2010 by;
Michael Cooper. M.Arb. Dip. P.R.A

Site: Ayton Wood Cottage
Crane Moor

Carried out on behalf of client: Ben Wainwright.

TR NO	SPECIES	HGT m	STEM DIAM mm	BR SPREAD m	HGT OF CRN CLRN m	A G E	PHYS COND	STRUCTURAL CONDITION.	PRELIMINARY MANAGEMENT RECOMMENDATIONS	EST. REMAIN CONT years	C A T
T1	X Cupressocy leylandii 'Castlewellan', Golden Leyland's Cypress.	12m	450mm	N 2.5m E 2.8m S 2.1m W 2.6m	GL	M	Fair	This conifer is growing at the edge of the stream that runs adjacent to the development site. One main trunk through the crown. Normal build up of dead wood due to the density of the crown and its close proximity to the adjoining conifers in the line.	No work required.	20	C2
T2	X Cupressocy leylandii 'Castlewellan', Golden Leyland's Cypress.	12m	320mm	N 1.6m E 1.7m S 1.6m W 1.5m	GL	M	Fair	This conifer is growing at the edge of the stream that runs adjacent to the development site. One main trunk through the crown. Normal build up of dead wood due to the density of the crown and its close proximity to the adjoining conifers in the line.	No work required.	20	C2

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T3	X Cupressocy leylandii 'Castlewellan', Golden Leyland's Cypress.	14m	440mm	N 2.8m E 1.9m S 1.9m W 2.5m	GL	M	Fair	This conifer is growing at the edge of the stream that runs adjacent to the development site. One main trunk through the crown. Normal build up of dead wood due to the density of the crown and its close proximity to the adjoining conifers in the line.	No work required.	20	C2
T4	X Cupressocy leylandii 'Castlewellan', Golden Leyland's Cypress.	14m	410mm	N 2.5m E 1.8m S 1.5m W 1.4m	GL	M	Fair	This conifer is growing at the edge of the stream that runs adjacent to the development site. One main trunk through the crown. Normal build up of dead wood due to the density of the crown and its close proximity to the adjoining conifers in the line.	No work required.	20	C2

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T5	X Cupressocy leylandii 'Castlewellan', Golden Leyland's Cypress.	14m	460mm	N 2.4m E 1.9m S 2.5m W 1.3m	GL	M	Fair	This conifer is growing at the edge of the stream that runs adjacent to the development site. One main trunk through the crown. Normal build up of dead wood due to the density of the crown and its close proximity to the adjoining conifers in the line.	No work required.	20	C2
T6	X Cupressocy leylandii 'Castlewellan', Golden Leyland's Cypress.	10m	260mm	N 1.5m E 1.5m S 1.2m W 1.6m	GL	M	Fair	This conifer is growing at the edge of the stream that runs adjacent to the development site. One main trunk through the crown. Normal build up of dead wood due to the density of the crown and its close proximity to the adjoining conifers in the line.	No work required.	20	C2

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TR NO	SPECIES	HGT m	STEM DIAM mm	BR SPREAD m	HGT OF CRN CLRN m	AGE	PHYS COND	STRUCTURAL CONDITION.	PRELIMINARY MANAGEMENT RECOMMENDATIONS	EST. REMAIN CONT years	CAT
T7	Acer pseudoplatanus, Sycamore.	15m	980mm GL	N 5.7m E 4.6m S 6.6m W 5.8m	4m	M	Fair	Two stems arising at 0.75m from ground level. The soil level has been raised at the base of this tree. Extensive ivy growth on the main trunk and throughout the crown. Metal wire attached to the main trunk which was the original support for a climbing rose. Minor dead wood.	Cut ivy at ground level. Remove wire. Crown lift to facilitate the increase in height of the dwelling if planning permission is granted. It is not necessary to crown lift all around the tree. Crown thin by 20%.	40	B2
T8	X Cupressocy Leylandii, Leyland's Cypress.	8m	480mm GL	N 2.9m E 2.1m S 2.8m W 2.4m	GL	M	Fair	One trunk through the crown with numerous small lateral stems arising at ground level. Normal build up of dead wood which is a trait of this conifer.	No work required.	20	C2

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TR NO	SPECIES	HGT m	STEM DIAM mm	BR SPREAD m	HGT OF CRN CLRN m	AGE	PHYS COND	STRUCTURAL CONDITION.	PRELIMINARY MANAGEMENT RECOMMENDATIONS	EST. REMAIN CONT years	CAT
T9	Salix, Willow	16	650mm	N 2.8m E 7.5m S 8.1m W 11.4m	1.8m	M	Fair	This tree grows/ leans to the south. Major limb has been lost at 6m to the south west. This limb has obviously split off and the tear has gone into the main trunk. Some previous minor limb removal. Minor dead wood.	No work required.	40	B2
T10	Fraxinus excelsior, Common Ash.	17m	890mm	N 3.6m E 8.4m S 7.5m W 11.5m	2m	M	Fair	Main trunk divides to two at 6m. Growing adjacent to three overhead electricity cables. Extensive amount of dead wood within the crown of this tree. Numerous damaged limbs that have been broken. Many have branch stubs ranging from 300mm to over a metre in length left in situ. Numerous crossing and rubbing branches.	Remove dead wood. Prune damaged branches/limbs back in accordance with BS 3998.	40	B2

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G1	1 no Chamaecyparis lawsoniana Lawson's Cypress. 1 no Chamaecyparis lawsoniana 'Allumii', Lawson's Cypress. 1 no Chamaecyparis lawsoniana 'Potentilla' Lawson's Cypress.	2-5m Av.	200-240mm Average	N 1.0m E 1.0m S 1.0m W 1.0m	GL	SM	Good	I have surveyed these as a group and applied an average measurement for the trunk circumference. The largest diameter in these is 240mm on the Cupressus macrocarpa 'Goldcrest'	No work required.	20	C2

Carried out on behalf of client: Ben Wainwright.

[illegible]

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[illegible]

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ROOT PROTECTION ZONE

The attached sheet(s) provide the root protection areas for each tree on site that is recommended for retention. This allows for developers to calculate the distance within which they can build in proximity to each tree.

I have provided two figures, these being;

The Overall Root protection zone.

This is in effect the total area around the trees canopy and rooting area which is required to be kept free of any development or encroachment to ensure it survives the development and post development period.

The Root Protection Radius

This is the radius of any area necessary to meet the requirements of the overall root protection zone. This should ideally be applied across the full width of the trees canopy.

NB These calculations are in accordance with the requirements of the British Standard Institute Specification 5837, 2005

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TR NO	SPECIES	TRUNK DIAMETER	ROOT PROTECTION AREA RADIUS	OVERALL ROOT PROTECTION AREA
T1	X Cupressocyparis leylandii 'Castlewellan', Golden Leyland's Cypress.	450mm	5.40m	91.62 sq mt
T2	X Cupressocyparis leylandii 'Castlewellan', Golden Leyland's Cypress.	320mm	3.84m	46.33 sq mt
T3	X Cupressocyparis leylandii 'Castlewellan', Golden Leyland's Cypress.	440mm	5.28m	87.59 sq mt
T4	X Cupressocyparis leylandii 'Castlewellan', Golden Leyland's Cypress.	410mm	4.92m	76.06 sq mt
T5	X Cupressocyparis leylandii 'Castlewellan', Golden Leyland's Cypress.	460mm	5.52m	95.74 sq mt
T6	X Cupressocyparis leylandii 'Castlewellan', Golden Leyland's Cypress.	260mm	3.12m	30.59 sq mt
T7	Acer pseudoplatanus, Sycamore.	980mm GL	9.8m	301.76 sq mt
T8	X Cupressocyparis Leylandii, Leyland's Cypress.	480mm GL	4.8m	72.39 sq mt

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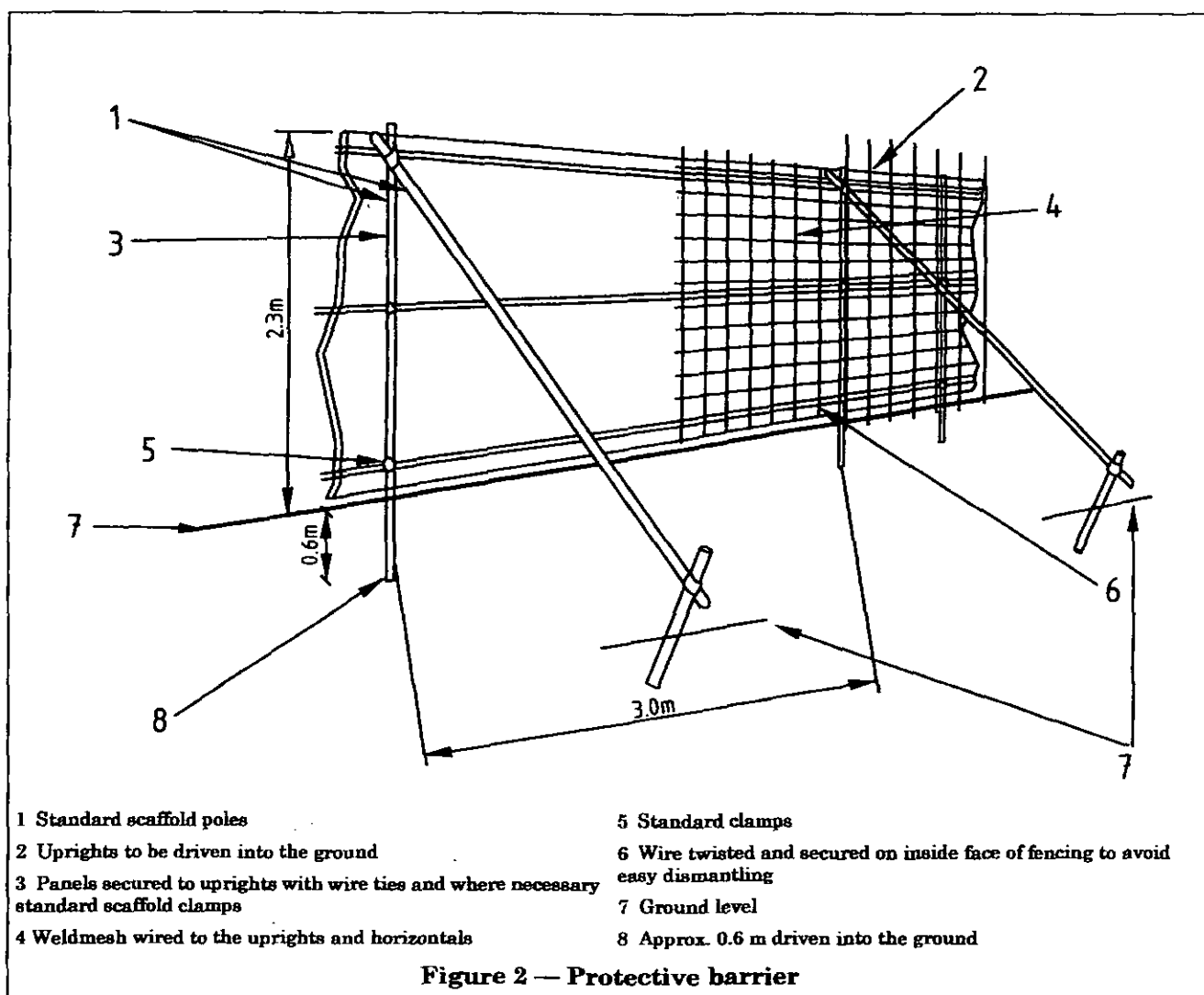
TR NO	SPECIES	TRUNK DIAMETER	ROOT PROTECTION AREA RADIUS	OVERALL ROOT PROTECTION AREA
T9	Salix, Willow	650mm	7.80m	191.16 sq mt
T10	Fraxinus excelsior, Common Ash.	890mm	10.68m	358.38 sq mt
G1	1 no Chamaecyparis lawsoniana Lawson's Cypress. 1 no Chamaecyparis lawsoniana 'Allumii', Lawson's Cypress. 1 no Chamaecyparis lawsoniana 'Potentilla' Lawson's Cypress. 1 no Chamaecyparis lawsoniana 'Stewartii' Lawson's Cypress. 1 no Chamaecyparis lawsoniana 'Laneii' Lawson's Cypress. 3 no Chamaecyparis lawsoniana 'Ellwoodii', Lawson's Cypress. 1 no Chamaecyparis lawsoniana 'Ellwood's Gold' Lawson's Cypress.	200-240mm	2.88m	26.06 sq mt

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TR NO	SPECIES	TRUNK DIAMETER	ROOT PROTECTION AREA RADIUS	OVERALL ROOT PROTECTION AREA
	1 no Chamaecyparis Pisifera, Sawara Cypress.			
	1 no Chamaecyparis Pisifera, 'Plumosa Aurea' Sawara Cypress.			
	1 no Araucaria araucana, Monkey Puzzle.			
	1 no Cupressus macrocarpa 'Goldcrest'.			
	2 no Juniperus Squamata 'Meyerii'.			
	2 no Taxus baccata 'Fastigiata', Irish Yew.			
	1 no Prunus laurocerasus, Cherry Laurel.			
	1 no Salix caprea, Willow.			



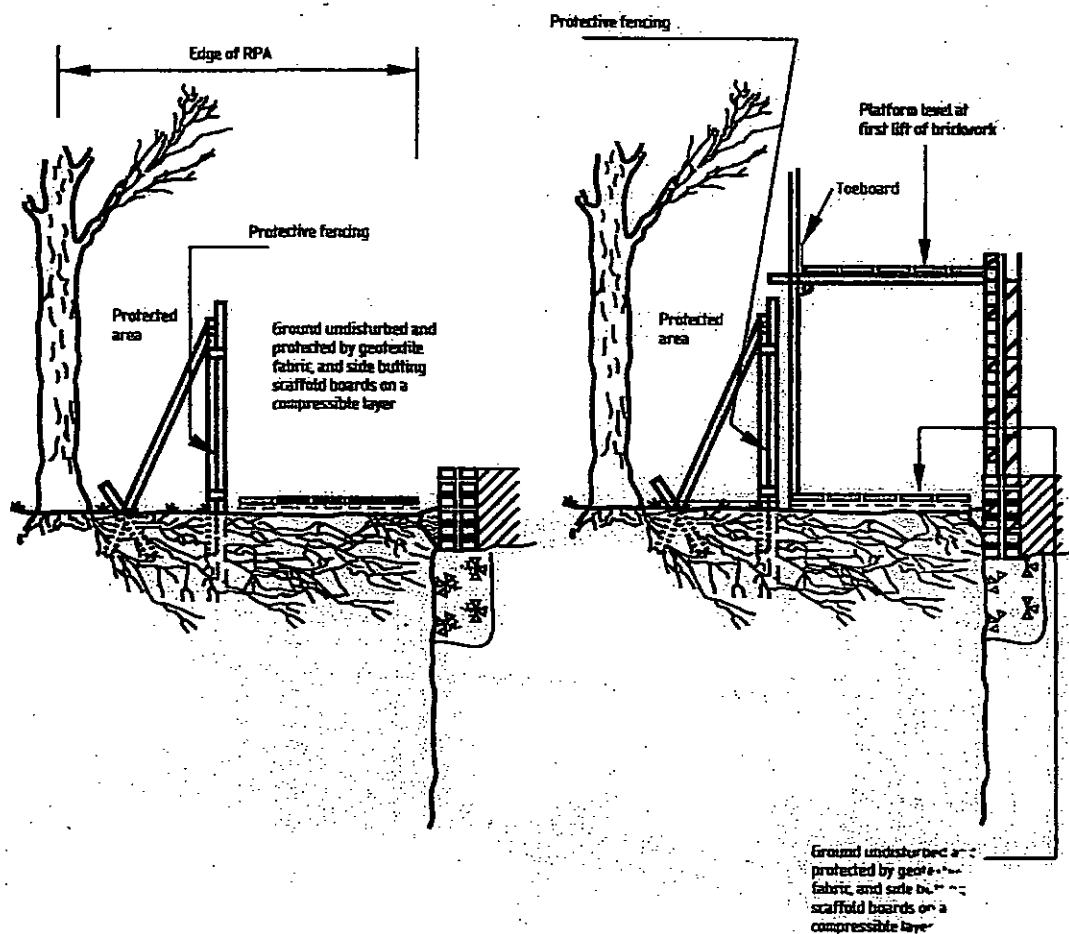


Figure 3 — Scaffolding within the RPA