

**Arboricultural Method Statement
For
The Cowdray Works Yard,
Easebourne Lane, Easebourne**

eco **urban**
ARBORICULTURAL

Ash Fraxinus excelsior Aspen Populus tremula Beech Fagus sylvatica Blackthorn Prunus spinosa Black poplar Populus nigra Box elder Acer negundo Catalpa Catalpa bignonioides Coast redwood Sequoia sempervirens Dawn redwood Metasequoia glyptostroboides Deodar cedar Cedrus deodara Douglas fir Pseudotsuga menziesii Elder Sambucus nigra False acacia Robinia pseudoacacia Field maple Acer campestre Goat willow Salix caprea Hawthorn Crataegus monogyna Hazel Corylus avellana Holm oak Quercus ilex Holly Ilex aquifolium Hornbeam Carpinus betulus Horse chestnut Aesculus hippocastanum Indian bean tree Catalpa bignonioides Japanese cedar Cryptomeria japonica Judas tree Cercis siliquastrum Lawson cypress Chamaecyparis lawsoniana Leyland cypress x Cupressocyparis leylandii Liquidambar Liquidambar styraciflua Lombardy poplar Populus nigra 'Italica' London plane Platanus x hispanica Maidenhair Ginkgo biloba Mimosa Acacia dealbata Monkey puzzle Araucaria araucana Monterey cypress Cupressus macrocarpa Monterey pine Pinus radiata Norway maple Acer platanoides Norway spruce Picea abies Oak Quercus robur Persian ironwood Parrotia persica Red horse chestnut Aesculus carnea Red oak Quercus rubra Rowan Sorbus aucuparia Scots pine Pinus sylvestris Sitka spruce Picea sitchensis Swedish whitebeam Sorbus intermedia Sweet chestnut Castanea sativa Sycamore Acer pseudoplatanus Tulip tree Liriodendron tulipifera Turkey oak Quercus cerris Walnut Juglans regia Western Hemlock Tsuga heterophylla Western red cedar Thuja plicata Whitebeam Sorbus aria Wild cherry Prunus avium Wellingtonia Sequoiadendron giganteum White poplar Populus alba White willow Salix alba Wild Cherry Prunus avium Yew Taxus baccata Ash Fraxinus excelsior Aspen Populus tremula Beech Fagus sylvatica Blackthorn Prunus spinosa Black poplar Populus nigra Box elder Acer negundo Catalpa Catalpa bignonioides Coast redwood Sequoia sempervirens Dawn redwood Metasequoia glyptostroboides Deodar cedar Cedrus deodara Douglas fir Pseudotsuga menziesii Elder Sambucus nigra False acacia Robinia pseudoacacia Field maple Acer campestre Goat willow Salix caprea Hawthorn Crataegus monogyna Hazel Corylus avellana Holm oak Quercus ilex Holly Ilex aquifolium Hornbeam Carpinus betulus Horse chestnut Aesculus hippocastanum Indian bean tree Catalpa bignonioides Japanese cedar Cryptomeria japonica Judas tree Cercis siliquastrum Lawson cypress Chamaecyparis lawsoniana Leyland cypress x Cupressocyparis leylandii Liquidambar Liquidambar styraciflua Lombardy poplar Populus nigra 'Italica' London plane Platanus x hispanica Maidenhair Ginkgo biloba Mimosa Acacia dealbata Monkey puzzle Araucaria araucana Monterey cypress Cupressus macrocarpa Monterey pine Pinus radiata Norway maple Acer platanoides Norway spruce Picea abies Oak Quercus robur Persian ironwood Parrotia persica Red horse chestnut Aesculus carnea Red oak Quercus rubra Rowan Sorbus aucuparia Scots pine Pinus sylvestris Sitka spruce Picea sitchensis Swedish whitebeam Sorbus intermedia Sweet chestnut Castanea sativa Sycamore Acer pseudoplatanus Tulip tree Liriodendron tulipifera Turkey oak Quercus cerris Walnut Juglans regia Western Hemlock Tsuga heterophylla Western red cedar Thuja plicata Whitebeam Sorbus aria Wild cherry Prunus avium Wellingtonia Sequoiadendron giganteum White poplar Populus alba White willow Salix alba Wild Cherry Prunus avium Yew Taxus baccata Ash Fraxinus excelsior Aspen Populus tremula Beech Fagus sylvatica Blackthorn Prunus spinosa Black poplar Populus nigra Box elder Acer negundo Catalpa Catalpa bignonioides Coast redwood Sequoia sempervirens Dawn redwood Metasequoia glyptostroboides Deodar cedar Cedrus

Arboricultural Method Statement

The Cowdray Works Yard, Easebourne Lane, Easebourne

Produced by:

Barrie Draper BSc (Hons) Arb TechCert(ArborA) CertArb(RFS)

Arboricultural Consultant

Report Ref: **201287 - AMS - Cowdray Works Yard**

Report Date: **27 March 2024**

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1 INTRODUCTION

- 1.1 **Instruction:** I am instructed by Metis Homes Ltd to report on trees which could be affected by a development at The Cowdray Works Yard, Easebourne Lane, Easebourne and prepare an Arboricultural Method Statement (AMS) to assist with the discharge of a tree related planning condition attached to a recently issued planning consent.
- 1.2 **Document disclosure:** Initially, I was provided with a topographical survey (drawing reference “7GG2A - Egmont Road and Easebourne Lane [PS]”). This showed the positions of the significant trees on or near the site, together with the existing buildings and other important features. Subsequently, I was supplied with a copy of the consented landscape plan, (drawing reference ‘2198-TF-00-00-DR-L-1001 Landscape GA P10’) showing a new site configuration.
- 1.3 **Scope of report:** All my tree observations are of a preliminary nature, with the tree survey carried out from ground level without any investigations using invasive or diagnostic equipment. I was not able to fully view all the trees detailed in this report from all directions, as some were located on an adjacent private property. I have therefore confined observations of these trees to what was visible from within the site. I have not checked the accuracy of the positions of the trees shown on the provided plans and I have estimated all dimensions unless otherwise indicated.
- 1.4 **The Tree Protection Plan:** This is included in Appendix 1 and is a composite drawing derived from the information provided. It shows the existing landscape features (from the land survey) in grey superimposed over the consented layout shown in colour. The Tree Protection Plan has also been annotated to show protection measures for the trees that could realistically be affected by the new development. It shows any activities in Root Protection Areas (RPAs) and if trees are to be removed, they are shown with a red dashed crown outline.
- 1.5 **Qualifications and experience:** This report is based on my site observations and I have come to my conclusions in the context of my experience as a former local government tree officer and a private practice arboricultural consultant. I have qualifications in both arboriculture and forestry and details of these, together with a career summary are provided in Appendix 5.

1.6 **Ecological issues:** Providing guidance on ecological issues is not within my sphere of expertise. However, trees and other vegetation can often provide nesting, roosting and feeding opportunities for protected species. Therefore, before any tree work proceeds on site, I advise that appropriate advice is sought to see whether the trees to be removed are being utilised by any protected species.

1.7 **Relevant background information:** As discussed, this report relates to an extant planning consent for the site. A Planning condition has been attached to the permission relating to trees, as follows:

No development hereby permitted shall commence on site, including any site clearance work and any works of demolition or level changes, until an updated Arboricultural method statement and protection plans to accord with the approved layout plan (01486A_MPo1_B_Po8) and showing additionally the retention and protection of T17 Lime and T18 Lime trees have been submitted to and approved by the Local Planning Authority and all protection measures have been installed on site. Works shall then proceed in full accordance with the provisions set out on the approved details, including compliance with BS5837:2012 and use of hand tools in sensitive areas.

Reason: To protect the trees and other vegetation and around the site which make an important contribution to the environment of the site and locality.

This report and updated Tree Protection Plan (Appendix 1) is presented to the council in pursuance of the discharge of this tree related planning condition.

2 ARBORICULTURAL METHOD STATEMENT

2.1 Tree protection issues

2.1.1 **Tree Protection Plan (TPP):** The plan in Appendix 1 is illustrative, but is based on the layout drawings and topographical survey provided. Therefore, all scaled measurements should be checked against the original design documents. The attached plan and all other information in this report should only be used for dealing with the tree protection issues and all other uses are prohibited, unless authorised by **ecourban** Ltd. All the existing trees will have been numbered, with any higher categories (A and B) highlighted in green and blue rectangles and any low categories (C and U) highlighted in grey and red respectively. The plan also shows the locations of the protective measures, including areas where special care may be required. Additionally, any trees to be removed are indicated with a red dashed crown outline. The TPP is an important document and a copy of it should be kept on site for reference whilst the development is under construction.

2.1.2 **Protective barriers:** The approximate location of the barriers is illustrated on the plan in Appendix 1 and information on barrier design based on BS 5837:2012 guidance is included in Appendix 3. The protective barriers will be erected before any materials or machinery are brought onto the site and before any clearance or construction activities occur. With the exception of the barrier positions around group G10 and tree T13 (see below), once the protective barriers have been positioned, these will stay in situ for the duration of the construction, unless previously agreed with the arboricultural consultant or council's tree officer. There will be no access into the protected areas and the storage of excavated debris and building materials will be prohibited, unless authorised by the arboricultural consultant, after discussion with the council's tree officer. No fires or fuel storage will be allowed within or near to protected areas under any circumstances.

2.1.3 **Temporary repositioning of barriers:** With regard to group G10 and tree T13, the barriers around these trees are located adjacent to where a building is to be demolished and also where new soft landscaping is proposed. The barriers in this area are shown initially at the edge of the construction zone to allow this activity to commence and will then need to be extended out to cover the RPAs indicated.

2.1.4 **Ground protection measures:** Where the positioning of tree protection barriers is not feasible due to the need for construction access, then ground protection measures will be needed to safeguard RPAs. The position of ground protection is shown on the plan included in Appendix 1, with guidance for ground protection design included in Appendix 4 and an installation video for proprietary ground protection is available to view at <https://www.youtube.com/watch?v=QiaRgNUackY>. The ground protection will also be installed before any materials or machinery are brought onto the site and prior to any clearance or construction activities occurring. Again, once the ground protection has been positioned, it will stay in situ for the duration of the construction phase, unless previously agreed with the project arboricultural consultant or council's tree officer.

2.2 **Arboriculturally sensitive operations**

2.2.1 **Activities in Root Protection Areas (RPAs):** Work in RPAs must be undertaken with care, as set out in the following text. Site personnel will be properly briefed before any activities start and all sensitive work will be inspected regularly during the course of operations.

2.2.2 **Removal of existing office building:** Group G10 and tree T13 could be potentially affected by this activity and care must be taken to avoid damage, particularly to tree roots. With this in mind, I set out the following guidance to help minimise the risk of significant impact occurring:

- **Minimal disturbance:** Care will need to be taken during the demolition of the office block, which will need to take place from inside the existing building footprint in a 'top down, pull back' type operation. In addition, attention will need to be paid to dealing with any foundation removal. If appropriate, this will be left in situ just below ground level to minimise the potential for ground/root disturbance. However, if the foundation is to be removed, all works will generally be undertaken using appropriate hand operated tools. A machine with a suitable reach may be used (under arboricultural supervision) if it can work from outside the RPAs indicated, or from part of the existing floor slab of the structure. If an excavating machine is being used, the bucket of the excavator should only be used in a careful scraping or lifting motion to minimise disturbance to soil beneath the foundation, where tree roots may be found.
- **Dealing with tree roots:** During digging, care will be taken to locate any substantial tree roots. Once roots have been located, soil will be carefully cleared away from them. Those roots temporarily exposed will be protected from direct sunlight, drying out and

extremes of temperature by appropriate covering. Where roots may need to be cut, those smaller than 25mm diameter may be pruned back, preferably to a side junction, using a cutting tool such as bypass secateurs or handsaws. Roots larger than 25mm should only be severed following consultation with an arboriculturist, as they may be essential to the tree's health and stability.

- **Removal of demolished building material:** Any work to remove the foundation will proceed starting at a point closest to the trees and working backward away from them. In this way, there should be no need to traverse the areas where the foundation has been taken up. Debris will then be removed manually across the existing floor slab in a way that prevents any soil compaction. Alternatively, debris or spoil will be lifted out by machines working from outside the RPAs shown, or positioned on part of the existing floor slab. As discussed in section 5.1.3, once the demolition works are complete, the tree protection barriers indicated on the plan in Appendix 1 will be extended out to encompass the RPAs shown in preparation for the soft landscape phase.

- **Installation of new soft landscaping:** Tree protection barriers may need to be redeployed to allow operatives access so that the soft landscape works can be completed. Nonetheless, soft landscaping activity after construction can also be damaging to tree roots. Therefore, no significant level changes, deep excavation or cultivation shall occur within RPAs. Where necessary, good quality top soil can be used around the trees and this should be firmed into place, but not overly compacted in preparation for turfing or grass seeding. As discussed, exposed soil and tree roots are vulnerable to damage by compaction. Therefore, vehicular access will not be permitted in RPAs during the soft landscape installation phase and pedestrian movements required to carry out the necessary work will be kept to a minimum.

2.3 Additional tree-related issues

- 2.3.1 **Site supervision:** Site personnel will be properly briefed regarding the tree protection issues before any work starts, and the tree protection will be inspected periodically to ensure the retained trees are protected in accordance with this document and any conditions imposed by the council.

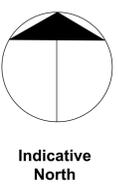
-
- 2.3.2 **Installation of new services or upgrading of existing provision:** Where practicable, all new services will be outside the protected areas indicated on the plan in Appendix 1, but where existing services within RPAs require upgrading or new provision is needed, great care will be taken to minimise any disturbance. Trenchless installation will be the preferred option, but if this is not feasible, any excavation will be carried out by hand in accordance with the guidelines set out in NJUG Volume 4 - Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.
- 2.3.3 **Material storage areas and site compounds:** All construction material storage areas, cement silos or cement mixing areas, fuel storage points and compounds for machinery etc. will be outside protected areas, unless otherwise agreed with the council.
- 2.3.4 **Contractors car parking, site offices and welfare facilities:** Whilst it is possible to have site offices and welfare facilities within RPAs, care is needed in their positioning and also in the connection of water, electricity and drainage to service them. Therefore, these will generally be sited outside the tree RPAs, unless agreed previously with the council. Contractor's car parking facilities will also be located away from retained trees.
- 2.3.5 **Tree works:** Any tree pruning or tree removal operations are set out in the tree schedule included in Appendix 2. Additionally, those trees scheduled for removal are also shown on the Tree Protection Plan included in Appendix 1.
- 2.3.6 **Timing of events:** I propose the following preliminary cascading timetable of events to help minimise any risk of impact on important trees. However, the following schedule may be modified at the pre-commencement meeting, subject to discussion with all parties and agreement with the council:
1. Pre-commencement site meeting
 2. Extent of any arboricultural supervision agreed
 3. Tree works undertaken
 4. Protective barriers erected before any clearance or construction activities occur on site and notification to the council that this is in place
 5. Ground protection installed before any clearance or construction activities occur on site and notification to the council that this is in place
 6. Removal of existing building and redeployment of tree protection barriers
 7. Installation of new soft landscaping

-
8. Tree protection only removed at the end of the construction phase when there is no longer any risk to trees

Barrie Draper BSc (Hons) Arb TechCert(ArborA) CertArb(RFS)
Arboricultural Consultant

Date: **27 March 2024**

1 Ao plan



Indicative North

Rose Cott
Woodcote
URNE LANE

Orchard

Issues

Area subject to outline application with all matters reserved

Area where care needed removing existing building within tree RPA



ECO 24 - TREE PROTECTION FOR COWDRAY ESTATE YARD, EASEBOURNE

SCALE: 1:200 @ A0

This drawing was originally produced in colour, therefore any subsequent monochrome photocopies may not show appropriate levels of detail and should not be relied upon for the purposes of dealing with site tree issues

- T1
xxx BS Category A: Trees of high quality
- T1
xxx BS Category B: Trees of moderate quality
- T1
xxx BS Category C: Trees of low quality
- Tree protection barriers
- Area outside barriers requiring ground protection
- Trees/hedge section to be removed
- Root Protection Areas (RPAs): Below ground tree constraints for retained trees based on BS 5837 guidance

COMPOSITE PLAN: LAND SURVEY OUTLINED IN GREY, PROPOSED DEVELOPMENT SHOWN IN COLOUR

Appendix 2: Tree Schedule and Inventory

Tree No.	Species	Ht (m)	Single stem dia. at 1.5m (cm)	Est. Dia. *	STEM DIAMETERS (MULTIPLE)							Branch spread (m)	Ht above ground (m)	Age class	Notes	Management proposals	BS cat	RPA area (m ²)	RPA radius (m)				
					Multi stemmed trees with 1 - 5 stems (cm)					Multi stemmed trees with 1 - 5 stems combined (cm)	Multi stemmed trees >5 stems									N	E	S	W
					1	2	3	4	5	Mean stem dia. (cm)	No. of stems												
T3	Cherry	18	-	-	40	40	20	-	-	60	-	-	7	5	7	4	4	M	Multi stemmed tree, tight fork. Thinning canopy. Stem and canopy shrouded in ivy, limited access to survey. Close to highway. Preliminary Cat C.	Sever ivy and reinspect.	C1	163	7.2
H4	Holly and yew	1	8	* Avg at base	-	-	-	-	-	-	-	-	-	1	-	1	n/a	MA	Clipped hedge.	Cut back section to allow new access road formation.	C1	3	1.0
G5	Hazel and cherry	5	-	* Lgst	-	-	-	-	-	-	15	11	3	3	3	3	2	Y/ MA	Small tree and shrub. Overstood hazel.	Remove part of group (as shown on plan in Appendix 1).	C1	112	6.0
G6	Cherry, hawthorn and ash	13	-	* Lgst	30	35	-	-	-	46	-	-	5	4	5	6	4	MA/ M	Small trees, covered in ivy and situated in overgrown area. Limited access to survey. Unremarkable. Preliminary Cat C.	Remove part of group (as shown on plan in Appendix 1). Sever any ivy/clear undergrowth and resurvey.	C1	96	5.5

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					Multi stemmed trees with 1 - 5 stems (cm)					Multi stemmed trees with 1 - 5 stems combined (cm)	Multi stemmed trees >5 stems												
					1	2	3	4	5		Mean stem dia. (cm)	No. of stems	N	E	S	W							
T7	Weeping willow	16	65	*	-	-	-	-	-	-	-	-	-	6	5	5	4	M	Offsite boundary tree, no access to survey and restricted clear line of sight. Main stem and scaffolds covered in ivy. Heavily crown reduced.		C1	191	7.8
T8	Norway maple	10	-	*	30	25	-	-	-	39	-	-	-	5	5	5	3	MA	Offsite boundary tree, no access to survey and restricted clear line of sight. Twin stemmed and covered in ivy.		B1	69	4.7
T9	Oak	15	65	*	-	-	-	-	-	-	-	-	5	6	-	4	4	MA/M	Offsite tree, stem covered in ivy. Ditch to south. Restricted access to survey. Some deadwood and slightly thinning branch extremities.		B1	191	7.8

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					Multi stemmed trees with 1 - 5 stems (cm)					Multi stemmed trees with 1 - 5 stems combined (cm)	Multi stemmed trees >5 stems		N	E	S	W							
					1	2	3	4	5		Mean stem dia. (cm)	No. of stems											
G10	Ash	7	-	* Lgst	-	-	-	-	-	-	8	8	3	3	-	3	2	Y	Small, multi stemmed offsite trees. Poor structural arrangements. No direct access to survey.		C1	23	2.7
T11	Beech	11	85	*	-	-	-	-	-	-	-	-	-	6	6	6	2	M	Offsite tree, no direct access to survey. Low lateral branch extending south.		B1	327	10.2
T12	Pine	8	35	*	-	-	-	-	-	-	-	-	-	2	3	4	3	Y/ MA	Small, squat shaped offsite tree. No direct access to survey and limited clear line of sight. Unbalanced.		C1	55	4.2
T13	Sweet chestnut	12	-	*	30	35	-	-	-	46	-	-	4	5	5	5	4	MA	Offsite tree, no direct access to survey. Twin stemmed with old pruning wounds. Topped out.		C1	96	5.5
T14	Lime	26	-	-	81	148	-	-	-	169	-	-	5	5	4	4	4	OM	Part of linear grouping of trees. Veteran tree.		A3	707	15.0

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					Multi stemmed trees with 1 - 5 stems (cm)					Multi stemmed trees with 1 - 5 stems combined (cm)	Multi stemmed trees >5 stems		N	E	S	W							
					1	2	3	4	5		Mean stem dia. (cm)	No. of stems											
T15	Lime	14	39	-	-	-	-	-	-	-	-	-	3	4	3	4	3	MA	Part of linear grouping of trees.		A2	69	4.7
T16	Lime	10	30	-	-	-	-	-	-	-	-	-	3	4	3	4	3	MA	Part of linear grouping of trees.		A2	41	3.6
T17	Lime	15	62	-	-	-	-	-	-	-	-	-	3	5	5	5	3	MA	Part of linear grouping of trees. Twin stemmed at 2.5m, tight fork.		A2	174	7.4
T18	Lime	14	42	* 1m	-	-	-	-	-	-	-	-	3	5	3	5	3	MA	Part of linear grouping of trees. Twin stemmed at 1.5m, tight fork.		A2	80	5.0
T19	Lime	14	49	-	-	-	-	-	-	-	-	-	3	6	3	5	3	MA	Part of linear grouping of trees.		A2	109	5.9
T20	Lime	14	46	* 1m	-	-	-	-	-	-	-	-	3	5	3	5	3	MA	Part of linear grouping of trees. Multi stemmed at 1.5m.		A2	96	5.5
T21	Lime	10	38	-	-	-	-	-	-	-	-	-	3	5	2	5	3	MA	Part of linear grouping of trees.		A2	65	4.6
T22	Lime	11	52	-	-	-	-	-	-	-	-	-	4	5	2	4	3	MA	Part of linear grouping of trees. Partial limb failure and cavity main stem east side with decay ingress main trunk.		C1	122	6.2

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					Multi stemmed trees with 1 - 5 stems (cm)					Multi stemmed trees with 1 - 5 stems combined (cm)	Multi stemmed trees >5 stems		N	E	S	W							
					1	2	3	4	5		Mean stem dia. (cm)	No. of stems											
T23	Lime	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dead.	Fell for management reasons.	U	-	-	
T24	Lime	11	31	-	-	-	-	-	-	-	-	-	3	4	3	5	3	MA	Part of linear grouping of trees. Tight fork at 2.5m.		A2	43	3.7
T25	Lime	10	27	-	-	-	-	-	-	-	-	-	2	4	3	5	3	MA	Part of linear grouping of trees.		A2	33	3.2
T26	Lime	10	27	-	-	-	-	-	-	-	-	-	2	5	3	3	3	MA	Part of linear grouping of trees.		A2	33	3.2
T27	Lime	10	29	-	-	-	-	-	-	-	-	-	4	4	3	5	3	MA	Multi stemmed at 2.5m, tight forks.		A2	38	3.5

Abbreviations:

Abbreviations	Meaning	Abbreviations	Meaning	Abbreviations	Meaning
T	<i>Individual tree</i>	M	<i>Mature</i>	RPA	<i>Root Protection Area</i>
G	<i>Groups of trees</i>	MA	<i>Maturing</i>	<	<i>Less than</i>
H	<i>Hedge</i>	Y	<i>Young</i>	>	<i>More than</i>

Appendix 2: Tree Schedule and Inventory

Tree Schedule Notes:

Tree number	Assigned during the site visit and also referenced on the plan in Appendix 1.
Species	Common name and referenced to scientific name in the above list. Where I have some doubt over the actual tree species, the genus will have been noted followed by sp. Where trees are numerous and present in groups, not every individual species may have been noted.
Height	Measurement of total tree height using a laser hypsometer to nearest metre or where clear line of site is not possible then an estimate based on interpolation of heights of nearby measured trees.
Stem diameters	Measurement of stem diameter either at 1.5m above ground (or in accordance with BS guidance where trees have multiple stems) with a forester's girth measuring tape. Diameters followed by asterisk symbol indicate estimated diameters because of access difficulties, presence of ivy or other obstructions. Where trees are present in a group, the tree with the largest stem diameter within the group will have been measured/estimated.
Est. Dia.	Estimated diameters due to access restrictions are indicated with an asterisk
Branch spread	Where appropriate and where ground conditions allow, an estimate of the crown spread at each of the cardinal compass points. Where only part of the site is affected by trees, measurement may be in one or two directions only
Existing height above ground level	Distance in metres to first significant branch or canopy or a height above which crown lifting operations would not be appropriate
Age class	Simplistic estimate of tree age in one of FOUR categories (young, maturing, mature or over mature).
Notes	Although this document is not intended to be a full and detailed report on tree health and safety, any significant structural defects or physiological conditions have been identified where these were visible. Where no entries are recorded, this indicates no observable issues were identified. Where there is restricted access to the base of a tree, its attributes are assessed from the nearest point of access. Climbing inspections are not carried out during a walkover tree survey and, if heavy ivy is present, tree condition is assessed from what can be seen from the ground.

Appendix 2: Tree Schedule and Inventory

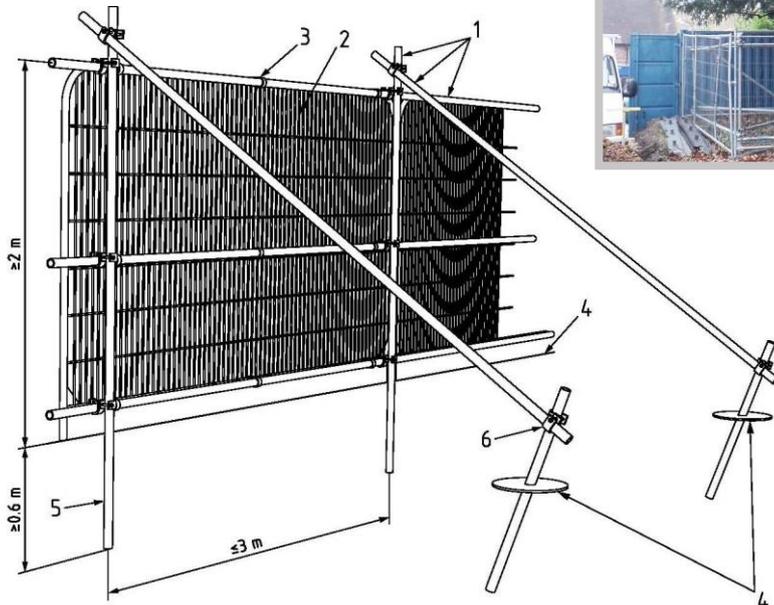
Management proposals	<i>The inspection of all trees was of a preliminary nature and only defects visible from the ground have been identified. Each individual tree may not have been inspected closely because of access difficulties and only defects visible from the inspection point have been identified. Monitoring may be indicated where tree risk can be adequately managed by increased frequency of site inspections. Further investigation may be indicated where additional data may be required beyond a purely visual assessment. However, a full post development tree inspection is recommended to establish that the trees retained during construction pose acceptable levels of risk once the development has been completed.</i>
BS 5837 (2012) Category	<i>Either U, A, B or C based on the BS 5837 (2012) guidance.</i>
RPA and RPA radius	<i>RPA and RPA radius calculations have been undertaken in accordance with the guidance set out in BS 5837 (2012).</i>

Tree Inventory:

Common Tree Names	Scientific Tree Names		Common Tree Names	Scientific Tree Names
Ash	<i>Fraxinus excelsior</i>		Norway maple	<i>Acer platanoides</i>
Beech	<i>Fagus sylvatica</i>		Oak	<i>Quercus robur</i>
Cherry	<i>Prunus avium</i>		Pine	<i>Pinus sp.</i>
Hazel	<i>Corylus avellana</i>		Sweet chestnut	<i>Castanea sativa</i>
Holly	<i>Ilex aquifolium</i>		Weeping willow	<i>Salix babylonica / x sepulcralis 'Chrysocoma'</i>
Lime	<i>Tilia cordata and Tilia x europaea</i>		Yew	<i>Taxus baccata</i>

Appendix 3: Illustrative Specification for Tree Protection Barriers



Key

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

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

The default specification should consist of a vertical and horizontal scaffold framework, well braced to resist impacts. The vertical tubes should be spaced at a maximum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed.
 – BS 5837 (2012)

Ref: Tree Protection Barriers (Type 1)	Drawing No. TPB1
Scale: N/A	

Appendix 4: Illustrative Specification for Ground Surface Protection



New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

NOTE The ground protection might comprise one of the following:

a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane;

b) for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards, placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;

c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

- BS 5837 (2012)

Ref: Ground Protection	Drawing No. GP1
Scale: N/A	

Appendix 5: Qualifications and Experience of Barrie Draper

- 1** **Qualifications:** I have a BSc degree (with Honours) in Arboriculture from the University of Central Lancashire. I also hold a BTEC Higher National Diploma (HND) in Forestry (Lowland Management), the Arboricultural Association's Technician's Certificate in Arboriculture (Tech Cert), the Royal Forestry Society's Certificate in Arboriculture (Cert Arb) and the National Examinations Board Certificate in Forestry.

- 2** **Career experience:** I began my arboricultural career in 1993 as an arborist with Portsmouth City Council. During my time with the council I worked for both the direct labour organisation and for a private contractor where I obtained valuable hands on experience in all aspects of arboriculture. From 1999 to 2002 I was employed as Senior Arborist by Parchment Housing Group, a housing association based near Portsmouth. I managed the Groups' tree stock on their behalf, carrying out tree inspections and practical management operations. I have also worked in local government, spending time with Thurrock Borough Council in Essex where I was the Tree and Landscape Officer, and with Winchester City Council, where I was Arboricultural Officer for a period of 2 years. During my time working in local government I was responsible for making Tree Preservation Orders, administering applications to work on protected trees and advising on planning applications when trees were considered material constraints on development. Working within a planning environment allowed me to gain valuable experience in the management of trees in development situations and an understanding of the planning process and how it relates to trees. From January 2005 I worked for Barrell Tree Consultancy Ltd advising clients on a wide range of tree related issues. I left the company in September 2008 and set up ecourban ltd.



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