November 2023
CBA11630 v1C

West Sussex County Council and
Sussex Police

ARBORICULTURAL DEVELOPMENT STATEMENT

Site: Worthing Durrington Police Station
and Custody Suite
Durrington Lane
Worthing
BN13 2PQ

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The Complete Arboricultural Consultancy

ARBORICULTURAL DEVELOPMENT STATEMENT

Arboricultural Implications Assessment Including Arboricultural Method Statement

Client:	West Sussex County Council and Sussex Police
Site:	Worthing Durrington Police Station and Custody Suite, Durrington Lane, Worthing, BN13 2PQ
Arboricultural Consultant:	Stefan Rose *BSc (Hons), TechCert (Arbor.A), Tech.Arbor.A*
Date:	November 2023

SUMMARY

Permission is being sought for a proposed new designated access at Worthing Durrington Police Station and Custody Suite, Durrington Lane, Worthing, BN13 2PQ.

This Arboricultural Development Statement follows the initial tree survey of the wider site and provides information on tree protection specifications and should be read in association with the Tree Retention/Removal and Protection Plan CBA11630.03C TRRPP.

The emphasis of the report is predominantly that of preservation and protection of trees to be retained immediately around the area of proposed works. It identifies methodologies to provide protection for trees, to ensure their healthy and safe retention during and post development, as guided by BS5837:2012 and current best practice.

Of the 38 (thirty-eight) individual trees and 6 groups of trees that were identified as part of the site wide tree survey exercise, the planning application works will involve the removal of 10 (ten) individual trees and the partial removal of 1 (one) group of trees.

Seven replacement trees will be planted along the roadside with ample rooting volume so that they will have space to establish and mature away from built form.

CBA Trees believes that the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

CONTENTS

Section	*Title*	*Page No.*
1.0	*INTRODUCTION*	*3*
2.0	*CLIENT'S BRIEF*	*3*
3.0	*DESCRIPTION OF THE SITE*	*3*
4.0	*THE TREE STOCK*	*4*
5.0	*TREE PRESERVATION ORDER/CONSERVATION AREA*	*5*
6.0	*PROPOSED TREE RETENTION AND TREE LOSS*	*5*
7.0	*SUMMARY OF ARBORICULTURAL IMPLICATIONS*	*5*
8.0	*PRE-COMMENCEMENT SITE MEETING*	*7*
9.0	*ADDITIONAL ARBORICULTURAL ADVICE FOR SITE PERSONNEL*	*8*
10.0	*PRE-COMMENCEMENT TREE WORKS*	*8*
11.0	*TREE PROTECTION MEASURES*	*9*
12.0	*AVOIDING DAMAGE TO STEMS AND BRANCHES*	*10*
13.0	*VEHICULAR MOVEMENTS*	*10*
14.0	*SITING OF TEMPORARY OFFICES, TOILETS AND MATERIAL STORAGE COMPOUNDS*	*11*
15.0	*GENERAL CONSIDERATIONS WITHIN AND OUTSIDE THE CONSTRUCTION EXCLUSION ZONE*	*11*
16.0	*GROUND LEVEL ALTERATIONS*	*12*
17.0	*UTILITY SERVICE CONNECTIONS*	*12*
18.0	*REMOVAL OF PROTECTIVE BARRIERS*	*12*
19.0	*SOFT LANDSCAPING WORKS*	*12*
20.0	*CONCLUSION*	*13*

SUPPORTING INFORMATION/ APPENDICES:

CB1 Tree Survey Schedule and Tree Survey Plan CBA11630.01A TSP
CB2 Root Protection Area Schedule
CB3 Tree Retention/ Removal and Protection Plan CBA11630.03C TRRPP
CB4 Tree Works Schedule
CB5 Tree Protection Guidance Leaflet
Construction Exclusion Zone Site Notice
Common Causes of Damage During Construction Works
CB6 Qualifications and Experience

1.0 INTRODUCTION

1.1 Permission is being sought for a proposed new designated access at Worthing Durrington Police Station and Custody Suite, Durrington Lane, Worthing, BN13 2PQ.

1.2 Document disclosure provided:

- Topographical Site Survey (Ref: ENC/150322/IVV9)
- Proposed Site Plan 183.0002 X-MODEL - 50mph correct location 14.06.23
- Indicative Drainage Strategy by Paul Basham Associates 183.5002/DFTN/1
- Proposed Site plan by Allford Hall Monaghan Morris, drawing no. 12102
- Tree Replacement Plans by Hyland Edgar Driver

1.3 The client provided the original site plans and locations of the trees, and these have been the basis for the production of subsequent plans. Whilst CBA Trees has had a limited input in defining the contents of the development plan, it broadly conforms to the requirements of BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"* and current best practice advice.

2.0 CLIENT'S BRIEF

2.1 In line with our written quotation and verbal instructions, information has been compiled in accordance with BS5837:2012 and current best practice advice.

- To undertake a tree survey of the site as a whole, schedule appended at CB1.
- Produce a Root Protection Area schedule in accordance with BS5837:2012 Annex D, appended at CB2.
- To produce a Tree Survey Plan based on the site wide survey that relies on the accuracy of the topographical survey provided by the client (plan CBA11630.01A TSP appended with the tree survey schedule at CB1).
- To undertake an arboricultural implications assessment of the trees specifically within the red line boundary of the planning application as provided by the client.
- Based on the above and further on-going discussions, to provide an Arboricultural Development Statement detailing tree protection specification that may be required.

3.0 DESCRIPTION OF THE SITE

3.1 The overall site is formed by the Worthing Durrington Police Station and the Worthing ID Unit for Sussex Police with the associated access and car parking areas and areas of soft landscaping.

3.2 The specific area of works associated with the planning application works is on the southern side of the site with the A2032 Littlehampton Road.

3.3 Trees grow on a bank forming part of the landscaping between the A2032 and the site. There is a mix of semi mature to mature age class individual trees and a mix of trees and shrubs forming a linear group.

3.4 Ground levels generally rise up from the southern to the northern side of the area of works.

4.0 THE TREE STOCK

4.1 A tree survey was undertaken by CBA Trees on 4th April 2022. The tree survey exercise identified 38 (thirty eight) individual trees and 6 (six) groups of trees. The Tree Survey Schedule and Plan CBA11630.01A TSP are appended at CB1.

4.2 ***Tree Categorisation Method***

Category U = Trees in such a condition that any value would be lost within 10 years, or should be removed for reasons of sound arboricultural management.
There were no 'U' grade trees on the site at the time of surveying.

Note: BS5837:2012 states -
"Category U trees are those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years."

Category A = Trees of high quality and value: in such a condition as to make a substantial contribution, (40 years or more is recommended).
There were no 'A' grade trees on the site at the time of surveying.

Category B = Trees of moderate quality and value, capable of making a significant contribution for in excess of 20 years.
There were 17 (seventeen) individual trees and 3 (three) groups of trees categorised as 'B' grade on the site at the time of surveying.

Individual Trees: 2, 5, 10, 11, 13, 14, 17, 25, 27, 28, 29, 32, 33, 34, 35, 36, 37
Groups: 1, 4, 5

Category C = Trees of low quality and value which might remain for a minimum of 10 years or young trees with stems of less than 150mm diameter.
There were 21 (twenty one) individual trees and 3 (three) groups of trees categorised as 'C' grade on the site at the time of surveying.

Individual Trees: 1, 3, 4, 6, 7, 8, 9, 12, 15, 16, 18, 19, 20, 21, 22, 23, 24, 26, 30, 31, 38
Groups: 2, 3, 6

Note:
Trees under these categories are trees that should be a material consideration in the development process; the subcategories are intended to reflect arboricultural, landscape and cultural values respectively.

4.3 For more details of the existing tree stock, refer to the Tree Survey Schedule (appended at CB1).

5.0 TREE PRESERVATION ORDER/CONSERVATION AREA

5.1 Several of the trees across the whole site are protected by The Worthing Tree Preservation Order No.15 1992, Grounds of Gateway House, Durrington Lane, Worthing. It appears that Trees 7, 25, 31 (possible replacement tree), 32, 33 and Group 1 and some trees within Group 2 are protected, but it is advised to check with the LPA prior to undertaking any tree works outside of a full planning permission that details tree works. Specific to the area of works is T7 and certain tree species within Group 2.

5.2 If it is intended to carry out works to trees on site prior to the granting of Full Planning Consent and Discharge of Planning Conditions or, in excess of those shown within this arboricultural statement, it will be necessary to provide written notification to Worthing Borough Council and an application made should protected trees need additional tree work.

6.0 PROPOSED TREE RETENTION AND TREE LOSS

6.1 In accordance with the recommendations contained within BS5837:2012, an experienced arboriculturist has assessed the requirements for tree protection and the Root Protection Area (RPA) (appended at CB2). The implications of the proposed development are detailed below, along with any mitigating measures to ensure the retention of these trees.

6.2 As part of the assessment, dimensions have been scaled from the proposed drawings (ref: 183.0002 X-MODEL - 50mph correct location 14.06.23) prepared and modified, to include the relevant Tree Survey data and the information as shown on plan CBA11630.03C TRRPP appended at CB3.

7.0 SUMMARY OF ARBORICULTURAL IMPLICATIONS

7.1 The following is a summary of arboricultural implications as indicated on Tree Retention/ Removal and Protection Plan CBA11630.03C TRRPP for the trees and group immediately around the area of the planning application works. Trees and groups not detailed below are not impacted by the works.

Table 1: Arboricultural Implications

Tree No.	*Species*	*BS 5837:2012 Cat*	*Potential cause of harm*	*Implication*	*Mitigation*
7 TPO T5	Weeping Willow *Salix x chrysocoma*	C1+2	• Contractor movements • Material storage and mixing • Earth works to achieve level changes • Minor infringement of rooting area for new junction	• Retained	• Protected as detailed within this report as shown on Tree Protection Plan CBA11630.03C TRRPP

Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
8	Monterey Cypress *Cupressus macrocarpa*	C1+2	• Section of root protection area under and immediately adjacent to the footprint of the junction causing root loss • Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots • New gas and water metering housing • New gas and water service route locations	• Removed	• Replacement planting
8.1	Monterey Cypress	C1+2	• Section of root protection area under and immediately adjacent to the footprint of the junction causing root loss • Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots • New gas and water metering housing • New gas and water service route locations	• Removed	• Replacement planting
8.2	Monterey Cypress	C1+2	• Section of root protection area under and immediately adjacent to the footprint of the junction causing root loss • Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots • New gas and water metering housing • New gas and water service route locations	• Removed	• Replacement planting
8.3	Monterey Cypress	C1+2	• Section of root protection area under and immediately adjacent to the footprint of the junction causing root loss • Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots • New gas and water metering housing • New gas and water service route locations	• Removed	• Replacement planting
9	Lawson Cypress *Chamaecyparis lawsoniana*	C1	• Under the footprint of the junction	• Removed	• Replacement planting
10	Common Sycamore *Acer pseudoplatanus*	B1+2	• Under the footprint of the junction	• Removed	• Replacement planting
11	Common Sycamore *Acer pseudoplatanus*	B1+2	• Under the footprint of the junction	• Removed	• Replacement planting

Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
12	Lawson Cypress *Chamaecyparis lawsoniana*	C1+2	• Under the footprint of the junction	• Removed	• Replacement planting
13	Atlas Cedar *Cedrus atlantica*	B1+2	• Removal of existing built form damaging roots, trunk and crown • Drainage works removing roots	• Removed	• Replacement planting
14	Common Sycamore *Acer pseudoplatanus*	B1+2	• Section of root protection area under and immediately adjacent to the footprint of the realigned footpath causing minor root loss • Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots • New gas and water metering housing • New gas and water service route locations	• Removed	• Replacement planting
15	Common Sycamore *Acer pseudoplatanus*	C1	• Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots	• Removed	• Replacement planting
16	Common Sycamore *Acer pseudoplatanus*	C1	• Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots	• Removed	• Replacement planting
17	Common Sycamore *Acer pseudoplatanus*	B1+2	• Section of root protection area under and immediately adjacent to the footprint of the realigned footpath causing minor root loss • Contractor movements • Material storage and mixing • Earth works to achieve level changes • Drainage works removing roots	• Removed	• Replacement planting
Grp 2 TPO A1 (some trees within Grp 2)	Cherry Laurel Blackthorn Photinia Common Hawthorn Elder Lawson Cypress Pyracantha Crab Apple Purple Leaved Plum Goat Willow Elder Rowan	C2	• Section of group under and immediately adjacent to the footprint of the junction layout • Contractor movements • Material storage and mixing • Earth works to achieve level changes	• Part retained; part removed	• Fell to ground level and remove stumps in section shown on Tree Protection Plan CBA11630.03C TRRPP • Protected as shown within this report and as shown on Tree Protection plan CBA11630.03C TRRPP • Replacement Planting

8.0 PRE-COMMENCEMENT SITE MEETING

8.1 It is recommended that a pre-commencement site meeting is held prior to any works commencing on site, to agree all approved processes with the arboricultural consultant, the construction personnel and West Sussex County Council/Worthing Borough Council. This meeting could be used to formally agree the methods of work,

position of site offices, material storage, compounds, parking and tree protection measures prior to commencement of the development and the associated clearance work.

9.0 ADDITIONAL ARBORICULTURAL ADVICE FOR SITE PERSONNEL

9.1 To provide site personnel with additional information regarding the requirements of Tree Protection, a leaflet, appended at CB5 shall be issued to all staff at the time of their site induction. Spare copies of this leaflet shall be available in the site office as replacements and as a reference point.

9.2 In order to inform site personnel of the purpose of the barriers, information notices shall be fixed to the barriers at 5m intervals. These notices shall be of all-weather construction and shall be substantially in the form of the specimen provided at appendix CB5 and replaced as and when necessary.

10.0 PRE-COMMENCEMENT TREE WORKS

10.1 All tree works will be undertaken prior to the commencement of site preparation and construction works once the planning application works have been agreed for the proposed new access.

10.2 **All permitted or proposed tree work** should be carried out in accordance with the British Standard *"Recommendations for Tree Work"* BS3998:2010, by suitably qualified and experienced professional tree surgeon. Under no circumstances shall site personnel undertake any tree pruning operations. All tree surgery works should be carried out prior to the development of the site, and erection of protective barriers.

10.3 Consideration should be given to the timing of the proposed tree works to avoid the active growing period of trees. Therefore, all tree work should ideally be carried out during the dormant period from November through to February and then again from June to August.

10.4 Due to the official bird nesting season considered to be from 1st March through to the 31st July (Natural England) depending on weather conditions, consideration must also be given to the potential for nesting birds. Therefore, if tree work is to be carried out within these months the project ecologist must be consulted to:

- Complete or advise on a pre-works survey which needs to be carried out by a suitably competent person. As a general rule, it should be assumed that birds will be nesting in trees, and it is down to contactors to assess, record and confirm that any works carried out in the management of trees and other vegetation has not disturbed actively nesting birds*.

10.5 Should additional tree works become apparent during the construction process; written consent will be required from Worthing Borough Council prior to these additional works being undertaken.

11.0 TREE PROTECTION MEASURES

11.1 All site operations will be planned, implemented and supervised to prevent the following on or immediately around retained trees:

Unplanned root severance
- Damage to the bark, branches and trunks
- Compaction of the soil within the Construction Exclusion Zone
- Alterations in soil level
- Soil contamination by phytotoxic materials such as herbicides, petrol, oils, diesel, cement and concrete washings or other construction additives

11.2 Before starting works on site, tree protection will be installed in accordance with tree protection plan CBA11630.03C TRRPP (appended at CB3). This will occur immediately following the completion of tree works and prior to any site preparation works starting.

11.3 A copy of the Tree Removal/Retention and Protection Plan CBA11630.03C TRRPP will be kept on site as a point of reference for all site operatives during site works.

11.4 The appropriate barrier will consist of a robust barrier where it (the barrier) is resistant to impact and requires a positive or considered movement/adjustment by contractors to adjust its position. Installing the following protective barrier will protect any retained trees, groups and hedges.

11.5 The robust barrier will consist of weld mesh panels coupled together with two clasps fastened from the inside (on the side away from the site works), mounted on rubber feet which are secured into position with ground pins or similar. The weld mesh panels will be stabilised by supporting struts that are secured in position with the ground pins (see Figure 1 below).

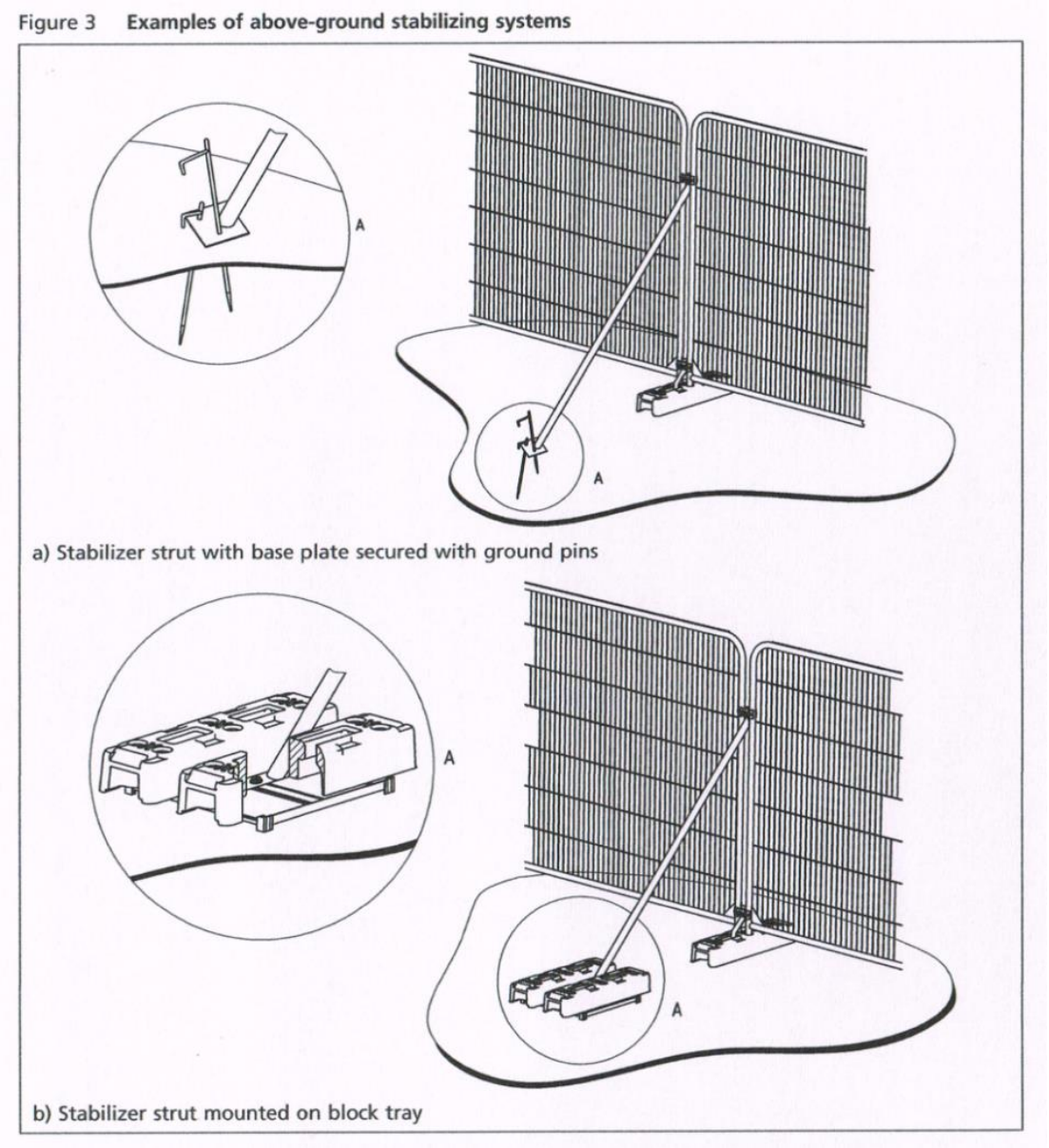
11.6 The establishment and retention of the tree protection measures during the site works will be the responsibility of the appointed Site Manager unless otherwise agreed in writing with involved parties.

11.7 The area within the Tree Protection Barriers shall be known as the Construction Exclusion Zone (CEZ) and will be regarded as **sacrosanct.**

11.8 Tree protection barriers will remain *in-situ* for the duration of the project for all works until the junction is complete.

11.9 An example of a CEZ notice is appended at CB5.

Figure 1: Tree Protective Barrier example (taken from BS5837:2012, Figure 3)



12.0 AVOIDING DAMAGE TO STEMS AND BRANCHES

12.1 Care shall be taken when planning site operations, to ensure that wide or tall loads, or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact could result in serious damage to them and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees, will be conducted under the supervision of a banksman, in order to ensure adequate clearance from trees is maintained at all times.

13.0 VEHICULAR MOVEMENTS

13.1 There shall be no vehicular or contractor plant machinery movement in any protected rooting zones of retained trees unless operations form existing hard surfacing.

14.0 SITING OF TEMPORARY OFFICES, TOILETS AND MATERIAL STORAGE COMPOUNDS

14.1 All storage materials and deliveries shall make use of the existing access and hard surfaces within the site confines where possible, in order to avoid unnecessary damage to tree roots.

14.2 The locations shall be agreed in writing with West Sussex County Council/Worthing Borough Council prior to the commencement of works on site and will remain in only those agreed locations throughout the construction phases. If an alternative location is required, this must be agreed in writing with West Sussex County Council/and Worthing Borough Council. This will also include the delivery, storage and movement of all essential facilities, as well as aspects such as temporary contractor vehicle parking and site location of chemical mixing (e.g. concrete). All such locations will be outside of the RPAs and avoid areas where 'run off' of chemicals may flow into RPAs.

14.3 ***Site Huts***

All site huts (if required) that are to be situated on ground that is not existing hard surfacing, shall have appropriate footings or be situated on a temporary surface, which will aid in reducing the potential for compaction of the ground, where they are in close proximity to the existing tree protective barrier line.

14.4 ***Material Storage***

This shall be accommodated outside of the CEZ formed by the tree protection barriers, particularly to avoid harmful spillages of fuel, or phytotoxic substances that may damage the health of retained trees.

15.0 GENERAL CONSIDERATIONS WITHIN AND OUTSIDE THE CONSTRUCTION EXCLUSION ZONE

15.1 Inside the Construction Exclusion Zone (CEZ) formed by the protective barriers and ground protection measures, the following prohibitions shall apply:

- No construction activity will occur within the CEZ unless otherwise stated in this report or agreed in writing with West Sussex County Council/Worthing Borough Council prior to the specific activity taking place.

15.2 In addition to the above, further precautions are necessary adjacent to trees outside the CEZ:

- Materials which will contaminate the soil e.g. concrete mixing, diesel, oil and vehicle washings, shall not be discharged within 10 metres of the tree stem, branches, foliage or RPA. This should take into consideration the topography of the site, to avoid liquids such as concrete washings running downhill towards trees.

- Fires shall not be lit in a position where their flames can extend to within 10 metres of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.

- Notice boards, telephone cables or other services shall not be attached to any part of the tree (see appendix CB5 Common Causes of Damage During Construction Works).

16.0 GROUND LEVEL ALTERATIONS

16.1 There will be no level changes to the ground within the protected areas around the retained trees and group.

17.0 UTILITY SERVICE CONNECTIONS

17.1 Details of all existing and new service/drainage location proposals have not been forwarded to CBA Trees at the time of compiling this assessment. It is however assumed, given the location of the retained trees and the new road junction layout, that services/drainage will be installed outside the root protection areas of retained trees, and connected to the existing where practicable, this will avoid disturbance of tree roots and ensure their healthy retention.

17.2 It is understood that a gas and water metering house will be relocated to an area currently occupied by the bicycle shed/storage area which could impact on T8 and T14, however these trees are also impacted upon by the proposed junction and drainage strategy and would be removed as a result of these impacts thus the gas and water metering relocation works can be implemented without further requirements towards trees.

18.0 REMOVAL OF PROTECTIVE BARRIERS

18.1 When the construction phase is complete, all drainage and service runs are in place, all site machinery has been removed and any landscaping/making good of soft ground adjacent to the new junction has been implemented, the protective barriers will be dismantled and removed from site.

18.2 This fence dismantling must be undertaken with great care and will need to be supervised to avoid heavy machinery being used within the root protection areas. Hoarding, scaffolding and other barrier materials will need to be removed from site immediately.

19.0 SOFT LANDSCAPING WORKS

19.1 Tree replacement soft landscaping works that form part of the planning application will be in accordance with the approved landscape plan, and any specification of such works that are approved by West Sussex County Council/Worthing Borough Council.

19.2 It is understood that seven replacement trees will consist of Sycamore (x5) and Atlas Cedar (x2) with girths of 16-18cm, which will be planted adjacent to the site in an area where the seven trees can grow to maturity. This offsite planting is practical and appropriate for the designated police and custody centre access planning application and meets the requirements of planning policy.

19.3 The construction exclusion zone of the retained trees will remain off limits for all site plant and machinery unless fit for purpose ground protection is installed. Pedestrian

traffic must be kept to an absolute minimum and only permitted for the ground preparation and landscape installation works.

19.4 Any surface mulch used to create planting circles will consist of well-composted material such as bark or wood chips. This is necessary to avoid potential nutrient loss from the soil, such as Nitrogen, as the mulch breaks down and as nutrient loss can be detrimental to the health and longevity of retained trees.

19.5 It is also advised that the planting pit specification incorporates a watering system.

19.6 All work specified in the approved landscaping scheme shall be carried out before the end of the first planting season, following the completion of the development.

19.7 It is recommended that a planning condition such as the following could be applied to ensure existing and new planting is retained:

Any existing tree shown to be retained, or trees and shrubs to be planted as part of the landscaping scheme that are removed, die, become severely damaged beyond recovery or diseased within the first 5 years of planting, shall be replaced with trees or shrubs of appropriate size and species that complement the existing tree stock, within the next planting season. Where the trees in question are protected by planning controls, the local planning authority should be informed, and necessary arrangements made prior to such work.

20.0 CONCLUSION

20.1 Permission is being sought for a proposed new designated access at Worthing Durrington Police Station and Custody Suite, Durrington Lane, Worthing, BN13 2PQ.

20.2 Of the 38 (thirty-eight) individual trees and 6 (six) groups that were identified as part of the site wide tree survey exercise, twelve trees and three groups of trees within or adjacent to the red line boundary of the application are potentially impacted upon from the works. The planning application works will involve the removal of 10 (ten) individual trees and the partial removal of 1 (one) group of trees for the new junction, gas and water metering housing relocations and the associated proposed drainage strategy.

20.3 Individually, legally protected trees are retained within this development proposal. The partial removal of Grp 2 will remove trees from within the Area TPO designation, these trees though are small stature.

20.4 Seven replacement trees will be planted along the roadside with ample rooting volume so that they will have space to establish and mature away from built form. This offsite planting is practical and appropriate for the designated police and custody centre access planning application and meets the requirements of planning policy.

20.5 Provided the recommendations included within this report are strictly adhered to, it is our opinion that the trees identified for retention can be afforded due respect and provided adequate protection, ensuring their safe and healthy retention during the development process.


CB1

The Professional Arboricultural Consultancy

TREE SURVEY NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2012 and current arboricultural best practice.

- Each tree has been numbered and, where instructed, for future identification on site, has been tagged using small durable metal or plastic tags.
- Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in mm at 1.5 metres above ground level, using a standard measuring tape as defined by British Standards, unless otherwise stated.
- Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which will be recorded on the tree survey plan.
- An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:

  Y = young trees
  SM = semi-mature trees
  EM = early mature trees
  M = mature trees
  OM = over-mature trees

- An assessment of a tree's physiological condition is defined as:

  Good = fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound closure
  Fair = fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure
  Poor = a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure
  Dead = dead

- An assessment of a tree's structural condition is defined as:

  Good = no significant structural defects
  Fair = structural defects which could be alleviated through remedial tree surgery or management practices
  Poor = structural defects which cannot be alleviated through tree surgery or management practices
  Dead = dead

- An assessment of a tree's future life expectancy is defined as: **<10, 10+, 20+ or 40+ years.**

Categorisation of Trees

The category for each tree is assessed using the recommendations of BS5837:2012. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will however not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

Category U				Identification colour on plan
Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality			**DARK RED**
Category A	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands, of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	**LIGHT GREEN**
Category B	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are down-graded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation value or other cultural value	**MID BLUE**
Category C	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	**GREY**

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. This will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either "*full ground level inspection"* or "*climbing inspection required".* There may also be a further reference to the need for "*decay detection equipment"* to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

TREE SURVEY REPORT (BS5837:2012)

Site:	Centenary House, Durrington, Worthing, BN13 2PQ
Date:	04 April 2022
Consultant:	Stefan Rose *BSc (Hons), TechCert (Arbor.A), TechArbor.A*
Tagged:	No

Notes:

1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base.
2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access.
3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised.
4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals.
5. Tree Groups have been assessed with estimated and representative data.
6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner.
7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species which needs consideration prior to any tree surgery works commencing.
8. The data collected and any advice provided within this report is supplied in the interests of sound arboricultural management. Trees are a living dynamic organism that can be affected by external conditions (high winds, storms, snow, heavy rain or drought) and may occasionally fail without warning. It is therefore not possible to state with any certainty that any tree or group of trees is completely safe. The condition of a tree or group of trees can change rapidly as a result of external factors; we would advise that the occupier/ owners inspect the trees at least every 12 months or following periods of extreme weather and where concerns are raised relating to tree health that would be considered beyond the knowledge of a layperson, further arboricultural advice should be sought.

TREE PRESERVATION ORDER:

Some of the trees are protected by The Worthing Tree Preservation Order No.15 1992, Grounds of Gateway House, Durrington Lane, Worthing. It appears that Trees 7, 25, 31 (possible replacement) 32, 33 and Group 1 and some trees within Group 2 are protected but it is advised to check with the LPA prior to undertaking any tree works.

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
1	Common Holly *Ilex aquifolium*	6	S	Est 100	1.5	1.0	1.0	1.0	2.0	2.5	2.5	2.5	SM	Good	Fair Unable to verify health and safety due to no access Ivy on trunk and in crown	No works required at time of survey	10+	C1
2	Common Whitebeam *Sorbus aria*	6	S	170	2.5	2.5	2.5	3.0	2.0	2.0	2.0	2.0	SM	Good	Fair Multi-stemmed at 1.6m above ground level Low hanging branches Minor deadwood in crown	No works required at time of survey	40+	B1+2
3	Field Maple *Acer campestre*	6	S	110	1.5	1.5	1.0	2.0	1.5	1.5	1.5	1.5	SM	Good	Fair Developing tree Epicormics on trunk Bark wounds on trunk	No works required at time of survey	40+	C1+2
4	Pedunculate Oak *Quercus robur*	5	S	80	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.0	SM	Good	Good Developing tree	No works required at time of survey	40+	C1+2
5	Field Maple *Acer campestre*	6	S	110	1.5	2.0	1.5	1.5	2.0	2.0	2.0	2.0	SM	Good	Fair Mechanical damage at base Developing tree Crossing and rubbing branches in crown	No works required at time of survey	40+	B1+2
6	Common Ash *Fraxinus excelsior*	6	MS<5	170	2.0	3.0	1.5	1.0	3.0	3.5	3.0	2.5	SM	Good	Fair Bifurcated at 0.5m above ground level Old pruning wounds on trunk and in crown	No works required at time of survey	20+	C1+2
7 TPO T5	Weeping Willow *Salix x chrysocoma*	14	S	990	9.0	9.0	10.0	9.5	2.0	2.0	0.0	0.0	M	Good	Fair Roots lifting tarmac car park Ivy on trunk Multi-stemmed at 2m above ground level Low hanging branches Several limbs split and failed Major deadwood in crown	Reduce crown Remove deadwood and failed branches	10+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
8	Monterey Cypress *Cupressus macrocarpa*	16	S / MS	See below	7.0	8.0	7.0	8.5	4.0	2.0	3.0	2.0	EM	Good	Fair Group of three trees Tight forks with included bark Leans north Old pruning wounds on trunk Major deadwood in crown	No works required at time of survey	10+	C1+2
8.1	Monterey Cypress	-	MS<5	760	-	-	-	-	-	-	-	-	-	-	-	-	-	C1+2
8.2	Monterey Cypress	-	S	480	-	-	-	-	-	-	-	-	-	-	-	-	-	C1+2
8.3	Monterey Cypress	-	MS<5	530	-	-	-	-	-	-	-	-	-	-	-	-	-	C1+2
9	Lawson Cypress *Chamaecyparis lawsoniana*	7	MS<5	340	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	EM	Fair	Fair Trifurcated at ground level Low hanging branches Minor deadwood in crown Of limited value	No works required at time of survey	10+	C1
10	Common Sycamore *Acer pseudoplatanus*	9	MS<5	570	7.0	9.0	8.0	6.0	3.0	2.0	5.0	2.0	EM	Good	Fair Multi-stemmed at ground level Leans and weighted south Minor deadwood in crown Storm damage in crown	No works required at time of survey	20+	B1+2
11	Common Sycamore *Acer pseudoplatanus*	10	MS<5	480	4.0	6.0	7.0	6.0	3.0	3.0	5.0	2.5	EM	Good	Fair Bifurcated at ground level Tight forks with included bark Leans and weighted south Storm damage in crown Minor deadwood in crown	No works required at time of survey	20+	B1+2
12	Lawson Cypress *Chamaecyparis lawsoniana*	7	MS<5	190	2.5	2.5	2.5	2.0	0.0	0.0	0.0	0.0	SM	Fair	Fair Bifurcated at ground level Low hanging branches Minor deadwood in crown Crown shape distorted due to group pressure	No works required at time of survey	10+	C1+2

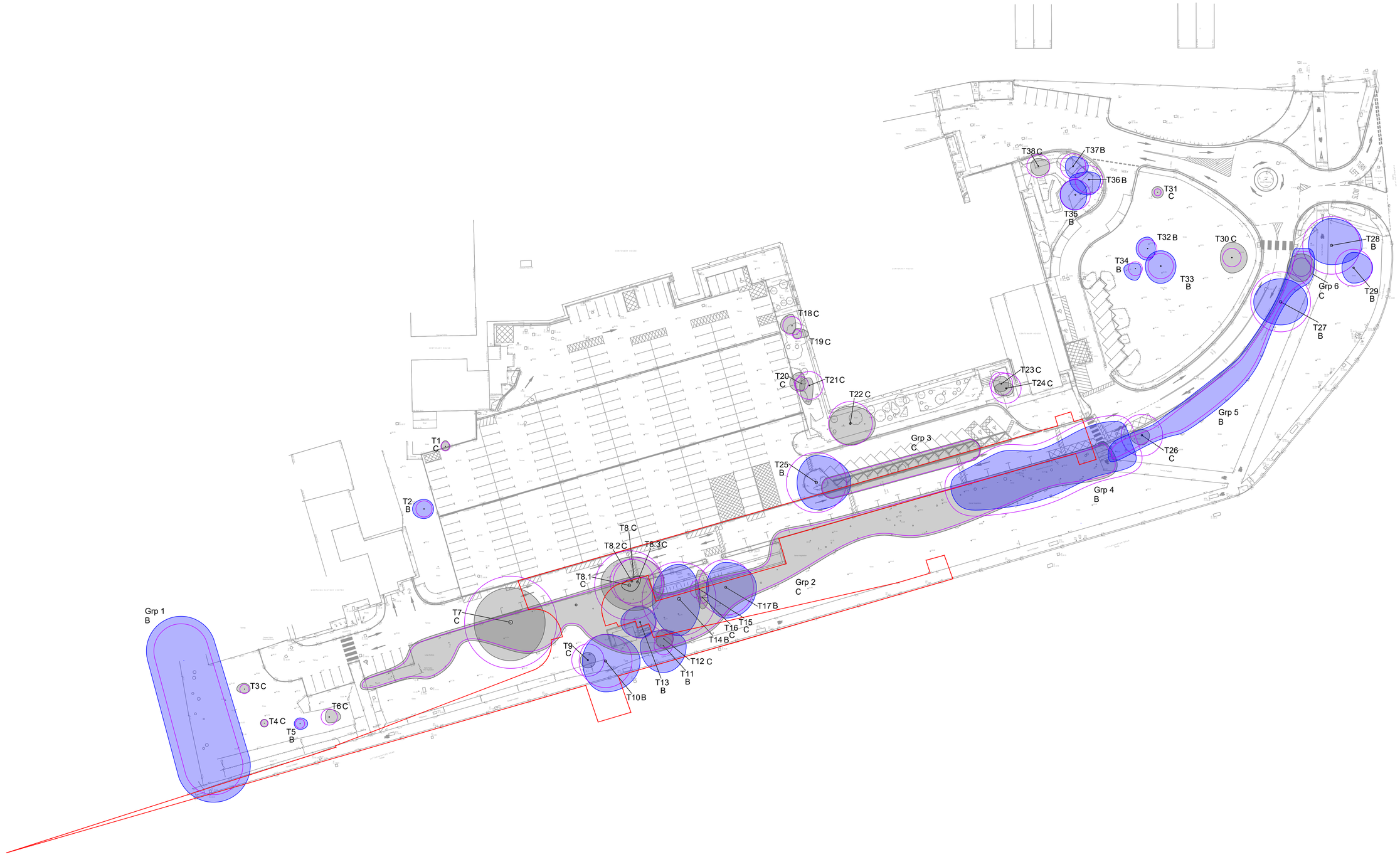
Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
13	Atlas Cedar *Cedrus atlantica*	16	S	340	4.0	4.0	4.0	5.0	3.0	4.0	2.5	2.5	EM	Good	Fair Bifurcated at approximately 6m above ground level Major deadwood in crown	No works required at time of survey	20+	B1+2
14	Common Sycamore *Acer pseudoplatanus*	15	MS<5	810	9.0	5.5	9.5	7.0	3.0	2.0	2.0	3.5	EM	Good	Fair Multi-stemmed at 1.2m above ground level Major deadwood in crown	No works required at time of survey	20+	B1+2
15	Common Sycamore *Acer pseudoplatanus*	13	S	200	5.0	2.5	2.0	1.0	3.0	3.0	3.0	6.0	SM	Good	Fair Leans and weighted north Crown shape distorted due to group pressure	No works required at time of survey	10+	C1
16	Common Sycamore *Acer pseudoplatanus*	10	S	120	0.0	1.5	3.0	1.0	-	2.0	2.0	2.0	SM	Good	Fair Trunk and crown shape distorted due to group pressure Leans and weighted south	No works required at time of survey	10+	C1
17	Common Sycamore *Acer pseudoplatanus*	12	S	590	6.5	8.0	8.0	5.0	4.0	3.0	2.0	3.0	M	Good	Fair Ivy on trunk Leans north east Crown shape distorted due to group pressure Major deadwood in crown	No works required at time of survey	20+	B1+2
18	Flowering Cherry *Prunus spp*	6	MS<5	210	3.0	1.0	2.0	3.0	1.5	2.0	2.0	2.0	SM	Fair	Fair Multi-stemmed at 1m above ground level Previously crown reduced on east side Weighted west Old pruning wounds on trunk and in crown	No works required at time of survey	10+	C1+2
19	Rowan *Sorbus aucuparia*	5	MS<5	110	1.5	3.0	1.0	1.0	2.0	2.0	2.0	2.0	SM	Good	Fair Bifurcated at ground level Basal suckers Epicormics on trunk and in crown	No works required at time of survey	10+	C1

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
20	Flowering Cherry *Prunus spp*	6	S	140	3.0	1.0	2.0	3.0	2.0	3.0	2.0	2.0	SM	Fair	Fair Crown shape distorted due to group pressure Weighted west	No works required at time of survey	10+	C1+2
21	Flowering Cherry *Prunus spp*	7	MS<5	290	2.0	1.0	5.0	2.5	2.5	2.5	2.5	2.5	SM	Fair	Fair Trifurcated at ground level Previously crown reduced on east side Weighted west Old pruning wounds on trunk and in crown	No works required at time of survey	10+	C1+2
22	Monterey Cypress *Cupressus macrocarpa*	11	S	470	4.5	6.5	5.5	5.5	2.0	2.0	2.0	2.0	EM	Good	Fair Tight forks with included bark Low hanging branches Multi-stemmed at 1.6m above ground level Minor deadwood in crown	No works required at time of survey	10+	C1+2
23	Cabbage Palm *Cordyline australis*	5	MS<5	240	2.0	2.0	2.0	2.0	3.0	3.0	2.0	2.0	SM	Good	Fair Bifurcated at 1.2m above ground level	No works required at time of survey	10+	C1+2
24	Cabbage Palm *Cordyline australis*	6	S	320	1.5	2.0	2.0	3.0	4.0	4.0	4.0	4.0	SM	Good	Fair Trifurcated at 1.6m above ground level	No works required at time of survey	10+	C1+2
25 TPO T4	Weeping Willow *Salix x chrysocoma*	15	S	660	7.0	9.0	7.0	5.0	5.0	5.0	5.0	4.0	EM	Good	Fair Previously crown reduced Multi-stemmed by 4m above ground level Old pruning wounds in crown Epicormics on trunk and in crown Branch tear wound and storm damage in crown Major deadwood in crown	Remove deadwood	20+	B1+2
26	Lawson Cypress *Chamaecyparis lawsoniana*	8	S	460	1.5	2.0	2.5	3.0	0.0	0.0	0.0	0.0	EM	Fair	Fair Low hanging branches Minor deadwood in crown	No works required at time of survey	10+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
27	Common Sycamore *Acer pseudoplatanus*	11	S	660	6.0	7.0	6.0	7.0	4.0	1.0	2.0	2.5	M	Good	Fair Ivy on trunk and in crown limits survey Low hanging branches Minor deadwood in crown	Sever ivy	20+	B1+2
28	Common Beech *Fagus sylvatica*	11	MS>6	620	7.0	8.0	5.0	6.0	2.0	2.0	2.0	2.0	EM	Good	Fair Multi-stemmed at 1m above ground level Tight forks with included bark Old pruning wounds on trunk and in crown Minor deadwood in crown	No works required at time of survey	20+	B1+2
29	Common Sycamore *Acer pseudoplatanus*	9	MS<5	410	4.0	5.0	4.0	3.0	2.0	2.0	2.0	2.0	EM	Good	Fair Trifurcated at ground level Old pruning wounds on trunk and in crown Minor deadwood in crown	No works required at time of survey	20+	B1+2
30	Flowering Cherry *Prunus spp*	4	S	200	4.0	4.0	4.0	3.0	1.0	1.0	1.0	2.0	SM	Good	Fair Grafted at base Trifurcated at 1.6m above ground level Crown shape distorted due to group pressure Minor deadwood in crown Low hanging branches	No works required at time of survey	10+	C1+2
31 TPO T2?	Himalayan Birch *Betula utilis*	4	S	<75	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	SM	Good	Good Developing tree Possible replacement TPO tree	No works required at time of survey	40+	C1
32 TPO G1	Silver Birch *Betula pendula*	8	S	210	3.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	SM	Good	Good Low hanging branches Minor deadwood in crown	No works required at time of survey	20+	B1+2
33 TPO G1	Silver Birch *Betula pendula*	10	S	270	4.0	4.0	4.5	4.0	2.0	3.0	3.0	2.0	EM	Good	Good Low hanging branches Minor deadwood in crown	No works required at time of survey	20+	B1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
34	Silver Birch *Betula pendula*	6	S	160	1.5	1.5	3.0	3.0	2.0	2.0	2.0	2.0	SM	Good	Good Low hanging branches Minor deadwood in crown	No works required at time of survey	20+	B1+2
35	Fastigiate Hornbeam *Carpinus betulus 'Pyramidalis'*	9	S	320	4.0	3.0	4.0	4.0	2.0	2.0	2.0	2.0	EM	Good	Good Crown shape distorted due to group pressure Minor deadwood in crown	No works required at time of survey	20+	B1+2
36	Fastigiate Hornbeam *Carpinus betulus 'Pyramidalis'*	9	S	290	2.0	3.0	4.0	5.0	2.0	2.0	2.0	2.0	EM	Good	Good Crown shape distorted due to group pressure Minor deadwood in crown	No works required at time of survey	20+	B1+2
37	Fastigiate Hornbeam *Carpinus betulus 'Pyramidalis'*	8	S	280	2.5	4.0	3.0	2.0	2.0	2.0	2.0	2.0	EM	Good	Good Crown shape distorted due to group pressure Minor deadwood in crown	No works required at time of survey	20+	B1+2
38	Fastigiate Hornbeam *Carpinus betulus 'Pyramidalis'*	8	MS<5	260	2.0	3.0	2.5	2.0	2.0	2.0	2.0	2.0	EM	Good	Fair Multi-stemmed at 1m above ground level Tight forks with included bark Crown shape distorted due to group pressure Minor deadwood in crown	No works required at time of survey	20+	C1+2
Grp 1 TPO G4	Hybrid Black Poplar Leyland Cypress	20	S	600	-	-	-	-	-	-	-	-	M	Good	Fair Linear group growing along site boundary Trunk and crown shape distorted due to group pressure Low hanging branches Unable to verify health and safety due to no access Cypress grow beneath Poplars	No works required at time of survey	20+	B1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m) N	E	S	W	H't of Crown AGL (m) N	E	S	W	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
Grp 2 TPO A1 (some trees within Grp 2)	Cherry Laurel Blackthorn Photinia Common Hawthorn Elder Lawson Cypress Pyracantha Crab Apple Purple Leaved Plum Goat Willow Elder Rowan	5	MS	310	-	-	-	-	-	-	-	-	SM	Good	Fair Multi-stemmed at ground level Low hanging branches	No works required at time of survey	10+	C2
Grp 3	Flowering Cherry x14	5	MS	220	-	-	-	-	-	-	-	-	SM	Fair	Fair Linear group growing along side of car parking Old pruning wounds on trunk and in crown Low hanging branches Of limited value	No works required at time of survey	10+	C1+2
Grp 4	Monterey Cypress	12	S	650	-	-	-	-	-	-	-	-	EM	Good	Fair Low hanging branches Trunk and crown shape distorted due to group pressure Minor deadwood in crown Old pruning wounds in crown	No works required at time of survey	20+	B1+2
Grp 5	Lawson Cypress Purple Leaved Plum Blackthorn Cherry Laurel Pyracantha	7	S	180	-	-	-	-	-	-	-	-	SM	Good	Fair Trunk and crown shape distorted due to group pressure Low hanging branches Some multi-stemmed at ground level	No works required at time of survey	20+	B1+2
Grp 6	Common Sycamore	10	S	200	-	-	-	-	-	-	-	-	SM	Good	Fair Trunk and crown shape distorted due to group pressure Tall and etiolated due to group pressure Minor deadwood in crown	No works required at time of survey	10+	C1



NOTES:

1. All trees marked with * are indicatively plotted.
2. Shading Arcs not shown on this plan.
3. Root Protection Areas are shown as a theoretical circle and at this stage do not take into account site features and constraints.
4. The original of this drawing was produced in colour, a monochrome copy should not be relied upon.

KEY

ROOT PROTECTION AREA (RPA)
CROWN SPREAD
GROUP NUMBER
TREE NUMBER
CATEGORY

Grp1
T1
C

CATEGORY A TREES
CATEGORY B TREES
CATEGORY C TREES
CATEGORY U TREES

JOB TITLE
Worthing Durrington Police Station and Custody Suite, Durrington Lane, Worthing, BN13 2PQ

DRAWING TITLE
Tree Survey Plan

CBA DRAWING No.
11630.01A TSP

BASE PLAN BASED ON DRG:
1VV9 - Centenary House (P5).dwg

SCALE 1:500 @ A1

DRAWN MJE

DATE June 2023

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CBA Trees
Chesil House, Arrow Close
Eastleigh, SO50 4SY
Tel: 02380 986229


CB2

BS5837:2012 TREE ROOT PROTECTION AREA SCHEDULE

Site:	Centenary House, Durrington, Worthing, BN13 2PQ
Date:	04 April 2022
Consultant:	Stefan Rose *BSc (Hons), TechCert (Arbor.A), TechArbor.A*

Notes:
1. This is an assessment of the Root Protection Area (RPA) required, based on the individual tree data collected and Section 4.6.1 of BS5837:2012.
2. For all single stem trees with a stem diameter greater than 1250mm, and multi-stem trees with a stem diameter greater than 1500mm, the calculated RPA has been capped at 707m2 in accordance with Section 4.6.1 of BS5837.2012.

TREE PRESERVATION ORDER:
Some of the trees are protected by The Worthing Tree Preservation Order No.15 1992, Grounds of Gateway House, Durrington Lane, Worthing. It appears that Trees 7, 25, 31 (possible replacement) 32, 33 and Group 1 and some trees within Group 2 are protected but it is advised to check with the LPA prior to undertaking any tree works.

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
1	Common Holly Ilex aquifolium	C1	S	100	1.2	5
2	Common Whitebeam Sorbus aria	B1+2	S	170	2.0	13
3	Field Maple Acer campestre	C1+2	S	110	1.3	5
4	Pedunculate Oak Quercus robur	C1+2	S	80	1.0	3
5	Field Maple Acer campestre	B1+2	S	110	1.3	5
6	Common Ash Fraxinus excelsior	C1+2	MS<5	170	2.0	13
7 TPO T5	Weeping Willow Salix x chrysocoma	C1+2	S	990	11.9	443
8	Monterey Cypress Cupressus macrocarpa	C1+2	S / MS	See below	-	-

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
8.1	Monterey Cypress	C1+2	MS<5	760	9.1	261
8.2	Monterey Cypress	C1+2	S	480	5.8	104
8.3	Monterey Cypress	C1+2	MS<5	530	6.4	127
9	Lawson Cypress Chamaecyparis lawsoniana	C1	MS<5	340	4.1	52
10	Common Sycamore Acer pseudoplatanus	B1+2	MS<5	570	6.8	147
11	Common Sycamore Acer pseudoplatanus	B1+2	MS<5	480	5.8	104
12	Lawson Cypress Chamaecyparis lawsoniana	C1+2	MS<5	190	2.3	16
13	Atlas Cedar Cedrus atlantica	B1+2	S	340	4.1	52
14	Common Sycamore Acer pseudoplatanus	B1+2	MS<5	810	9.7	297
15	Common Sycamore Acer pseudoplatanus	C1	S	200	2.4	18
16	Common Sycamore Acer pseudoplatanus	C1	S	120	1.4	7
17	Common Sycamore Acer pseudoplatanus	B1+2	S	590	7.1	157
18	Flowering Cherry Prunus spp	C1+2	MS<5	210	2.5	20
19	Rowan Sorbus aucuparia	C1	MS<5	110	1.3	5
20	Flowering Cherry Prunus spp	C1+2	S	140	1.7	9
21	Flowering Cherry Prunus spp	C1+2	MS<5	290	3.5	38
22	Monterey Cypress Cupressus macrocarpa	C1+2	S	470	5.6	100

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
23	Cabbage Palm Cordyline australis	C1+2	MS<5	240	2.9	26
24	Cabbage Palm Cordyline australis	C1+2	S	320	3.8	46
25 TPO T4	Weeping Willow Salix x chrysocoma	B1+2	S	660	7.9	197
26	Lawson Cypress Chamaecyparis lawsoniana	C1+2	S	460	5.5	96
27	Common Sycamore Acer pseudoplatanus	B1+2	S	660	7.9	197
28	Common Beech Fagus sylvatica	B1+2	MS>6	620	7.4	174
29	Common Sycamore Acer pseudoplatanus	B1+2	MS<5	410	4.9	76
30	Flowering Cherry Prunus spp	C1+2	S	200	2.4	18
31 TPO T2?	Himalayan Birch Betula utilis	C1	S	75	0.9	3
32 TPO G1	Silver Birch Betula pendula	B1+2	S	210	2.5	20
33 TPO G1	Silver Birch Betula pendula	B1+2	S	270	3.2	33
34	Silver Birch Betula pendula	B1+2	S	160	1.9	12
35	Fastigiate Hornbeam Carpinus betulus ‘Pyramidalis’	B1+2	S	320	3.8	46
36	Fastigiate Hornbeam Carpinus betulus ‘Pyramidalis’	B1+2	S	290	3.5	38
37	Fastigiate Hornbeam Carpinus betulus ‘Pyramidalis’	B1+2	S	280	3.4	35

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
38	Fastigiate Hornbeam Carpinus betulus 'Pyramidalis'	C1+2	MS<5	260	3.1	31
Grp 1 TPO G4	Hybrid Black Poplar Leyland Cypress	B1+2	S	600	7.2	163
Grp 2 TPO A1 (some trees within Grp 2)	Cherry Laurel Blackthorn Photinia Common Hawthorn Elder Lawson Cypress Pyracantha Crab Apple Purple Leaved Plum Goat Willow Elder Rowan	C2	MS	310	3.7	43
Grp 3	Flowering Cherry x14	C1+2	MS	220	2.6	22
Grp 4	Monterey Cypress	B1+2	S	650	7.8	191
Grp 5	Lawson Cypress Purple Leaved Plum Blackthorn Cherry Laurel Pyracantha	B1+2	S	180	2.2	15
Grp 6	Common Sycamore	C1	S	200	2.4	18


CB3



NOTES:

1. All trees marked with * are indicatively plotted.
2. Shading Arcs not shown on this plan.
3. Root Protection Areas are shown as a theoretical circle and at this stage do not take into account site features and constraints.
4. The original of this drawing was produced in colour, a monochrome copy should not be relied upon.

KEY

- ROOT PROTECTION AREA (RPA)
- CROWN SPREAD
- GROUP NUMBER / TREE NUMBER / CATEGORY (Grp1 / 1 / C)
- TREES/GROUPS TO BE RETAINED AND PROTECTED
- TREES/GROUP TO BE REMOVED
- LOCATION OF TREE PROTECTION BARRIER
- PROPOSED AREA OF WORKS
- LOCATION OF PROPOSED TREE PLANTING

JOB TITLE
Worthing Durrington Police Station and Custody Suite, Durrington Lane, Worthing, BN13 2PQ

DRAWING TITLE
Tree Removal / Retention and Protection Plan

CBA DRAWING No.
11630.03C TRRPP

BASE PLAN BASED ON DRG:
1VV9 - Centenary House (P5).dwg

SCALE 1:500 @ A1

DRAWN MjE

DATE June 2023

THIS DRAWING IS COPYRIGHT OF CBA Trees. AND SHOULD NOT BE REPRODUCED WITHOUT PERMISSION. ALL DIMENSIONS MUST BE CHECKED ON SITE AND NOT SCALED FROM THIS DRAWING.

CBA Trees
Chesil House, Arrow Close
Eastleigh, SO50 4SY
Tel: 02380 986229


CB4

CBA Trees	**TREE WORKS SCHEDULE**			
	Site:	Worthing Durrington Police Station and Custody Suite, Durrington Lane, Worthing, BN13 2PQ		
	Date:	June 2023	**Consultant:**	Stefan Rose *BSc (Hons), Tech Cert ArborA, TechArborA*

Tree No.	Species	Recommended Works
1	Common Holly *Ilex aquifolium*	• No works required for planning application
2	Common Whitebeam *Sorbus aria*	• No works required for planning application
3	Field Maple *Acer campestre*	• No works required for planning application
4	Pedunculate Oak *Quercus robur*	• No works required for planning application
5	Field Maple *Acer campestre*	• No works required for planning application
6	Common Ash *Fraxinus excelsior*	• No works required for planning application
7 TPO T5	Weeping Willow *Salix x chrysocoma*	• No works required for planning application
8	Monterey Cypress *Cupressus macrocarpa*	• Fell to ground level and remove stump
8.1	Monterey Cypress	• Fell to ground level and remove stump
8.2	Monterey Cypress	• Fell to ground level and remove stump
8.3	Monterey Cypress	• Fell to ground level and remove stump
9	Lawson Cypress *Chamaecyparis lawsoniana*	• Fell to ground level and remove stump
10	Common Sycamore *Acer pseudoplatanus*	• Fell to ground level and remove stump
11	Common Sycamore *Acer pseudoplatanus*	• Fell to ground level and remove stump
12	Lawson Cypress *Chamaecyparis lawsoniana*	• Fell to ground level and remove stump
13	Atlas Cedar *Cedrus atlantica*	• Fell to ground level and remove stump
14	Common Sycamore *Acer pseudoplatanus*	• Fell to ground level and remove stump
15	Common Sycamore *Acer pseudoplatanus*	• Fell to ground level and remove stump
16	Common Sycamore *Acer pseudoplatanus*	• Fell to ground level and remove stump
17	Common Sycamore *Acer pseudoplatanus*	• Fell to ground level and remove stump
18	Flowering Cherry *Prunus spp*	• No works required for planning application
19	Rowan *Sorbus aucuparia*	• No works required for planning application
20	Flowering Cherry *Prunus spp*	• No works required for planning application
21	Flowering Cherry *Prunus spp*	• No works required for planning application
22	Monterey Cypress *Cupressus macrocarpa*	• No works required for planning application

Tree No.	Species	Recommended Works
23	Cabbage Palm *Cordyline australis*	• No works required for planning application
24	Cabbage Palm *Cordyline australis*	• No works required for planning application
25 TPO T4	Weeping Willow *Salix x chrysocoma*	• No works required for planning application
26	Lawson Cypress *Chamaecyparis lawsoniana*	• No works required for planning application
27	Common Sycamore *Acer pseudoplatanus*	• No works required for planning application
28	Common Beech *Fagus sylvatica*	• No works required for planning application
29	Common Sycamore *Acer pseudoplatanus*	• No works required for planning application
30	Flowering Cherry *Prunus spp*	• No works required for planning application
31 TPO T2?	Himalayan Birch *Betula utilis*	• No works required for planning application
32 TPO G1	Silver Birch *Betula pendula*	• No works required for planning application
33 TPO G1	Silver Birch *Betula pendula*	• No works required for planning application
34	Silver Birch *Betula pendula*	• No works required for planning application
35	Fastigiate Hornbeam *Carpinus betulus* *'Pyramidalis'*	• No works required for planning application
36	Fastigiate Hornbeam *Carpinus betulus* *'Pyramidalis'*	• No works required for planning application
37	Fastigiate Hornbeam *Carpinus betulus* *'Pyramidalis'*	• No works required for planning application
38	Fastigiate Hornbeam *Carpinus betulus* *'Pyramidalis'*	• No works required for planning application
Grp 1 TPO G4	Hybrid Black Poplar Leyland Cypress	• No works required for planning application
Grp 2 TPO A1 (some trees within Grp 2)	Cherry Laurel Blackthorn Photinia Common Hawthorn Elder Lawson Cypress Pyracantha Crab Apple Purple Leaved Plum Goat Willow Elder Rowan	• Fell to ground level and remove stumps in section shown on Tree Protection Plan CBA11630.03B TRRPP
Grp 3	Flowering Cherry x14	• No works required for planning application

Tree No.	Species	Recommended Works
Grp 4	Monterey Cypress	• No works required for planning application
Grp 5	Lawson Cypress Purple Leaved Plum Blackthorn Cherry Laurel Pyracantha	• No works required for planning application
Grp 6	Common Sycamore	• No works required for planning application

- It is advised that all remedial tree works such as pruning is carried out between July and September or November and February. Tree works should also avoid the season for nesting birds.

- All tree works should be carried out in accordance with current best practice guidelines and BS3998: 2010 – Tree Works. Only natural target pruning method to be used.

- We recommend the use of an Arboricultural Association Approved Contractor or an ISA Certified Arborist/Tree Worker suitably insured and experienced to carry out the tree works.


CB5

SUMMARY OF

TREE PROTECTION MEASURES

Introduction

This leaflet shall be issued to all site personnel as part of their induction briefing.

It describes in summary form, the precautions that site personnel shall at all times follow, to ensure that the existing trees on the site come to no harm.

The precautions described are neither arbitrary nor reducible and must be adhered to in full.

These precautions are necessary because unprotected trees are very vulnerable to damage during demolition and construction works.

Furthermore, many of the trees on the site are under LEGAL PROTECTION and damaging them can result in heavy fines.

Two common misconceptions about trees:

MYTH: Trees have deep taproots and so shallow excavations will not harm the tree.
FACT: 90% of all tree's roots are found in the top 600mm of soil; all excavations near to trees are likely to cause root damage which can kill the tree.
MYTH: Trees will quickly heal over any bark wound, with no ill effect.
FACT: Bark wounds take years to heal and larger ones never do; missing bark can lead to disease and even the death of the tree.

Tree Protection

All trees adjacent to unsupervised work areas have been protected by fencing.

This fencing must be respected at all times and no attempts shall be made to damage, bypass or ignore it.

In areas designated for supervised working, no works shall be undertaken without the supervisor being present or without him/her issuing a "carry on" chit.

Prohibitions Adjacent to Trees

Inside the exclusion area of the tree protection, the following prohibitions shall apply.

- No digging or scraping
- No storage of plant or materials
- No vehicular access
- No fire lighting
- No handling, discharge or spillage or any chemical substance
- No water-logging

In addition to the above, further precautions shall be taken near to trees.

- A 10m separation distance shall be observed between trees and any substance injurious to their health, including fuels, oil, bitumen, cement (including washings) builders' sand, concrete mixing and other chemicals.

- No fire shall be lit such that flames come within 5m of any foliage; this shall be taken to mean a fire separation distance to the leaves of 20m.

Avoiding Damage to Stem and Branches

Care shall be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights, can operate without coming into contact with trees.

Consequently, any transit or traverse of plant in proximity to trees shall be conducted under the supervision of a spotter to ensure that adequate clearance is at all times maintained.

In some circumstances, it may be impossible to achieve this, necessitating the pruning of the tree.

If this is necessary, a specialist team shall be called in following referral to the project Arboriculturist.

No tree pruning shall be undertaken by demolition or construction personnel.

Asking for Help

If you see any damage to a tree or its protective fencing, or if you need a tree pruning for plant clearance, contact **CBA Trees** as follows:

Office Telephone: 02380 986229

REMEMBER:
ALL TREE DAMAGE IS AVOIDABLE – SO AVOID IT!



PROTECTIVE BARRIERS.
THESE BARRIERS MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.



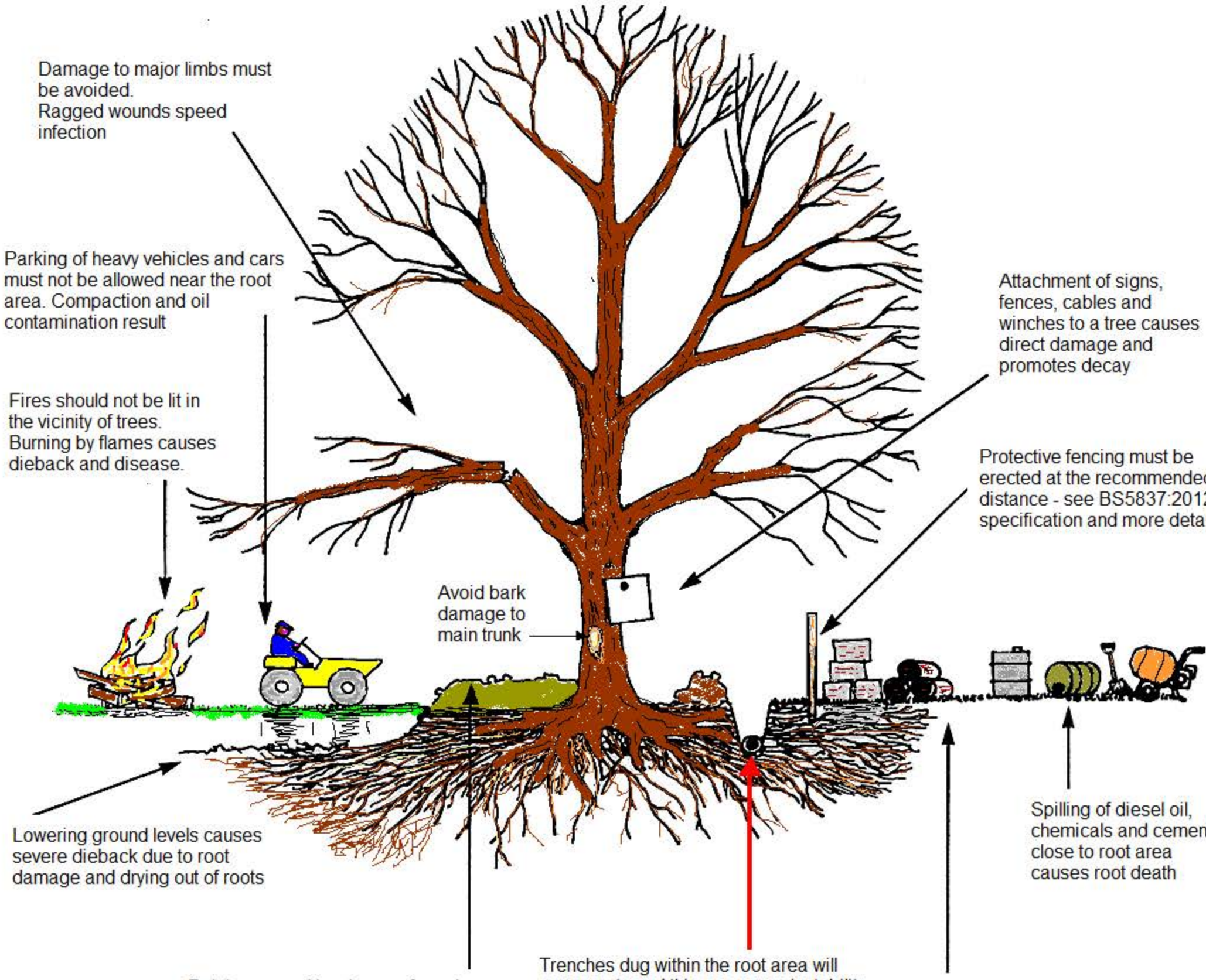
TREE PROTECTION AREA
KEEP OUT !

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

COMMON CAUSES OF TREE DEATH

The use of properly positioned protective barriers can prevent tree deaths occurring.



Raising ground levels even for only a few weeks and by only several centimetres can suffocate roots, causing severe dieback

Trenches dug within the root area will sever roots and this can cause instability and crown dieback, due to root death from drying out.
Hand dig if required - do not use machinery.

Storage of materials within root area causes compaction and root suffocation


CB6

The Professional Arboricultural Consultancy

Qualifications of
Stefan Rose
Principal Consultant

Stefan Rose *BSc (Hons), TechCert (Arbor.A), TechArbor.A,* joined CBA Trees in 1998 as a junior surveyor and having gained extensive knowledge and a wealth of experience over the years including Professional Tree Inspectors Certification (LANTRA), has progressed to Principal Consultant. He has considerable experience in working as a locum for Local Authorities, assessing new and extant Tree Preservation Orders, and continues to work on a number of major development projects nationwide.

As our Principal Consultant Stefan undertakes a full range of arboricultural services from health and safety audits to BS5837:2012 tree surveys, providing expert advice and guidance on initial feasibility site assessments to full scale planning applications. He is accomplished at producing implication assessments and method statements for the submission of planning applications, working with both individual home owners and within multi-disciplinary teams to achieve successful arboricultural outcomes.