

Arboricultural Method Statement Bourne Court

Document information

Prepared for:
Richard Henley
HGH Consulting

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Assessment information

Prepared by:
Jason Mills
Rachel Crookes

Quality assured by:
Nathan Shelley

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Executive Summary

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Executive summary

Eight Associates has been appointed by HGH Consulting to carry out an Arboricultural Method Statement to the British Standard 5837:2012 'Trees in relation to design, demolition and construction' at Bourne Court, Station Approach, South Ruislip in the London Borough of Hillingdon.

A site visit was made on the 27th July 2018 to survey the trees, hedges and vegetation to the British Standard. The condition of all trees on site was assessed and a Category Rating was allocated; this information is detailed in Appendix 3 of the Tree Survey report (3162 - Bourne Court - Tree Survey - 1807-27rc). A Tree Constraints Plan was produced following the survey, which along with the Tree Survey forms the basis of this report.

An Arboricultural Implication Assessment (AIA) has been produced to consider how the proposed development and the associated trees will co-exist and interact in the present and the future. A plan of the trees to be retained and removed, as well as their Root Protection Areas (RPA) have been outlined on plans of the proposed development using AutoCAD to create a Tree Protection Plan. This report considers trees to be affected by the proposed build.

The AMS takes into consideration construction operations undertaken in the vicinity of the trees. It will deal with such issues as site access, intensity of construction activity, space needed for works, location of materials and location of service runs.

Summary of tree work to be undertaken on site:

Consideration	Number of trees
Trees / groups / hedges to be retained	3
Category A trees / groups / hedges to be removed	0
Category B trees / groups / hedges to be removed	6
Category C trees / groups / hedges to be removed	3
Category U trees/ groups/ hedges to be removed	8

Introduction

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Introduction

Eight Associates Ltd has been instructed by HGH Consulting to produce an Arboricultural Method Statement (AMS) on specified trees and vegetation in and adjacent to the site identified at Bourne Court, Station Approach, South Ruislip.

The Arboricultural Method Statement (AMS) is a methodology for the implementation of any aspect of the proposed development that has the potential to result in loss of or damage to a tree identified as suitable to be retained.

The AMS takes into consideration construction operations undertaken in the vicinity of the trees. It will deal with such issues as site access, intensity of construction activity, space needed for works, location of materials and location of service runs.

This AMS includes with it a Tree Protection Plan (TPP). The TPP outlines trees to be retained, removed, preliminary location of barriers and type of barrier to be installed. This method statement contains a timetable indicating when and how specific works adjacent to trees should be carried out.

There are some aspects that are not dealt with within report (please also refer to Appendix 7). This report does not deal with issues relating to subsidence or heave either as a result of retention or removal of trees. It does not consider the water demands of the trees present to enable decisions as to foundation type and depth. This can be done if so required. Current or proposed structures in relation to the indirect influence of trees are not considered within the report unless directly instructed. It is considered that such considerations are best dealt with in a different report having liaised with the structural engineer.

Names and contact numbers of parties involved

Table to be completed prior to site commencement:

Contact name	Company/ Organisation	Role	Contact details
Ben Willcox	Wam Architecture	Architect	01753 839460
TBC	TBC	Structural Engineer	TBC
Richard Henley	TBC	Project Management	TBC
Jason Mills	Eight Associates	Arboricultural Supervision	0207 0430418
TBC	TBC	Site Manager/ Agent	TBC
TBC	TBC	Main Contractor	01923 840048
John Bartlett	London Borough of Hillingdon	LPA Tree Officer	01895 558304

Availability of this AMS

Copies of this document will be made available for all site visits. The Site Manager and Main Contractor will each hold a copy of the document, including the tree protection plan.



Supervision and Monitoring Arboricultural Method Statement Bourne Court

Monitoring and supervision

All required Arboricultural supervisory works and monitoring visits must be confirmed by formal correspondence circulated to all relevant parties, including the council. These records of site visits will provide proof of compliance.

Phasing of arboricultural involvement in development

The Sequence of Events section on page 6 lists and details the events in relation to trees that require Arboricultural involvement.

Recommendations for site monitoring and supervision

A pre-commencement meeting should be held on site before any of the tree work, demolition and construction work begins. This should be attended by the Site Manager and the Arboricultural Consultant. The Arboricultural Consultant will inform the council in writing of the details of meetings. All tree protection measures detailed in this document must be discussed so that they are fully understood by all the parties. Clarification or modifications to the consented details must be recorded and circulated to all parties in writing. These documents should then form the basis of any supervision arrangements between the Arboricultural Consultant and the proposer, as agreed with the Local Planning Authority where applicable.

The Arboricultural Consultant will visit during the phases as set out in the Sequence of Events section on page 6. The Consultant's role is to advise on the development in relation to the trees, as well as liaise as necessary between the developer/ site manager and the local planning authority to ensure that appropriate protection measures are in place. The role will involve monitoring compliance with Arboricultural conditions (where applied) and advising on any tree problems as they arise. A development site monitoring form (please see Appendix 6 for an example), will be completed by the supervising Arboriculturist during each site visit, to include the following;

1. Date of visit.
 2. List of those in attendance on site.
 3. Findings in relation to trees.
 4. Details of any non-compliance.
 5. Recommendations to be actioned so that the non-compliance is addressed and remedied.
 6. List of the parties concerned to whom the monitoring sheet has been sent.
 7. Date that monitoring sheet emailed/ posted to the recipients.
-

Site Mitigation Requirements

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Site management

It is the Site Manager's responsibility to ensure that the requirements set out within the Arboricultural Method Statement are known and understood by all site personnel. Copies of pertinent documents should be kept on site at all times. The site manager will brief all personnel who may have an impact on any trees and relay specific tree protection requirements. This methodology should be a part of all site induction procedures and written into appropriate site management documents.

The following pertinent points should be explained to all personnel who could have an impact on trees;

1. The specification of the Protective Barriers around retained trees.
2. The requirement for Protective Barriers to be sufficiently robust to prevent incursion by construction activity.
3. Why it is essential that the Protective Barriers remain throughout the works.
4. The importance of the 'exclusion zones' around retained trees.
5. The potential damage caused to trees by compaction of soils.

Variations

Any variations to the tree protection measures will need to be agreed in writing by the Local Planning Authority before implementation. The variation will be set out in writing, detailing the reasons leading to the change and the modifications required.



Schedule of Tree Work

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Tree works to be carried out prior to installation of protective barriers

The following tree works will need to be carried out prior to the installation of protective barriers. The schedule below also lists preliminary management recommendations brought forward from the Tree Survey and Report that relate to the proposed development and associated operations.

Tree no.	Species	Works Required
T01	Apple	Fell and remove stump
T02	Ash	Fell and remove stump
T03	Sycamore	Fell and remove stump
T04	Box Elder	Fell and remove stump
T05	Birch	Fell and remove stump
TG01	Group of Leyland Cypress	Fell and remove stump
TG02	Group of Leyland Cypress	Fell and remove stump
TG03	Group of Leyland Cypress	Fell and remove stump
TG04	Group of Leyland Cypress	Fell and remove stump
T09	Leyland Cypress	Fell and remove stump
T10	Leyland Cypress	Fell and remove stump
T11	Sycamore	Fell and remove stump
TG05	Leyland Cypress	Fell and remove stump
T12	Silver Maple	Fell and remove stump
T13	Indian Bean tree	Fell and remove stump
T14	Eucalyptus	Fell and remove stump
T15	Apple	Fell and remove stump

Tree works to be carried out post-construction

It is currently considered that there will be no requirement for tree works immediately post construction.

Sequence of Events

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Sequence of events

Sequence	Brief outline of events	Arboricultural monitoring requirement
1	Pre-commencement meeting	Yes – please refer to section “Recommendations for site monitoring and supervision.”
2	Carry out tree works as detailed in section “Tree works to be carried out prior to installation of Protective Barriers”.	-
3	Install Protective Barriers as shown on the Tree Protection Plan – Establish Temporary Storage Areas.	Yes – to check adequacy and location of tree protection measures.
4	Commencement of demolition and main build - Main Build Phase.	-
5	Pre-commencement meeting	Yes – please refer to section “Recommendations for site monitoring and supervision.”

Retained Tree RPA Mitigation Arboricultural Method Statement Bourne Court

Mitigation required

No retained tree Root Protection Area mitigation is required

Retained Tree RPA Mitigation Arboricultural Method Statement Bourne Court

Protective barriers

Before the commencement of any works on site (other than those set out in the schedule of tree works, contained in this document), protective vertical barriers must be erected adjacent to specified areas to receive new tree planting. The location of the barriers is illustrated on the Tree Protection Plan. However, it must be noted that these locations are indicative at present, construction methodologies may evolve such that the barrier locations may require amendment or supplementing.

The barriers are to be erected to exclude construction activity in the specified areas for new tree planting. The barriers will remain in place until completion of the main construction phase and then only removed with the agreement with the consulting Arboriculturist.

Other than works detailed within this method statement or approved in writing by the local planning authority, no works shall take place within the exclusion zones defined by the protective fencing. No vehicles will be allowed to enter areas to be protected by barriers.

Specification of protective barriers

The barriers should be fit for purpose of excluding construction activity. At this site, it is considered sufficient to install two-metre-tall welded mesh or solid panels on concrete feet (please refer to Figures 1a and 1b. The fence panels (Heras type) should be joined together using a minimum of two anti-tamper couplers and installed so they can only be removed from the inside. The distance between the fence couplers should be at least 1 metre and should be uniform throughout the protective barrier.

The panels should be supported on the inner side by angled stabilizer struts installed every 3.5 metres at the join of the fence panels. Both the concrete feet and the stabiliser strut base plates should be secured with ground pins. Where fencing is to be erected on retained hard surfaces or it is otherwise unfeasible to use ground pins stabilizer struts should be mounted on a block tree.

The specification of the temporary barriers will be installed in accordance with the specification as discussed in the paragraph above and referenced in Figures 1a and 1b. Notices will be affixed to all protective fencing 'Construction exclusion zone - Keep Out' (please refer to figure 2).



Appendix 1: Protective Barriers

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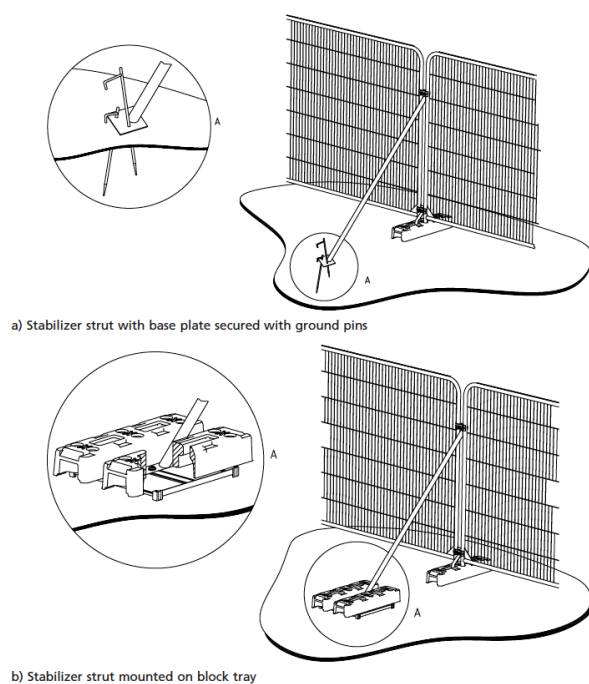


Figure 1: Diagram of protective barriers taken from BS 5837 (2012)



Figure 2: Example of suitable warning sign affixed to protective barrier

Appendix 2: Utility Service Provision

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Utility Service Provision

Infrastructure requirements at the site are not currently known. The new properties will require the provision of utility services. Where possible existing infrastructure should be utilised and utility services should, where possible, share trenches to avoid additional disturbance. Similarly, where new trenches are required they should be located to avoid the RPAs of retained trees. At this site, there appears to be ample space to install utility services outside of the RPAs of retained trees.

Installation of new trenches for services must be conducted in accordance with National Joint Utilities Group (2007) Publication Volume 4: Issue 2 Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.

(Note: if trenching or excavation is to be carried out within the RPA of a retained tree Arboricultural advice must be sought to ensure that minimum impact is caused to the rooting area. In this instance areas should be cleared with the use of an air spade to reveal existing roots. Where possible thrust boring techniques should be used to install underground services, rather than digging. Where boring is not possible trenches must be hand excavated taking care not to cut, sever or damage large groups of roots (regardless of the stem diameter). Trenches dug must not leave roots exposed and it is recommended that they are wrapped with a hydro-gel and geo-textile membrane).

Appendix 3: General Site Conditions and Tree Protection Measures

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Temporary storage of materials

Designated areas for storage of materials and site office will be decided by the Site Manager before any works can commence. In this instance, almost the entire site, save for the encroaching RPA of T14 Eucalyptus and the can be utilized for material storage. As such, it is considered that It is advisable to consult with the Arboriculturist if the storage areas or site office deviates from that area as outlined by the TPP.

Fires

There will be no fires or burning of waste materials on site.

Discharge of contaminants

No materials that are likely to have an adverse effect on tree health, such as oil, bitumen or cement will be discharged within the RPA of any of the trees to be retained. It is advised that the disposal of all waste materials is carried out in an appropriately sustainable fashion.

Contingency plans

Should there be any contamination of soils either within or adjacent to the RPA these should be dealt with as quickly as possible with a proprietary emergency clean up kit. The situation should then be assessed as to whether it is appropriate to remove soils. An Arboriculturist should be consulted before a decision is made. The protection barriers erected should be able to be removed relatively easily to access the area in event of an emergency.

Changes in ground levels and soft surface ground changes within RPAs

It is considered certain operations may require ground level changes but these changes should be limited to a minimum. Landscaping operations within the RPA of trees to be retained should be carried out with minimum disruption to the existing landscape avoiding removal of topsoil and re-introduction of foreign soils.

Access to the area of proposed works

Main access to the site is believed to be from the front of the existing Bourne Court on the south-eastern boundary. It is considered that this would be the only access point into the site for the purposes of carrying out the development as proposed. If there are any other proposed access points into the site, this should be agreed prior to use with the Arboriculturalist.

Cranes and lifting equipment

It may be necessary to utilise a crane or lifting equipment at the site.

The cranes and associated apparatus should be located outside the RPA's of all retained trees. The crane should be located such that neither the boom nor related carrying apparatus come into contact with the crowns of the retained trees. This includes the working height of the boom and materials being lifted. The following approximate heights of the pertinent trees located within the site:

- T6-T8 Birch = 9 metres
- T14 Eucalyptus = 15 metres

During operation the cranes should be guided by a banksman in contact with the driver/operator to ensure that contact with any trees is avoided.

Appendix 4: Example Site Monitoring Form

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Site Monitoring Form	
Arboriculturalist Details	
Consultant's Name:	
Tel:	
Mobile:	
Development Site Details	
Address:	
Planning Application Ref:	
Local Authority Details (LPA)	
LPA:	
LPA Tree Officer:	
LPA Case Officer/ Contact:	
Developer's Details	
Developer name:	
Address:	
Contractor Details	
Contractor name:	
Contact name:	
Date:	
Stage of Development:	
Purpose of visit:	
Protective Barriers:	
Ground Protection:	
Compaction:	
Damage to retained trees:	
Other notes:	
Photos:	
Further action required:	
Date of next site visit:	
Date this form sent to LPA:	

Appendix 5: Limitations of AMS

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Limitations of the tree survey and scope of the report	Please also refer to the introduction of the report. The survey was based on unaided, visual observations made from ground level only. No climbing inspection or below ground inspections were carried out at the time of the survey. The survey preliminary in nature and should not be interpreted as a detailed tree condition inspection. All observations were made from within the boundaries of the property, or from public land unless otherwise stated. Trees within neighbouring property are inspected as closely as is reasonably possible from within the boundaries of the property or from public land.
Findings of the survey and the report	Validity, accuracy and findings of the report will directly relate to the accuracy of information provided at the time of the survey. The report is based on information provided by third parties and the specifications and recommendations is dependent upon information provided therein. No checking of independent data provided will be undertaken.
Timing of the survey and the report	The considerations/ findings in this tree report and tree survey are only valid for one year. Such considerations/ findings will become invalid if any building works are undertaken, soil levels are altered or tree work undertaken. If there are any alterations to either the property or soil levels, or if tree works are carried out, it is recommended that a new tree survey/report is undertaken.
Trees in relation to other properties	This report/survey only considers the trees in relation to the site as identified. It does not comment on possible effects of trees on neighbouring properties, including in relation to subsidence or heave, or with regard to possible hazards presented by trees surveyed. Neighbouring owners of trees that are identified as posing a possible risk to the property/site in question should seek their own advice as to possible effects of the recommendations given within this report. Damage to, or possibility of damage to, any other structure that is not referred to within the report is not considered unless otherwise specified. This includes both neighbouring structures and any other structure on the property, built structures and surrounding vegetation.
Trees in relation to subsidence, heave and direct damage	This report does not deal with issues relating to subsidence or heave in relation to any built structures and surrounding vegetation. However, it may be prudent to consider the effects of heave on any property if trees are removed. Similarly, the issue of direct damage (when the roots of a tree have physical contact with a structure) is not considered within this report.
Trees subject to statutory controls	Where trees are covered by a Tree Preservation Order or are located in a Conservation Area it will be necessary to consult the local authority before any tree works, other than certain exemptions, can be carried out. The works specified above are necessary for reasonable management and should be acceptable to the local authority. However, tree owners should appreciate that the local authority may take an alternative point of view and have the option to refuse consent.
Trees are subject to changes outside man's control	Trees are living organisms subject to changes outside man's control. Changes to ground water conditions will affect the root growth of a tree. Such changes are not always the result of man's influence and other factors may be involved.