24 Heath Drive Arboricultural Method Statement

Prepared by: Stacey Cougill Eight Associates Ground Floor 57a Great Suffolk Street London, SE1 0BB

email

stacey@eightassociates.co.uk

Our Ref:

1948 AMS 1702-10sc.docx

Date of Issue: Issue 3: 10.02.2017

Prepared for: Hannes Voss Studio Kyson 28 Scrutton Street, London,

EC2A 4RP

Issue Status 24 Heath Drive

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	Prepared on behalf of Eight Associates by	
	Stacey Cougill	
Position:	Sustainability Consultant	
Signature:	SC	
	Verified by	
	Rachel Crookes	
Position:	Sustainability Consultant	
Signature:	RC	
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Introduction 24 Heath Drive

Introduction

Eight Associates Ltd has been instructed by Hannes Voss of Studio Kyson to carry out an Arboricultural Method Statement (AMS) in relation to investigatory works, such as trial pits and boreholes.

The Arboricultural Method Statement (AMS) is a methodology for the implementation of any aspect of development as proposed 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, 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.

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.

Contact Details 24 Heath Drive

Ecologist's Details		
Company Name	Eight Associates	
Company Address	57a Great Suffolk Street, London, SE1 0BB	
Contact Name	Stacey Cougill	
Contact Telephone Number	020 7043 0418	
Tree Survey Report Reference	1948 24 Heath Drive 1610-31sc	
Developer / Client Details		
Company Name	Studio Kyson	
Company Address	28 Scrutton Street, London, EC2A 4RP	
Contact Name	Hannes Voss	
Contact Telephone Number	020 7247 2462	
Development Details		
Development Name	24 Heath Drive	
Development Address	24 Heath Drive, London NW3 7SB.	

Site Mitigation Requirements 24 Heath Drive

General Site Mitigation Requirements

Storage of Materials

Designated area(s) for temporary storage of materials and site office will be decided by the Site Manager before any works can commence. Suggested suitable areas are marked out on the Tree Protection Plan (TPP).

It is advisable to consult with the Arboriculturist if the storage areas or site office deviates from that area as outlined on 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.

Protective Vertical Barriers

Before the commencement of any works on site (other than those set out in the schedule of tree works, contained in this document), permanent protective vertical barriers must be erected. The location of the barriers is illustrated on the TPP. 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 RPAs of retained trees

The barriers will remain in place until completion of the main construction phase and then only removed with the agreement of 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 the vertical barriers.

Notices will be put on all protective barriers 'Construction exclusion zone - Keep Out'

Site Mitigation Requirements 24 Heath Drive

General Site Mitigation Requirements

Specification of Barrier

Generally, the permanent protective barriers will comprise of a 2.4-metre-high scaffold framework with uprights driven into the ground, supporting welded mesh panels (e.g. Heras). Please refer to Figure 1 in Appendix 1 for specification.

In certain areas, such installation may prove impractical due to lack of space. If this is the case it is considered appropriate to install two-metre-tall welded mesh or solid panels on rubber or concrete feet (please refer to Figure 1 in Appendix 1 for specification) as for the temporary protective barriers.

The fence panels (Heras type) should be joined together using a minimum of 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 stabilizer struts, which would normally be attached to a base plate 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.

Notices will be attached to all protective fencing 'Construction exclusion zone – Keep Out' (please refer to Figure 4 in Appendix 1).

Ground Protection

It will be necessary to protect the open ground/ shrub bed at the front of the property and adjacent to hedge H1. The root protection areas of some retained trees fall within the construction access area; ground protection will be necessary to ensure minimum compaction and ground contamination of soils within these areas. For ease of installation it is considered that proprietary interlocking sheets (temporary road way) can be used as ground protection utilising wood chip to level the ground to allow installation of the sheets. The specification of such protection is given within the Appendices of this report.

Site Mitigation Requirements 24 Heath Drive

General Site Mitigation Requirements

Access to the area of proposed works

Access to the site is assumed to be from the two entrances on to the driveway of the property. Recommendations for cutting back of hedges to improve sight-lines and access is suggested within the schedule of tree works. It is considered that these would be the only access points into the site for the purposes of development. If there are any other proposed access points into the site, this should be agreed prior to use with the Arboriculturist.

Utility Service Provision

All excavations for pipework and inspection chambers should be conducted in accordance with the National Joint Utilities Group (2007) Publication Volume 4: Issue 2 Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.

Please note that if trenching 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 traditional 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), or any roots exceeding 25mm in diameter. Trenches dug must not leave roots exposed and it is recommended that they are wrapped with a hydro-gel and geo-textile membrane.

Access to the site and temporary site storage area

It is assumed that the existing hard stand will be sufficient to withstand the weight of all machinery associated with the build. If it is considered that the existing hard stand will not bear the weight of construction machinery/activity it will be necessary to use ground protection over the entire area (it is considered that the driveway will likely only tolerate vehicle weights up to 7.5 tonnes).

Ground protection is required over the existing shrub bed. Interlocking temporary road way maybe used. The specification of the ground protection must be suitable to accommodate

- 1. The weight of delivery vehicles,
- 2. In areas where spillages could occur, harmful to soils and root systems, the ground protection should include a non- permeable material layer. This may be laid beneath the main ground protection if the main ground protection system utilises offers better traction (or is non-slip).

Position of all recommended ground protection is provided within the accompanying Tree Protection Plan.

Protective Barriers

It is considered that the use of Heras fencing that is suitable instated will suffice in this instance as protective barrier to the retained trees within the site.

Schedule of Tree works 24 Heath Drive

Tree (& related) works to be carried out prior to installation of protective Barriers

Following tree works will need to be carried out prior to the installation of protective barriers.

Tree	Species	Works Required
Number		
H1	Privet	Fell and remove/grind stumps.
H2	Privet	Fell and remove/grind stumps.
T3	Oak	Fell and remove stump
T4	Elder	Fell and remove stump
T5	Elder	Fell and remove stump
T6	Pyracantha	Fell and remove stump
T7	Pyracantha	Fell and remove stump
T8	Goat Willow	Fell and remove stump
T9	Elder	Fell and remove stump
T10	Birch	Fell and remove stump
T11	Cherry	Fell and remove stump
T12	Cherry	Fell and remove stump
T13	Rhododendron	Fell and remove stump
T14	Cherry	Fell and remove stump
T15	Yew	Fell and remove stump
T16	Oak	Fell and remove stump
T17	Oak	Fell and remove/grind stump
T18	Sycamore	Fell and remove stump
T19	Crab Apple	Fell and remove stump
T23	Lime	Crown lift to a height of 4m retaining major laterals. Crown reduce by 2m to NW and SE and 1m to NE and SW. Crown clean.
T24	Lime	Crown lift to a height of 4m retaining major laterals. Crown reduce by 2m to N, W and S to balance crown. Crown clean.
T25	Oak	Fell and remove/grind stump
G1	Group	Fell and remove/grind stump

Tree works to be carried out post-construction

It is currently considered that there will be no requirement for tree works post construction. This should be reviewed by the Arboriculturist post construction.

Supervision and Monitoring 24 Heath Drive

Role of the Arboricultural Consultant

An Arboricultural consultant will be responsible for monitoring of all the tree works and matters pertaining to works related to or affecting the trees. In addition, an Arboricultural consultant will inspect the Protective Barriers and monitor any works within exclusion zone where required, including landscaping works.

On completion of works an Arboricultural consultant will inspect trees giving an assessment of condition and recommended management of works to retained trees if required. Similarly, they will inspect all newly planted trees and advise on management regimes as necessary where deemed appropriate.

Record of monitoring

All site visits will be recorded and findings made available to the Developer/ Site Manager and Local Authority, please see Appendix 3 for example monitoring form.

Sequence of events 24 Heath Drive

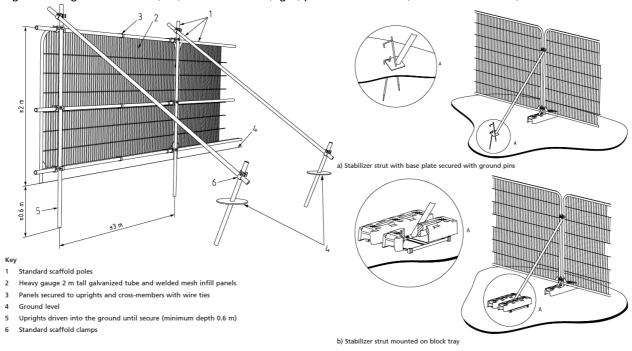
Sequence of events

It is considered that prior to each event all matters pertaining to the trees should be checked and liaison made with an Arboriculturist, including a site inspection where necessary.

Sequence	Brief outline of events	Arboricultural monitoring requirement
1	Carry out all recommended tree works as listed in the schedule of tree works.	Arboriculturist inspection and completion of site monitoring form on completion of tree works.
2	Install all Protective Barriers as indicated on the Tree Protection Plan	
3	Establishment of all ground protection as indicated on the Tree Protection Plan	
4	Establishment of temporary storage areas as indicated on the Tree Protection Plan	Arboriculturist inspection and completion of site monitoring form.
5	Demolition of build	
6	Commencement to completion of construction	
7	Removal of temporary storage areas	
8	Removal of ground protection	
9	Removal of protective barriers	
10	Re-inspection of retained trees	Arboriculturist report and site monitoring form.

Appendix 1: Specification and Design of Protective Barriers 24 Heath Drive

Figure 1: Diagram of default (left) and alternative (right) protective barriers (taken from BS 5837)



Appendix 1: Specification and Design of Protective Barriers 24 Heath Drive

Figure 2 Photo of Heras panels affixed to scaffold and



Figure 3 - Example of suitable warning sign affixed to protective barrier



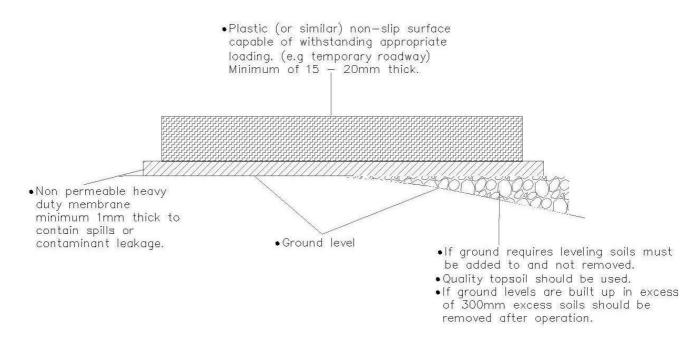
Appendix 2: Installation of Ground Protection 24 Heath Drive

Ground Protection will be installed in areas as indicated on the TPP according to the level of use, as follows.

A. Pedestrian movement and pedestrian-operated machinery up to a gross weight of 2 tonnes
Lay an impermeable geo-textile matting directly onto the soft ground, onto which will be installed a layer 150 millimetres thick of a
compressible material such as woodchip, capped with a finished surface of interlinked ply-board sheets or proprietary ground
protection boards.

B. Machinery in excess of 2 tonnes gross weight

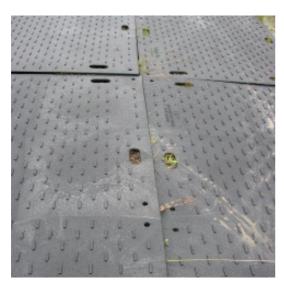
The area shall be protected by the laying of an impermeable membrane onto the site surface. Any levelling off of the ground surface prior to laying the impervious membrane surface shall be made using soil or aggregate infill of hollows to build up to a general site level, no excavation or grading of surfaces will be allowed. Onto this base shall be laid a geotextile pocketed mat, in-filled with inert coarse aggregate to a depth of 150 millimetres spread and levelled to form a wearing surface. Onto which proprietary interlinking ground protection boards can then be installed.



Based on the anticipated comparatively low level of access for heavy machinery proprietary interlinking ground protection boards such as 'Ground Guard' and 'TuffTrack' would be adequate in this case.

Appendix 2: Installation of Ground Protection 24 Heath Drive

Rubber ground protection mats



Aluminium temporary road way



Appendix 3: Example Site Monitoring Form 24 Heath Drive

Site Monitoring Form		
Arboricultural Consultant's 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 Local Planning		
Authority		

Appendix 4: Limitations 24 Heath Drive

Limitations of the Report	The report is based on information provided by third parties and the specifications and recommendations is dependent upon information provided therein.
	This report does not consider the possible implications to any present or future built structures other than those considered within the report.
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 tree survey.
Timing of the Survey and the Report	The considerations/ findings in this method statement are valid for one year.
	Such considerations/ findings will become invalid if any building works are undertaken, soil levels are altered or tree work undertaken outside of the scope of works as detailed and presented at the time of compiling this report.
	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 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.
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 whether the structure or vegetation falls within the boundaries as considered or lies beyond the boundaries.
	The report does not consider issues relating to subsidence or heave in relation to any proposed built structures or future vegetation whether within the boundaries as considered or beyond the boundaries
	It is 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.

Appendix 4: Limitations 24 Heath Drive

Trees subject to statutory controls:

If the 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 pruning 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. Trees and environment alter with the seasons it is as well to inspect trees whilst in full leaf and when out of leaf.

If there are any harsh or unexpected weather conditions, or heavy storms it is also prudent to inspect trees.

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 others factors may be involved.