BS5837:2012
Arboricultural Impact Assessment

Safestore
1 Bradfield Road, South Ruislip
HA4 0NU

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Contents

1. Introduction

1.1. This report provides an arboricultural impact assessment of the proposed development for Safestore Ltd at Safestore, 1 Bradfield Road, South Ruislip, HA4 0NU in accordance with BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.

1.2. This Arboricultural Impact Assessment is based on the proposed layout reference 4747-SK01PL revision A by Tew and Smith Architects. The proposed layout is shown on the Tree Protection Plan reference TGA.2597.TPP.002.

1.3. The site is currently a self-storage unit. The proposed development is the extension of the existing building at the southeast and north of the existing.

1.4. A survey was carried out in accordance with BS5837 to identify the constraints and opportunities on the site presented by the existing trees reference TGA.2597.TreeSurvey.

1.5. For details of the trees to be retained and tree protection proposed, reference should be made to the Tree Protection Plan reference TGA.2597.TPP.002.

1.6. No details have been supplied or sought of any statutory protection which may cover the subject trees.

1.7. The controlling authority is London Borough of Hillingdon who can be contacted at: www.hillingdon.gov.uk.

1.8. Any questions relating to the content of this report should be directed in the first instance to T Grayshaw Arboriculture Ltd.

2. Survey method & limitations

2.1. The survey has been carried out following BS5837:2012 Trees in relation to design, demolition and construction – Recommendations. Further notes on survey method are included in the comments section of the schedule where required.

2.2. Trunk diameters were measured at 1.5m above ground level using a diameter tape. For trees that were offsite or inaccessible at the time of survey, stem diameters may be estimated. Multiple stemmed trees are measured according to section 4.6 of BS5837:2012. For groups of trees the diameter given may be an estimated average or an estimated maximum.

2.3. Tree heights were measured with a Hagloff clinometer or estimated in relation to those measured with the clinometer.

2.4. Crown clearance is interpreted as the height of lowest foliage from the crown above ground level.

2.5. Tree canopies were measured in four directions using a Leica Deisto laser measure. Where required dimensions were estimated by pacing. Symmetrical canopies are measured in one direction only, with dimensions in the remaining directions assumed to be similar.

2.6. Categories are based on the Table 1 -Cascade chart for tree quality assessment from BS5837:2012 (see appendix 1 below). An assessment was made of each tree's health and condition, and an assessment of its life expectancy if its surroundings were to be unchanged.

2.7. Where dimensions were estimated the reason is given in the survey comments for that tree or group.

2.8. Where trees are located on neighbouring land dimensions are estimated.

2.9. Where stems or branches are obscured by ivy or other materials a full assessment of those parts was not possible.

2.10. No soil assessment was carried out at the time of survey.

2.11. Where trees were not plotted on the topographical survey their positions must be considered as estimated.

2.12. Information from this survey may be used for NHBC chapter 4.2 foundation calculations with the limitation that the survey was not carried out explicitly for that purpose. It is recommended that further advice is sought from the author prior to use of this report for this purpose.

2.13. This report provides tree survey data in accordance with BS5837:2012. The survey was not carried out for health and safety purposes.

3. Arboricultural Impact Assessment

3.1. The site is currently a self-storage unit. The proposed development is the extension of the existing building at the southeast and north of the existing.

3.2. This impact assessment is of the effects of the proposed development on the existing trees. Where required, mitigation measures are proposed in the Arboricultural Method Statement and Tree Protection Plan to reduce or avoid impact, as recommended in BS5837:2012 section 5.4.

3.3. Evaluation of impact of proposed tree removal

It is confirmed that no trees are proposed for removal as a result of the development.

3.4. Construction within RPAs

The trees included in the survey are located on a grass verge adjacent to the site. Between the trees and the site there is a 1m high (approx.) retaining wall which is on top of a retaining wall at the edge of the site. Within the site there is concrete hard standing, and no soft landscape. Roots from the trees will not extend within the site and therefore will not be affected by any proposed construction within the site. The RPAs of the trees have been adjusted to reflect this on the tree protection plan. See photo in text below.

Trees 1 – 3 to right. Retaining wall on boundary

3.5. Trees to be pruned

3.5.1. Trees T2 and T3 are Ash trees located adjacent to the site. The lowest part of the canopy of the trees overhangs the site by approximately 2m. It is recommended that the canopies are pruned back to the boundary line to ensure there is clearance between the trees and the proposed extension. Reducing the canopies will also ensure allow working room within the site

and ensure the overhanging canopy is not damaged during construction. The level of pruning is well within the limits of good arboricultural practice and will not be of any detriment to the trees. It should be mentioned that due to their species, the trees will have a limited life expectancy due to Ash dieback disease.

3.5.2. In the event that any further tree surgery works are required during the development, these must be specified clearly by the project arboriculturist and approved by the council before being carried out. Any proposed work must comply with BS3998:2010 'Tree Work'.

Showing part of canopy of T3 overhanging site

T1 – T3 adjacent to site

3.6. Protection for retained trees

3.6.1. BS5837:2012 section 6.2.1. states: 'All trees that are being retained on site should be protected by barriers and/or ground protection before any materials or machinery are brought onto the site, and before any demolition,

development or stripping of soil commences. Where all activity can be excluded from the RPA, vertical barriers should be erected to create a construction exclusion zone. Where, due to site constraints, construction activity cannot be fully or permanently excluded in this manner from all or part of a tree's RPA, appropriate ground protection should be installed'.

3.6.2. It is recommended that the canopy of T2 and T3 are protected using heras fence panels fixed to the existing metal boundary fence for the duration of the development.

3.7. Demolition, site clearance & groundworks

3.7.1. Tree protection fencing must be installed prior to plant machinery entering site to carry out demolition, site clearance and groundworks.

3.7.2. To ensure damage does not occur to retained trees, tree protection fencing must be installed after tree removals have been undertaken, and prior to demolition and groundworks proceeding. If plant machinery is to be used on site as part of tree clearance, tree protection fence must be installed to prevent movement of machinery within the tree protected areas.

3.7.3. If plant machinery or other vehicles are required on site for the purpose of installation of the tree protection fence, these must not operate within tree protection areas.

3.8. Underground utilities

Details of services have not been provided at the time of writing, however it can be seen that no services within the red line of the development will have any influence on the trees. If there is the requirement for the installation of underground apparatus within the RPA of retained trees, this must be carried out as per the section provided in the method statement below and in accordance with BS5837:2012 recommendations.

3.9. Conclusion

This report concludes that the development proposals are in accordance with BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.

4. Arboricultural Method Statement

4.1. Tree Protection Plan

4.1.1. Reference must be made to the Tree Protection Plan reference TGA.2597.TPP.002.

4.1.2. The Tree Protection Plan indicates the trees required for removal, with a red dashed canopy outline (see section below).

4.2. Tree protection fencing

4.2.1. The position for the tree protection fence is indicated on the Tree Protection Plan drawing number TGA.2597.TPP.002.

4.2.2. The Tree Protection Fence must be installed as follows:

1) The tree protection fence must be installed before any demolition, groundworks or construction take place.
2) The tree protection fence must be installed in the position shown on the approved Tree Protection Plan, and not estimated.
3) The tree protection fence must be installed as per the specification given below. Any variation to the specification must be approved by the council.
4) The position of the tree protection fence is approved as part of the planning permission and must not be moved once installed.
5) The tree protection fence must comprise of 'Heras' type wire mesh panels, clamped together with two metal clamps between panels, and attached with wire or strong cable ties to the existing blue metal boundary fence.
6) Each panel must be secured (with galvanised wire or strong cable ties) to a scaffold pole upright driven firmly into the ground.
7) All weather notices must be fixed to every second panel stating, 'Tree Protection Fence - Keep Out'

4.2.3. Once installed, the tree protection fence must remain in place whilst any demolition, groundworks and construction take place.

4.2.4. Once construction is finished, the tree protection fence may be removed to allow soft landscaping to take place.

4.2.5. The specification for the tree protection fence is given on the Tree Protection Plan. If an alternative specification for the fence is to be used, this must first be approved by the council.

4.3. Phasing of works in relation to tree protection

4.3.1. Works on site must be carried out in the following order:

1) Tree surgery
2) Tree protection fence installed
3) Demolition/site clearance
4) Groundworks
5) Construction
6) Removal of tree protection fencing

4.3.2. The above phasing must not be changed without approval from the project arboriculturist and Council.

4.4. Restrictions within tree protection areas

4.4.1. The purpose of the tree protection fence is to prevent damage to retained trees from following causes:

- Damage to the main trunk, branches and foliage
- Roots being severed as a result of excavation
- Root damage from soil compaction
- Chemical damage

4.4.2. The following restrictions therefore apply within the areas protected by the tree protection fence unless otherwise specified within this report:

1) No movement of vehicles or plant machinery
2) No excavation
3) No hand digging
4) No raising or lowering of levels for any reason
5) No storage of plant or materials
6) No fire lighting such that flames come within 5m of tree foliage.
7) No substances injurious to tree health to be used or stored, including fuels, oil, bitumen, cement washings, builders sand, concrete mixing and other chemicals
8) Care must also be taken with site operations outside of the fenced off areas to ensure that wide or tall loads, or plant with booms, jibs and counterweights etc. do not cause damage to tree canopies.

4.5. Site operations

4.5.1. Provisions will be required for site operations such as working access, materials storage, contractor parking, welfare facilities, temporary services/drainage etc.

4.5.2. Site operations must be designed to avoid the areas designated as tree protection, with none of the above provisions sited within RPAs of retained trees. Tree protection fence must not be moved to accommodate site operations.

4.5.3. If the requirement for working space or temporary construction access is unavoidable for any reason, any alterations to the tree protection plan must be approved by the project arboriculturist.

4.6. Tree surgery and removal

4.6.1. T2 and T3 are to be pruned back where they overhang the site. The canopy should be pruned in line with the blue boundary fence, with all cuts made to suitable growth points, and without leaving stubs.

4.6.2. Any further tree surgery works required during the development must be approved by the Local Planning Authority before being carried out.

4.6.3. All work will be carried out in accordance with BS 3998:2010 Recommendations for Tree Work, industry best practice and in line with any works already agreed with the Council.

4.6.4. It is the sole responsibility of the instructed arboricultural contractor to ensure that correct health and safety planning for any proposed works is identified and managed prior to commencement of proposed works. All risks associated with the work should be identified by carry out a site-specific risk assessment and managed by the use of appropriate safe working procedures.

4.6.5. The statutory protection afforded by the Wildlife and Countryside Act and Countryside and Rights of Way Act must be adhered to. If further advice is required, particularly if bats are discovered during tree work, Natural England or a competent ecologist must be contacted.

4.6.6. According to the Arboricultural Association: When tree or vegetation clearance work has to be undertaken during the nesting season, a pre works survey 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 contactors have the responsibility to assess, record and confirm that any works carried out in the management of trees and other vegetation has not disturbed actively nesting birds.

4.6.7. The stumps of trees marked for removal located within the RPAs of retained trees must be either cut flush to ground level and left in situ, or ground out

using a stump grinder. Stumps must not be winched out as this damages the roots of retained trees.

4.6.8. All tree works and tree surgery must be carried out such that damage to retained trees is avoided. Retained trees must not be used as the anchor point for winching.

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18 January 2024

5. Tree Survey Schedule

No.	Species	Ht (crown)	Dia (stems)	Crown spread (NESW)	Life stage	ERC	Comments & preliminary recommendations	BS Cat
T1	Betula pendula (Silver Birch)	10(2)	170(1)	2, 2, 2, 2	SM	20+	No visible significant defects. Planted in grass verge next to road. Landscape value as part of street scene.	C2
T2	Fraxinus excelsior (Ash)	10(2)	430(1)	5, 5, 5, 5	M	10+	Limited life expectancy due to Ash dieback disease. Planted in grass verge next to road. Landscape value as part of street scene. Crown clearance 6m above road. Bark missing on main stem consistent with vehicle strike. Low branches previously cut back to boundary line of site. Scope to trim canopy in line with site boundary. RPA will not extend into site due to retaining wall on boundary.	C2
T3	Fraxinus excelsior (Ash)	10(2)	390(1)	5, 4, 4.5, 5	M	10+	Limited life expectancy due to Ash dieback disease. Planted in grass verge next to road. Landscape value as part of street scene. Crown clearance 6m above road. Low branches previously cut back to boundary line of site. Scope to trim canopy in line with site boundary. RPA will not extend into site due to retaining wall on boundary.	C2
G4	Sambucus nigra (Elder),Crataegus monogyna (Hawthorn)	3(0)	100(1)	2, 2, 2, 2	SM	10+	Low quality and not a development constraint. Offsite self seeded scrub with brambles and Buddleia.	C2