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Tree & Landscape Report

Site:

The Garden House
Vale of Health
London
NW3 1AN

Client:

James Gorst Architects
16a Crane Grove
London
N7 8NN

Date of Report:

12th December 2017

Report Reference:

AR/MF/053/17

Report Prepared by:

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Report Contents

1. Introduction

1.1 This report has been commissioned to survey, assess and provide recommendations for the proposed landscape and tree planting / replacement works associated with the proposed development, The Garden House, Vale of Health, London, NW3 1AN.

1.2 A site visit was made on Thursday 24th August 2017 to survey and assess the trees; the survey was undertaken alongside a wider survey of all trees within the site in relation to the proposed development works. The weather at the time of inspection was mixed sunshine, mild and dry.

1.3 The details of the subject trees are set out in the tree survey table in *Appendix A*. The trees were surveyed on the date and time shown above and the tree survey assessment information for the trees describing size, condition and surroundings is found in this appendix.

1.6 The trees surveyed are shown in a site plan, *Appendix B*, and this corresponds to the tree survey results table, *Appendix A*.

1.7 Photographs of the trees can also be found in *Appendix C*.

1.8 This report and the opinions within it have been produced without prejudice by Marcus Foster on behalf of *Marcus Foster Arboricultural Design & Consultancy.*

1.9 Reference has been made to the following plan for the purposes of this report:

James Gorst Architects Ltd
Dwg No: PR_GA_050 REV T2

2. Survey Details and Scope

2.1 The site survey for the purposes of this report includes the 13 trees (T1-T13) as shown in the survey, *Appendix A,* and also highlighted on the site plan*, Appendix B.*

2.2 The trees have been surveyed from ground level; the height of the trees have been estimated due to sloping and restricted topography and the diameter of the trunks measured using a diameter tape.

2.3 The following information was recorded for the tree and is shown in the Tree Schedule included in *Appendix A*:

- Number: an identity number which cross-references locations shown on the plan in Appendix A with the schedule in Appendix B.
- Species: listed by common names
- Tree Height: height in metres (m)
- Tree Spread: spread in metres (m)
- Stem diameter: measured in millimetres (mm) and taken at 1.5m above ground level
- Age Class: Y (young); EM (early-mature); M (mature); OM (over-mature)
- Vigour: G (good); F (fair); P (poor); D (dead)
- Physiological Condition: G (good); F (fair); P (poor); D (dead)
- Structural conditions: Specific comments relating to each tree
- Preliminary Management Recommendations
- Estimated Remaining Contribution (years)
- BS5837 Category Grading
- Protection Distance (if applicable – BS5827: 2012)

2.4 The information contained within the report reflects the condition of the specimens examined at the time of the inspection. As the inspection was only visual no guarantee can be given concerning the condition of the wood at present in any of the trees inspected and furthermore that no future problems or deficiencies may arise.

2.5 Information recorded in the tree survey is expanded in the report findings and a management programme specified in the recommended schedule of works has been included.

2.6 The status of the trees within this site has been checked for Conservation Area and Tree Preservation Order status and the trees are protected by virtue of their location within the Hampstead Conservation Area.

2.7 It is important to note that the tree survey and arboricultural / landscape appraisal of the landscape plan and proposal scheme references the restrictive covenant that this property adheres to. In summary the revenant covenants dating from 15th January 1925 are as follows:

(2) Not to erect or suffer to be erected at any time any fence or hedge upon the said land or any part thereof which would in any way interfere with the view aforesaid and in particular to leave the water edge unfenced and open as at present

(3) Not at any time to erect or place or suffer to be erected or placed anything whatsoever upon the said land or any part thereof or to plant or suffer to be planted any trees bushes or shrubs thereon which might obstruct or in any way interfere with the aforesaid view

3. Survey Limitations

3.1 No soil excavation or root inspection has been carried out for the purposes of this tree survey / appraisal.

3.2 This report only considers conditions at the time of inspection.

3.3 No internal decay devices/ invasive tools were used during this site survey.

3.4 Soil conditions have been researched but have not been physically investigated.

4. Findings and Discussion

4.1 The trees being surveyed are located within the gardens of The Garden House, Vale of Health, London, NW3 1AN. The UK Soil Observatory Maps (http://www.ukso.org) show the following relevant information:

- The property to be located on a medium to heavy soil mix consisting mainly of clay and silt.

- The soil moisture levels for the garden area to be categorised as 40-45% - a relative high figure related to proximity of Hampstead Heath and associated pond landscape feature

4.2 The trees included within this report has been surveyed in relation to their overall health and structural condition; in addition due to the proposed development works the trees have been surveyed in relation to their form and amenity value provided within the wider landscape. The findings below provide discussion and recommendations further to the site visit carried out and proposed landscape schemes.

Tree T1

4.3 Sited within a raised retainer tree T1 is a developing young to early mature Ash tree. Although generally structurally sound and with compact and columnar form, T1 is inappropriately placed and will be problematic for the long term with the following information relevant:

4.3.1 The 800mm height x 1500mm width raised retainer is insufficient for the mature development of an Ash tree, a species with an expansive and significant root system

4.3.2 The historic boundary wall to the west - approximate height 4m - is likely to be damaged with the development of a large and mature tree due to the very close proximity

4.3.3 The canopy growth will for the long term become expansive both in height and spread for the location close to Heath Villas and The Garden House also

4.4 The tree's removal will not be detrimental to the amenity value currently provided and the overall landscape; in addition this will prevent future management to cyclical manage the tree which ultimately would diminish its form and size.

4.4 Trees T2 - T4

4.5 The trees on the south western boundary with the rear garden boundary of Heath Villas comprises 1 x early mature Ash tree (T2) and 2 x mature Berberis shrubs / small trees (T3 & T4). The trees / shrubs are also underplanted on the boundary with mixed shrubs to form an informal hedge which includes Laurel and Elder. The trees collectively define the boundary and form good screening.

4.6 Tree T2 as a developing specimen, similarly to tree T1 as described above, is inappropriately placed on the boundary line between The Garden House and No. 13 Heath Villas, and close to the buildings also - notably No.s 12 & 13. The tree for the long term will be problematic due to location and the limited ability to impose upon the landscape as the species would from full maturity means that replacement planting in conjunction with additional planting on this boundary line can provide an improved landscape for the long term here.

4.7 The 2 x mature Berberis shrubs (T3 & T4) are large specimens for the species having grown to the light beneath the adjacent Mulberry tree, T5. The trees are sited within close proximity of the boundary line between the 2 properties and also offer screening to a height of 6 metres. The trees are generally structurally sound and are unruly in habit with a congested shrub like branch framework. These trees are proposed for removal within the scheme which alongside replacement planting for tree T2 can provide a uniform replacement planting for this boundary.

4.8 The replacement planting and landscape scheme for this boundary will provide for an improved landscape with the following characteristicss

> 4.8.1 Planting of a species proposed as a mix (quantity and location to be confirmed subject to aggreement with neighbours) of *Crataegus prunifolia* and *Sorbus vilmornii* - see *Appendix D* - which will provide wildlife habitat and long term amenity value for the location in close proximity to Hampstead Heath without affecting the restrictive covenants on the property in relation to the views of Hampstead Heath
>
> 4.8.2 The tree plantings will allow for the highlighting of the developing Sycamore tree, T6, proposed for retention with full tree protection for the development process. As the most balanced of tree in this location and the most appropriate location, tree T6 will grow harmoniously alongside the replacement plantings
>
> 4.8.3 The planting of a native hedgerow mix (or similar) to be planted beneath the plantings on this south western boundary to define the boundary as currently exists but with improved species and wildlife attributes. Height of the hedge to step in two places from 1.8m to 1m at the bottom of Upfleet and Leapsteps garden. Exact positions to be agreed with neighbours

All tree planting and boundary hedge planting should be implemented in accordance with specifications as outlined within this report - *Section 6: Replacement Planting Specification*

Trees T5 & T6

4.9 Tree T5 is proposed for removal as highlighted within the *Arboricultural Impact Assessment Report - AIA/MF/052/17*. The tree is unsuitable in relation to the property in its current condition and therefore as proposed also for the following reasons:

> 4.9.1 Very close proximity of medium sized tree with dense habit and large leaf size
>
> 4.9.2 Tendency to lean with age particularly on sites where preferred dry / well drained soil is not present
>
> 4.9.3 Poor aesthetics further to pruning works required cyclically for tree in its current location and compromised form for the long term

4.10 Direct tree replacement planting is proposed to allow for the removal of this tree and the tree planting recommended is to provide a compact and balanced shape which will be suitable for the location for the long term whilst also providing adequate replacement canopy cover and amenity value. The tree planting should be implemented in accordance with specifications as outlined within this report -

*Section 6: Replacement Planting Specification.*The following species is recommended to provide compact yet medium crown shape / size and a tolerance for damp conditions

Nyssa sylvatica (Tulepo tree)

4.11 Tree T6, the early mature to mature Sycamore tree is proposed for retention and as discussed above will be complimented by the proposed replacement planting scheme on the south western boundary between The Garden House and No. 13 Heath Villas

Tree T7

4.12 The Cypress tree (T7) within the main lawn area has died and requires removal as in its current condition it is hazardous being unstable. The tree has likely died due to excessive wet conditions with the ground consistently wet underfoot (late summer at time of inspection - August 2017)

4.13 The tree's removal facilitates tree replacements which can be sited on the southern boundary. The proposed species is to be confirmed.

4.14 The location of the trees on the boundary ensures that the restrictive covenants are not affected and the medium size of the trees also allows for the tree's to develop to maturity without the requirement for cyclical management works.

Trees T8 - T10

4.15 Trees T8 comprise 3 x trees sited on the edge of the pond which are a significant distance from the property and therefore providing a greater contribution to the landscape of Hampstead Heath rather than the garden. The trees are proposed for retention within all schemes but their condition requires monitoring and management for the long term mainly for reasons of prolonged water logging with the ground conditions excessively wet for time of survey, summer 2017.

4.16 Tree T8 and T9 are sited on the south eastern boundary with Hampstead Heath. Tree T9 is a large and mature Yew tree. The tree remains with good vigour only partially but a significant amount of the crown is dead including the entire western crown, and the majority of the southern and eastern crown; the upper canopy has largely lvl growth but the majority of the crown is located in the broadened mid canopy as is characteristic with species shape and form. Management is required for the long term to reduce extent of dead sections overhanging the neighbouring garden and this is required either from removal with replacement or significant reduction works to retain the tree for wildlife habitat.

4.17 Tree T9 is a large mature to over-mature Willow tree which is partially collapsed within the edge of the pond. The tree's base is located on the boundary between the property, the pond and the neighbouring property to the south also. No action is deemed necessary for this tree as it is offering a wildlife habitat with good screening within the verge of the Hampstead Heath area.

4.18 Tree T10 on the north eastern boundary is a mature Ash tree with 2 x main stems one developing vertically and the eastern stem growing laterally over the adjacent pond. The tree is generally structurally sound and requires no action within the proposed scheme or in relation to general arboricultural management.

4.19 The garden boundary in relation to the above trees will not be affected by the proposals and should remain as exists without the requirement for further tree planting

Trees T11 & T12

4.20 Tree T11 is a mature Sycamore tree which is sited on the northern boundary of the site on steeply sloping topography (north to south). The tree is sited 0.3m from the historic low retaining wall which at 1200mm height full retains the land to the north within the rear gardens of Athenaeum Hall. The survey of this tree was carried out with the tree being significantly ivy clad and therefore not all structural features could be identified. However the main characteristics of the single stemmed tree include:

- Base appears generally structurally sound
- Significant compensatory growth at 1.6-1.8m on west side likely due to removal of large stem growing towards property originally
- Excessively crown lifted thereafter to crown break at 7-8m
- Overall crown limited relative to age of species with majority
- Low to moderate vigour in upper crown / moderate vigour in mid crown

4.21 The tree is proposed for retention with protective measure required where formalisation of the garden topography is required within the landscape scheme. With the sloping ground it is likely that dominant anchorage roots exist to the south and west with a significant amount of roots also abutting the low retaining wall where moisture is likely to have been freely available for the development of roots originally.

4.22 The mature Magnolia tree (*Magnolia* x *soulangeana*) currently suppressed beneath tree T11 adjacent appears generally structurally sound. The from is compromised by suppression mainly to the south and west from the adjacent Sycamore tree. Proposed for retention in the scheme, the tree will require protection where formalisation of the garden topography is required within the landscape scheme.

Tree T13

4.23 The Fig tree, T13, at the rear of the property on the western boundary is a fair specimen offering very limited amenity value growing against the rear of the property. This tree is proposed for removal and within the landscape scheme due to inappropriate location.

Summary

4.24 The proposed management plan and tree removal is recommended as part of a wider scheme to implement the following:

- Remove the inappropriately sited trees T1 and T5 which are growing adjacent to the rear retaining wall and property respectively and replace with 1 x appropriate planting (*Nyssa* sylvatica) for the long term.

- Provide improved boundary planting on southern boundary adjacent to the property with a native hedgerow mix hedge and low native tree planting of compact species / size as specified within this report

- Provide improved and replacement amenity value in the form of a semi-mature tree planting to the southern boundary of the site where tree canopy cover has been lost, as deedmed appropriate in relation to the covenance

- Provide general management of those trees proposed for retention in line with good arboricultural practice

4.25 By implementing the replacement planting as recommended, the overall loss of amenity value will be minimal and in the long term will be enhanced. In addition the character of the landscape relating to the pond area and heath beyond will be highlighted once again and the landscape within this Vale of Health Area improved. The landscape scheme also provides a harmonious relationship between The Garden House and the landscape which can exist for the long term.

5. Tree Works Management Plan

5.1 Any tree work should be carried out to BS 3998; 2010 *Recommendations for Tree Work*. Permissions from the Local Authority (Section 211 Notification or Tree Preservation Order Application) should also be sought where required prior to the commencement of any tree works.

5.2 It is recommended that any tree work is carried out by a Local Authority approved contractor (approved list or similar) or an Arboricultural Association Approved Contractor.

5.3 Recommended Tree Works Specification

T1 Ash
Fell to ground level and grind out stump

T2 Ash
Fell to ground level and grind out stump

T5 Mulberry
Fell to ground level and grind out stump

T6 Sycamore
Crown lift to 4m
Remove any major deadwood

T7 Cypress (dead)
Fell to ground level and grind out stump

T8 Willow
No action required at present

T9 Yew
Option 1:
Fell to ground level to implement improved landscape scheme for boundary in accordance with all restrictive covenants

Option 2:
Crown reduce height 40% / Spread 25% to retain for habitat whilst removing hazards

T10 Ash
No action required at present

T11 Sycamore
Remove ivy and inspect main stem

T12 Magnolia
No action required at present

T13 Fig
Fell to ground level and grind out stump

NOTE: Where works specified are not carried out within 12 months of this survey (for arboricultural and health and safety reasons) the tree/s should be re-surveyed and a revised specification prepared as appropriate

6. Replacement Planting Specification

6.1 It is recommended that the replacement of the proposed tree removal is carried out with the replacement planting of the following trees within the site as proposed within replacement planting / landscape scheme - James Gorst Architects Ltd *Dwg No: GH16_130 Rev P1*

Western Boundary / adjacent to 13 Heath Villas

1 x *Nyssa sylvatica*
Minimum 16-18cm girth tree

South / South Western boundary

3 x trees from the following species
Minimum 10-12cm girth trees

Crataegus prunifolia
Sorbus vilmorinis

A summary of the above tree species and key characteristics is included within *Appendix D.*

6.2 All tree planting is recommended to be carried out to the following specifications:

- All tree planting to be carried out to *BS 8545; 2012 'Trees: From Nursery to Independence in the Landscape*'
- Irrigation pipe and suitable staking implemented as part of the scheme. It is recommended that the tree is protected with artist made tree guard with seating surrounding for interactive garden experience
- A weed suppressing bark mulch layer between 40-60mm thickness should be applied to the planted area The
- The tree planting should be accompanied with a strict watering schedule for the first 3 x full seasons after planting which should be incorporated as an interactive garden based activity
- The tree planting should be carried out within the dormant season (Nov-March) to ensure transplanting success

6.2 The sizes / specification of tree plantings are to be confirmed with the Local Authority prior to planting and installation to ensure that suitable replacement amenity value is provided from the commencement of completion of the proposed scheme.

7. Appendices

Appendix A: Tree Schedule (BS5837:2012)

The Garden House
Vale of Health
London
NW3 1AN

Colour Key: BS5837: 2012 (see *Section 2.6*)

- Category A
- Category B
- Category C
- Category U

The Garden House, Vale of Health, London, NW3 1AN
Tree Schedule (BS5837:2012) - 240817

Tree No	Species	Height (m)	DBH (mm)	Spread (m)	Age	Visual Condition	Vigour	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	Preliminary Management Recommendation	Root Protection Area (RPA) Radius (m)
T1	Ash	10	180	N: 4 E: 3 S: 4 W:2	EM	G	G	C.2	20 years +	Tree is generally structurally sound with good buttress roots although constrained within raised planter; leans to north straightening at approx 2-3m. Sited within 0.8m height x 1.5m width planter. Approx 4m height historic boundary wall to west - tree will be problematic in the long term.	Fell to ground level and provide suitable replacement planting to restore amenity value for the long term	N/A
T2	Ash	8	t/s 310	N: 4 E: 2 S: 3 W:3	EM/M	F	G	C.2	20 years +	Tree is twin-stemmed at the base with western stem leaning at 45degrees to west and eastern stem straight, ivy clad to 7m; fair union - some signs of included bark. Crown reduced to cyclical crown reduction points - likely within past 2 years. Unbalanced form and growing directly on boundary of rear garden area of property to south	Fell to ground level to implement improved landscape scheme for boundary in accordance with all restrictive covenants	N/A
T3	Berberis	5	t/s 200	N: 2 E: 2 S: 2 W:2	M	F	G	C.2	Less than 10 years	Very mature shrub / small tree; ivy clad throughout. Twin stemmed at base and suppressed beneath adjacent Mulberry tree	Fell to ground level to implement improved landscape scheme for boundary in accordance with all restrictive covenants	N/A
T4	Berberis	5	180	N: 1 E: 1 S: 2 W:1	M	F	G	C.2	Less than 10 years	Very mature shrub / small tree; ivy clad to 3.5m; suppressed beneath adjacent Mulberry tree	Fell to ground level to implement improved landscape scheme for boundary in accordance with all restrictive covenants	N/A
T5	Mulberry	9	440	N: 4 E: 4 S: 3 W:4	M	G	G	B.2	20 years +	Tree is generally structurally sound at base growing from informal hard landscaping area. Sever kink @ 1.5m in main stem to south where large stem has been previously been removed due to proximity to property - wounds have moderately occluded only and structural integrity compromised. Stem straightens @ 3m at main union to give low broad domed canopy as is characteristic with species. Mid canopy to north growing against building with branches deflected due to proximity.	Fell to ground level to implement improved landscape scheme for boundary in accordance with all restrictive covenants	N/A

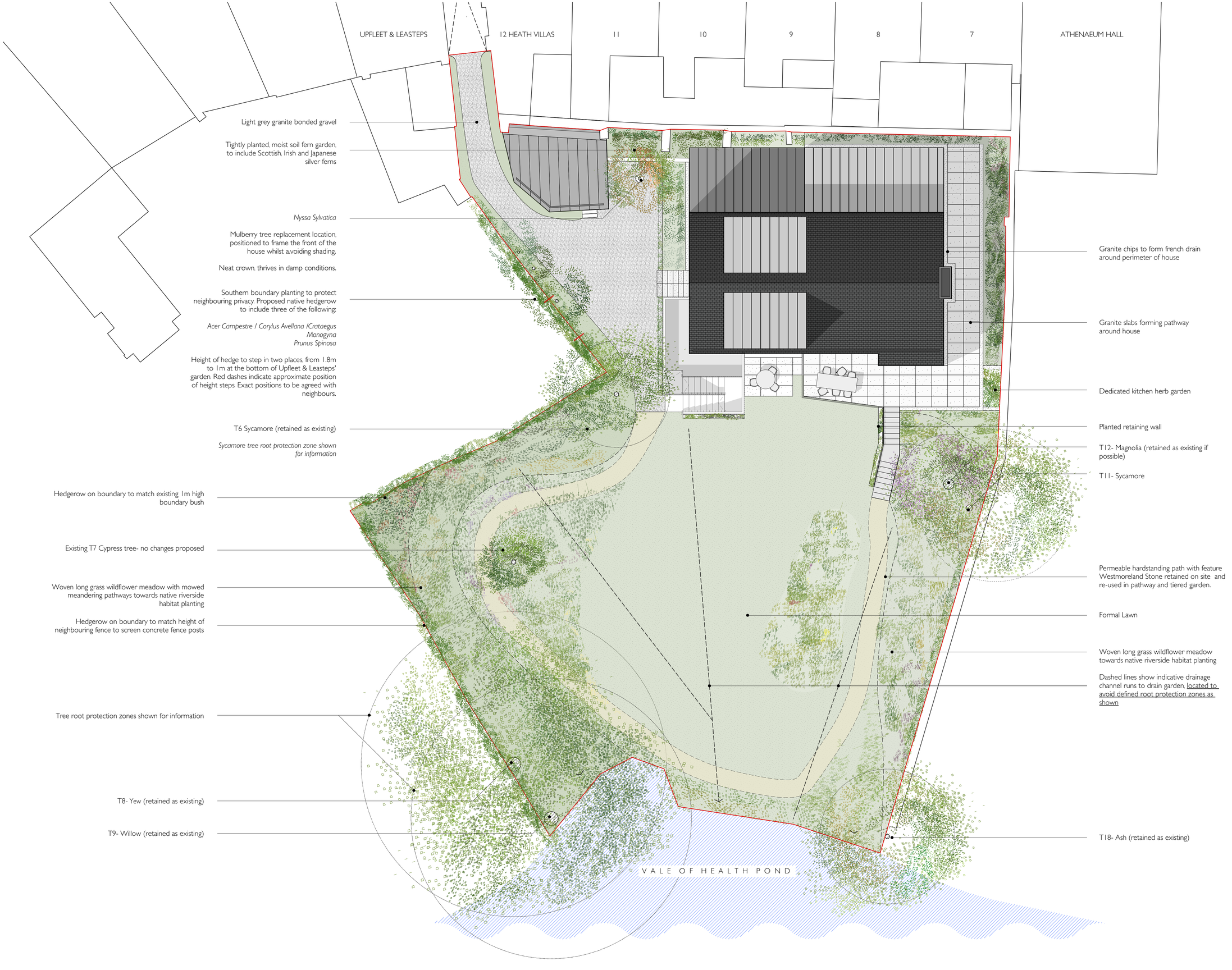
Tree No	Species	Height (m)	DBH (mm)	Spread (m)	Age	Visual Condition	Vigour	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	Preliminary Management Recommendation	Root Protection Area (RPA) Radius (m)
T6	Sycamore	10	250	N: 4 E: 3 S: 4 W:3	EM	G	G	B.1	40 years +	Tree generally structurally sound with good buttress roots at base particularly to the south - straight main stem to crown break at 4m. At 4-5m some decay / canker / squirrel growth with strong occluding growth - selectively repeated through mid canopy. Developing and balanced canopy in prominent location at rear of properties. Low growth to north over The Garden House.	Crown lift to 4m. Remove any major deadwood	3.0m
T7	Cypress	12	410	N: 2 E: 2 S: 2 W:2	OM/D	P	P	U	Dead	Dead tree with associated ivy growth dead also further to being cut at ground level. Waterlogged ground at base likely cause of tree's decline	Fell to ground level	N/A
T8	Yew	13	720	N: 6 E: 3 S: 4 W:4	M/OM	P	F/P	C.2	Less than 10 years	Tree has significant dead sections throughout but is an old tree with wildlife habitat directly adjacent to the pond / heath. To the west the tree is completely dead; to the north 25% live growth; to east very limited growth; to south 10% live growth ; upper canopy 50% live growth. Dieback likely due to tree's permanently waterlogged ground condition, not preferred by species	Option 1: Fell to ground level to implement improved landscape scheme for boundary in accordance with all restrictive covenants Option 2: Crown reduce height 40% / Spread 25% to retain for habitat whilst removing hazards	8.6m
T9	Willow	10	600 (e)	N: 5 E: 3 S: 3 W:3	M/OM	P	F	C.2	10-20 years	Tree is a heavily leaning specimen to the north east over the adjacent pond. Not able to fully inspect due to this location but in latter stages of life offering important wildlife habitat	No action required at present	7.1m
T10	Ash	10	320	N: 2 E: 4 S: 4 W:4	EM / M	G	F	C.1	10-20 years	Tree is twin stemmed at the base - western stem straight growing on boundary; eastern stem ivy clad to 6m with dieback throughout and particularly mid - upper canopy likely due to water logging. Fair specimen	No action required at present	3.8m
T11	Sycamore	14	660	N: 3 E: 5 S: 3 W:4	M	F	F	C.1	10-20 years	Tree is growing 300mm from historic retaining / boundary wall - 1.2m height with garden level to neighbours retained to this full height. Base appears generally structurally sound with tone of mallet inspection consistent. Tree is single stemmed with significant compensatory growth 1.6-1.8m on west side likely due to removal of large stem growing towards property. Tree excessively crown lifted therafter to 7-8m and ivy clad to this point so unable to inspect main stem without full removal / severance. Canopy limited for size / species with no lower crown	Remove ivy and inspect main stem	7.9m

Tree No	Species	Height (m)	DBH (mm)	Spread (m)	Age	Visual Condition	Vigour	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	Preliminary Management Recommendation	Root Protection Area (RPA) Radius (m)
T12	Magnolia	7	t/s 280	N: 3 E: 3 S: 2 W:3	M	F	G	C.1	10-15 years	Tree is ivy clad to 6m; sited on sloping topography east-west with unbalanced canopy with low growth to south and west; suppression from adjacent T11. Appears generally structurally sound.	No action required at present	2.8m
T13	Fig	6	m/s 100	N: 2 E: 2 S: 2 W:2	M	F	G	C.1	10-20 years	Ornamental tree grown against boundary retainer wall	No action required at present	1.0m

Appendix B

Tree Survey Site Plan
incorporating
Outline Landscape Scheme

The Garden House
Vale of Health
London
NW3 1AN



REVISIONS:

T1 - 17/11/2017 - Issued for Tender

T2 - 30/11/2017 - Boundary information added

T3 - 29/01/2019 - Drainage note added

NOTES:

PROJECT:
THE GARDEN HOUSE

DRAWING TITLE:
Proposed Site Plan

STATUS:
TENDER

NOTE:

Do not scale from the drawing. Any discrepancies to be reported to the architect.

All dimensions will be taken on site prior to ordering and construction.

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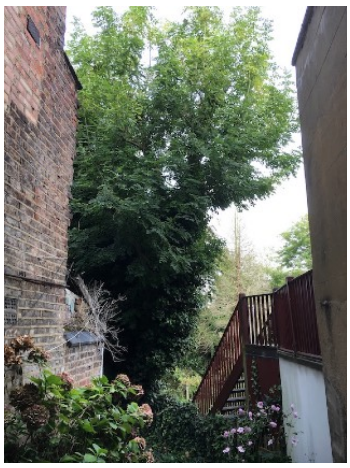
SCALE:	DRAWING NUMBER:	REVISION:
1:200 (A3)	PR_GA_050	T3

Appendix C

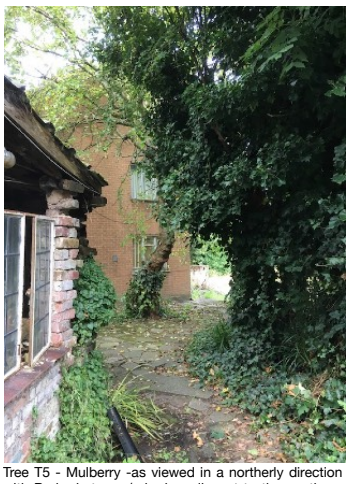
Site Photographs for:

The Garden House
Vale of Health
London
NW3 1AN

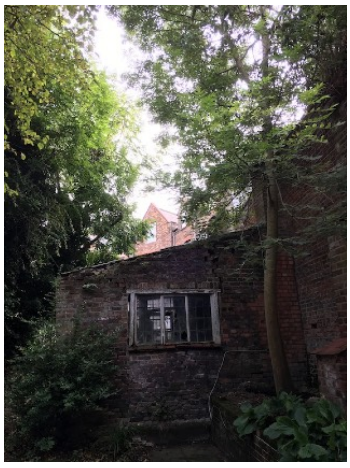
Taken 24th August 2017



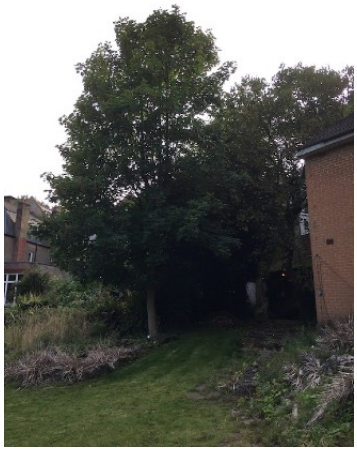
Tree T1 - Ash - as viewed in an easterly direction from within The Garden House access pathway



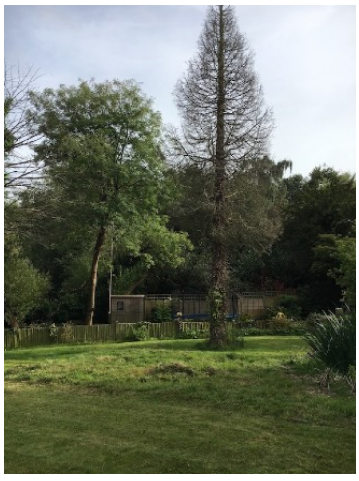
Tree T5 - Mulberry -as viewed in a northerly direction with Berberis trees / shrubs adjacent to the south on boundary



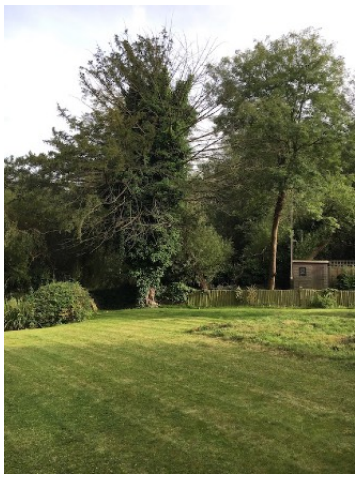
Tree T1 - Ash - located within raised border on western boundary as viewed in a southerly direction



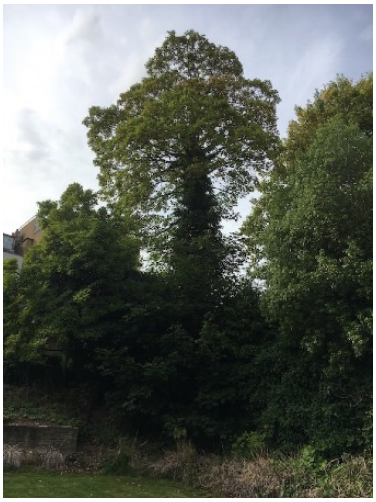
Tree T6 - Sycamore - and upper canopy of T5 - Mulberry - as viewed in a south westerly direction from main lawn area



Tree T7 - Cypress - tree is dead within main lawn area as viewed in a southerly direction

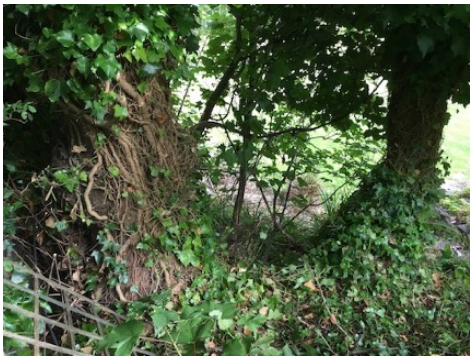


Tree T8 - Yew - as viewed in a southerly direction



Tree T11 - Sycamore - and T12 - Magnolia - as viewed from within main lawn area in a north westerly direction

Base of tree T11- Sycamore, as viewed in a easterly direction



Base of tree T11 - Sycamore - and T12 - Magnolia - as viewed in a south easterly direction showing sloping topography of ite

Base of tree T11 - Sycamore - with parial ivy removal

Appendix D: Tree Information References

The following tree information references have been issued in relation to the proposed landscape scheme and are in cluded within this Appendix:

1. Native Hedgerow Mix

2. *Crategus prunifolia*

3. *Nyssa sylvatica*

4. *Sorbus vilmornii*

TREE REPLACEMENT PROPOSALS
Southern boundary to the south of property

THE GARDEN HOUSE, VALE OF HEALTH

Mixed Species Native Hedgerow Mix

Underplanting of 3 x trees with Native Hedge to include maximum 3 of the following species:

Acer campestre
Corylus avellana
Crataegus monogyna
Prunus spinosa

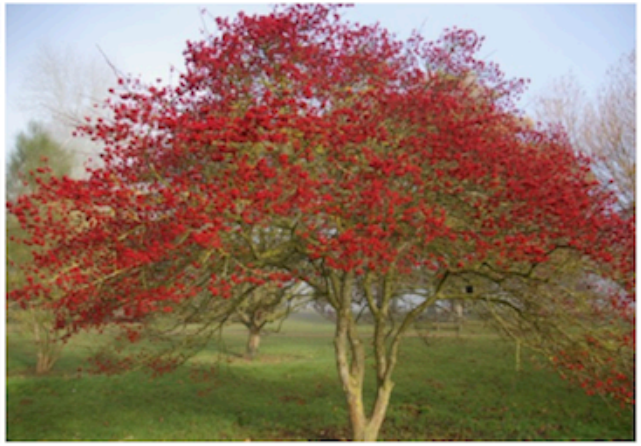
Proposed to be planted as 5 x plants / linear metre to provide wildlife habitat, boundary definition and low screening

Marcus Foster
www.marcus-foster.com

Crataegus prunifolia (Cockspur Thorn)

- Good wildlife attributes
- Compact habit w/ dense form
- Seasonal interest
- Moisture tolerant

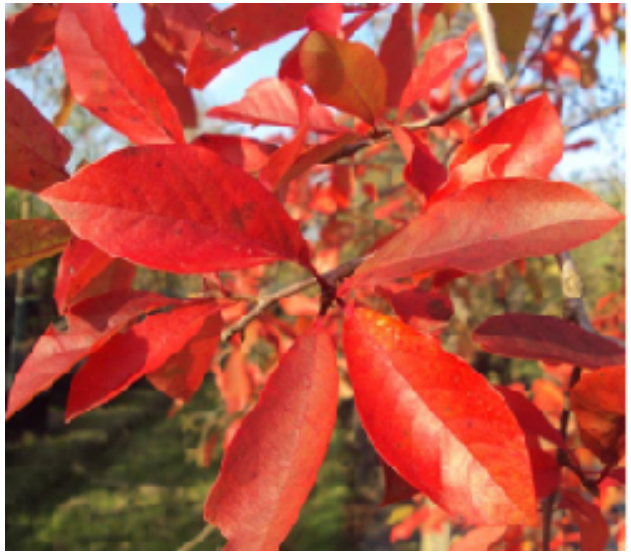
http://www.deepdale-trees.co.uk/trees/2010/10-Crataegus-prunifolia.html



Option C - Medium
Nyssa sylvatica (Tupelo tree)

- Hardy slow growing tree
- medium sized tree generally to 12m
- Excellent neat and pyramidal habit
- Vibrant autumn colour
- Moist soil for optimum growing conditions

http://www.deepdale-trees.co.uk/trees/2017/04-Nyssa-sylvatica.html



Sorbus vilmorinii (Vilmorin's Rowan)

- Good wildlife attributes
- Seasonal interest / good ornamental value with vibrant red berries
- Moisture tolerant / wet soils
- Compact and columnar form with semi formality

http://www.majestictrees.co.uk/tree-shrub/498-sorbus-vilmorinii

Appendix E: References

1. *Principles of Tree Hazard Assessment and Management,* Lonsdale, D. (Department for Transport, Local Government and the Regions, 1999)

2. *The Body Language of Trees*, Mattheck, C. and Breloer, H. (HMSO, 1994)

3. *Trees in Britain,* Philips, R. (Pan Books, 1978).

4. *Diagnosis of Ill Health in Trees,* Strouts, R. and Winter, (TSO, 1994)

5. *NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2),* (November 2007)