

4. **TREE DATA.**

T1	Beech	<i>Fagus sylvatica</i>
AGE RANGE		Early mature
DISTANCE FROM PROPERTY		13 metres (estimated)

COMMENTS.

The 0.3 metre high stump of a recently felled tree, located on the party boundary abutting a boundary fence

MANAGEMENT.

No work required

T2	Hawthorn	<i>Crataegus monogyna</i>
AGE RANGE		Semi-mature
HEIGHT		7 metres
STEM DIAMETER		190mm
DISTANCE FROM PROPERTY		10 metres
VITALITY		Good
POTENTIAL MATURE HEIGHT		10 metres (Cutler & Richardson 1989)
ROOTING DEPTH		Moderately deep (Cutler & Richardson 1989)

COMMENTS.

Low branches on the south side touching the roof of an adjacent single-storey brick outbuilding

MANAGEMENT.

Prune on the south side to obtain 1.5 metres clearance from the building

G1	Ash	<i>Fraxinus excelsior</i>
	Hawthorn	
	Holly	<i>Ilex aquifolium</i>
	Laburnum	<i>Laburnum anagyroides</i>
	Sycamore	<i>Acer pseudoplatanus</i>
	Silver Birch	<i>Betula pendula</i>
	Lime	<i>Tilia sp</i>
AGE RANGE		Young to mature
HEIGHT		≤19 metres
STEM DIAMETER		≤450mm
DISTANCE FROM PROPERTY		13 metres (estimated)
VITALITY		Moderate to good
POTENTIAL MATURE HEIGHT		≤ 24 metres (sycamore & lime) (Cutler & Richardson 1989)
ROOTING DEPTH		Deep (ash, laburnum & sycamore) Moderately deep (hawthorn & lime) Shallow (birch) no data (holly) (Cutler & Richardson 1989)

COMMENTS. Closely spaced linear group located to the eastern edge of the drive. Several trees appear to be located off-site within the grounds of a neighbouring property, although the precise position of the boundary is unclear in places. Maintained in the past on the west side by clipping back to the rear edge of the driveway up to a height of 3.5 metres. Dense vegetation partially restricts access to root collars and stems of several trees

G1/1 silver birch. Stem and crown colonised by dense ivy and expresses reduced vitality

G1/2 laburnum. Multi-stemmed from ground level. The southernmost stem is dead and the westernmost stem has extensive decay and hollowing at the base. Good adaptive growth around the area of decay with no visible signs of mechanical instability. An acute included-bark union of co-dominant branches at a height of 1.5 metres, with no visible signs of incipient failure

G1/3 ash. Located off-site abutting a boundary fence with moderate displacement of the fence adjacent to the base of the stem. Crown biased to the north, the result of past suppression by tree T1. Recently pruned to remove all branches on the east side, most probably during construction of the adjacent apartment building.

MANAGEMENT.

Clear low vegetation as necessary to facilitate a more detailed assessment of the lower stems and root collars of the larger trees. Maintain existing clearances along the driveway edge

G1/1 - sever and remove ivy to a height of 3.0 metres to facilitate a more detailed assessment

G1/2 - prune to remove dead stem. Monitor decayed stem for signs of mechanical instability. Monitor included-bark union for signs of incipient failure

G1/3 – Monitor displacement of the boundary fence

G2	Pear Silver birch Holly Sycamore	<i>Pyrus sp</i>
AGE RANGE		Young to mature
HEIGHT		≤15 metres
STEM DIAMETER		≤450mm
DISTANCE FROM PROPERTY		10 metres (estimated)
VITALITY		Moderate to good
POTENTIAL MATURE HEIGHT		≤24 metres (sycamore) (Cutler & Richardson 1989)
ROOTING DEPTH		Deep (sycamore), Shallow/locally deep (pear), Shallow (birch), no data (holly) (Cutler & Richardson 1989)

COMMENTS.

Closely spaced linear group of trees and shrubs located to the western edge of the drive. Maintained in the past on the east side by regular clipping back to the rear edge of the drive but substantially unmanaged in recent years, with dense vegetation partially restricting access to the root collars and stems of several trees. The sycamores are most probably young natural colonisation. The decaying remains of a fallen laburnum tree at the southern end.

G2/1 and **G2/2** - Both trees express reduced vitality

G2/3 - Extensive decay and hollowing at the base of the stem

MANAGEMENT.

Clear vegetation as necessary to facilitate a more detailed assessment of the lower stems and root collars of the sycamore and silver birch trees.

Monitor crowns of the two silver birch trees for signs of deterioration.

Maintain existing clearances along the driveway

G2/3 – Fell to ground level

G3	3 No. Beech 1 No. Ash	
AGE RANGE		Early mature to mature
HEIGHT		≤20 metres
STEM DIAMETER		380 - 730mm
DISTANCE FROM PROPERTY		4.5 metres
VITALITY		Moderate to good
POTENTIAL MATURE HEIGHT		≤23 metres (ash) (Cutler & Richardson 1989)
ROOTING DEPTH		Deep (ash), Shallow (beech) (Cutler & Richardson 1989)

COMMENTS.

Closely spaced linear group. The three beech trees at the western end are possibly the remnants of an old hedge, have potential for substantial future growth and are not wholly suited to long-term retention. Branches on the south side overhang the roof of the house by up to 3.0 metres and extend close to the roof and gutters and at the western end touch the roof and gutters of a single-storey brick outbuilding.

G3/1 – A partially occluded bark wound with minor decay of sapwood at the base of the stem on the west side

G3/2 - Extensive displacement of a block-pavior path adjacent to the base of the stem on the south side. The main stem bifurcates at a height of 3.0 metres, at which point there is an acute included-bark union of co-dominant stems with no visible signs of incipient failure. The tree expresses reduced vitality with thinning of foliage and dieback of twigs and sub-lateral branches in the upper crown

MANAGEMENT.

Prune on the south side by removal or shortening of lateral and sub-lateral branches to obtain 2.0 metres clearance from the roof and gutters of the house.

Prune on the south side to obtain 1.5 metres clearance from the roof and gutter of the outbuilding

G3/2 – Consider removal of a section of adjacent path and replace with a more flexible surface, e.g. gravel. (optional). Monitor included-bark union for signs of incipient failure. Monitor crown for signs of deterioration

G6	Beech Variegated sycamore Sycamore Pear Mixed ornamental conifers	<i>Aces pseudoplatanus 'Leopoldii'</i>
AGE RANGE		Early mature to mature
HEIGHT		≤22 metres
STEM DIAMETER		≤1000mm (estimated)
DISTANCE FROM PROPERTY		15 metres (estimated)
VITALITY		Dead to good
POTENTIAL MATURE HEIGHT		≤24 metres (sycamore) (Cutler & Richardson 1989)
ROOTING DEPTH		Deep (sycamore), Shallow/locally deep (pear), Shallow (beech) (Cutler & Richardson 1989)

COMMENTS.

Closely spaced linear group located to the eastern boundary of the rear garden. Several trees appear to be located off-site within the grounds of a neighbouring property, although the alignment of the boundary is not entirely clear in places. Includes the remnants of an overgrown holly hedge and an overgrown ornamental shrub bed. Dense ivy colonising several trees, which together with dense low vegetation restricts access to the lower stems and root collars of the majority of the trees. A small suppressed sycamore tree to the centre is almost dead

G6/1 – The main stem forks at a height of 4.0 metres, at which point there are several acute included-bark unions of co-dominant stems which could be assessed in detail due to dense vegetation and ivy

MANAGEMENT.

Sever and remove ivy to a height of 3.0 metres and clear low vegetation as necessary to facilitate a more detailed assessment of the lower stems and root collars of the mature trees

Fell the dying sycamore tree to the centre

G4	Beech Holly	
AGE RANGE	Young to early mature	
HEIGHT	≤18 metres	
STEM DIAMETER	≤450mm	
DISTANCE FROM PROPERTY	5 metres (estimated)	
VITALITY	Moderate to good	
POTENTIAL MATURE HEIGHT	≤20 metres (beech) (Cutler & Richardson 1989)	
ROOTING DEPTH	Shallow (beech), no data (holly) (Cutler & Richardson 1989)	

COMMENTS.

Closely spaced group

G4/1 and G4/2 - Are heavily suppressed

G4/3 - Is partially suppressed with crown biased to the south. Branches on the south-west side extend close the roof of the house. The tree has potential for substantial future growth and is not wholly suited to long-term retention

MANAGEMENT.

Prune on the south-west side to obtain 2.0 metres clearance from the house

G5	Holly Yew Sycamore	<i>Taxus baccata</i>
AGE RANGE	Young to semi-mature	
HEIGHT	≤15 metres	
STEM DIAMETER	≤300mm	
DISTANCE FROM PROPERTY	3.2 metres	
VITALITY	Good	
POTENTIAL MATURE HEIGHT	≤24 metres (sycamore) (Cutler & Richardson 1989)	
ROOTING DEPTH	Deep (sycamore), no data (holly & yew) (Cutler & Richardson 1989)	

COMMENTS.

Closely spaced group. The sycamore is most probably natural colonisation. The remains of a small, dead yew tree to the centre and a topiarised yew tree at the south-western end

G5/1 - Extensive decay of the lower stem and buttress roots

G5/2 - heavily suppressed with crown biased to the west and growing through the lower crown of an adjacent beech tree

MANAGEMENT.

G5/1 – fell to ground level

G5/2 – consider removal and poison stump to prevent re-growth (optional)

G7	Ash Sycamore Pear	
AGE RANGE		Young to mature
HEIGHT		≤22 metres
STEM DIAMETER		≤800mm (estimated)
DISTANCE FROM PROPERTY		50 metres (estimated)
VITALITY		Good
POTENTIAL MATURE HEIGHT		≤24 metres (sycamore) (Cutler & Richardson 1989)
ROOTING DEPTH		Deep (sycamore and ash), Shallow/locally deep (pear) (Cutler & Richardson 1989)

COMMENTS.

Closely spaced group located to the southern boundary of the rear garden, several of which appear to stand off-site, although the precise boundary line is unclear in places. Dense vegetation and ivy restrict access to most of the trees

G7/1 - Extensive decay and hollowing of the lower stem, although no visible signs of mechanical instability were noted

G7/2 - Dense ivy colonising stem and lower crown. Sporophores of Dryads saddle decay fungus (*Polyporus squamosus*) on the north side of the stem up to a height of 4.0 metres

G7/3 - Large branch stub at a height of 7.0 metres where a substantial primary branch recently failed

G7/4 - Signs of past small diameter branch failures throughout the crown, with several partially failed and failed branches remaining hanging in the crown

MANAGEMENT.

Determine ownership.

Sever and remove ivy to a height to 3.0 metres and clear low vegetation as necessary to facilitate a more detailed assessment of the lower stems and root collars of the mature trees

G7/1 – Monitor lower stem for signs of mechanical instability

G7/2 – Assess extent of decay to the stem

G7/3 and **G7/4** – Monitor for further branch failures

G8	Ash	
	Hawthorn	
	Elder	<i>Sambucus nigra</i>
	Sycamore	
	Apple	<i>Malus sp</i>
	Holly	
	Pear	
	Yew	
	Kanzan cherry	<i>Prunus 'Kanzan'</i>
AGE RANGE		Young to mature
HEIGHT		≤13 metres
STEM DIAMETER		≤500mm (estimated)
DISTANCE FROM PROPERTY		0 metres
VITALITY		Dead to good
POTENTIAL MATURE HEIGHT		≤24 metres (sycamore) (Cutler & Richardson 1989)
ROOTING DEPTH		Deep (ash & sycamore), Moderately deep (hawthorn), Shallow/locally deep (apple and pear), Shallow/moderate (cherry), no data (elder, holly and yew) (Cutler & Richardson 1989)

COMMENTS.

Closely spaced linear group to the western boundary of the rear garden. The holly and hawthorn to the southern half are most probably the remnants of an overgrown boundary hedge. The young sycamore, ash and elder are most probably natural colonisation. The southern half of the group is extensively overgrown and substantially unmanaged for many years with dense vegetation partially restricting access to several trees. There is a topiarised yew tree at the northern end and a partially maintained boundary hedge of cherry laurel and holly to the northern end

G8/1 - Decay to the lower stem, but no visible signs of mechanical stability

G8/2 - Dead

G8/3 - Partially failed at the base many years ago, with the stem growing horizontally along the ground

MANAGEMENT.

Clear low vegetation as necessary to facilitate a more detailed assessment of the lower stems and root collars of the mature trees

G8/1 - Monitor lower stem for signs of mechanical instability

G8/2 - Fell

6. RECOMMENDATIONS

- 6.1** Recommended works are listed with the tree descriptions in Section 4.0. Works are listed as 'optional' are at the discretion of the client having first considered all matters raised within the report.
- 6.2** A guide price for the implementation of the recommended arboricultural works is £400 to £600 plus vat. This is a guide only and the client is advised to obtain competitive quotations.
- 6.3** All tree pruning and felling works should be carried out by suitably qualified personnel and at least to the standards set out in BS3998 (1989). All personnel should use personal protective equipment to the minimum current CE and UK industry standards and in accordance with current industry codes of practice. All pesticides should be applied by certificated personnel in accordance with The Control of Pesticides Regulations.
- 6.4** The client should notify Cheshire Woodlands of any additional defects or signs of debility identified during tree climbing or other arboricultural operations carried out subsequent to this report, or otherwise identified to the client.
- 6.5** Consideration should be given to the presence of nesting birds when clipping hedges and pruning or removing trees. Trees and hedges should be inspected for nests prior to pruning or removal and any work likely to destroy or disturb inhabited nests should be avoided until the young have fledged.
- 6.6** Hedges of most species provide valuable nesting sites for a wide range of birds and clipping should be avoided during the months March to September.
- 6.7** All personnel working with or in the trees should be vigilant and mindful of the possible presence of roosting bats. A competent ecologist should investigate any indication that trees on the site are used by bats.
- 6.8** Where trees are identified as being the responsibility of third parties, the client should, through or following consultation with a solicitor, formally notify the respective land owners/tenants of their
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5.3 Damage to ancillary structures such as boundary fences and paths as described in section 4.0 should be evaluated by the client and balanced against the amenity value of the individual tree. In the long-term it would be more acceptable to retain a tree of high amenity value and monitor and repair an adjacent structure as necessary. Conversely a less significant tree may be removed and damage to the structure limited. This is an area where a decision must be made by the property owner having evaluated the points discussed above and based upon financial-v-aesthetic considerations.

5.4 We have not been made aware of any existing damage or blocking of drains that could be attributed to trees. Damage to drains as a direct result of tree action is not a common occurrence. Trees have the potential to cause damage to drain runs and inspection chambers via two separate modes of action.

- A tree stem or root adjacent to a drain, inspection chamber or other structure may, due to annual diameter growth increment, exert pressure upon the drain or structure and cause disruption.
- A leaking or defective drain is a source of moisture. As soil around a drain attains moisture content greater than that of the surrounding soil, tree root activity may increase at that location. As the soil then begins to dry, tree roots will grow towards the moisture source and may enter the drain often resulting in blockage.

5.5 The dynamic nature of trees is such that it cannot be determined whether a tree will or will not fail, in part or in whole, at any given time. Stability and health of trees is affected by a host of environmental factors, which are assessed when evaluating tree condition. Should a tree, or tree part, fail and/or cause damage or injury, a land owner/tenant may be held liable. It is therefore essential that a land owner/tenant has his/her trees inspected on a regular basis. Failure to establish the condition of trees in your ownership and to take appropriate action to ensure their safety may be viewed as negligence by a court of law. Trees standing within the curtilage of a neighbouring property are the responsibility of the neighbour.

H1	Privet
HEIGHT	2.5 metres
DISTANCE FROM PROPERTY	24 metres (estimated)
VITALITY	Good
POTENTIAL MATURE HEIGHT	No data (Cutler & Richardson 1989)
ROOTING DEPTH	No data (Cutler & Richardson 1989)

COMMENTS.

Length of maintained boundary hedge fronting the public highway

MANAGEMENT.

Clip back to solid form and maintain thereafter by not less than annual clipping

H2	Holly Hawthorn
HEIGHT	≤1.5 metres
DISTANCE FROM PROPERTY	5 metres
VITALITY	Moderate
POTENTIAL MATURE HEIGHT	≤10 metres (hawthorn) (Cutler & Richardson 1989)
ROOTING DEPTH	Moderately deep (hawthorn), no data (privet) (Cutler & Richardson 1989)

COMMENTS.

Short length of partially maintained internal hedging

MANAGEMENT.

Maintain at current dimensions by annual clipping

H3	Holly Privet Leyland Cypress
HEIGHT	≤3 metres
DISTANCE FROM PROPERTY	9 metres (estimated)
VITALITY	Good
POTENTIAL MATURE HEIGHT	≤22 metres (cypresses) (Cutler & Richardson 1989)
ROOTING DEPTH	Moderately deep (cypresses), no data (holly and privet) (Cutler & Richardson 1989)

COMMENTS.

Length of maintained party boundary hedge, which is slightly sparse at the southern end

MANAGEMENT.

Clip back to solid form and maintain thereafter by not less than annual clipping

A1	Mixed herbaceous plants Mixed ornamental shrubs Pear
AGE RANGE	Mature (pear)
HEIGHT	≤10 metres
DISTANCE FROM PROPERTY	0 metres
VITALITY	Good
POTENTIAL MATURE HEIGHT	≤12 metres (Cutler & Richardson 1989)
ROOTING DEPTH	Shallow/locally deep (pear) (Cutler & Richardson 1989)

COMMENTS.

Comprises several ornamental shrub beds sub-dividing the lawns within the formal part of the rear garden and a single mature pear tree at the southern end.

MANAGEMENT.

No work required

5. DISCUSSION & CONCLUSIONS

- 5.1** Tree related subsidence damage to buildings is a complex issue involving a number of interacting factors, most notably soil type, weather conditions, building foundation depths and tree species and distance from the structure. However, tree related subsidence damage is only a problem on shrinkable (most frequently clay) soils, which shrink as they dry and may swell when they subsequently rehydrate. Structures bearing onto shrinkable soils may move and be susceptible to damage as the soil volume fluctuates.
- 5.2** Taking into consideration the sandy, free-draining nature of the local soils as identified at the trial holes and by the British Geological Survey data, and assuming that soil type and conditions beneath the property are consistent with those identified at the trial holes, I am of the opinion that the trees do not have the potential to significantly influence soil volume beneath the subject property by water abstraction.

duty of care with regard to the property of others and the need for inspection and appraisal of their trees on a regular basis.

- 6.9** The trees should be inspected on a two yearly basis unless otherwise stated in the individual tree listings.

REFERENCES.

BS3998 (1989). Recommendations for Tree Work. British Standards Institute, London

Cutler, D. F. & Richardson, I. B. K. (1989) Tree Roots and Buildings. Longman Scientific & Technical, Harlow.

