

SJ Stephens Associates

ARBORICULTURAL, LANDSCAPE & MANAGEMENT CONSULTANTS

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Tree Hazard Assessment

At:-

Westfield 15 Kidderpore Avenue London NW3

On behalf of:-

West Field Management Company (UK Ltd) c/o Faraday Property Management Ltd 52-54 High Holborn, London WC1V 6RL

Prepared by:

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Survey Date: Report Date: Project no: 25th May 2016 18th August 2016 385

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1 BACKGROUND

- **1.1** This report has been prepared by SJ Stephens Associates as per instructions from Ian Gilbert of Faraday Property Management Ltd.
- **1.2** The site contains extensive gardens, with many large, mature trees which give the gardens their character, but which also create a potential hazard.
- **1.3** Under the Occupiers Liability Acts (1957 and 1984), an owner, or occupier, has a duty of care for the reasonable safety of people and property. Whether the owner or occupier takes responsibility depends on particular circumstances. However, in this situation it is more likely that the occupier would be deemed to have responsibility. This duty of care extends to those who may come onto the property and for adjoining property that might be affected as a consequence of the structural failure of trees.
- **1.4** The measures which the law might expect an owner to employ to ensure *reasonable* safety is not a "black and white" issue. However, case law suggests that for an estate where grounds staff are employed, there should be a systematic tree hazard assessment system in place. In the event of an accident, the court would want to see documented evidence that appropriate systems were in place and were complied with.
- **1.5** The assessment of risk is based on three factors:
 - The level of occupancy within striking range ie. the "target"
 - The likelihood of failure
 - The size of the tree/tree part that is at risk of failing

- **1.6** Trees on the site are covered by a Tree Preservation Order enforced by the London Borough of Camden. This requires that permission is sought from the council for any proposed tree work.
- **1.7** An initial tree survey was carried out by SJ Stephens Associates and a report, dated 3rd April 2008, was produced. As a result of this report, internal decay detection scans were taken of a number of trees and tree surgery works were undertaken.
- **1.8** Further site surveys were undertaken on 6th March 2009, 13th March 2009, 28th April 2010, 28th April 2011, 3rd April 2012, 30th April 2013, 1st April 2014, 23rd March 2015 and the most recent survey on 25th May 2016. These surveys re-examined every tree, checked that previous works proposed have been completed and, where necessary, proposed further action.
- **1.9** Tree surveys were undertaken, and this report has been prepared, by Simon Stephens MA Oxon, Dip Arb (RFS), MArborA, a Registered Consultant with the Arboricultural Association, with over 20 years relevant experience.

2 SURVEY DETAILS AND SCOPE

- **2.1** The Tree Survey included all mature trees on site, and any that could potentially present a hazard within the next 5 years.
- **2.2** Tree inspection took place from ground level with the use of binoculars, sounding hammer and metal probe using the Visual Tree Assessment method (Mattheck & Breloer 1994). The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could increase the risk of structural failure were noted.
- **2.3** Trees details have been added to plan data purchased from Ordnance Survey, which is included as Appendix A. Tree positions are approximate, fixed by reference to the plan provided or by pacing distances on site from features shown on the plan. The following information was recorded for each tree, and is shown in the Tree Schedule included as Appendix B:
 - Number: an identity number for each tree, which cross references locations shown on the plan with the schedule in Appendix B. Where possible, numbers used on the original layout plan have been used. For trees not included on the plans provided, numbers have been allotted starting with no.200. Where a number of trees, normally of the same species, are located close together and are similar in character and requirements, they have been treated as a Group under a single Number, prefixed with a "G".
 - **Species**: common name.
 - **Tree height**: approximate height in metres.
 - **Stem diameter**: approximate diameter in millimetres, taken at 1.5mabove ground. Where there are a number of stems, the diameter has been taken just above the root flare.

- Crown diameter: approximate diameter of the crown in metres.
- Age class: Young, Middle aged, Mature, Over-mature, Veteran.
- **Physiological Condition**: Good, Fair, Poor, Dead.
- **Condition**: features that affect the safe useful life expectancy and amenity of the tree, including the presence of decay or any physical defect.
- **Management Recommendations**: recommendations to ensure the health and safety of the tree, within the future development.
- Estimated Remaining Contribution: <10 years, 10-20 years, 20-40 years, >40 years.
- **Category grading**: tree classification taken from BS 5837:2012, Trees in Relation to Construction (see Appendix C for details), as follows:
 - Category U: trees with less than 10 years life expectancy, normally recommended for removal (Red)
 - Category A: high quality trees, able to make a substantial contribution for at least 40 years. (Green)
 - Category B: moderate quality trees, able to make a significant contribution for at least 20 years. (Blue)
 - Category C: low quality, in adequate condition to remain for at least 10 years, or young trees <150mm stem diameter.(Grey/Uncoloured)

3 SURVEY LIMITATIONS

- **3.1** No internal decay devices, or other invasive tools to assess tree condition, were used.
- **3.2** No soil excavation or root inspection was carried out.
- **3.3** This survey has not considered the effect that trees or vegetation may have on the structural integrity of future building through subsidence or heave.

4 FINDINGS AND PROPOSALS

4.1 Overview

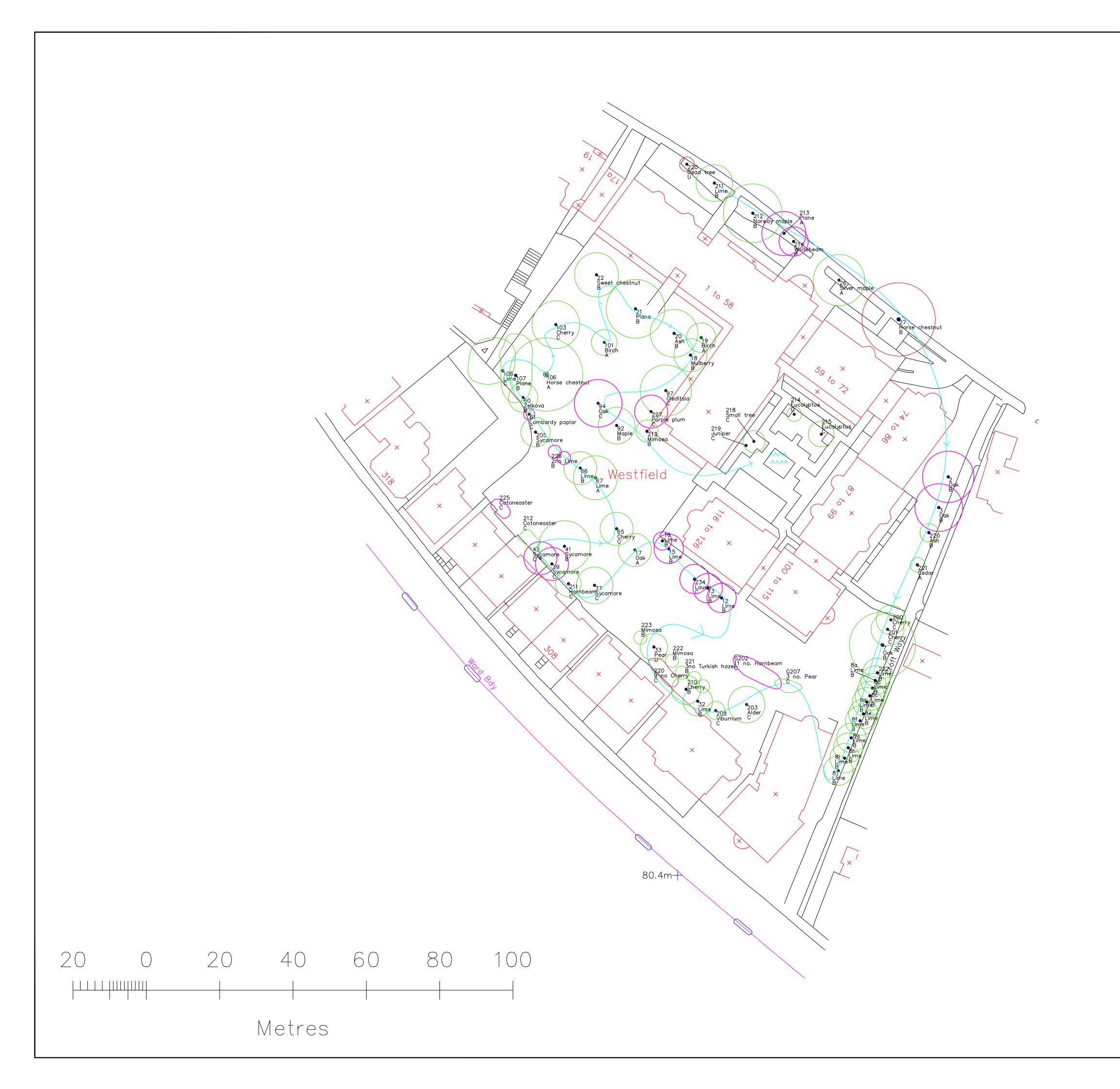
- 4.1.1 All trees are in fair or good condition. There is a good age spread of trees, with some fine specimens.
- 4.1.2 Tree work proposals are detailed in the Tree Schedule attached as Appendix B. Work proposed for 2016 is classified as Low or Medium, rather than High, priority.

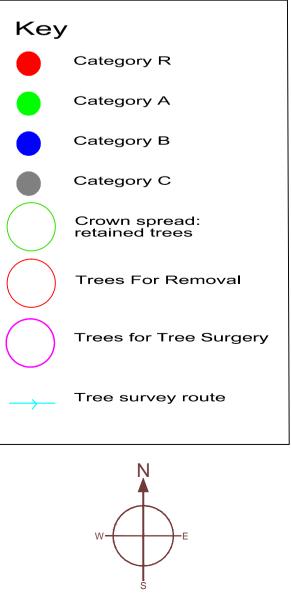
4.2 2016 Tree Work Proposals

- 4.2.1 Details of tree condition and proposed tree works are included in the Tree Schedule included as Appendix B.
- 4.2.2 Routine pruning of a number of trees has been specified together with re-pollarding of a number of lime trees and removal of a dying tree (T220).
- 4.2.3 Patches of basal decay were found around the base of the fine Horse chestnut (T106). An internal decay detection test was therefore undertaken with the results included as Appendix D. This showed that there is basal decay present, but, at present, this is not so extensive as to justify remedial action.
- 4.2.4 A similar test was undertaken during 2008 for the roadside Horse chestnut (T27). A further test was undertaken during July 2016, with results attached in Appendix E. This shows that the decay has developed over the last 8 years to point where the tree now needs to be removed.
- 4.2.5 Tree works are prioritised as of Low, Medium or High priority. It is recommended that works should be completed within the following timescales:-
 - High: within 3 months
 - Medium: within 6 months
 - Low: within 12 months
- 4.2.6 Tree works should be completed within the following timescales:-
 - Low priority by 31/05/2017
 - Medium priority by 30/11/2016
 - High priority by 18/11/2016
- 4.2.7 To assist with budgeting, the estimated cost of tree works proposed has been included, totaling £3,528, which is based on a 2man gang charging £85/hour. This sum may vary depending, particularly, on access and treatment of arisings.
- 4.2.8 All tree work should be undertaken to the standards set out in BS 3998:2010 British Standard recommendations for Tree Work.
- 4.2.9 It is recommended that an Arboricultural Association Approved Contractor is used for tree surgery work. See <u>www.trees.org.uk</u> for details.

4.3 Recommendations

- 4.3.1 Within the next 6 months, it is recommended that:
 - The Westfield Management Committee confirm works required.
 - This report is then revised as necessary and submitted to Camden with an application to carry out all works recommended.
 - Subject to approval, these works are undertaken.
- 4.3.2 To be able to demonstrate that an appropriate Tree Hazard Assessment system is in place, records must continue to be kept detailing inspections carried out and action taken.
- 4.3.3 The tree schedule and plan attached to this report (appendices A and B) should continue to be used as a base to record relevant information over time to demonstrate a systematic approach.
- 4.3.4 The annual tree inspection, as instructed, should be undertaken by SJ Stephens Associates to:-
 - Review tree works undertaken
 - Re-inspect all trees
 - Provide a report, updating the tree schedule and plan to record works undertaken and any further recommendations.





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job title WESTFIELD, 15 KIDDERPORE AVE, LONDON NW3	
drawing title TREE HAZARD ASSESSMENT PLAN	
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REVISIONS

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	hours	
					Ormi				As	ssumed 2 m	an gang ho	urly rate	£ 85
T220	Dying tree	7	130	4	Semi mature	Dead	25.5.16 - almost entirely dead	Remove	<10	U		1.5	£ 128
T211	Lime	13.0	320	10	Semi- mature	Good	30.04.13: Good form and structure, but beginning to obscure street light. 01.04.14: Crown lifted during 2013 - no further work required. 23.3.15: No work required. 25.5.16 - No work required.		20-40	В		0	£O
T212	Norway maple	17.0	750	16	Mature	Good	30.04.13: Occasional dead branches. Occasional decay points. 01.04.14: Deadwood removed during 2013 - no further work required. 23.3.15: No work required. 25.5.16 - No work required.		20-40	В		0	£0
T213	Plane	13.5	280	13	Early mature	Good	30.04.13: Reasonable form and structure. 01.04.14: No work required - consider crown reduction during 2015. 23.3.15: No work required. 25.5.16 - Lateral branches becoming over extended.	Lift crown to give 3m clearance over pavment, 5m clearance over road and 3m over lawn. Reduce canopy spread over road and towards buildings by 3.5m.	>40	A	Medium	1.5	£ 128
T214	Whitebeam	8.0	200	8		Good	required - Int crown during 2015. 23.3.15: No work pavem required. 25.5.16 - Obstructing lamp. 03.04.08: Good form and structure. Minor deadwood,	Lift crown to provide 3.5 m clearance over pavement and lawn.	15-30	В	Medium	0.5	£ 43
T26	Silver maple (Acer saccharinum)	14.0	400	14	Middle aged	Good	but not a hazard. 13.03.09 : No action required. 28.04.10 : No action required - consider crown reduction during 2011. 28.04.11 : No action required. 03.04.12 : Growing quickly - canopy only 2m from building. 30.04.13 : 15% crown reduction undertaken during 2012. No work required. 01.04.14 : No work required. 23.3.15 : No work required. 25.5.16 - No work required.		20-40	A		0	£0
T27	Horse chestnut (Ae <i>sculus</i> <i>hippocastanum</i>)	20.0	1000	20	Mature	Good	 103.04.08: Main stem leans to east and bifurcates at 2.4m. Main stem is growing into brick wall to east. Water filled cavity to west at 2m just below the fork, with at least 400mm decay, stretching down into main stem. Further cavity at 3.5m in northern stem. 23.04.08: Internal Decay Detection undertaken. 13.03.09: 30% crown reduction completed during 2008. Comparison with photo taken in April 2008 shows that the lean of the tree has not increased. A brick wall is out of line - photos taken to be able to compare if this is increasing in future. Minor diagonal crack in wall seen. 9.02.10: Inspected with Michael Barnett - crown reduction works recommended and instructed. 28.04.11: No work required. 30.04.13: Showing good vigour, following reduction, and putting on extensive new growth. 01.04.14: Crown reduced by 15% and two Cobra braces installed since last inspection - no work required. 23.3.15: Only modest regrowth since previously reduced. No work required. 25.5.16 - Vigorous regrowth since previous crown reduction. Internal decay detection test undertaken, as per report attached, showing extensive decay. 	Remove	15-30	В	High	8	£ 680

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	hours	
T2	Oak (Quercus robur)	19.0	750	14	Mature	Fair	03.04.08: Reduced in the past. Deadwood of up to 100mm. Major limb removed to west at 6m. No decay to date. Minor cavity opening at 6m to south. 13.03.09: Deadwood removed during 2008. 28.04.10: No work required. 28.04.11 Minor deadwood, but not a sufficient size to create a hazard. No work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: Minor deadwood at crown apex, but no action required. 23.3.15: Minor deadwood over Croft Way, but not big enough to present a hazard - no work required. 25.5.16 - Occasional dead wood, but good overal vigour.	Remove deadwood	<u> </u>	B	An gang ho	1.5	£ 85 £ 128
тз	Oak (Quercus robur)	17.0	750	13	Mature	Fair	 03.04.08: Reduced in past. Minor deadwood, though not causing a hazard. 13.03.09: No work required. 28.04.10: No work required. 28.04.11: Minor deadwood, but not a sufficient size to create a hazard. No work required. 03.04.12: No work required. 30.04.13: No action required. 01.04.14: Storm damage during October 2013 - crown reduction undertaken. No further work required. 23.3.15: Minor deadwood, but not large enough to be a hazard - no work required. 25.5.16 - Occasional dead wood, but good overal vigour. 		>40	В	Medium	1.5	£ 128
T220	Ash (Fraxinus excelsior)	11.0	160	5	Semi- mature	Good	23.3.15: Slight lean to west, but showing good vigour. No work required. 25.5.16 - No work required.		>40	В		0	£0
T221	Cedar	9.0	140	4	Semi- mature	Good	23.3.15: Good quality tree showing good vigour. 25.5.16 No work required.	-	>40	А		0	£0
T200	Cherry (Prunus cerasifera)	8.0	300	8	Mature	Fair	 03.04.08: Multi-stem from base. Stem to northwest cracking and likely to fail. 13.03.09: Reduced during 2008, no further work required. 28.04.10: No work required. Consider further reduction during 2011. 28.04.11 No work required, consider further reduction during 2012. 03.04.12: Extensive fresh growth, putting stress on crack. 30.04.13: Crown reduced during 2012. 01.04.14: Crown reduced during 2013 - no further work required. 25.5.16 - Crown reduced since last inspection. 		10-20	С		0	£O
T201	Cherry (Prunus cerasifera)	8.0	300	9	Mature	Fair	03.04.08: Twin stem from base. Short lived variety. Re- inspect regularly. 13.03.09: Fork, with included bark at base is a weakness, but leave at present untill T200 has regrown. 28.04.10: No work required. 28.04.11: Reduce/thin crown by 20%, to reduce weight on basal fork. 03.04.12: Pruned during 2011, no work required. 30.04.13: No action required. 01.04.14: No work required. 23.3.15: Growing vigorously and putting increased stress on fork. Concerns regarding subsidence to property the other side of Croft Way. 25.5.16 - Crown reduced and ivy severed since last inspection.		10-20	С		0	£0

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	hours	
Τ7	Oak (Quercus robur)	22.0	850	18	Mature	Fair	 03.04.08: Reduced in the past. Minor deadwood and broken branch stubs - some over footpath. 13.03.09: Deadwood removed during 2008. Good vigour. 28.04.10: No work required. 28.04.11: Good vigour, no work required. 03.04.12: No work required. 30.04.13: Crown beginning to obscure lamp. 01.04.14: Minor pruning undertaken during 2013 - no further work required. 23.3.15: Minor deadwood. Subsidence concerns regarding property other side of Croft Way. Attractive tree. High amenity value. 25.5.16 - Crown reduced since last inspection. 		A:	B	an gang ho	urly rate	£ 85 £ 0
T222	Lime	11.5	140	7	Semi- mature		23.3.15 : Good quality tree, but growing at the edge of the canopy of T7. 25.5.16 - No work required.		>40	В			
T8B T8C T8D T8E T8F T8G T8H T8I	Lime (Tilia x europaea) Lime (Tilia x europaea)	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	300 300 300 300 300 300 300 300 300 300	8 8 8 8 8 8 8 8 8 8 8 8 8	Mature Mature Mature Mature Mature Mature Mature Mature Mature Mature	Fair Fair Fair Fair Fair Fair Fair Fair	03.04.08: Regularly pollarded at 6m. Minor pockets of decay. 13.03.09: Lateral branches now within only 1m of building. 28.04.10: Lateral branches touching guttering. 28.04.11: Trees pollarded during 2010. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: Approx 3.5m fresh growth. 25.5.16 - Pollarded since last inspection.		15-30 15-30 15-30 15-30 15-30 15-30 15-30 15-30 15-30 15-30	B B B B B B B B B B B B B B		0	£O
	3 no. Pear	5.0	60-90	2.5	Young	Good	28.04.10: Good quality young trees. 28.04.11: Minor bark damage to eastern tree. No work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 - No work required.						
G202	8 no. Hornbeam	5.0 - 14.0	80 - 200	3.0 - 8.0	Middle aged	Fair	03.04.08 : Tree surgery carried out Spring 2008. 13.03.09 : No action required. 28.04.10 : No work required. 28.04.11 : Two westernmost trees have extensive patches of dead bark around base and thinning foliage. 5th tree from western end shows same basal bark death. Possibly Honey fungus. 03.04.12 : Diseased trees removed during 2011. 30.04.13 : Extensive bark damage to small tree - 4th from western end. 01.04.14 : Small dying tree removed during 2013 - no further work required. 23.3.15 : Patches of dead bark at base of several trees. No work required. 25.5.16 - 2 trees dead, remaining 5 showing reasonable vigour at present.	Remove 2 dead trees	10-20	С	Medium	1.5	£ 128
T203	Cut leaf alder (Alnus glutinosa Imperialis)	12.0	200	10	Middle aged	Fair	03.04.08: Twin stem from base, with a tight fork - a structural weakness limiting life expectancy. 13.03.09: No work required. 28.04.10: No tree work required. 28.04.11: No action required. 03.04.12: Secondary stem removed during 2011. 30.04.13: No action required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 - Will ecome overlrge - consider reduction in 2017.		5-15	С		0	£O

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	hours	
T208	Viburnum	5.0	450	9.00	Mature	Good	28.04.10: Foliage now within 0.5m of building and cutting out light. 28.04.11: No works undertaken during 2010. No works required. 03.04.12: Crown lifting carried out during 2011. 30.04.13: No action required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 -		A:	c	an gang ho	urly rate	£85 £0
T32	Lime <i>(Tilia x europaea)</i>	14.5	650	8	Mature	Fair	No work required. 103.04.08: Previously topped at 9m. Growing only 4m from building. Branches hitting building. 13.03.09: Re- pollarded during 2008. 28.04.10: Basal growth re- growing. 28.04.11: Basal growth roughly cut, leaving 200/500mm stems. 03.04.12: 150/300mm basal stems remain. 30.04.13: Basal growth removed during 2012. No action required. 01.04.14: Branches almost hitting building. 23.3.15: Pollarded during 2014. No work required. 25.5.16 - No work required.		20-40	В		0	£0
T210	Cherry	7.0	150	8	Young	Good	30.04.13: Attractive tree, but with branches hitting building. 23.3.15: Pruned away from building during 2014. No work required. 25.5.16 - No work required.		15-30	В		0	£0
G220	9 no Cherry	7.0	75-100		Semi- mature	Fair	25.5.16 - P reviously topped at 2m. Low quality - Will cut out light from building.	Remove	10-20	С	Low	1.5	£ 128
G221	3 no Turkish hazel (Corylus colurna)	4-6	60-100		Semi- mature	Good	25.5.16 - Reasonable form structure and vigour.		20-40	В		0	£0
T232	Mimosa	5.0	150	5	Semi- mature	Good	25.5.16 - Reasonable form structure and vigour.		15-30	В		0	£0
T233	Mimosa	5.0	150	5	Semi- mature	Good	25.5.16 - Reasonable form structure and vigour.		15-30	В		0	£0
T33	Pear (Pyrus communis)	11.0	400	7.5	Mature	Fair	03.04.08 : Previously reduced, but has developed an attractive crown shape. Patches of dead bark and decay throughout crown. 13.03.09 : Crown reduced during 2008. Decayed remains of fungal brackets found at base identification not possible. Sounding hammer did not reveal any hollowness. 28.04.10 : No signs of decay developing - no work required at present. 28.04.11 : No work required. 03.04.12 : Minor patches of dead bark around base. Attractive blossom. No work required. 30.04.13 : No work required. 21.04.14 : No action required. 23.3.15 : No work required. 25.5.16 - Patches of dead bark with undering white mycelium around base. Honey fungus likely. Likely to require emoval in next 5 years.		<10	U		0	£O
T12	Lime (<i>Tilia x europaea</i>)	15.0	550	8	Middle aged	Fair	03.04.08: Pollarded at 7m. 13.03.09: Re-pollard during winter 09/10 or 10/11. 28.04.10: Branches now hitting building. 28.04.11: Pollarded during 2010. No work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. Consider re-pollarding during 2016. 25.5.16 - Re-pollard.	Pollard to previous points.	15-30	В	Medium	2	£ 170

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	Gang hours	Estimated cost
									A	ssumed 2 m	an gang ho	urly rate	£ 85
T13	Lime (<i>Tilia x europaea</i>)	15.0	550	8	Middle aged	Fair	03.04.08: Pollarded at 7m. 13.03.09: Re-pollard during winter 09/10 or 10/11. 28.04.10: Branches now hitting building. 28.04.11: Pollarded during 2010. No work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. Consider re-pollarding during 2016.	Pollard to previous points.	15-30	В	Medium	2	£ 170
T234	Laurel	7.5	400	8	Mature	Good	25.5.16 - Becoming over large and shading balcony and shrub bed. Could consider removal.	Reduce by 25%.	10-20	С	Medium	2	£ 170
T15	Lime <i>(Tilia x europaea)</i>	15.0	550	8	Middle aged	Fair	03.04.08 : Main stem has slight lean to west. 13.03.09 : Re-pollard during winter 09/10 or 10/11. 28.04.10 : Branches only 1m from guttering. 28.04.11 : Pollarded during 2010. No work required. 03.04.12 : No work required. 30.04.13 : Extensive basal growth. 01.04.14 : No work required. 23.3.15 : No work required. Consider re-pollarding during 2016.	Pollard to previous points.	15-30	В	Medium	2	£ 170
T16	Lime <i>(Tilia x europaea)</i>	15.0	320	5	Middle aged	Fair	03.04.08 : Main stem has slight lean to west. 13.03.09 : Re-pollard during winter 09/10 or 10/11. 28.04.11 : Pollarded during 2010. No work required. 03.04.12 : No work required. 30.04.13 : Extensive basal growth. 01.04.14 : No work required. 23.3.15 : No work required. Consider re-pollarding during 2016. 25.5.16 - Growing lover balcony.	Pollard to previous points.	15-30	В	Medium	2	£ 170
T17	Oak (Quercus robur)	13.0	210	9	Young	Good	13.03.09: No work required. 28.04.10: No tree work required. 28.04.11: Minor deadwood - not a hazard but unsightly. 03.04.12: Deadwood removed during 2011. No work required. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 - No work required, but consider reduction in next 3 years to maintain at approx current size.		>40	A		0	£O
T37	Sycamore (Acer pseudoplatanus)	14.0	400	10	Middle aged	Fair	Internation at approx current size. Tight fork, limiting life expectancy. 13.03.09: Wide spreading low laterals will cause extensive shading in future. 28.04.11: Crown lifted during 2010. No work required. 03.04.12: No work required. 03.04.13: No work required. 01.04.14: No work required. 25.5.16 - No work required.		10-20	С		0	£O
T211	Hornbeam (<i>Carpinus</i> <i>betulus</i>)	7.0	150	7	Semi- mature	Fair	01.04.14: Canopy within 0.3m of building and overshadowing patio. 23.3.15: Pruned during 2014. No work required. 25.5.16 - No work required.		10-20	С		0	£0
Т39	Sycamore (Acer pseudoplatanus)	17.0	350	9	Middle aged	Fair	03.04.08 : Main stem bifurcates at 1.6m, with a reasonable fork. Main stem leans to southeast. 13.03.09 : Will require reduction during the next 2-3 years. 28.04.10 : No work required. 28.04.11 : Branches close to touching building. 03.04.12 : Crown reduced during 2011. No work required. 30.04.13 : No work required. 01.04.14 : Litter suspended in canopy. 23.3.15 : Consider crown reduction during 2016. 25.5.16 - Becoming over large for location.	20% crown reduction. Remove lowest lateral branch.	10-20	С	Medium	2.5	£ 213

Image: constraint of the second of	Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	Gang hours	Estimated cost
T42Sycamore (Acer pseudopletanus)18.07009MatureFair Fairbark - mating breakout of stems possible. Phung candid out, Sping 2008. Growing in nised beding, 2013. No work pauliding, 2013. No work required 2.5, and thin 2011. No work required 3.04.12. Crown reduction.20k crown reduction.10-20CCMedium2.5£.213C2122 no. Cotoneester simonai6.0905MatureFairPrince developing out sing constrained constra				()		-				A	ssumed 2 m	an gang ho	urly rate	£ 85
ContractionContracti	T42		18.0	700	9	Mature	Fair	bark - making breakout of stems possible. Pruning carried out, Spring 2008. Growing in raised bed, 3m from building. 13.03.09 : Cable brace installed during 2008. 28.04.10 : No work required - consider crown reduction within 2011. 28.04.11 : Branches almost touching building. 03.04.12 : Crown reduced during 2011. No work required. 30.04.13 : No work required. 01.04.14 : Cobra brace checked during 2013 - no work required. 23.3.15 : No work required. 25.5.16 - Becoming over large for location.	20% crown reduction.	10-20	С	Medium	2.5	£ 213
G2252 no Cotoneaster simonsiii5.01505Early matureFair $relative25.16 - Stems growing out towards buildingremainder by approx 50%.Remove at mis over patio area. Reducememainder by approx 50%.10-20CLow0.5£ 43T41Sycamore (Acerpseudoplatanus)16.550014MatureFairrelative03.04.08: Main stem has slight leant to east andbifurcates at 3m, with a reseance buildingreseance during 2008. Extensive cavity to north,however sounding harmer indicates adequate soundwood to relating approx. 28.04.410: Low branchesrequired. 23.04.51: No workrequired. 23.04.51: No work required.28.04.11: No work required. 21.04.14: No workrequired. 23.3.15: On workrequired. 23.3.15: On workrequired. 23.3.15: On work required. 21.04.41: No workrequired. 23.3.15: On work required.20.04.13: No work required. 20.04.13: No work required.20.04.13: No work required.$	G212	2 no. Cotoneaster simonsii	6.0	90	5	Mature	Fair			10-20	С			£0
T41 Sycamore (Acer pseudoplatanus) 16.5 500 14 Mature Fair Fair Fair (Converteduced during 2008. Extensive cavity to north, however sounding hammer indicates adequate sound wood to retain at present. 28.04.10: Low branches removed during 2008. No further work required. 28.04.11: Appeard. 2004.01.12: No work required. 01.04.14: No work required. 03.04.08: Extensive decay in main stem to north. However a high amenity value and low risk of harm. 28.04.11: Stower a high amenity value and low risk of harm. 28.04.11: Stower a high amenity value and low risk of harm. 28.04.11: No work required. 23.3.15: Showing good viality despite extensive stem decay. 25.5.16 - Reduced since last inspection. 5-10 C 0 £ 0 TET Image (Jilia x auronase) 20.0 700 12 Mature 03.04.08: Dense ivy around base. Basal shoots. 13.03.09: Ivy severed and basal shoots. 13.03.09: Ivy severed and basal shoots. 20.0 A Image (Jilia x auronase. 20.00	G225	2no Cotoneaster simonsii	5.0	150	5		Fair			10-20	С	Low	0.5	£ 43
T65Cherry (Prunus sp.)11.03809MatureFairHowever a high amenity value and low risk of harm. 28.04.10: Decay developing slowly. 28.04.11: 15% crown reduction completed during 2010. No work required. 03.04.12: No work required. Out and only modest growth put on - no work required. 23.3.15: Showing good vitality despite extensive stem decay. 25.5.16 - Reduced since last inspection.5-10C0£ 0T67Lime (Tilia x europeae)20.070012MatureGood03.04.12: No work required. 03.04.11: No work required. 03.04.12: No work 2008. 28.04.11: No work required. 03.04.12: No workSecond20.40ALow0.5£ 43	T41		16.5	500	14		Fair	bifurcates at 3m, with a reasonable union. 13.03.09 : Crown reduced during 2008. Extensive cavity to north, however sounding hammer indicates adequate sound wood to retain at present. 28.04.10 : Low branches removed during 2009. No further work required. 28.04.11 : Appears to be losing vigour. Minor deadwood, but too small to be a hazard. 03.04.12 : No work required. 23.3.15 : Only moderate vigour, with minor deadwood. No work required. 25.5.16 - No work		20-40	В		0	£0
T67 Lime (Tilia x europaea) 20.0 700 12 Mature Good 2008. 28.04.11: No work required. 03.04.12: No work Persona composition around base 20.40 A Low 0.5 6.43	T65	Cherry (Prunus sp.)	11.0	380	9	Mature	Fair	However a high amenity value and low risk of harm. 28.04.10: Decay developing slowly. 28.04.11: 15% crown reduction completed during 2010. No work required. 03.04.12: No work required. 30.04.13: Prolific blossom, but basal decay continuing. Consider reduction in 2014. 01.04.14: No significant deterioration in decay and only modest growth put on - no work required. 23.3.15: Showing good vitality despite extensive stem		5-10	С		0	£0
decay, caused by compost. 23.3.15: As above. 25.5.16: As above.	T67	Lime <i>(Tilia x europaea)</i>	20.0	700	12	Mature	Good	13.03.09: Ivy severed and basal shoots removed during 2008. 28.04.11: No work required. 03.04.12: No work required. 01.04.14: Bark around base beginning to decay, caused by compost. 23.3.15: As above. 25.5.16: As above.	Remove compost from around base.	20-40	A	Low	0.5	£ 43
T66 Lime (<i>Tilia x europaea</i>) 20.0 650 9 Mature Pair 03.04.08: Previously topped at 5m, but a reasonable crown has grown out. 13.03.09: No work required. 20.40 B 0 £0 T66 Lime (<i>Tilia x europaea</i>) 20.0 650 9 Mature Fair 28.04.11: No work required. 20.04.04: Previously topped at 5m, but a reasonable crown has grown out. 13.03.09: No work required. 20-40 B 0 £0 21.0 10.04.14: No work required. 25.5.16: No work required. 25.5.16: No work required. 20-40 B 0 £0	T66	Lime (<i>Tilia x europaea</i>)	20.0	650	9		Fair	crown has grown out. 13.03.09: No work required. 28.04.11: No work required. 03.04.12: No work required. 01.04.14: No work required. 23.3.15: No work required.		20-40	В		0	£0
G226 2no Lime 10.0 180 8 Semi Good 25.5.16 - Low branches approx 1.6m over path. Remove low hanging branches to give 3m crown >40 B Low 0.5 £43	G226	2no Lime	10.0	180	8	Semi mature	Good	25.5.16 - Low branches approx 1.6m over path.	Remove low hanging branches to give 3m crown clearance.	>40	В	Low	0.5	£ 43

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	Gang hours	Estimated cost
								A	ssumed 2 m	an gang ho	urly rate	£ 85
T205	Norway maple	15.0	190	8	Middle aged	Good	03.04.08: Bifurcates at 2.2m, with a reasonable union. 13.03.09: No work required. 28.04.11: No work required. 03.04.12: No work required. 30.04.13: Adaptive growth to fork. No work required. 01.04.14: No work required. 23.3.15: No work required. 23.3.15: No work required. 25.5.16: No work required.	20-40	В		0	£O
T61	Lombardy poplar (Populus nigra italica)	24.0	200	3	Middle aged	Fair	03.04.08: Low amenity value. 13.03.09: Inappropriate species for location. 28.04.11: No work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16: Becoming over tall - possibility of basal hollowing.	5-15	с	Medium	2.5	£ 213
Т60	Zelcova (Zelcova carpinifolia)	13.0	200	8	Middle aged	Fair	03.04.08: Graft point at 1.6m. Minor deadwood. 28.04.10: Minor dieback - no work required. 28.04.11: No work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16: No work required.	15-30	В		0	£O
T107	Plane (Platanus x hispanica)	20.0	750	17	Mature	Fair	03.04.08: Previously reduced to 7m, but a reasonably structured crown has grown out. Occasional deadwood of up to 75mm diameter. Main stem has slight lean to north. Basal swelling could be as a result of internal decay - though not indicated by sounding hammer. 23.04.08: Internal Decay Detection undertaken: stem sound. 13.03.09: No work required. 28.04.10: Soil disturbance around base. 28.04.11: Crown reduced during 2010, no work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: Dead branch at 4m, growing to south, towards T60. 23.3.15: Dead branch removed during 2014. No work required. 25.5.16: Dead branch removed since last inspection.	15-30	В		0	£O

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	hours	
T108	Lime cultivar	22.0	750	15	Mature	Fair	03.04.08: Grafted variety - with graft at 750mm above ground. Below graft point, diameter is approx. 550mm & above graft point it is approx. 750mm. Majority of weight is to west, over children's playground. Decay entering main stem at 1.8m to east. Extensive stress on graft point, which sometimes can fail. 23.04.08 : Internal Decay Detection undertaken - no decay found. 13.03.09 : 25% crown reduction undertaken during 2008. Stress on graft point reduced, but still all remaining weight over playground. Carry out further crown reduction in 2-3 years when tree had re-established vigour. 28.04.10 : Soil disturbance around base. Consider crown reduction during 2011. 28.04.11 : No work required, consider crown reduction during 2012. 03.04.12 : Dead branch (150mm diameter) over playground. Specify crown reduction during 2013. 30.04.13 : Dead branch removed during 2012. 01.04.14 : Crown reduced/thinned during 2013. 23.3.15 : Crown lifting carried out during 2014. No work required. 25.5.16 - Vigorous growth - consider crown reduction in 2017		A 10-20	C	an gang ho	urly rate	£ 85 £ 0
T106	Horse chestnut (Aesculus hippocastanum)	24.0	1400	20	Mature	Fair	03.04.08 : Recent tree surgery leaving branch scars of up to 300mm, which are liable to cause decay in the future. Good form and structure. 13.03.09 : No work required. 28.04.10 : Showing good vigour - no work required. 28.04.11 : No work required. 03.04.12 : Minor resin spots on main stem. Monitor. No work required. 30.04.13 : No further resin spots. No work required. 01.04.14 : No work required. 23.3.15 : Patch of decay at base to west, but showing good vitality. 25.5.16 - patches of basal decay to north and west. Internal decay test undertaken, showing only localised decay.		10-20	В		0	£0
T103	Cherry (Prunus avium)	17.0	350	13	Mature	Fair	03.04.08: Minor decay at 1.5m to northeast, with minor gum exudations. Surface rooting. 13.03.09: No action required. 28.04.10: No work required. 28.04.11: No work required. 03.04.12: No work required. 30.04.13: Prolific blossom. No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 -No work required.		10-20	С		0	£O
T101	Birch (Betula pendula)	16.0	300	9	Mature	Good	03.04.12: Good form and structure. Attractive tree. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 -No work required.		20-40	В		0	£O
T22	Sweet chestnut (<i>Castanea</i> <i>sativa</i>)	14.0	400	12	Middle aged	Fair	03.04.08: Low limbs removed, without any sign of decay. Good form and structure. 13.03.09: Area of basal dead bark to north. 28.04.10: No work required. 28.04.11: Minor deadwood, not a hazard. No work required. 03.04.12: No work required. 30.04.13: No work required. 01.04.14: Minor deadwood - no work required. 23.3.15: No work required. 25.5.16 -No work required.		20-40	В		0	£O

Tree/ Group No.	Species	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	Gang hours	Estimated cost
T21	Plane (Platanus x hispanica)	19.0	550	16	Mature	Fair	03.04.08: Slight lean to northeast. Cavity at 5m to southeast. Recently reduced. 13.03.09: Permission for 15% crown reduction received from L.B Camden - not considered essential, but crudely reduced 2 years ago and could improve shape this time. 28.04.10: 15% crown reduction undertaken during 2009. 28.04.11: No work required. 03.04.12: Regrowth blocking view for residents. 30.04.13: 15% crown reduction undertaken during 2012. No work required. 01.04.14: No work required. 23.3.15: Consider crown reduction during 2016. No work required. 25.5.16 -No work required.		A:	B	an gang hoi	urly rate	£85 £0
T20	Ash (Fraxinus excelsior)	20.0	430	13	Mature	Good	03.04.08: Minor deadwood but good form and structure. 13.03.09: Extended lateral branch growing to south, towards lawn at risk of future breakout. 28.04.10: Lateral branch to south reduced by 20% during 2009. 28.04.11: Reduced during 2010, no work required. 03.04.12: No work required. 30.04.13: No work required. 23.3.15: 10% crown reduction undertaken during 2014, leaving a well shaped canopy. Resident complaining of excessive shading. 25.5.16 -Crown reduced since last inspection.		20-40	В		0	£O
T19	Birch (<i>Betula pendula</i>)	12.0	320	8	Mature	Good	03.04.08: Good form and structure. 13.03.09: Crown reduced during 2008. 28.04.10: Minor decay at base - no work required. 28.04.11: No work required. 03.04.12: No work required. 30.04.13: No work required. 23.3.15: Crown reduced by 15% during 2014.25.5.16 -No work required.		20-40	A		0	£0
T18	Mulberry (<i>Morus nigra</i>)	8.0	700	9	Mature	Fair	 03.04.08: Extensive decay in main stem, but fine gnarled old specimen - low risk of causing damage, if fails. 13.03.09: Resident complaining of lack of light to windows. 28.04.10: Height reduced by 1.2m during 2009. 28.04.11: No work required. 03.04.12: No work required. 01.04.14: Minor pruning undertaken during 2013 - no further work required. 23.3.15: No work required. 25.5.16 -No work required. 		15-30	В		0	£O
T97	Honey locust (Gleditsia triacanthos)	15.0	300	14	Mature	Fair	03.04.08: High crown. Leaning towards building. Will be exposed when adjacent willow is reduced. 13.03.09: Reduced during 2008. 28.04.10: No work required. 28.04.11: No work required. 03.04.12: Consider reduction during 2013. No work required. 30.04.13: Leaning towards building, with majority of fresh growth on this side. 01.04.14: Crown reduced during 2013 - no further work required. 23.3.15: No work required. 25.5.16 -No work required.		10-20	С		0	£0
T227	Purple plum	11.5	300	9	Early mature	Good	25.5.16 - Slight lean to south. Bushy growth.	Reduce crown by 20% to allow more light through to building.	10-20	С	Low	1.5	£ 128
T213	Mimosa	5.5	150	6	Semi- mature	Good	01.04.14: Growing strongly. Consider pruning during 2015 - no work required. 23.3.15 : Pruned during 2014. No work required. 25.5.16 -No work required.		20-40	В		0	£0

Tree/ Group Species No.	Approx Height (m)	Approx Stem Diam. at1.5m (mm)	Approx Crown spread (m)	Age Class	Phys. Cond.	Condition	Management Recommendations	Estimated Remaining Contribution (years)	BS 5837 Category Grading	Priority	Gang hours	Estimated cost
								As	ssumed 2 m	an gang ho	urly rate	£ 85
T94 Oak (Quercus robur)	19.0	320	13	Middle aged	Poor	03.04.08: Extensive area of dead bark around base - possibly Honey fungus. 13.03.09: No action required. 28.04.10: Dead bark to approx 45% of base - no action required at present. 28.04.11: Minor deadwood, but showing reasonable vigour. No work required. 03.04.12: Reduced vigour. Dead branch at 4m, but good crown shape. 30.04.13: No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 Minor deadwood.	15% crown reduction to check growth and maintain at smaller size.	5-30	С	Low	3.5	£ 298
T92 Maple (<i>Acer sp</i> .)	17.0	320	10	Middle aged	Good	03.04.08: Good form and structure, though an asymmetric crown caused by competition with T93. Bark scar to east at 1.6m, but callusing with no signs of decay to date. 13.03.09: No action required. 28.04.10: Resin bleeding spots around base - no action required at present. 28.04.11: No work required. 03.04.12: Patches of resin bleeding on main stem. Showing good vigour. Monitor. No work required. 30.04.13: Resin spots around base. No work required. 01.04.14: No work required. 23.3.15: No work required. 25.5.16 - Low vigour, sparse crown.		20-40	В		0	£O
T214 Eucalyptus	7.5	300	4	Early mature	Good	01.04.14: Twin stem from 1.3m. Pruned approx three years ago. 23.3.15: Reduce during 2014. No work required. 25.5.16- No work required.		10-20	С		0	£0
T215 Eucalyptus	8.0	300	7	Early mature	Good	01.04.14: Twin stem from 1.3m. Pruned approx three years ago. 23.3.15: Reduced during 2014. No work required. 25.5.16- No work required.		10-20	С		0	£0
T216 Eucalyptus	8.0	150	5	Early mature	Fair	01.04.14: Twin stem from 1.3m. Pruned approx three years ago. 23.3.15: Reduced during 2014. No work required. 25.5.16 - Removed since last inspection.		10-20	С		0	£0
G217 8 no. Juniper 'Sky rocket'	7 - 9	120	1	Early mature	Fair	01.04.14: All showing some browning of low foliage, but branches are not dead - possibly frost damage. All showing good shape. Apical shoots all appear healthy. No work required. 23.3.15: As above - no work required. 25.5.16 - Removed since last inspection.		10-20	С		0	£O
T218 Cercis canadensis	4	200	6	Mature	Good	01.04.14: Eight stems from base. 23.3.15: Crown reduced during 2014. No work required. 25.5.16 - No work required.		10-20	С		0	£0
T219 Juniper	5	110	0.6	Semi mature	Poor	01.04.14: Uprooted during gales and now held in place with rope after straightening. 23.3.15 : Now showing good shape and reasonable vigour. No work required. 25.5.16 - No work required.		10-20	С			£0
							Estimated cost of tree work					£ 3,528

Category and definition	Criteria (including subcategories where appropriate)	ippropriate)		Identification on plan
Trees unsuitable for retention (see Note)	(see Note)			
Category U Those in such a condition that thev cannot realistically	Trees that have a serious, irremediable, structural defect, such that thei including those that will become unviable after removal of other categ reason, the loss of companion shelter cannot be mitigated by pruning)	Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)	is expected due to collapse, (e.g. where, for whatever	See Table 2
be retained as living trees in	Trees that are dead or are showing s	Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline	e overall decline	
the context of the current land use for longer than 10 vears	Trees infected with pathogens of significance to the hea quality trees suppressing adjacent trees of better quality	Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality	trees nearby, or very low	
	NOTE Category U trees can have existin see 4.5.7.	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.	tht be desirable to preserve;	
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention	ention			
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2



ATWORTH ARBORICULTURE LTD

PICUS TOMOGRAPH TEST ON TWO HORSE CHESTNUT TREES AT WESTFIELD HOUSE.



Prepared for: Ian Gilbert.

Faraday Property Management.

Atworth Arboriculture Ltd, 189 Purlpit, Atworth, Melksham, Wiltshire, SN128HJ.

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Site Address: Westfield House, 15 Kidderpore Avenue, London, NW3 7SF.

<u>Client:</u> Ian Gilbert.

Instruction: Carry out Picus Tomograph Decay detection test on main stem of two Horse Chestnut Trees.

Inspection: The Inspection was carried out on the 5th July 2016. The conditions were dry and clear. The Inspector was Kim Dear.

Tree 106. Horse Chestnut. (Aesculus hippocastanum) Height 22m. Diameter 1040mm.



General Observations:

The tree is situated 50m from the edge of the property to the north. There are numerous old pruning wounds on the stem, with some decay in the stubs. There is an area of staining and decay to the north west at ground level. The leaf and bud are evenly spread throughout the crown and appear normal.

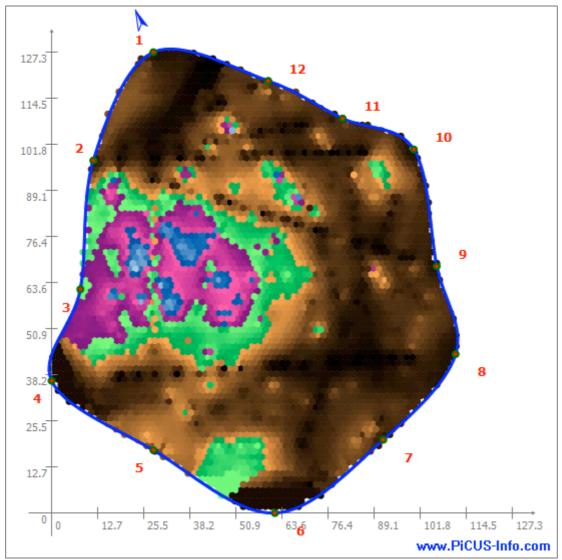
Picus Sonic Tomography

The Picus Sonic Tomograph is made by a German company called Argus-Electronic-Gmbh. It is a specialised electronic instrument which can 'look' internally into a branch or tree trunk and display a computer generated image of its condition. It achieves this by measuring the speed that sound travels through the wood in a number of different positions and directions.

Sound travels fastest through solid wood. Decayed wood will slow its path. By measuring the *speed* that sound takes to pass through a tree, an idea of its condition can be obtained.

The PICUS Sonic Tomograph consists of 8 to 14 sonic sensors. These sensors are spaced out evenly around the circumference of the trunk. They detect stress waves induced by manual impact propagated through the wood. Time-of-sound-transmissions are used to generate two-dimensional pictures that document decay and cavities.

The sounds are generated manually by tapping on a number of metal nails with a hammer. Special sensors fixed around the stem read the interval the sound takes to travel through the wood. Once all nails have been tapped, and recordings taken, the computer software works out a visual image that requires professional assessment to assess decay.



Picus Tomograph result at 10cm agl.

The tomograph shows an area of decay to the West of the stem with a cavity shown in blue, advanced decay coloured pink/purple and the incipient or early decay coloured green.

Recommendations:

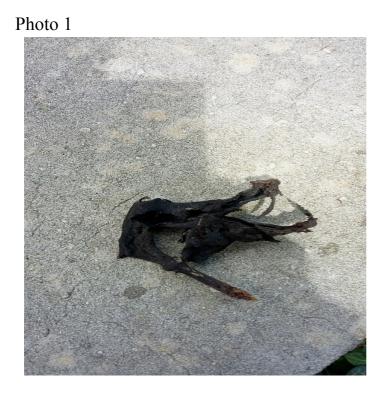
Whilst the tree is not of immediate threat, it should be inspected on an annual basis, or sooner if showing signs of decline.

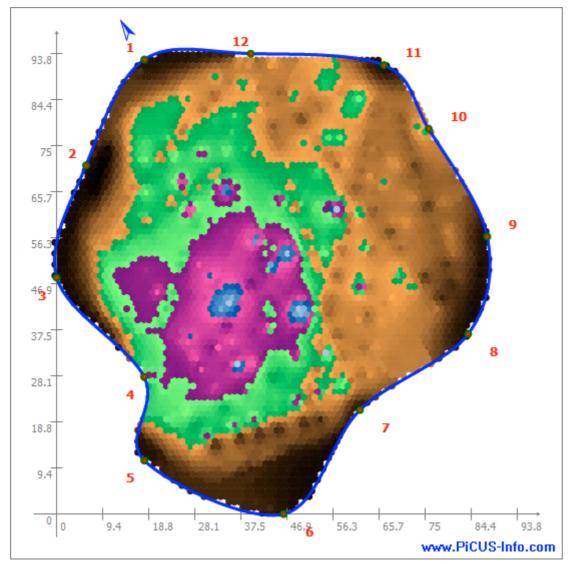
Tree T27.

Horse Chestnut. (Aesculus hippocastanum). Height 18m Diameter 940mm

General observations.

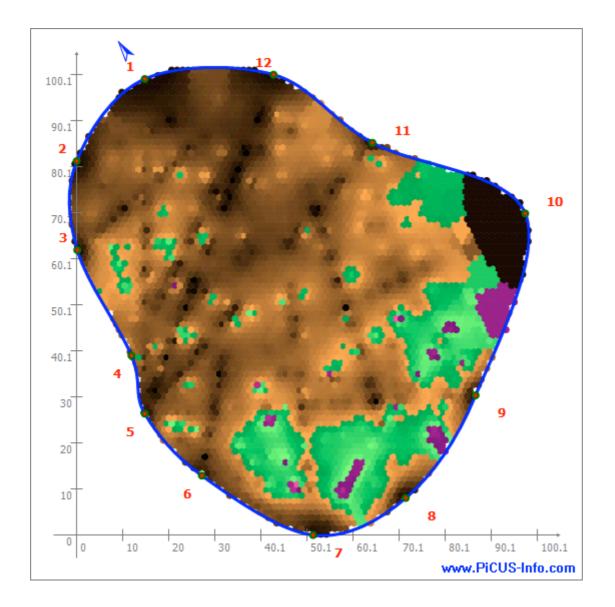
The tree is on the boundary of the property, leaning over the pavement and Kidderpore Avenue. The crown has been reduced in the past, and a cable brace has been fitted between the two co-dominant stems at 10m above ground level. There is a cavity at 2 metres on the southernmost stem at the break point in the stem. The leaves in the lower part of the canopy have leaf miner damage. There was dried fungal remains at the base of the tree in the leaf litter, possibly Honey fungus (*Armillaria*). (photo 1.)





Picus reading at 1.2m agl.

There is a small cavity developing, shown in blue, with advanced decay in purple, and early incipient decay coloured green. The area of decay is extensive, occupying 50% of the stems area.



Picus reading at 1.95m agl.

There is decay developing to the southern part of the stem.

Recommendation.

Whilst it was not possible to do a Picus test lower down the stem, due to the close proximity of the wall, it is very likely that the decay has progressed up the stem from ground level. The area of decay at 1.2metres is sufficient to affect the structural integrity of the tree. With the high level of passing pedestrian and vehicular traffic, the tree should be felled as soon as practically possible by a fully qualified and insured tree surgeon to BS3998(2010), Tree work.

V. com

Vince Cainey BSc 16th August 2016.