



Tree Management Services

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Project: Title: Ashbourne House Residential Development,
Glounthaune Co. Cork

Report Title: Arboricultural Champion and Heritage Tree
Report

Client(s): BARLOW PROPERTIES LIMITED
Planning Ref: 21/05072

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1. Introduction:

1.1 We have been commissioned by Cunnane Stratton Reynolds Town Planners and Landscape Architects, to carry out this Arboricultural Tree Report on behalf of their client(s) Barlow Properties Limited, on lands at Ashbourne House, Glounthaune, Co. Cork. This Tree Report is in response to a request for further information from Cork County Council - Planning Department items 1-4 about concerns raised in relation to a proposed residential development for the site in their letter to the applicant dated 16th. June 2021 - Planning reference 21/05072.

1.2 The letter to the Applicant(s) raises concerns about the loss of a significant number of trees, about the likely presence or otherwise of Champion and Heritage trees on the site and about the protection of retained trees during the construction phase.

2. Scope of the Work

2.1 The study area are those lands outlined on the Aerial Location Map - Photo 1 below.



Photo 1: Aerial Location Map. (© Google maps).

3. Methodology

3.1 We carried out our field assessment from 7-29th. September 2021. As part of our field assessment we referred to the list of previously recorded champion and significant trees provided to us and as noted by the National Botanic Gardens and The Tree Council of Ireland. In addition to this list we also referred to the most recent brochure of the gardens of Ashbourne House Hotel indicating the layout of the gardens and the important trees listed at the various viewing points along the walking routes. In locating significant trees, we were also assisted by our Tree Survey Report carried out as a condition survey in 2020. Reference was also made to historical material and site visits by Alan Mitchell - a renowned dendrologist to the gardens in the 1970's and referenced in his book *Conifers in The British Isles* 1972. Material was also sourced from submissions by Mr. RH Beamish, owner of Ashbourne House to the *Gardener's Chronicle* during the early part of the twentieth century.

3.2 We carried out a full field assessment and recorded and measured all potentially important heritage and recorded champion trees. Refer to Tree Survey Schedule below. For selection of photo. images see Appendix 1. As our Tree Survey is a visual assessment, it should be noted that in certain areas, our assessments and measurements were impeded by heavy undergrowth of scrub, ground vegetation, ivy-covered stems, or limited or restricted access. Background research work was also carried out to determine site history, planting years and other information that might contribute to the presence or otherwise of champion/heritage trees. We defined Champion trees and Heritage trees as:

3.3 Champion Trees: The Tree Council of Ireland initiated The Tree Register of Ireland (TROI) in 1999 with the aim of compiling a database of champion trees in Ireland. Inclusion criteria for the Tree Register is based on Mitchell's (1994) criteria for choosing outstanding trees. These criteria were used in establishing the Register:

1. Trees of known planting date previously measured over a long period.
2. Old and venerable specimens that probably represent an ultimate size appropriate to the local site conditions.
3. Trees exhibiting good growth, horticultural or genetic value, disease or exposure resistance.
4. Any tree that occurs in a unique location or context and so provides a contribution to the landscape, including remnant native vegetation, and trees that form part of a historic landscape, park, garden or urban planting.
5. Rare or locally distributed taxa for which little data exist already.

3.4 A Heritage Tree is defined as a tree of biological, cultural, ecological or historical interest because of its age, size or condition.

4. Site History:

4.1 The site includes the lands attached to Ashbourne House, a former hotel that once housed a well-tended Arboretum with a fine collection of rare, exotic and Champion trees. These gardens at Ashbourne were founded by Richard Beamish - a recognised plantsman who travelled extensively, importing plants and trees from all areas of the world and from collections based at Glasnevin and Kew Botanical Gardens.

4.2 Old historical first edition maps from The Ordnance Surveys of 1898 indicates that the grounds were well laid out during that period with tree planting around the boundaries of the site and along the approach avenue to the main house. See historic OS map - Figure 1 below. The planted row of Lime - *Tilia spp.* can clearly be seen along the northern boundary of the site and where remnants of these trees exist to the present day.

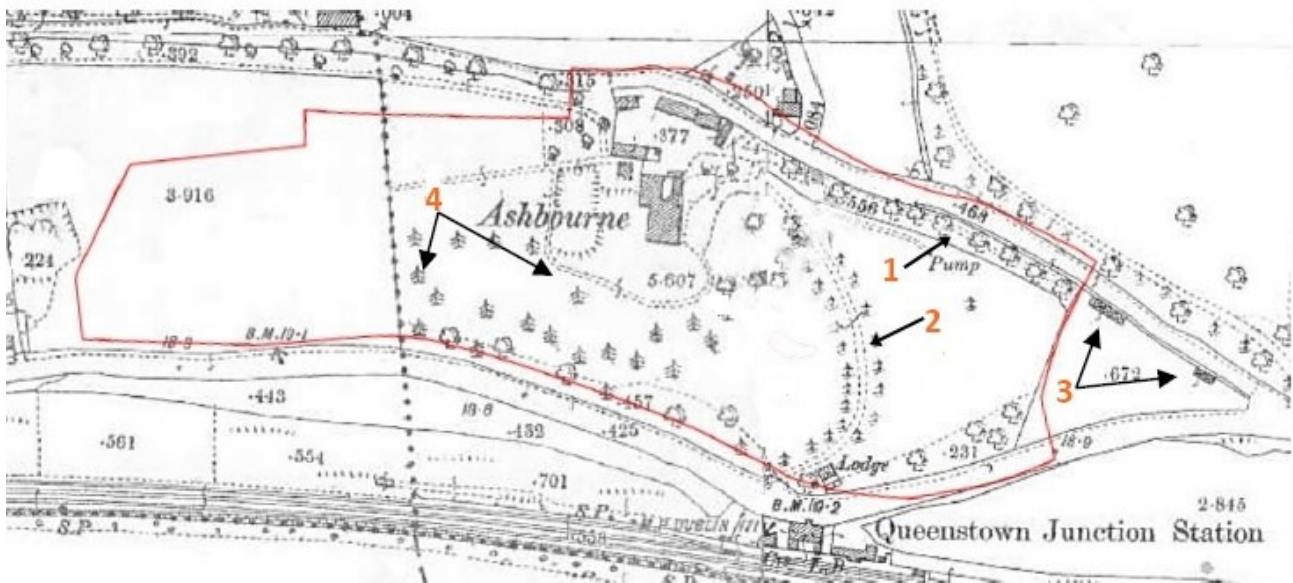


Figure 1: Ordnance Survey Map 1898 showing the layout of the grounds of Ashbourne with **1-** Linear row of Lime trees; **2-** Avenue tree planting; **3-** Greenhouses abutting the boundary wall; **4-** Conifer planting in the grounds (*Map supplied courtesy of Cunnane Stratton Reynolds Architects*).

4.3 Around the early part of the twentieth century, Richard Henrik Beamish laid out the gardens with a number of distinguishing features including a bog garden on the eastern side of the approach avenue and an arched Irish Yew Walk with Cordyline trees interplanted planting between the Yew trees. See historic OS Map Figure 2 below. He also laid out a more formal woodland gardens which included many unusual and rare trees collected during his extensive

world travels as well as trees that came through from the collections at Glasnevin Botanical Gardens Dublin and Kew Botanical Gardens London.



Figure 2 Ordnance Survey Map 1929 showing the more formal layout of the grounds of Ashbourne with 1- Bog garden with pond; 2- Yew Walk; 3- Formal walkways; 4- Tree planting in grounds and around boundaries. (©Map supplied courtesy of Cunnane Stratton Reynolds Architects).

4.4 The gardens changed ownership in 1960 and the new owners upgraded and open the gardens to guests and the general public. See Figure 3 below - Map of Grounds from 1990's brochure and a historic sketch drawing of gardens from the early 1960's Appendix 2. The trees were managed and maintained as a woodland arboretum with full-time gardening staff employed to nurture and maintain the extensive range of herbaceous, shrub and tree species.

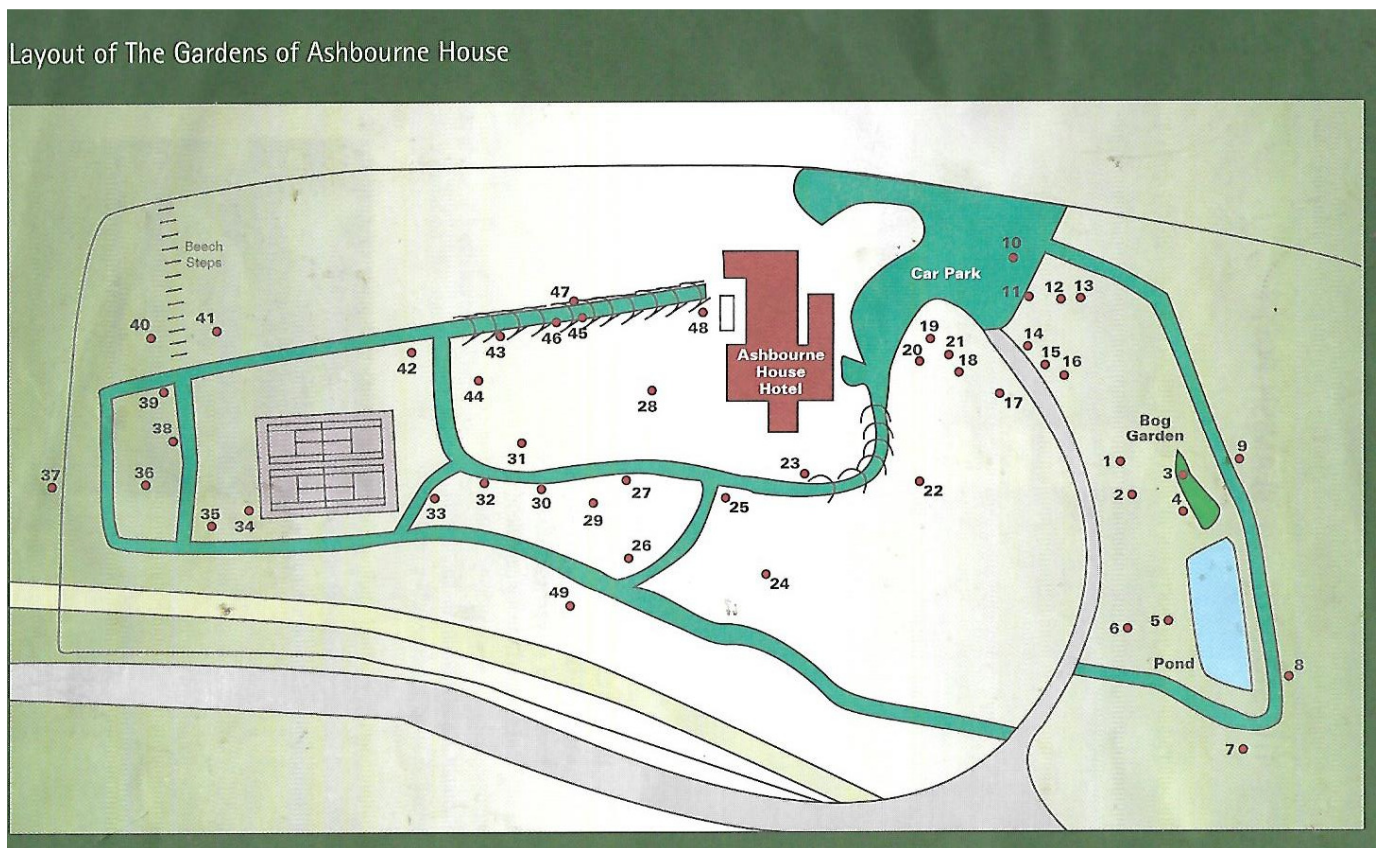


Figure 3: Map of the grounds from the Brochure 'The Gardens of Ashbourne House' publ. 1997.

4.5 The gardens of Ashbourne House Hotel in the 1990's had listed laid out walkways with notable trees at the various numbered stopping points. Significant trees at that time included at stop: **2** - *Gymnocladus dioicus* - rare Kentucky Coffee tree (no longer on site, but a new tree is close by probably self-seeded or derived from sucker growth); **5** - *Aesculus californica* - Californian Buckeye (on site but in poor condition); **6** - *Ginkgo Biloba* (2 x specimens on site); **7** - *Cercidiphyllum japonica* - Katsura (2 x trees on site); **10** - *Nothofagus Solanderi* - Mountain Beech (on site but overpruned in past); **13** - *Nothofagus Obliqua* - Roble Beech (on site); **14** - *Magnolia Cambelli* - Giant Himalayan Pink Tulip tree (on site); **16** - *Laurelia serrata* - Chilean laurel and later defined as *Laurelia philippiana* (3 x trees on site); **17** - *Pinus Walllichiana* - Bhutan Pine (on site); **18** - *Cupressus Kashmiriana* - Kashmir Cypress (no longer on site); **19** - *Robinia Pseudacacia* - Black Locust (not on site); **22** - *Eucalyptus spp.* Mountain Gum and Snow Gum (on site); **23** - *Podocarpus andinus* - Plum fruited Yew (not on site); **24** - *Pinus radiata* - Monterey Pine (planted throughout the site); **25** - *Sciadopitys Verticillata* - Japanese Umbrella Pine (on site); **26** - *Parrotia Persica* - Persian Ironwood (2 x trees on site); **27** - *Drimys Winteri* - Winters Bark (at least 2 x trees on site, one tree over-pruned in past); **32** - *Umbellularia Californica* - Californian Bay Laurel (on site); **34** - *Ehretia Dicksonii* - Ehretia a very rare tree (3 x trees now recorded on site when originally thought to be just one); **36** - *Quercus rubra* - Red Oak (on site); **38** - *Quercus pontica* - Pontine Oak (not on site); **41** - *Taxus baccata 'Fastigata'* - represents the formal Yew walk (now overgrown and in disrepair); **42** - *Pseudopanax Arborens* - Ivy tree (a number of trees on site); **43** - *Viburnum Cyclindricum* - Evergreen viburnum (has grown and seeded freely on site); **44** - *Ilex Dipyrena* - Himalayan Holly (a number of trees on site); **45** - *Eucalyptus Globulus* - Tasmanian Blue Gum (on site but topped in past); **47** - *Diosypros Lotus* (Date Plum not on site); .

4.6 The site was sold around the year 2000 and there was a change of use from hotel at that time to a Direct Provision centre still in use to the present day. With the exception of the lawn areas around the main house, the woodland gardens ceased to be managed and the woodlands have fallen into a state of neglect. The condition of a number of trees has deteriorated since 2000 and a number of trees have been lost due to storms or natural failure.

4.7 Since about the year 2000, tree maintenance works have been carried out on an ad hoc basis, with remedial tree works based mainly around the safety and well-being of staff, residents and visitors of the Direct Provision centre. Works have been largely concentrated on trees around the main building and car parks, open lawn areas and immediately west of the main house. The remaining areas of the site have been neglected and allowed to naturalize so as to restrict and deter persons from entering these zones. The main woodland areas are now in an overgrown and neglected state. Tree condition varies from good to poor, with little or no arboricultural management practices carried out in the recent past.

4.8 While any tree works in an Arboretum environment should be carried out sensitively to protect the shape and size of the tree, nonetheless ongoing minor tree works would be necessary on a regular basis. Works could include the removal of any dangerous or dead limbs, the repair of broken or storm-damaged limbs and general light tip pruning to maintain shape and overall appearance. Such works would help maintain the trees in an overall good condition and prolong longevity. Good arboricultural management and timely intervention would also detect or prevent any tree diseases, fungal or biological attacks.

4.9 The overcrowded conditions particularly on the eastern side of the main avenue in and around the bog garden has resulted in the faster-growing trees of Magnolia, Cedar, Chilean Laurel and Katsura becoming the dominant tree species. The under canopy of planted bamboo has now colonized large areas of the site, swamping and killing off the slower-growing or light-sensitive lower-canopy shrub species. Examples of trees lost, suppressed or in decline include the *Stewartia pseudocamellia* - deciduous Camellia and the *Fuchsia Excorticata* - New Zealand Fuschia

5. Champion and Heritage trees;

5.1 From the tree list provided, there remains on the site a large proportion of the tree species of Champion and Heritage trees previously recorded on the site by the Tree Council of Ireland and The National Botanic Gardens at Glasnevin, Dublin.

5.2 References and dates from the list suggest that tree survey and measurement dates range from 1999 to 2004 with a small number of reassessments carried out in 2019. The 2019 assessments were carried out on the following trees - *Aesculus Californica*, *Drimys winterii*, *Ehretia dicksonii*, *Ginkgo biloba*, *Laureliopsis philippiana*, *Magnolia Campbellii* and a *Magnolia grandiflora*. It should be noted that, a Champion tree recorded in the past may not be a

Champion tree in the present day for a variety of reasons including tree failure, storm damage resulting in limb failure or loss of height from excessive pruning or topping or superseded by champion trees discovered elsewhere.

5.3 Our assessment strategy was to locate all Champion and Heritage trees on the site from the list provided and ascertain if the said trees were still present on the site. Once the presence of a tree was verified, we carried out height, diameter girth and circumference measurements as well as recording crown spread. Refer to the Tree Survey Schedule - Appendix 1. Based on the BS 5837:2012, the Root Protection Areas (RPA's) have been derived and plotted on the Tree Protection Plan drawing as well as the driplines of the trees or crown spread. Refer to Appendix 3 - Tree Location drawing indicating tree location, root protection areas and extent of tree crown spread.

5.4 The tallest tree on the site at present is tree no. 925 *Sequoiadendron giganteum* - Giant Sequoia with a recorded height of 36m. The tree with the largest girth is a *Pinus radiata* - Monterey Pine tree no 995 with a recorded girth diameter of 2300mm. In addition we have made new discoveries including the presence of an additional two trees of the very rare *Ehretia dicksonii* (only 3 no. previously recorded in Ireland) and a *Gymnocladus dioicus* - a rare Kentucky Coffee tree probably a self-seeded tree from the parent tree that had suffered from windblow in the past.

5.5 We have also highlighted trees previously recorded and now shown to be lost or no longer on site. In addition, we have compiled a list of other important, rare, or significant heritage trees that are worth noting and that could have Champion tree potential in time to come. These include *Pinus wallichiana* - Bhutan Pine (tree no. 984), 2 x *Thuja plicata* - Western Red Cedar (tree nos. 14 and 941 that have achieved heights of 28m. and 25m. respectively), a *Chamaecyparis obtusa* - Hinoki cypress (tree no. 57) with a recorded height of 13m. and an *Acer campestre*- Field Maple (tree no. 988) with a recorded height of 22m. and a girth of 80 cms at 1.5m. A *Sequoia sempervirens* - Redwood (tree no 1061) was not previously recorded and has achieved a height of 30m. We would recommend that the updated list of trees and their updated measurements be submitted to The Tree Council of Ireland and the National Botanic Gardens for verification and for further evaluation and assessment.

6. Summary and Recommendations:

5.1 We have carried out a detailed survey of the tree population on the site. The main objective was to identify, record and measure all potential Champion and Heritage trees from the list as provided by The National Botanic Gardens and The Tree Council of Ireland. The assessments and measurements dates on the list are outdated and will require updating and verification in line with the criteria in the evaluation of Champion trees.

5.2 A large percentage of the trees on the Tree Council of Ireland list are still present on the site. A small number of trees from the list have been lost from storms or removed in the interests of health and safety and in line with the current land use. In addition, we have identified a number of additional important, rare, heritage or potential champion trees.

5.3 Large areas of the site are in a neglected state. Little or no maintenance works has been carried out over the past twenty years. Bamboo, vine and ground ivy are suppressing lower canopy trees and shrubs. Bare areas are now colonized by low category, self-seeded Ash and Sycamore trees, often recognized as scrub or low-value retention species. These vigorous self-seeding trees could suppress the slower growing and important species causing losses to occur.

5.4 From measurements taken, we have plotted the locations of the trees and their associated root protection zones and crown spread. This will assist in the development of a proposed residential site layout for the site while ensuring that champion and heritage trees are fully protected and retained.

Assumptions and Limitations

This was a Tree Identification Survey only, the main objective was to record any potential heritage and champion trees within the site area. Only those trees specified in the scope of work were assessed and assessments were performed within the limitations specified. Identification and basal assessments were, in some instances, impeded and limited due to dense scrub and other ground vegetation. We have been authorized to carry out this report with the full permission and consent of Cunnane Stratton Reynolds Architects and Barlow Properties Limited.

Larry Phelan M.S.I.F. Certified Arborist, Dip EIA Mgmt. Dip in Science (Forestry)

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- Twomey, M. Fennell, A. McHugh, F. *The Tree Register of Ireland*. Society Of Irish Foresters 2016.
- Photo 1: Aerial Photograph, © Google Maps.
- Figure 1 and 2: Old OS maps, Cunnane Stratton Reynolds Architects and Town Planners.
- Figure 3: From *The Gardens of Ashbourne House*. Raven Design, Cork 1997.

Larry Phelan is a Professional Forester and Certified Arborist. He has over 35 years' experience in a broad range of tree-related matters including Forestry, Arboriculture, Landscaping and related activities. He trained and worked for the semi-state Forestry Company – Coillte Teoranta for over 30 years in a number of forestry-disciplines including Tree Services, Private Afforestation and Private Timber procurement.

He is a Professional Member and Certified Arborist with The International Society of Arboriculture (ISA), Technical Member of the Society of Irish Foresters (MSIF) and an Approved Forester including Native Woodlands with the Forest Service, Department of Agriculture Food and The Marine.

Explanation of headings – Tree Survey Schedule

Tree No.:	Reference Number affixed to individual trees to allow for identification.
Latin or Scientific Name:	In taxonomy refers to the genera and species.
Common Name:	The commonly known name associated with each tree.
Physiological Condition:	Tree condition is based on a 3-tier rating system, and constitutes a general assessment of the physiological condition of the tree where a rating of: Good = represents good health and vigour Fair = Healthy and reasonable vigour Poor = Showing signs of decline, disease or decay.
Survey Date:	The date the tree was recorded and measured.
Ht.:	The approximate tree height to the nearest .5/m. is given.
DBH:	This is the trunk diameter range (in cms.) at a height of 1.5 m above ground level.
GIRTH:	This is the circumference of the main trunk (in ms.) at a height of 1.5 m above ground level.
CHAMPION TREE:	Previously recorded as a Champion tree
HERITAGE TREE:	Deemed to be a Heritage Tree because of its biological, cultural, ecological or historical significance.
COMMENTS:	Comments or points to note about the tree.

TREE SURVEY SCHEDULE

Denotes tree present on site

Denotes tree no longer present or not found

Tag No	Latin Name	Common Name	Condition	Survey Date	Height	DBH	Girth_(m)	Champion Tree	Heritage Tree	Comments
1010	<i>Abies nordmanniana</i>	Caucasian Fir	Good	17/09/2021	28	88	2.9		✓	Possibly broken apical stem.
948	<i>Aesculus californica</i>	Indian Horse Chestnut	Poor	14/09/2021	12	51	1.6		✓	Lacks vigour; Signs of early decline
	<i>Azara microphylla</i>	Small-leaved azara		17/05/2004	8		0.81			Not Found
	<i>Catalpa speciosa</i>	Northern Catalpa		17/05/2004	9.5		1.33			Not recorded in recent Surveys
1088	<i>Cedrus atlantica</i>	Blue Atlas Cedar	Dead	16/09/2021						Dead standing tree
916	<i>Cedrus deodara</i>	Deodar	Good	14/09/2021	31	154	5		✓	Signs of decay at base. Peeling bark along main trunk. Check species if Cedar of Lebanon
921	<i>Cercidiphyllum japonicum</i>	Katsura Tree	Fair	14/09/2021	22	170	5.5	✓	✓	Girth measured at 1m. Infected with <i>Ganoderma spp.</i>
919	<i>Cercidiphyllum japonicum</i>	Katsura Tree	Fair		20	130	4.1		✓	Infected with <i>Ganoderma spp.</i>
1180	<i>Cornus capitata</i>	Bentham's Cornel	Fair	14/09/2021	12	42,20 ,25	1.5		✓	x 2 stems from base and x 3 stems from 1m.
985	<i>Cupressus cashmeriana</i>	Cashmere Cypress		05/10/1999	22		2.81			Felled c. 2014-2018
983	<i>Cupressus macrocarpa</i>	Monterey Cypress	Good	14/09/2021	29	192	6		✓	High pruned in past.
952	<i>Drimys winteri</i>	Winter's Bark	Good	15/09/2021	28	122	4	✓	✓	Forked from 1m. X 6 stems
	<i>Drimys winteri</i> 'Glauca'	Winter's Bark		06/10/1999	13		2.5			Not Found
1092	<i>Ehretia dicksonii</i>	Ehretia	Good	14/09/2021	21	48	1.3	✓	✓	Leaning to NE. Clear stem to 5m.
922	<i>Ehretia dicksonii</i>	Ehretia	Good	14/09/2021	23	74	2.6	✓	✓	Cable brace installed. Ivy growth attached.
2651	<i>Ehretia dicksonii</i>	Ehretia	Poor	14/09/2021	14	41	1.2		✓	Derived from old stump. Basal decay present. Multiple suckers from base.
62	<i>Eucalyptus dalrympleana</i>	Mountain Gum	Good	14/09/2021	35	151	5		✓	Check cable bracing in crown

61	<i>Eucalyptus pauciflora</i>	Snow Gum	Good	14/09/2021	32	170	5.6	✓	✓	Check cable bracing in crown
195	<i>Eucalyptus globulus</i>	Tasmanian Blue Gum	Good	15/09/2021	25	155E	4.5E		✓	Topped in past; Strong regrowth.
	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair		05/10/1999	23.5		2.3			Probably Tree no 946
912	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair	Good	14/09/2021	17	48	1.6		✓	
946	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair	Good	14/09/2021	22	100	3.1		✓	Forked at 3m.
	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair		05/10/1999	16.5		0.65			Probably Tree no 912
	<i>Ginkgo biloba</i>			18/06/2019	25		2.95			Probably Tree no 946
	<i>Gleditsia triacanthos</i>	Honey Locust		06/10/1999	22		1.45			Not on site
	<i>Gymnocladus dioica</i>	Kentucky Coffee Tree		05/10/1999	19		1.57			Not on site
34	<i>Gymnocladus dioica</i>	Kentucky Coffee Tree	Good	28/09/2021	10.5	11	0.55		✓	Leaning to south; Possibly a seedling or sucker from adjacent fallen tree
1176	<i>Ilex dipyrrena</i>	Himalayan Holly	Fair	23/09/2021	15	40	2.37		✓	Could be a Champion tree
176	<i>Ilex dipyrrena</i>	Himalayan Holly	Poor	20/09/2021	5	50E	2		✓	Suppressed by vine growth.
162	<i>Ilex x altaclarensis</i>	Highclere Holly	Poor	23/09/2021	13	30	1.1		✓	Good condition; Forked at 4m. Species to be confirmed.
950	<i>Laureliopsis philippiana</i>	Tepa, Laurela	Good	09/09/2021	20	69	2.2		✓	Could be a Champion tree. Good condition; Clear stem to 3m. Suppressed on west side by Magnolia tree.
929	<i>Laureliopsis philippiana</i>	Tepa, Laurela	Good	14/09/2021	16	58	1.95		✓	Close to tree no. 928
928	<i>Laureliopsis philippiana</i>	Tepa, Laurela	Good	14/09/2021	16	54	1.9		✓	Close to tree no. 929
	<i>Leptospermum scoparium</i>		Good	05/10/1999	10		1.1			Not Found
1062	<i>Liriodendron tulipifera</i>	Tulip Tree	Poor	20/09/2021	20	53	2.1		✓	Dead stem from 2m. Unbalanced and deformed crown.
955	<i>Magnolia acuminata</i>	Cucumber Tree	Good	09/09/2021	21	71	1.93	✓	✓	Clear stem to 5m. Well-formed crown.
32	<i>Magnolia campbellii</i>	Campbell's Magnolia	Good	09/09/2021	21.5	87	2.8	✓	✓	Clear stem to about 4m. Upright crown
943	<i>Magnolia grandiflora</i>	Evergreen Magnolia	Good	09/09/2021	15	74	2.4		✓	Large open wound on main trunk east side. Cavity on west side.
29	<i>Magnolia macrophylla</i>	Large-leafed Cucumber Tree	Good	09/09/2021	13	33,28,26	1.2		✓	Species to be confirmed; x 3 stems from base; Orange bark; Could be a Champion tree
956	<i>Nothofagus obliqua</i>	Roble Beech	Fair	09/09/2021	29	116	3.8	✓	✓	Decay at base to 1m. East side. Clear stem to 6m. Possibly topped in past. Compact crown.

2	<i>Nothofagus solandri var. cliffortioides</i>	Mountain Beech	Fair	09/09/2021	14.5	76	2.6		✓	Tarmacadam over root zone. Some damage to root system. Decay at base on northern side; Forked at 1.5m. Crown topped in past; Good response to pruning.
161	<i>Parrotia persica</i>	Persian Ironwood	Good	15/09/2021	12	27,26	1.7	✓	✓	Wide-spreading;
213	<i>Parrotia persica</i>	Persian Ironwood	Good	15/09/2021	6.5	20 avg.	1.8	✓	✓	Multi-stemmed
953	<i>Picea omorika</i>	Serbian Spruce	Good	14/09/2021	21	75	2.5	✓	✓	Lighting fixture and cables attached
965	<i>Pinus armandii</i>	Armand's Pine	Fair	15/09/2021	10	36	1.12		✓	Could be <i>Pinus strobus</i>
995	<i>Pinus radiata</i>	Monterey Pine	Good	15/09/2021	23	230	6.8		✓	Forked from 1.5m. High pruned in past
1007	<i>Pittosporum eugenioides 'Variegatum'</i>	Pittosporum	Good	14/09/2021	12	30	1.2		✓	Attractive foliage. Crown slightly suppressed by overhanging limbs.
1100	<i>Pittosporum tenuifolium</i>	Pittosporum	Good	20/09/2021	14	42	1.3	✓	✓	Crooked stem see also tree no 1093 which has a smaller girth but ht measured at 18
	<i>Prumnopitys andina</i>	Plum-Fruited Yew	Poor	17/05/2004	16.5		1.41			Not found
980	<i>Pseudopanax arboreus</i>	Ivy tree	Poor	22/09/2021	10	20	2		✓	Multi-stemmed from .5m. Suppressed by Griselinia. Sparse foliage
180	<i>Pseudopanax arboreus</i>	Ivy tree	Good	23/09/2021	16	28,14 ,22	1.1		✓	Forked from base
1091	<i>Quercus canariensis</i>	Mirbeck's Oak	Good	16/09/2021	28	97	3.1	✓	✓	Close to Ehretia no 1092
1060	<i>Quercus rubra</i>	Red Oak	Good	16/09/2021	30	95	3	✓	✓	Strong clear stem to 5m. Well-formed crown.
76	<i>Sciadopitys verticillata</i>	Japanese Umbrella Pine	Good	14/09/2021	12	46,44	1.61, .4	✓	✓	Forked from base. Well-formed crown
925	<i>Sequoiadendron giganteum</i>	Wellingtonia, Giant Sequoia	Good	13/09/2021	36	170	5.1		✓	Sparse foliage in upper crown
951	<i>Stewartia pseudocamellia</i>	Deciduous Camellia	Poor	14/09/2021	7	54	1.8	✓	✓	In advanced state of decline. Girth measured at .7m.
898	<i>Tilia platyphyllos</i>	Large-leafed Lime	Good	15/09/2021	35	70	2.3		✓	Crooked stem. the tallest Lime is no. 898
3	<i>Tilia platyphyllos</i>	Large-leafed Lime	Good	23/09/2021	25	80	2.8		✓	Adjoining car park
101	<i>Tilia platyphyllos 'Laciniata'</i>	Large-leafed Lime	Fair	23/09/2021	21	38	1.3	✓	✓	Forked at 2m. Broken and storm-damaged limbs in crown.
37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	9	26	0.9		✓	x 4 trees largest is 9m high Suppressed by ivy
37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	8	23	0.6		✓	
37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	7	25	0.8		✓	

37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	7	24	0.7		✓	
1195	<i>Umbellularia californica</i>	Californian Laurel or Headache Tree	Good	15/09/2021	21	55,64	2,1.9		✓	x 2 stems. Wide-spreading. Forked at 2m. Leaning stems to east.
	<u>Additional Important trees</u>									
984	<i>Pinus wallichiana</i>	Bhutan Pine	Fair	09/09/2021	22	110	3.6		✓	High pruned to 18m. Lightly topped in past. Leaning over avenue; Could be a Champion tree
941	<i>Magnolia x soulangiana</i>	Saucer Magnolia	Good	09/09/2021	9	63	2.2		✓	Forked at 1m. Cavity on north side of main stem
14	<i>Thuja plicata</i>	Western Red Cedar	Good	14/09/2021	28	117	3.2		✓	Broken minor co-dominant stem
910	<i>Thuja plicata</i>	Western Red Cedar	Good	14/09/2021	25	112	3.7		✓	Minor storm damage in crown
57	<i>Chamaecyparis obtusa</i>	Hinoki cypress	Good	14/09/2021	13	68	2.4		✓	Leaning to east; Remove heavy ivy growth.
184	<i>Pseudopanax arboreus</i>	Ivy tree	Fair	23/09/2021	13	25	0.9		✓	Leaning to north
196	<i>Eucalyptus globulus</i>	Tasmanian Blue Gum	Good	15/09/2021	30	64	2.2		✓	Vigorous growth habit
182	<i>Cornus capitata</i>	Bentham's Cornel	Good	16/09/2021	18	28,18, 17	2		✓	Forked from base
1061	<i>Sequoia sempervirens</i>	Redwood	Good	20/09/2021	30	75,31	2.5,1.1		✓	Minor co-dominant stem on west side
1109	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	20/09/2021	9	30,22	.9,.6E		✓	Tag represents 2 x trees
1114	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	20/09/2021	9	30	0.8E		✓	Suppressed by heavy ivy growth
172	<i>Viburnum cylindricum</i>	Viburnum	Poor	20/09/2021	8	25	0.5		✓	Partially fallen tree
82	<i>Magnolia x soulangiana</i>	Magnolia	Good	23/09/2021	8	30,30, 35	1.9		✓	Forked at .7m
80	<i>Drimys winteri</i>	Winter's Bark	Fair	23/09/2021	7	52	1.8		✓	Heavily pruned in past
139	<i>Ilex dipyrena</i>	Himalayan Holly	Fair	23/09/2021	15	25	0.9		✓	Close to adjoining Beech
1174	<i>Davidia involucrata</i>	Dove tree	Good	24/09/2021	13	24,263 0, 22	1.1		✓	Forked from base
988	<i>Acer campestre</i>	Field Maple	Good	24/09/2021	22	80	2.5		✓	Adjacent to car park; Could be a Champion tree
1204	<i>Araucaria araucana</i>	Monkey Puzzle	Good	25/09/2021	17.5	57	2		✓	Light ivy growth attached to main trunk
347	<i>Pseudopanax arboreus</i>	Ivy tree	Good	28/09/2021	12	8,7,5	0.4		✓	Forked from base

Appendix 1:



Photo 2: *Tree nos. 2 and 3.*



Photo 3: *Tree no. 956.*



Photo 4: *Tree no. 953.*



Photo 5: *Tree nos. 955 and 37(4).*



Photo 6: *Tree nos. 928 and 929.*



Photo 7: *Tree no. 922.*



Photo 8: *Tree no. 921.*



Photo 9: *Tree nos. 984 and 995.*



Photo 10: *Tree no. 61.*



Photo 11: *Tree no. 76.*



Photo 12: *Tree no. 195.*



Photo 13: *Tree no. 1195.*



Photo 14: *Tree no. 180.*



Photo 15: *Tree nos. 950 and 32.*



Photo 16: *Tree no. 948.*



Photo 17: *Tree no. 916.*



Photo 18: *Tree no. 34.*



Photo 19: *Tree no. 988.*



Photo 21: *Tree no. 1007.*



Photo 22: *Tree no. 82.*



Photo 23: *Tree no. 161.*

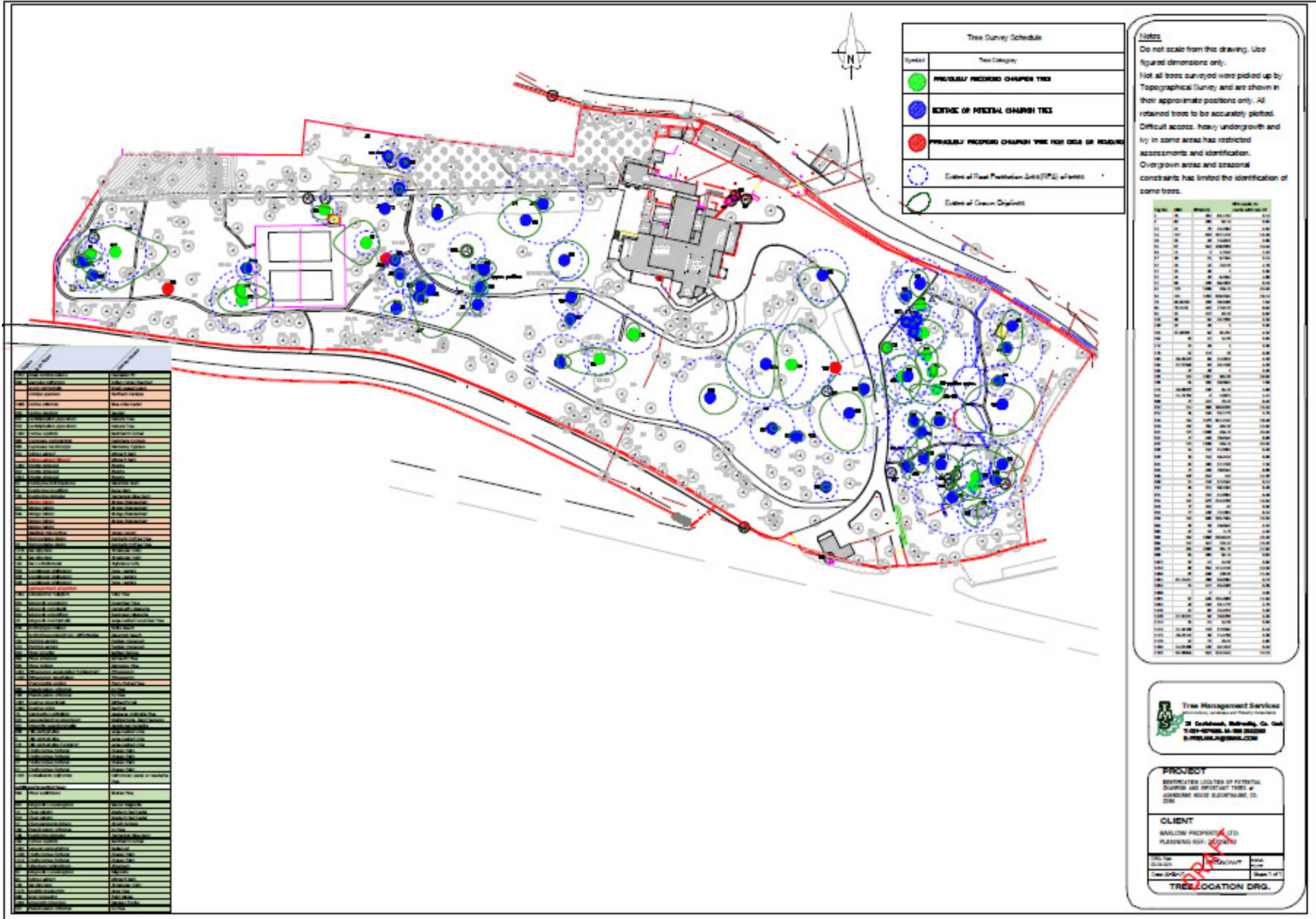


Photo 24: *Tree no. 955.*

Appendix 2: Past historic drawing showing layout of Gardens of Ashbourne House (, c 1960's).



Appendix 3: Tree Location drawing indicating Tree Root Protection Areas and Crown Spread:



Tag No	DBH	RPA(m2)		RPA equiv. to corcle with rad. Of
2	76	261	83.1744	9.12
3	80	290	92.16	9.60
12	41	76	24.2064	4.92
14	117	619	197.1216	14.04
29	33	49	15.6816	3.96
32	87	342	108.9936	10.44
34	11	5	1.7424	1.32
37	26	31	9.7344	3.12
37	23	24	7.6176	2.76
37	25	28	9	3.00
37	24	26	8.2944	2.88
57	68	209	66.5856	8.16
61	170	1308	416.16	20.40
62	151	1032	328.3344	18.12
76	63.65532	183	58.3488	7.64
80	73.5119	245	77.8176	8.82
82	55	137	43.56	6.60
101	38	65	20.7936	4.56
139	25	28	9	3.00
161	37.48333	64	20.232	4.50
162	30	41	12.96	3.60
172	25	28	9	3.00
176	50	113	36	6.00
180	38.26225	66	21.0816	4.59
182	37.37646	63	20.1168	4.49
184	25	28	9	3.00
195	155	1087	345.96	18.60
196	64	185	58.9824	7.68
213	48.98979	109	34.56	5.88
347	11.74734	6	1.9872	1.41
898	70	222	70.56	8.40
910	112	568	180.6336	13.44
912	48	104	33.1776	5.76
916	154	1073	341.5104	18.48
919	130	765	243.36	15.60
921	170	1308	416.16	20.40

Tag No	DBH	RPA(m2)		RPA equiv. to corcle with rad. Of
922	74	248	78.8544	8.88
925	170	1308	416.16	20.40
928	54	132	41.9904	6.48
929	58	152	48.4416	6.96
941	63	180	57.1536	7.56
943	74	248	78.8544	8.88
946	100	452	144	12.00
948	51	118	37.4544	6.12
950	69	215	68.5584	8.28
951	54	132	41.9904	6.48
952	122	673	214.3296	14.64
953	75	255	81	9.00
955	71	228	72.5904	8.52
956	116	609	193.7664	13.92
965	36	59	18.6624	4.32
980	20	18	5.76	2.40
983	192	1668	530.8416	23.04
984	110	547	174.24	13.20
995	230	2393	761.76	27.60
988	80	290	92.16	9.60
1007	30	41	12.96	3.60
1010	88	350	111.5136	10.56
1060	95	408	129.96	11.40
1061	81.15417	298	94.8384	9.74
1062	53	127	40.4496	6.36
1088		0	0	0.00
1091	97	426	135.4896	11.64
1092	48	104	33.1776	5.76
1100	42	80	25.4016	5.04
1109	37.20215	63	19.9296	4.46
1114	30	41	12.96	3.60
1174	51.34199	119	37.9584	6.16
1175	28.23119	36	11.4768	3.39
1176	40	72	23.04	4.80
1180	52.81098	126	40.1616	6.34
1195	84.38602	322	102.5424	10.13

Appendix 4: Tree Root Protection Areas