Tree Survey and Constraints Plan

Exeter Royal Academy for Deaf Education Topsham Road, Exeter

Tim Pursey MICFor, M.Arbor.A., Dip.Arb.(RFS), Tech.Cert.(Arbor.A.) Chartered Arboriculturist



Tel. 0117 951 1375 1 Stanley Park, Lower Easton, Bristol BS5 6DT Email <u>arb@timpursey.co.uk</u> <u>www.timpursey.co.uk</u>

1.0 Date of survey

1.1 August 2017

2.0 <u>Surveyor</u>

2.1 Tim Pursey

3.0 Instructions

- 3.1 As a result of a potential planning application, I am instructed on behalf of the owners of the property to carry out a tree survey in selected areas in accordance with BS5837:2012 *Trees in Relation to Design, Demolition and Construction – Recommendations* in order to aid in the design of proposed development within the site.
- 3.2 The report includes:
 - An indication of the constraints placed on the design by the trees on site
 - Site plan detailing the existing trees on site drawings TP 2277/1707/TCP appended
 - A schedule indicating the tree survey results

4.0 <u>Report limitations</u>

- 4.1 All inspections were made from ground level, using binoculars where necessary. Should a more detailed inspection, by climbing or by elevated platform, be required then this will be highlighted within the survey recommendations.
- 4.2 I have not contacted the local planning authority to determine the legal status of the trees on site. If any trees are the subject of an order, or the land forms part of a Conservation Area then it will be necessary to properly notify, or to obtain prior permission from, the local authority before carrying out any works on the trees.
- 4.3 Trees are living, dynamic organisms. Their health and overall condition changes as the trees grow and can be affected by external conditions. For this reason the condition survey and any recommendations given are valid for a period not exceeding one calendar year from the date of issue of this report.

5.0 <u>Findings</u>

- 5.1 The attached site plan is based upon a topographical survey of the site which identifies tree reference numbers and which also indicates the positions and crown spreads of the trees on site.
- 5.2 The areas in red lines surrounding the trees indicate the theoretical extent of root protection areas within each group. These represent areas where construction activities should if possible be avoided (if trees retained) and care taken when removing any existing structures including services, hard surfacing etc.
- 5.3 The site consists of an academy with associated landscaping. Tree stock is mixed with plenty of low quality specimens and shrubbery with occasional higher quality trees.

20 August 2017 Tim Pursey Chartered Arboriculturist

Tree Survey

Key:

Height:	Estimated in metres.
Stem diameter:	Measured at 1.5m above ground level.
Branch spread:	Estimated in metres at four cardinal points.
Height of crown Clearance:	Height in metres (estimated) above adjacent ground level to inform on ground clearance, crown stem ratio and shading.
Age class:	Young tree in first third of its life expectancy Middle age tree Mature trees Over Mature Veteran
Category grading:	A/B/C/U – In accordance with BS 5837:2012 Trees in relation to Design, Demolition and Construction – Recommendations.
	Attached plan indicates rooting areas (circled in red). The colours used to mark their stems indicate the following:
	Category A – High Quality - stems are marked in green on the attached plan. Category B – moderate quality - are marked in dark blue. Category C- low quality - are marked in grey.
	Category U – very poor quality - are marked in dark red.

Tree No.	Species	Height (m)	Stem Dia.(mm)	Crown Radius (m)				Crown Ht. (m)	Age Class	Remaining Contribution	Structural and Physiological Condition	Preliminary Management Recommendations	Retention Category
				Ν	Е	S	W						
G1	Prunus, Crab Apple	3	100- 150	2	2	2	2	1.5	Mat	20-40	Normal	None	C1
T2	Thorn	3	190	3	3	3	3	2	Mat	20-40	Normal	None	C1
Т3	Thorn	6	250	3	3	3	3	2	Mat	20-40	Normal	None	C1
T4	Purple Leaf Plum	7	290	4	4	4	5	2	Mat	10-20	Normal	None	C1
Т5	Purple Leaf Plum	6.5	380	5	5	5	5	2	Mat	10-20	Normal	None	C1
T6	Apple	5	220	3	3	3	3	2	Mat	10-20	Normal	None	C1
T7	Purple Leaf Plum	7	310	5	5	5	5	2	Mat	10-20	Normal	None	C1
Т8	Purple Leaf Plum	6	275	4	4	4	4	2	Mat	10-20	Normal	None	C1
Т9	Purple Leaf Plum	6	290	4	4	4	4	2	Mat	10-20	Normal	None	C1
T10	Purple Leaf Plum	6	320	5	5	5	5	2	Mat	<10	Poor condition. Stem decay	None	U
T11	Elder	3	100	2	2	2	2	1.5	Mid	20-40	Normal	None	C1
T12	Turkey Oak	17	725	9	8	8	8	3	Mat	20-40	Twin stemmed. Average	None	C1
T13	Scots Pine	10	650	5	4		6	2	Mat	20-40	Shaped by wind	None	B2
T14	Scots Pine	10	425	5	5	5	5	2	Mat	20-40	Normal	None	B2
T15	Field Maple	4	240	3	3	3	3	1.5	Mid	40+	Normal	None	B2
T16	Norway Maple, Pine	15						2	Mid - Mat	40+	Normal group of trees	None	B2
T17	Red Oak	9	260	6	6	6	6	2	Mat	40+	Normal	None	B1 B2
T18	Oak	7	500	7	7	7	7	2	Mat	40+	Normal. Growth suppressed by wind	None	B2

Tree No.	Species	Height (m)	Stem Dia.(mm)	Crown Radius (m)		Crown Ht. (m)	Age Class	Remaining Contribution	Structural and Physiological Condition	Preliminary Management Recommendations	Retention Category		
				Ν	E	S	W						
T19	Sweet Chestnut	5.5	250	3	3	3	3	2	Mid	40+	Normal	.none	C1
T20	Horse Chestnut	4.5	200	2.5	2.5	2.5	2.5	2	Mid	40+	Normal	None	C1
T21	Red Oak	10	440	7	7	7	7	2	Mat	40+	Normal	None	B1 B2
G22	Mixed group	5-6							Mat	40+	Mixed shrubbery with Cherry, Hawthorn, Ash, Rowan, Yew, Apple etc. Mostly unmanaged	None	C1
T23	Sycamore	9	240	3	3	3	3	2	Mid	10-20	Normal	None	C1
G24	Turkey Oak x4	12- 15	300- 400	5	5	5	5	2.5	Mat	10-20	Normal. Trees unexceptional but corner position as a group	None	B2
T25	Pittosporum	6	200	2.5	2.5	2.5	2.5	1	Mid	20-40	Normal	None	C1
T26	Ginkgo	12	410	5	5	5	5	2	Mat	40+	Normal	None	B1 B2
T27	Norway Maple	9	510	6	6	6	6	2	Mat	40+	Normal	None	B1 B2
T28	Norway maple	11	390	5	5	5	5	2	Mat	40+	Normal	None	B1 B2
T29	Serbian Spruce	8	180	1.5	1.5	1.5	1.5	1	Mid	20-40	Normal	None	C1
G30	Leyland Cypress	14	200- 400					1	Mat	10-20	Normal boundary planting	None	C1 C2
T31	Horse Chestnut	10	325	4	4	4	4	2	Mat	20-40	Normal	None	C1
G32	Mixed group	10- 12	200- 300					2	Mid	20-40	Mixed group including Lime, Maple, Hornbeam	None	C1 C2
G33	Lombardy Poplar x2	25	850	4	4	4	4	2	Mat	10-20	Large trees relatively close to adjacent housing	None	C1 C2
G34	Leyland Cypress	15	300					1	Mat	10-20	Normal	None	C1 C2

Tree No.	Species	Height (m)	Stem Dia.(mm)	Crown Radius (m)			Crown Ht. (m)	Age Class	Remaining Contribution	Structural and Physiological Condition	Preliminary Management Recommendations	Retention Category	
				Ν	Е	S	W						
G35	Lombardy Poplar x2	25	850	4	4	4	4	2	Mat	10-20	Large trees relatively close to adjacent housing	None	C1 C2
Т36	Deodar Cedar	13	495	4	4	4	4	2.5	Mat	20-40	Normal	None	C1
G37	Poplar	16	700	4	4	4	4	2	Mat	10-20	Previously topped	None	C1
T38	Southern Beech	9	300	4	4	4	4	2	Mat	10-20	Thin canopy	None	C1
Т39	Southern Beech	15	750	7	7	7	7	3	Mat	40+	Normal	None	B1 B2
T40	Turkey Oak	20	765	8	8	8	8	3	Mat	40+	Normal	None	A1
T41	Holm Oak	12	625	6	6	6	6	3	Mat	20-40	Multistemmed. Normal	None	B2
T42	Norway Maple	13	450	5	5	7	1	3	Mat	20-40	Normal	none	C1
G43	Apple x2	6	220					1.5	Mat	<10	Generally poor	None	U
T44	Sycamore	16	450	7	7	7	7	3	Mat	20-40	Normal	None	B2
T45	Birch	16	280	4	4	4	4	2.5	Mat	20-40	Normal	None	C1
G46	Mixed group	6- 10							Mid - mat	20-40	Mixed species including Laburnum, Holly, Japanese Red Cedar, Bay, Hazel, Beech, Apple, Cotoneaster etc	All unexceptional	C1
G47	Holly, Pittosporuma	6	200- 250					2	Mat	20-40	Normal	None	C1
T48	Sycamore	9	225	3	3	3	3	2	Mid	10-20	Normal	None	C1
T49	Beech	2	100	1	1	1	1	1	Mid	10-20	Heavily pruned	None	C1
T50	Douglas Fir	15	535	6	6	6	6	2	Mat	40+	Normal	None	B1 B2
G51	Holly, Pittosporum, Elder etc	9							Mat	10-20	Normal	None	C1

Tree No.	Species	Height (m)	Stem Dia.(mm)	Crown Radius (m)			Crown Ht. (m)	Age Class	Remaining Contribution	Structural and Physiological Condition	Preliminary Management Recommendations	Retention Category	
				Ν	Е	S	W						
T52	Lime	13	900	6	6	6	6	3	Mat	10-20	Pollard tree. Unexceptional	None	B2
G53	Serbian Spruce x2	9	200	2	2	2	2	2	Mat	40+	Normal	None	C1
T54	Indian Bean Tree	5	300	4	4	4	4	2	Mat	20-40	Normal	None	C1
G55	Lawsons Cypress x2	8	250- 300	3	3	3	3	2	Mat	20-40	Normal	None	C1
T56	Cotoneaster	2.5	100	3	3	3	3	2	Mat	20-40	Normal	None	C1
T57	Purple Beech	11	690	8	8	4	8	2.5	Mat	40+	Normal	None	B1 B2
T58	Persian Ironwood	3.5	240	4	4	4	4	1	Mid	20-40	Normal	None	C1
T59	Laburnum	3	260	2	2	2	2	1	Mid	20-40	Normal	None	C1
T60	? Dead tree	3										Remove	U
T61	Sweet Gum	12	330	4	4	4	4	2	Mat	40+	Normal	None	B1 B2
T62	Whitebeam	4	200	3	3	3	3	2	Mid	40+	Normal	None	C1
T63	Beech	8	200	3	3	3	3	2	Mid	10-20	Normal	None	C1
T64	Beech	10	275	4	4	4	4	2	Mid	10-20	Normal	None	C1
T65	Rowan	4	180	2.5	2.5	2.5	2.5	2	Mat	20-40	Normal	None	C1
T66	Apple	6	265	4	4	4	4	2	Mat	20-40	Normal	None	C1
T67	Western Red Cedar	7	150	2	2	2	2	2	Mid	20-40	Normal	None	C1
T68	Ash	9	300	4	4	4	4	2	Mat	10-20	Multistemmed	None	C1
G69	Mixed small trees	3	100						Mid	10-20	Normal	None	C1
T70	Purple Beech	7	220	3	3	3	3	2	Mid	20-40	Normal	None	C1

Tree No.	Species	Height (m)	Stem Dia.(mm)	Crown Radius (m)				Crown Ht. (m)	Age Class	Remaining Contribution	Structural and Physiological Condition	Preliminary Management Recommendations	Retention Category
				Ν	Е	S	W						
T71	Sweet Gum	9	200	3	3	3	3	2	Mid	20-40	Normal	None	B2
T72	Pittosporum	5	225	5	4	4	5	2	Mat	10-20	Normal	Reduce in size	C1
T73	Crab Apple	6	300	4	4	4	4	2	Mat	20-40	Normal	None	C1
T74	Lawsons Cypress	4	300	3	3	3	3	1	Mat	10-20	Generally poor. Multistemmed	None	C1
T75	Cherry	4	280	3	3	3	3	2	Mat	10-20	Generally poor	None	C1
T76	Koelreuteria	6	320	5	5	5	5	2	Mat	20-40	Normal	None	C1
T77	Cherry	3	110	2.5	2.5	2.5	2.5	2	Mat	10-20	Generally poor	None	C1

<u>Bibliography</u>

British Standard 3936-1:1992 Nul British Standard 3998:2010 Red British Standard 4428:1989 Cod British Standard 5837:2012 Tre Cod	rsery Stock commenda de of Pract es in Relat nstruction -	- Specification for Tree tions for Tree Work ice for General Landso tion to Design, Demolit - Recommendations	es and Shrubs caping Operations ion and
Tree Preservation Orders: A Guide to The Subsidence of Low-Rise Buildings Standards-Chapter 4.2 Building Near Trees	ne Law and 2000 ees 2003	Good Practice Institution of Structura National House Build	2000 al Engineers ing Council
Guidelines for The Planning, Installation	and Mainte	enance of Utility Servic	ces in
Proximity to Trees	1995	National Joint Utilities	Group
Controlling Water Use of Trees to Allevia	ate Subside	ence Risk	
	2004	Horticulture Link Proje	ect 212
Inspection of Highway Trees Roads 52/7 Site Layout Planning for Daylight and Su	75 1975 Inlight 2007	Department of the En 7 Littlefair, P.J.	vironment Circular BRE 209
Forestry Commission Information Notes Phytophthora Pathogens of Trees: Their Forests, Carbon and Climate Change: th	Rising Pro the UK Cont	ofile in Europe ribution	FCIN030 1999 FCIN048 2003
Forestry Commission Bulletin Climate C	hange: Imp	oact on UK Forests	FCBU125 2002
Essential Soil Science Visual Amenity Valuation of Trees and V	2003 Voodlands	Ashman, M.R. & Puri	, G.
The Hillier Manual of Trees and Shrubs The Arboriculturalist's Companion Collins Tree Guide Habitat Management for Invertebrates Dead Wood Matters: The Ecology and C	2003 2004 1990 2004 2001 Conservatio	Helliwell, D.R. Hillier, J. & Coombes James, N.D.G. Johnson, O. & More, Kirby, P.	, A. D. ebrates in Britain
Dead Wood Matters. The Leology and C	1992	Kirby, K.J. & Drake, C	C.M.
Physiology of Woody Plants Hazards from Trees: A General Guide Principles of Tree Hazard Assessment a	1979 2000 Ind Manade	Kramer, P.J. & Kozlov Lonsdale, D.	wski, T.T.
	2001	Lonsdale, D.	
The Body Language of Trees	2003	Mattheck, C. & Brelow	er, H
I rees of Britain and Northern Europe Fundal Strategies of Wood Decay in Tre	1978 es 2004	Mitchell, A. Schwarze F Engels	. I Mattheck C
Modern Arboriculture	2003	Shigo, A.L.	, 0 , mattrook, 0 .
Diagnosis of III-Health in Trees	2000	Strouts, R.G. & Winte	er, T.G.
Soil Types: A Field Identification Guide	1989	I rudgill, S. Woher K & Mattheod	
Reducing Infrastructure Damage by Tree	e Roots		κ, Ο .
Tree Roots in the Built Environment Porous Pavements	2003 2006 2005	Costello L.R. & Jones Roberts, Jackson, Sn Ferguson, B.K.	s K.S. nith

Publications from Arboricultural Advisory and Information ServiceAPN1 Driveways Close to TreesPatch, D. & Dobson, M.APN12 Through the Trees to DevelopmentPatch, D. & Holding, B.ARIN 130/95/ARB Tree Root SystemsDobson

