

Part 1

TREE SURVEY

OF LAND AT

GREEN LANE CHESTERTON

Our Reference JTK/8364/so

CLIENT
CSa Environmental Planning
Dixies Barns
High Street
Ashwell
Hertfordshire
SG7 5NT



1. Objective

1.1 To assess the condition of the trees and provide sufficient information to enable decisions to be made on planning aspects of the site and its potential development.

2. Notes

- 2.1 The assessment was carried out from ground level from within the site or from any adjacent public place.
- 2.2 The assessment has been carried out following the guidelines set out in BS 5837:2012 Trees in relation to design, demolition and construction Recommendations
- 2.3 The survey was conducted by Jaime Bray, Prof.Dip.Arb on the 3rd April 2014.

3. Tree Identification and details

- 3.1 As annotated on the drawing. Please note that sketch drawings or drawings marked 'not to scale' are indicative only, and tree positions should not be relied upon for design or setting out.
- 3.2 Details of each individual tree are recorded in the Schedule of Trees at Appendix 1 of this report.

4. Site Description

- 4.1 The area of this survey lies to the east of Green Lane. To the northeast the site is bounded by allotments, to the southeast it is bounded by residential properties and to the southwest by arable fields.
- 4.2 The site is of broadly flat plane with a stable block in the northern tip of the site.
- 4.3 The land is dissected by a hedgerow running from northwest to southeast through the north easterly side of the site. The land to the northeast of the hedge is predominantly pasture and the land to the southwest of the hedge is arable.
- 4.4 The majority of trees, predominantly Ash with occasional Field Maple and Sycamore, grow along the south western and south eastern boundaries, within hedgerows of varied species.
- 4.5 There is a small pocket of mature Ash and Sycamore in the northern tip of the site adjacent to the allotments.



5. Geology

5.1 The geological information has been taken from the British Geological Survey map of Great Britain using a postcode search. The geological information given in this report should not be relied upon by other parties who are advised to carry out their own assessment of the site conditions to suit their own needs.

Bedrock Geology

5.2 Cornbrash Formation - Limestone. Sedimentary bedrock formed approximately 161 to 168 million years ago in the Jurassic Period. Local environment previously dominated by shallow carbonate seas.

Superficial deposits

5.3 None recorded.

6. General Guidance Notes for Development

- 6.1 These notes are provided as a guide to the designer. They represent my personal views of the tree stock, which trees should be retained and how they should be protected. The views expressed have not been subject to consultation or discussion with any other party.
- 6.2 If not already provided, the site designer should establish root protection areas by creating a circle around each tree that has a radius of 12 times the trunk diameter (10 times trunk diameter for trees with an 'm' suffix).
- 6.3 Ideally, building lines should be at least 2m outside the root protection area to provide working space for construction however protection measures can be taken if such clearance, in isolated cases, is not achievable. Service runs should be routed outside the root protection area. Limited use may be made for parking, drives or hard surfaces within the root protection areas, subject to advice from a qualified arboriculturist.
- On residential developments consideration must be given to future tree growth and orientation, i.e. adverse shading and blocked views from windows raise concerns for incoming residents, which may lead to pressure to fell or remove trees in the future. Wherever possible arrange or orientate windows to primary rooms parallel or tangentially to tree canopies to lessen the conflict.

Signed: PP Date: 8th April 2014

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Appendix 1

SCHEDULE OF TREES UPON LAND AT GREEN LANE CHESTERTON

Our Reference JTK/8364/SO



Key to Schedule of Trees

Column Heading	Explanation
TPO No	If applicable and where known
Tree No.	Unique number corresponding with number on plan
Species	English names
Ht (m)	Height in metres
Branch Spread	Crown radius in metres to cardinal points of the compass
Stem diameters (cm)	All measurements conform to Annex C of BS 5837:2012
otem diameters (em)	Single stem - Stem diameter in centimetres measured at 1.5m above ground level. Multi-stemmed tree with 2 to 5 stems – Diameter of each stem
	Multi-stemmed tree with more than 5 stems – Average stem diameter and number of stems
Height of crown clearance	Height in metres between the ground and underside of canopy
Height of first major branch and direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	Suffix 'e' denotes an estimated dimension. Suffix 'av' denotes an average dimension
Age class	Age Class definitions:
	Y = less than one third natural life span spent MI = between one third and two thirds natural life span M = greater than two thirds life span completed OM = overmature V = veteran
Category grading and Estimated remaining	Summary of BS 5837: 2012 categorisation:
contribution (yrs)	Trees that do not warrant consideration for retention: U = those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.
	2. Trees to be considered for retention: A1, 2 or 3 = trees of high quality and value (substantial contribution >40 yrs)
	B1, 2 or 3 = trees of moderate quality and value (significant contribution >20 yrs)
	C1, 2 or 3 = trees of low quality and value (but adequate, ie >10 yrs or young trees – until new planting can be established)
Estimated remaining	Useful estimated remaining contribution of the tree or tree group
contribution	
Condition	Brief description including physiological and structural defects
Preliminary management	Describes current arboricultural requirement for the tree in its current context
recommendations	
Root protection radius	Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of BS5837:2012
Root protection area	Total area of minimum root protection area extrapolated from root protection radius

No.	Species	Ht			n)		tem			diam		(cm)	th	ore an	of crown ce (m)	Height of first branch (m) and direction (compass point)	Age class	grading	stimated remaining contribution (yrs)	Condition	Preliminary management	ection radius (m)	otection area sq.m
Tree No.	•	(m)	N			W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of crown clearance (m)	Height of f (m) and o		Category 8	Estimated contribut	Physiological / Structural	recommendations	Root prot	Root pr
1	Pair of Ash	7av		3	av		<23								1	1W	Y	C2	>10	Growing at edge of road. Tree to south multi- stemmed from ground level with tight union susceptible to failure. Some deadwood present.		2.76	24
2	Ash	10	4	5	3	6		31	31						1	3NW	MI	C2	>10	Contributing to line of trees. Twin-stemmed from ground level with tight union up to circa 1 metre above ground level susceptible to failure. Large pocket of decay and cavity present on north face of trunk at circa 0.5 metres above ground level. Old pruning wounds present throughout crown with pockets of associated decay. Large deadwood present.		5.26	87
3	Ash	10	8	7	6	7							22av	7	1	1N	MI	C2	>10	Multi-stemmed from ground level with tight unions therein susceptible to failure. Large pockets of decay present at base of stem within central area of trunk. Small pockets of decay present throughout crown possibly associated with previous branch removal. Large deadwood present.		6.98	153
4	Hawthorn	5	4	1	3	3							10	14	0	-	MI	C2	>10	Contributing to line of trees. Multi-stemmed from ground level.		4.49	63
5	Group of Ash	13av		7:	av								<25	6	2	2N	MI	C2	>10	Contributing to line of hedgerow trees. Heavily clad in dense ivy preventing any inspection of multi-stemmed union. Multi-stemmed from circa ground level with tight unions therein susceptible to failure. Small wounds present throughout with small pockets of associated decay. Small deadwood present throughout.		7.35	170

No.	6	Ht	Br	anch (r	Spr		tem			diam	ms	(cm)	th	ore an ems	of crown ce (m)	irst branch direction s point)	Age class	grading	remaining tion (yrs)	Condition	Preliminary management	ection radius (m)	protection area sq.m
Tree No.	Species	(m)	N	Е	S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age	Category	Estimated remainin contribution (yrs)	Physiological / Structural	recommendations	Root protection radius (m)	Root prote sq.
6	Ash	9	6	4	5	6		21	25	8	20e				3	4NW	MI	C2	>10	Contributing to hedgerow. Multi-stemmed from ground level with tight unions therein susceptible to failure. Ivy present preventing accurate measurement of one stem. Large crossing branch with large wound present to northwest of crown at circa 4 metres above ground level. Large pocket of decay on smaller stem to the northeast at circa 0.5 metres above ground level. Small deadwood present throughout.		4.69	69
	Hedgerow of predominantly Hawthorn, Blackthorn, Dog Rose, Privet, Elderberry	5av		2:	av		10av								0	-	MI	C2	>10	Providing screening of site from surrounding arable field. Ivy present throughout much of the hedgerow preventing thorough inspection. Small pockets of basal decay present in many stems, some having failed. Some deadwood present.		1.20	5
8	Group of Ash	9av		5:	av								<20	6	3	4N	MI	C2	>10	Contributing to hedgerow. Heavily clad in dense ivy preventing thorough inspection. Multistemmed from ground level with tight unions therein susceptible to failure.		5.88	109
9	Group of Ash	8av		4:	av								15	6	3	-	MI	C2	>10	Contributing to hedgerow. Multi-stemmed from ground level with tight unions therein susceptible to failure. Ivy present preventing thorough inspection. Small deadwood throughout.		4.41	61
10	Pair of Ash	8av		4:	av								15	6	4	3NE	MI	C2	>10	Growing amidst dense Blackthorn preventing thorough inspection of base. Multi-stemmed from ground level with tight unions therein.		4.41	61

			Rr.	anch	Spr	ead			Stem	diam	eters	(cm)	М	ore	υ	nch n		۵۵	ing ()			dius	area
No.	Species	Ht		(n	n)		stem		2-	-5 ster	ns		th	an	of crownice (m)	irst brandirections point	class	grading	remaining tion (yrs)	Condition	Preliminary management	ection rac (m)	protection a
Tree No.	Species	(m)	N	Е	S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age	Category 8	Estimated remainin contribution (yrs)	Physiological / Structural	recommendations	Root protection radius (m)	Root prote sq.
11	Ash	7	4	4	3	4							15	7	3	4N	MI	C2	>10	Growing amidst dense Hawthorn preventing thorough inspection of base. Multi-stemmed from circa 0.2 metres above ground level with tight unions therein highly susceptible to failure. Large deadwood present.		4.76	71
12	Pair of Ash	8av		32	av			<20	<20	<20	<20				4	2NW	MI	C2	>10	Contributing to hedgerow. Multi-stemmed from ground level with tight unions therein susceptible to failure. Ivy preventing thorough inspection. Small deadwood throughout.		4.80	72
13	3 Sycamore	10	4	3	4	3		20e	20e	20e					4	3E	MI	C2	>10	Growing amidst dense bramble and Hawthorn preventing accurate measurement. Multistemmed from 0.2 metres above ground level. Small deadwood present throughout.		4.16	54
14	Ash	9	5	5	3	4		10e	15e	25e	16				4	1.5NE	MI	C1	>10	Contributing to hedgerow. Multi-stemmed from ground level. Crossing stems from circa 1.4 to 2 metres above ground level resulting in an estimated diameter. Ivy preventing accurate measurement of three stems. Small deadwood present throughout.		4.17	55
15	Ash	14	7	6	5	7		28	30						4	4W	MI	B2	>20	Twin-stemmed from circa 1 metre above ground level with tight union therein susceptible to failure. Growing to north of older Field Maple coppice stump. Small deadwood present throughout.		4.92	76

;	No.		Ht	Bra	anch (n	_	ead	tem			diam	ns	(cm)	th	ore an ems	f crown ce (m)	rst branch lirection s point)	class	grading	remaining tion (yrs)	Condition	Preliminary management	tion radius 1)	ction area m
I	Tree No.	Species	(m)	N	Е	S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age	Category	Estimated remainin contribution (yrs)	Physiological / Structural	recommendations	Root protection radius (m)	Root protection sq.m
	16 F	ïeld Maple	15	6	5	5	7							<30	8	4	5W	M	B2	>20	Contributing to hedgerow. Possibly an old coppice stump allowed to regrow. Multistemmed from ground level with tight unions therein susceptible to failure. Ivy present on one large stem to south preventing thorough inspection. Tree consisting mainly of two large stems with 6 smaller stems of circa 20cm in diameter. Small deadwood present.		10.18	326
	17 F	ield Maple	11	6	7	6	8		18	23	20	30e				2	2W	M	B2	>20	Multi-stemmed from ground level possibly growing from old coppice stump. Large pocket of decay within central area of stump. Ivy present. Growing amidst dense Dog Rose and Blackthorn preventing accurate measurement of two stems to east. Small pocket of decay present at circa 5 metres above ground level on stem to west. Small deadwood present throughout.		5.57	97
		Mixed species nedgerow	10av		72	av		<30								0	2W	MI	B2	>20	Providing screening of site of residential properties to east. Hedgerow consists of Hawthorn, Field Maple, Goat Willow, Hazel, Dog Rose, Blackthorn, Elderberry all growing within a 30 metre section. Some stems heavily clad in ivy with some stem failure having occurred. Large pockets of decay associated with previous branch loss throughout. Growing amidst dense under thickett of bramble preventing thorough inspection of many stems. Large deadwood present throughout.		3.60	41

No.	Species	Ht	Bra	anch (n	-		stem			diam	eters	(cm)	th	ore an ems	of crown ce (m)	eight of first branch (m) and direction (compass point)	Age class	grading	stimated remaining contribution (yrs)	Condition	Preliminary management	ection radius (m)	protection area sq.m
Tree No.	Species	(m)	N	Е	S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age	Category ;	Estimated contribut	Physiological / Structural	recommendations	Root protection radius (m)	Root prote
19	Pair of Field Maple	15av		82	av								<35	6	0	2W	M	B2	>20	Visually significant contribution to tree belt. Multi-stemmed from ground level with tight unions therein susceptible to failure. Possibly originates from old coppice stump. Large stem to southeast of crown has split main fork with subsequent adaptive growth. Significant lean on many stems with heavy end loading of branches. Ivy throughout preventing further inspection.		10.29	333
20) Pair of Field Maple	13av		72	av								<30	6	0	2N	M	B2	>20	Visually significant contribution to tree belt. Multi-stemmed from 0.5 metres above ground level with tight unions therein susceptible to failure. Possibly growing from old coppice stump. Heavily clad in ivy preventing thorough inspection. Some stems have significant lean with heavy end loading of branches. Large deadwood present throughout.		8.82	244
2	Sycamore	12	6	5	5	6		23	38						4	5NW	MI	B2	>20	Contributing to tree belt. Twin-stemmed from circa 0.5 metres above ground level with tight union therein susceptible to failure. Stem to the east heavily clad in dense ivy preventing thorough inspection. Some deadwood present throughout.		5.33	89
22	2 Lime	9	4	3	3	4	25e								1	2N	Y	C1	>10	Heavily clad in ivy preventing accurate measurement and thorough inspection. Multistemmed from circa 2 metres above ground level. Some crossing branches present throughout.		3.00	28

ς Species	Ht		nch (m	1)		Stem			diam -5 stei	ns	(cm)	th	ore an ems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	grading	stimated remaining contribution (yrs)	Condition	Preliminary management	Root protection radius (m)	protection area sq.m
Tre	(m)	N		S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of crow clearance (m)	, ,	·	Category a	Estimated contribu	Physiological / Structural	recommendations		Root
23 Pair of Field Maple	13av		7a	V								25av	6	0	2W	M	B2	>20	Contributing to tree belt along boundary. Multistemmed from circa 0.5 metres above ground level with tight unions therein susceptible to failure. Possible growing from old coppice stump with small pockets of basal decay therein. Heavily clad in dense ivy preventing thorough inspection of fork union and crowns. Some deadwood present throughout.		7.35	170
24 Walnut	9	3	4	4	3	20e								3	-	Y	C1	>10	Growing within private garden preventing accurate measurement. Twin-stemmed from circa 4 metres above ground level.		2.40	18
25 Row of Conifers	2av		1a	V	•	10av								0.5	-	Y	C2	>10	Contributing to hedgerow along northeast boundary of site.		1.20	5
26 Field Maple	7	2	2	3	2							8	9	0	-	Y	C1	>10	Multi-stemmed from circa 0.5 metres above ground level. Growing amidst fencing with some branches entwined within wire mesh.		2.88	26
27 Pine	6	1	1	1	1	11								1	-	Y	C1	>10	Growing at northeast edge of site. Contributing to hedgerow.		1.32	5
28 Hedgerow of predominantly Hawthorn	1.5av		0.5	av	•	2av								0	-	Y	C2	>10	Recently planted hedgerow growing to south of mature off-site vegetation. Contributing to the boundary vegetation along northeast of site. Some Bramble, Conifer, Field Maple and Dog Wood growing amidst with occasional Blackthorn present.		0.24	0
29 Hedgerow of predominantly Hawthorn with occasional Blackthorn	1.5av		1a	V		10av								0	-	MI	C1	>10	Hedgerow consisting of predominantly Hawthorn and Blackthorn with Bramble growing amidst. Hedge laying has recently occurred resulting in large wounds present at the base of many stems.		1.20	5

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·o			Branch S ₁	_	n		Stem 2-	diam		(cm)	th	ore	rown (m)	t branch ection oint)	SS	ading	remaining tion (yrs)			n radius	on area
Tree No.	Species	Ht (m)	N E S	S W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia 5 ts	No. stems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remainin contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection sq.m
30	Hawthorn hedge	2.5av	1av		10av								0	-	Y	C2	>10	Providing screening of site from allotments. Recently trimmed to 2.5 metres above ground level.		1.20	5
31	Predominantly Hawthorn hedgerow	1.5av	0.5av	V	5av								0	-	Y	C2	>10	Recently trimmed to 1.5 metres above ground level.		0.60	1
32	Hawthorn hedge with occasional Field Maple, Blackthorn, Dog Rose, Privet, Dog Wood and Elderberry	2av	1av		5av								0	-	MI	C2	>10	Sparse hedgerow running from northwest to southeast of site with some new planting having occurred. Bramble growing amidst.		0.60	1
33 to 35	Yew	3av	1av		10av								1	-	Y	C1	>10	Growing along hedgerow.		1.20	5
30	Mixed species hedgerow of predominantly Hawthorn	2.5av	2av		10av								0	-	MI	C2	>10	Hedgerow of predominantly Hawthorn with occasional Ash and Sycamore trees growing amidst. Recently flailed to 2.5 metres above ground level with consequent large wounds present throughout. Ivy present on many stems preventing thorough inspection. Ash and Sycamore stems appear to have grown from old coppice stumps with large pockets of decay present throughout.		1.20	5

o .	Ht	Bra	anch (n	Spron)	ead	tem			diam	neters	(cm)	th	ore nan tems	f crown ce (m)	irst branch lirection s point)	class	grading	remaining tion (yrs)	Condition	Preliminary management	tion radius	protection area sq.m
Species	(m)	N	Е	S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category	Estimated contribu	Physiological / Structural	recommendations	Root protection radius (m)	Root protecti
37 Ash	9	4	4	4	5	30e								2	4SE	MI	C1	>10	Heavily clad in ivy preventing accurate measurement and thorough inspection. Twinstemmed from circa 2 metres above ground level. Ivy preventing inspection of main fork. Dense bramble growing amidst up to circa 4 metres above ground level.		3.60	41
38 Hedgerow of Conifers	3av		1:	av		15av								0	-	Y	C2	>10	Recently reduced to 3 metres above ground level.		1.80	10
39 Predominantly Hawthorn hedgerow	2.5av		1:	av		10av								0	-	MI	C2	>10	Recently maintained to 2.5 metres above ground level. Providing screening of sheds and barns from road.		1.20	5
40 Ash	13	6	6	6	7	43								3	3E	M	B2	>20	Contributing to tree belt. Small wounds present throughout possibly associated with previous branch loss/removal with small pockets of associated decay therein. Small deadwood present throughout.		5.16	84
41 Sycamore	14	5	4	4	5	36								4	4N	MI	B2	>20	Contributing to tree belt. Heavily clad in ivy preventing thorough inspection of crown. Possibly growing from old coppice stump with large pockets of decay therein.		4.32	59
42 Sycamore	12	5	5	5	5	35e								2	38	MI	B2	>20	Growing adjacent to corrugated shed preventing accurate measurement of stem. Triple-stemmed from circa 2 metres above ground level with tight union therein up to 4 metres above ground level highly susceptible to failure. Large pocket of basal decay present to north of stem at 0.5 metres above ground level.		4.20	55

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					_				Stem	diam	eters	(cm)				ch			ng ,			ius	ea
No.		Ht	Bra	anch (n	-	ead	Stem		2-	-5 sten	ns		th	ore an ems	f crown ce (m)	irst bran lirection s point)	class	grading	remaining tion (yrs)	Condition	Preliminary management	tion rad	ction ar m
Tree	Species	(m)	N	E	S	W	Single S	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height o	Height of fi (m) and c	Age	Category	Estimated contribut	Physiological / Structural	recommendations	Root protecti	Root protecti
43	Hedgerow of Sycamore and Ash	7av		38	av		10av								0	-	Y	C2	>10	Growing from old coppice stumps with large pockets of associated decay. Contributing to tree belt.		1.20	5
	Hawthorn hedgerow with occasional Ash and Sycamore	6av		22	av		10av								0	-	MI	C2	>10	Hawthorn hedgerow of circa 4 metres in height with emerging Sycamore and Ash coppice growth. Providing screening of allotments from main road		1.20	5