

BS5837:2012 Trees in relation to design, demolition and construction

Arboricultural Impact Statement:

AJA186 25/08/2023

Church Gate and Priory Cottage,

Southam,

Cheltenham

GL52 3NY

Client Eric Cole Ltd

Consulting Arborist

Alasdair Jeffrey. DipArb, TechArborA

Contents

1.0 Introduction	3
1.1 Legal Considerations/Risk Assessment	3
1.2 Relevant Plans	3
1.3 Qualifications	3
2.0 Rationale	4
3.0 Character Assessment	4
4.0 Tree Survey Findings	4
4.1 Table 1	5
4.2 Table 2	9
5.0 Arboricultural Impact Assessment	. 14

1.0 Introduction

AJ Arborists Ltd has been commissioned by John Dyton of Eric Cole Ltd, Eagle Suite, The Wheelhouse, Bonds Mill, Stonehouse, Gloucestershire GL10 3RF to provide details pursuant to the British Standard 5837: *Trees in relation to design, demolition and construction – Recommendations (BS5837:2012)* for the site Church Gate, Southam, Cheltenham GL52 3NY. This report is based on a site assessment and communication with the client.

The survey took place on the 20th of July 2023 when trees were assessed from ground level with the aid of binoculars, compass, drag tape, diameter tape and a clinometer. Weather conditions and visibility were good and therefore, did not act as an impediment to the survey.

1.1 Legal Considerations/Risk Assessment

Although the potential risk to someone passing beneath a tree, when the tree or part of it fails, is relatively remote; the risk is present. This increases significantly in areas of consistent and regular usage on a year-round basis, such as pedestrian and vehicular highways and amenity areas. Where static structures exist, the risks become constant, and an assessment is made as to whether complete or partial failure of a tree could cause damage to such structures. Within the scope of any tree survey, it is a fact that not all risks of stem or crown failure can be covered, particularly in relation to freak occurrences of weather when even trees of a sound condition can be the subject of structural failure. Trees also have the rare propensity to drop limbs that appear to be in an acceptable condition. These rare occasions have been known to occur in spring and summer on calm days. Although rare, trees shedding limbs should be acknowledged as a risk that cannot be entirely mitigated. The law requires that properties are retained safely for residents, visitors and neighbours (Occupiers Liability Acts 1957/84, Defective Premises Act 1972 and as Common Law Duty of Care), this includes the reasonable care of trees.

1.2 Relevant Plans

21074.03 - Eric Cole

EC-CHUGA-2604/22 - Geomap

1.3 Qualifications

I am a consulting arboriculturist with AJ Arborists Ltd. I have ABC Level 4 Diploma in Arboriculture. I am a LANTRA qualified Professional Tree Inspector. I am a technician member of the Arboricultural Association; I have been a consulting arborist since 2010.

Unit Q Donkeywell Farm Quenington GL7 5DH

2.0 Rationale

Provide sustainable solutions for trees and any new built form, with appropriate tree protection where required.

3.0 Character Assessment

The site lies at the village of Southam with the surrounding area being an urban setting. A few residential properties line the main access roads. The site is split up into two areas with Church Gate in the North portion of the site and Priory Cottage in the South of the site. The proposed development is in the Priory Cottage area of the site and the Church Gate area will not be accessed during construction. Works will easily be achieved with no deleterious impact upon the rural setting. The property is within a conservation area.

4.0 Tree Survey Findings

Trees were assessed for general condition, size and their amenity contribution as arboricultural features. In accordance with BS5837 (2012) tree amenity categorization is assessed individually, as groups, as woodland and in relation to the surrounding local character setting. Table 1 lists the trees and tree measurements. Table 2 sets out life stage, condition, categorisation and estimated remaining contribution. Recorded stem diameter @ breast height (1.5m) measurements are for the largest trees regarding groups, unless there are significant differences within the group where the largest and smallest measurements are then provided. Group root protection areas are to be applied from the edges of the cardinal points for maximum protection, crown spreads are also recorded from cardinal point edges.

Appendices I and II respectively, provide botanical tree and decay species name identification and a tree protection plan.

4.1 Table 1

Height metres = Height (m)
Diameter at breast height millimetres = DBH (mm)
First significant branch (cardinal direction) = FB (N, E, S or W)
Crown starts = CS
Above ground level = AGL
Root protection area = RPA

Tree no.	Species	Height (m)	DBH (mm)	FB & CS Height (m) AGL	Crown spread @ cardinal points; N,E,S & W (m)	RPA Radius (m)	RPA (m²)
1	Common Hazel	8	100	0.5 N	N: 4.5 E: 3 S: 2 W: 4	1.2	4.5
2	Purple Hazel	7	100	-	N: 4 E: 4 S: 3 W: 3	1.2	4.5
3	Common Lilac	5	180	0.5 W	N: 3 E: 3 S: 2 W: 3	2.2	14.7
4	Purple Hazel	8	90	0.5 N	N: 3.5 E: 3.5 S: 3 W: 2	1.1	3.7
5	Common Hazel	8	100	0.5 N	N: 3 E: 3 S: 3 W: 3	1.2	4.5
6	Plum	9	275	1.5 N	N: 2 E: 2 S: 2 W: 2.5	3.3	34.2
7	Common Walnut	20	980	4 S	N: 12 E: 11 S: 13 W: 11	11.8	434.5
8	Apple	4.5	175	2 E	N: 1 E: 2 S: 1.5 W: 1	2.1	13.9
9	Apple	5	115	1.5 S	N: 2 E: 2 S: 2 W: 2	1.4	6.0

Unit Q Donkeywell Farm Quenington GL7 5DH

Tree no.	Species	Height (m)	DBH (mm)	FB & CS Height (m) AGL	Crown spread @ cardinal points; N,E,S & W (m)	RPA Radius (m)	RPA (m²)
10	Common Pear	5	85	1 SE	N: 2 E: 2 S: 2 W: 2	1.0	3.3
11	Apple	6	310	2 W	N: 4 E: 5 S: 5 W: 4.5	3.7	43.5
12	Common Yew	15	780	2.5 E	N: 8 E: 7 S: 7 W: 8	9.4	275.3
G1	Lilac and Elm group	5	150	-	N: 3 E: 3 S: 3 W: 3	1.8	10.2
13	Colorado Blue Spruce	9	230	2 E	N: 2 E: 2 S: 2 W: 2	2.8	23.9
14	Colorado Blue Spruce	9	230	1 N	N: 2 E: 2 S: 2 W: 2	2.8	23.9
15	Laurel	8	235	0.5 N	N: 7 E: 7 S: 4.5 W: 4	2.8	25.0
16	Lawson Cypress	15	260	4 SE	N: 3 E: 3 S: 3 W: 3	3.1	30.6
17	Common Holly	14	280	2 SW	N: 3 E: 3 S: 5 W: 6	3.4	35.5
18	Cherry Plum	13	350	1 W	N: 5 E: 5 S: 5 W: 4	4.2	55.4
19	Cherry Plum	8	235	1.5 E	N: 4 E: 4 S: 4 W: 3	2.8	25.0

Tree no.	Species	Height (m)	DBH (mm)	FB & CS Height (m) AGL	Crown spread @ cardinal points; N,E,S & W (m)	RPA Radius (m)	RPA (m²)
20	Common Mulberry	8	440	0.5 E	N: 5 E: 5 S: 5 W: 5	5.3	87.6
21	Common Laburnum	6	210	0 E	N: 3 E: 3 S: 2 W: 4	2.5	20.0
22	Cotoneaster	7	210	1 W	N: 4 E: 5 S: 7 W: 5	2.5	20.0
23	Rowan	9	200	2 N	N: 3 E: 3 S: 4 W: 3	2.4	18.1
24	Common Yew	6	110	0.5 NE	N: 3 E: 5 S: 2 W: 1	1.3	5.5
25	Himalayan Whitebeam	15	485	1.5 W	N: 5 E: 5 S: 5 W: 5	5.8	106.4
26	Crab Apple	8	230	3 E	N: 3 E: 4 S: 2.5 W: 3	2.8	23.9
27	Crab Apple	8	305	2 W	N: 4 E: 3 S: 4 W: 2	3.7	42.1
28	Common Yew	8	135	0.5 S	N: 4 E: 4 S: 4 W: 3	1.6	8.2
29	Common Yew	8	215	0.5 NE	N: 3 E: 3 S: 3 W: 4	2.6	20.9
30	Norway Maple	18	390	2.5 N	N: 5 E: 5.5 S: 3.5 W: 5	4.7	68.8

Tree no.	Species	Height (m)	DBH (mm)	FB & CS Height (m) AGL	Crown spread @ cardinal points; N,E,S & W (m)	RPA Radius (m)	RPA (m²)
31	Silver Birch	17	320	9 SE	N: 3 E: 5 S: 4 W: 1	3.8	46.3
32	Norway Maple	17	375	2 S	N: 3 E: 5 S: 6 W: 5	4.5	63.6
33	Sorbus 'John Mitchell'	17	290	4 E	N: 4 E: 3.5 S: 4 W: 5	3.5	38.1
34	Manna Ash	18	385	3 E	N: 5 E: 5 S: 3 W: 4	4.6	67.1
35	Wild Cherry	14	245	2.5 S	N: 4 E: 3 S: 6 W: 5	2.9	27.2
36	Tree of Heaven	19	515	3 SW	N: 6 E: 5 S: 8 W: 5	6.2	120.0
37	Robinia	17	215	4 SE	N: 3 E: 4 S: 5 W: 0	2.6	20.9
G2	Shrub group	14	-	-	-	-	-
38	Plum	13	240	1.5 NE	N: 4 E: 4 S: 5 W: 2	2.9	26.1
39	Plum	9	160	2 S	N: 3 E: 3 S: 3 W: 3	1.9	11.6
40	European Larch	15	345	4 E	N: 4 E: 4 S: 3 W: 3	4.1	53.9

4.2 Table 2

Structural condition = Sc Physiological condition = Pc Estimated minimum life expectancy = Eml

Category A = High amenity, B = Moderate amenity & C = Insignificant specimen

Tree no.	Life stage	Sc	Pc	Eml	BS5837 Category	Comments
1	Mature	Good	Good	20+	C2	Multi stem Hazel by the garage.
2	Mature	Good	Good	10+	C2	-
3	Mature	Good	Good	10+	C2	-
4	Mature	Good	Good	20+	C2	-
5	Mature	Good	Good	20+	C2	-
6	Mature	Good / Fair	Fair	10+	C1	Major deadwood in the crown. Work recommendation – remove deadwood above 30mm in diameter. Works to be completed within 1 year from date of the report.
7	Mature	Good / Fair	Good	40+	B1	Focal walnut with multiple over long limbs the crown. Failed stems at 10m on west side. Major deadwood in the crown. Inonotus hispidus brackets at 5m west side. Work recommendation – reduce crown height by 3m and lateral spread by up to 4m. Remove deadwood above 30mm in diameter. Remove failed stems. Works to be completed within 3 months from date of the report.
8	Mature	Good / Fair	Fair	<10	С3	Birch in corner of site.

Unit Q Donkeywell Farm Quenington GL7 5DH

Tree no.	Life stage	Sc	Pc	Eml	BS5837 Category	Comments
9	Mature	Good / Fair	Good	20+	C2	Stem lean to southwest. Basal damage on west and east sides.
10	Semi – mature	Good	Good	20+	C2	Pear rust on leaves. Work recommendation – formative prune. Works to be completed within 1 year from date of the report.
11	Mature	Poor	Decline	<10	C2	Apple tree in decline. Fell to facilitate development if needed.
12	Mature	Good	Good	>40	A2	Focal Yew. Branches touching building on east side. Work recommendation – 2.5m overall crown reduction. Crown lift on northeast side over the proposed driveway to 4m to allow construction traffic access. Works to be completed within 1 year from date of the report.
G1	Mature	Poor	Dead	-	U	Group of dead Lilac and dead Elm. Work recommendation – fell to ground level. Works to be completed within 3 months from date of the report.
13	Mature	Good	Good	20+	C1	lvy on main stem. Remove to facilitate development.
14	Mature	Good	Good	20+	C1	Remove to facilitate development.
15	Mature	Good	Good	20+	C3	Remove to facilitate development.
16	Mature	Good	Good	20+	C2	-
17	Mature	Good	Good	>40	C2	Remove to facilitate development.

Tree no.	Life stage	Sc	Pc	Eml	BS5837 Category	Comments
18	Mature	Good	Good	20+	C2	Failed branch on west side onto neighbours shed. Work recommendation – remove failed branch. Works to be completed within 3 months from date of the report.
19	Mature	Good	Good	20+	C2	-
20	Mature	Good / Fair	Good	20+	C3	Failed stem at base on the south side. Multiple overlong limbs in the crown. Remove to facilitate development.
21	Mature	Good / Fair	Good	10+	C2	Included bark union at 2m on main stem and this is a weak union. Historic failed stem at 1.5m north side. Work recommendation – 1.5m overall crown reduction. Works to be completed within 6 months from date of the report.
22	Mature	Good	Good	20+	C2	Ivy present. Crown will fall over the proposed Car port. Work recommendation – girdle ivy at base of stem leaving a 0.5m gap. Reduce crown back by 1/3 rd to allow construction of Car Port. Works to be completed within 6 months from date of the report.
23	Mature	Good	Good	20+	C1	Work recommendation – girdle ivy at base of stem leaving a 0.5m gap. Remove basal sucker growth. Works to be completed within 6 months from date of the report.
24	Semi- mature	Good	Good	>40	C2	-
25	Mature	Good / Fair	Good	20+	В2	Tree splits into 2 stems at 3m on main stem. The union is weak with included bark. Work recommendation – 3m overall crown reduction. Works to be completed within 6 months from date of the report.

Tree no.	Life stage	Sc	Pc	Eml	BS5837 Category	Comments
26	Dead	Poor	Poor	-	U	Dead tree. Work recommendation – fell to ground level. Works to be completed within 3 months from date of the report.
27	Dead	Poor	Poor	-	U	Dead tree. Work recommendation – fell to ground level. Works to be completed within 3 months from date of the report.
28	Semi – mature	Good	Good	>40	C2	-
29	Semi – mature	Good	Good	>40	C2	-
30	Mature	Good	Good	20+	B1	Focal tree with major dead wood in the crown. Work recommendation – remove deadwood above 30mm in diameter. Works to be completed within 6 months. from date of the report.
31	Mature	Good	Good	20+	C1	-
32	Mature	Good	Good	20+	C2	-
33	Mature	Good	Good	20+	C2	-
34	Mature	Good	Good	20+	C2	-
35	Mature	Good	Good	20+	C2	-
36	Mature	Good	Good	20+	B1	Hung up limb at 10m in central crown. Major deadwood in the crown. Ivy on main stem. Work recommendation – remove deadwood above 30mm in diameter.

Unit Q Donkeywell Farm Quenington GL7 5DH

Tree no.	Life stage	Sc	Pc	Eml	BS5837 Category	Comments
						Remove hung up limb. Girdle ivy at the base leaving a 1.0m gap. Works to be completed within 1 year from date of the report apart from hung up limb which needs removed asap.
37	Mature	Good	Good	20+	C2	Ivy in tree. Work recommendation – Girdle ivy at the base leaving a 1.0m gap. Works to be completed within 1 year from date of the report.
G2	Mature	Good	Good	20+	C3	Shrub group including Bay, Acer, Ailanthus, Viburnum, Sorbus and Berberis.
38	Mature	Good / Fair	Good	10+	C2	Tree splits into 2 stems from the base with included bark union. Work recommendation – 3m overall crown reduction. Works to be completed within 1 year from date of the report.
39	Semi- mature	Good	Good	20+	C3	-
40	Mature	Good	Good	20+	C1	Major dead wood in the crown. Work recommendation – remove deadwood above 30mm in diameter. Works to be completed within 6 months. from date of the report.

5.0 Arboricultural Impact Assessment

The significant trees on the site are 7, 11 and 12 and are 'A', 'B' and 'C' classification. The RPAs of 11 & 12 fall over the proposed driveway, but the remaining trees RPAs will not come in contact with any of the proposed developments.

Other trees of category 'B' and 'C' classification are located in the throughout the site. These trees RPAs do not fall over any proposed works but when works are being undertaken measures will need to be taken.

The mature Walnut (7) falling into the 'B' classification is located in the southeast area of the site.

The symmetrical RPA does not encroach onto any of the proposed developments, but measures must be taken to minimise any damage to the RPA.

The mature Apple (11) falling into the 'C' classification is located in the centre of the Priory Cottage site adjacent to the proposed gravel driveway.

The symmetrical RPA does encroach onto the proposed gravel driveway. A working zone of 1m metre outside the line of the proposed driveway will be used during construction phase. This equates to an RPA encroachment of roughly 3.5m. It is likely that this encroachment will have an impact on the rooting system and overall tree health and measures must be put in place to minimise this disruption. The remainder of the root system is in the garden area which is free from potential factors causing damage.

The mature Yew (12) falling into the 'A' classification is located in the south of the Priory Cottage site adjacent to the proposed gravel driveway and the existing cottage.

The symmetrical RPA does encroach onto the proposed gravel driveway and over onto the northwest side of the driveway. A working zone of 1m metre outside the line of the proposed driveway on the southeast side and 2.5m on the northwest side will be used during construction phase. This equates to an RPA encroachment of roughly 8m. It is likely that this encroachment will have an impact on the rooting system and overall tree health and measures must be put in place to minimise this disruption. The remainder of the root system is in the garden area which is free from potential factors causing damage.

Access to the site is free from tree influence. It is expected that no access facilitation pruning will be required.

Overall, I assess the arboricultural impact of development within the site to be minimal if all points in this report are adhered to and CEZs remain sacrosanct.

Unit Q www.ajarborists.co.uk
Donkeywell Farm Page **14** of **14**Quenington 01285750874
GL7 5DH 07793763535