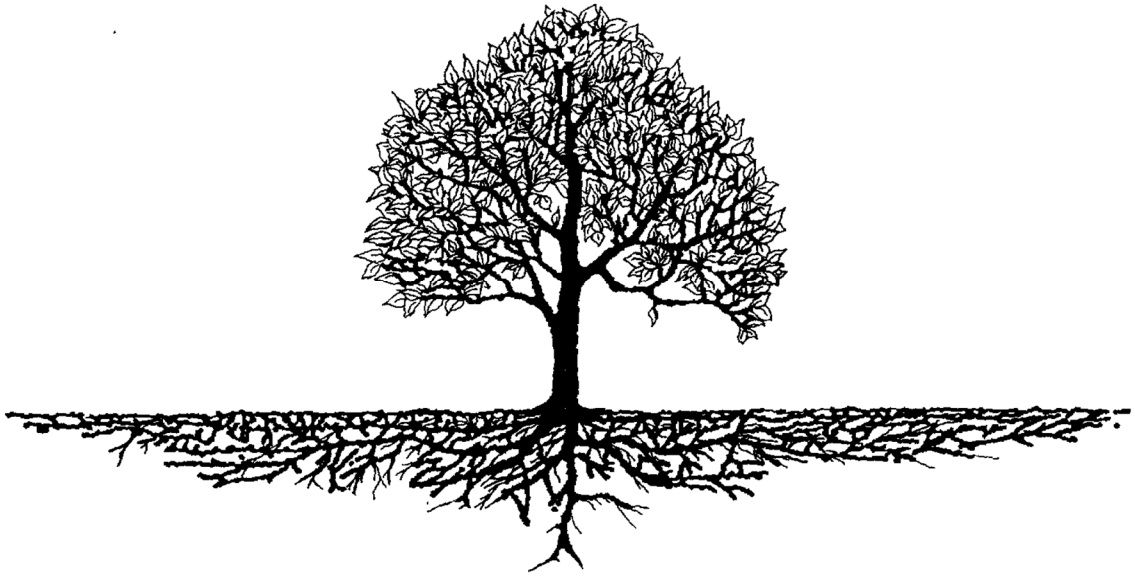
RESOLUTE
TREE CONSULTANCY



BS5837:2012 TREE SURVEY and Arboricultural Impact Assessment

On trees located at Alston RC Church, Longridge

By

Karl Williams

Resolute Tree Consultancy

30 Larkfield, Eccleston, Chorley, Lancashire, PR7 5RN

07547 719022

Table of Contents

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

Client:	JYM Partnership LLP
Ref no:	JYM/Alston Ln/001
Site details:	RC Church
Date of site inspection:	September 2015 Rev A Updated January 2017
Assessor & Report Author:	Karl Williams ND Arb. TechArborA. Resolute Tree Consultancy
Proposal:	Potential development

1.0 Instruction and the purpose of the report

1.1 I have been instructed to carry out a Tree Survey and prepare Arboricultural Impact Assessment for the of the trees at the above site in accordance with BS 5837:2012 (Trees in relation to design, demolition and construction – Recommendations). This report will assess the implications of the proposed development of the site in close proximity to trees, and to provide details of tree protection measures for any retained trees during the construction phase.

1.2 This report is to be read in conjunction with the Tree Survey Plan, Arboricultural Impact Assessment Plan and Tree Protection Plan that accompanies it Ref. JYM/Alston Ln/SP001A, JYM/Alston Ln/AIA001A and JYM/Alston LnTPP001A.

1.3 To provide a schedule of tree works to accompany a planning application.

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

2.0 The scope of the report - Methodology & Limitations

2.1 The tree survey process consisted of a ground-based visual inspection only. Where a further, more detailed or aerial inspection is required, this will be indicated within the recommendations.

2.2 The inspection consisted of an above-ground inspection only. Soil type was not assessed and the assessment of the potential influence of trees upon buildings or other structures resulting from the effects of trees upon shrinkable load-bearing soils or the effects of incremental root or branch growth, are specifically excluded from this report.

2.3 The Tree Survey was undertaken in accordance with British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'. The tree survey involved collecting the following data:

- Sequential reference number.
- Species listed by common name and scientific names.
- Height.
- Stem diameter.
- Branch spread, taken at the four cardinal points.
- Existing height above ground level of: - first significant branch and direction of growth; and of the canopy.
- Age class.
- Observations of structural and/or physiological condition.
- Management recommendations.
- Estimated remaining contribution, in years.
- Tree Category.

2.4 This report is valid for one year from the date of site inspection. The condition of trees can change following severe weather conditions, the effects of diseases or pests and other abiotic factors.

2.5 The comments made are based on observable factors present at the time of inspection. It must be stressed that this report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a risk assessment.

2.6 Trees are shown on the Tree Survey Plan with a corresponding number in the data tables in Appendix 2

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

2.7 Only trees over 150mm in diameter at 1.5 metres have been included in the report.

2.8 No details relating to the location or the installation of services has been supplied. Therefore this report can only deal with this issue in a preliminary manner. The positioning of services should be approved by a suitably qualified Arboriculturist.

3.0 Site Description and Nature of Tree Stock

3.1 The site is located in Alston within the boundaries of Ribble Valley Borough Council and it is not listed in their directory of Tree Preservation Orders.

3.2 The site consists of a field and gardens situated off the B6423 Preston Road with an adjoining Terrace of three properties. The trees that are subject to this survey are located mainly around the edges of the field and garden.

3.3 There are Hedgerows on the southwest and southeastern boundaries. The south western hedges appear to be regularly cut but the hedge to the southeast has had no maintenance or pruning for many years.

4.0 Description of the subject trees

4.1 The tree schedules in Appendix 2 and the Tree Survey Plan show the condition and location of the trees and their suitability for retention according to the British Standard 5837:2012 (Trees in relation to design, demolition and construction – Recommendations). This guidance sets out four categories of trees; from trees that are highly desirable to retain (A), through (B) to trees that may or may not be suitable for retention (C). This system assesses not only the tree health and condition, but other factors such as their long-term impact on adjacent structures and good arboricultural management. A more detailed breakdown of this is included in Appendix 1.

4.2 Trees marked 'U' (trees unsuitable for retention) can be removed due to their condition and/or life expectancy. Trees marked 'C1 – C3' are insignificant or immature specimens or those not of sufficient quality to be in the higher 'A' and 'B' categories. 'C' trees should be retained where possible or where it suits the development layout but there is a general presumption that they can be removed to facilitate development. These trees can be replaced with suitable landscaping.

4.3 There are no Tree Preservation Orders on the trees on this site.

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

4.4 There are no Groups of trees identified as the 14 trees are all classified as individuals with the more mature tree stock located on the boundaries of the site.

4.5 There are 4 Sections of hedgerow which are parts of the boundary hedging these have been designated H1 to H4. They're predominately made up of Hawthorn. All are maintained as typical field boundaries apart from H4 which has had no maintenance for a long time. As such, this part of the hedgerow now has the appearance of a line of large shrubs and small trees. There was no access to the trunks of the hedgerows to obtain DBH measurement and therefore these have been estimated and their RPA's can be adequately protected.

Table 1: Summary of surveyed trees.

Tree No.	BS5837 Rating
T6	A[1]
T1, T2, T3, T4, T11, H1, H2, H3, H4	B[1]
T5, T7, T8, T9, T12, T13, T14	C[1]

4.6 The only A category tree on site is a mature Oak located in the H3 part of the southwest boundary hedge. This can be adequately protected during the development.

4.7 The category B Ash trees T10 and T11 are both twin stemmed but one of each of the trees stems has been topped at 2.5m.

5.0 Arboricultural Impact Assessment

5.1 In order to achieve the proposed layout there is a need to fell some of the trees on site. The majority of these trees are young, low value and located internally. The proposed development requires the removal of the trees listed in table 2.

5.2 The trees that are to be retained and the trees that are to be removed are visualized in the plan JYM/Alston Ln/AIA001A.

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

Table 2: Summary of trees to be removed

Tree No.	Species	Category	Age
T7	Spruce	C	Young
T8	Fir	C	Young
T12	Ash	C	Young
T13	Maple	C	Young
T14	Ash	C	Young

6.0 Tree Protection

6.1 The Tree Protection Plan JYM/Alston Ln/TPP001A shows the ground to be designated as a Root Protection Area (RPA).

6.2 It should be noted that the full RPA cannot always be achieved on site due to ground constraints. The RPA can also be tailored to some extent given the structure and condition of individual trees.

6.3 Trees T1, T2 and T3 have a RPA that extends into the driveway. There would be little to no roots extending into this compacted ground as they would utilise the other open ground around them. Due to this the protective fencing is to be placed along the road edge.

6.4 Tree T11 has a RPA that can't be fenced off to the designated locations as the double garage will intrude into this area. It is surmised that there will be less roots in this part of the RPA due to presence of the current buildings and it is concluded that this intrusion into the RPA will not be significant to compromise the tree in any way.

6.5 **The following are precautions that must be taken within the RPA:**

a) Fencing to be erected prior to any development commencing on site or any materials or machinery associated with development are brought onto the site.

b) The fencing shall be maintained for the duration of the development unless otherwise agreed by the Local Planning Authority or in accordance with the approved plans and particulars.

c) No materials, machinery, chemicals or fuel shall be stored within the RPA for the duration of the development.

d) The ground levels within the RPA shall not be lowered or raised without the consent of the Local Planning Authority and/or in accordance with the approved plans and particulars.

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

e) Where existing vegetation is to be replaced with new landscaping within the RPA it shall be treated with a translocated herbicide e.g. glyphosate prior to removal.

f) Following treatment with herbicide, existing vegetation shall be removed once dead by the use of hand tools e.g. spade or fork and shall not be removed by machinery.

6.6 **Protective measures outside the RPA**: The following are additional precautions outside the RPA:

a) Care should be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious damage to trees and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banksman to ensure that adequate clearance from trees is maintained at all times.

b) Material which will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, should not be discharged within 10m of the tree stem.

c) It is essential that allowance be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.

d) Fires should not be lit in a position where their flames can extend to within 5m of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.

e) Notice boards, telephone cables or other services should not be attached to any part of the tree.

6.7 **Installation of new services**: No services should be installed within the root protection area (RPA). Should existing services within the RPA need upgrading this should be done in accordance with the advice of a suitably qualified Arboriculturist and using a method approved by the Local Planning Authority.

6.8 **Site monitoring**: It's recommended that any RPAs are monitored during construction by a qualified and experienced Arboriculturist. An appointed Arboriculturist should be involved with the pre-commencement discussions and oversee the tree protection measures.

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

6.9 **Construction plans**: The RPA should be marked on all the construction plans to prevent any breach of the protection measures and planning conditions.

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

Key for the categories used in the survey.

Tree Number - Corresponding to accompanying drawing Ref: PAB/Castle Hill Rd/001

Species - The common name of the tree.

Height – Current height in meters.

DBH. – The diameter of the trunk measured in millimetres taken with a DHB Tape at a height 1.5 metres above ground level.

Canopy Spread N, E, S, W - The Crown/Canopy spread in meters measured in the four cardinal compass directions to the nearest metre. (**"n/a"** – denotes that due to access or local topography this measurement was not freely available.)

Canopy Clearance N, E, S, W – Height in metres measured in the four cardinal compass directions to the nearest 0.5 metre to the lowest part of the canopy.

Age - An estimation of the trees age in relation to the predicted healthy life span for a tree of that species.

Young: Up to ¼ of the expected life span.
Early Mature: Between ¼ and ½ of the expected life span.
Semi Mature: Between ½ and ¾ of the expected life span.
Mature: Between ¾ and full expected life span.
Veteran: Over mature and showing signs of veteranisation.

General Condition – Observations made on the trees structural condition, wounds and defects.

Vitality - (Good, Fair, Poor, Dead) An assessment of the trees vitality through the observation of leaf or bud size/colour/density, annual extension growth and amounts of deadwood/Die-back.

Work required – The recommendations are for works that are considered to be in the interest of health and safety and also good tree management.

SULE - Safe and Useful Life Expectancy. An estimation of the trees remaining contribution in years <10, 10+, 20+, 40+.

RPA Radius – This measurement in metres is the dimension for the radius of a circle centred on the base of the stem plotted as the initial layout of the Root Protection Area (RPA).

RPA Area – This measurement in m^2 is the area of the polygon that should be used to protect the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability, and where the protection of the roots and soil structure is treated as a priority.

BS5837:2012 Rating – The trees are categorised using the criteria shown in Table 1 below. The purpose of the tree categorization method is to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring.

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

Appendix 1 **Cascade chart for tree quality assessment from BS 5837:2012**

Table 1 **Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• 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) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • 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 *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.*			See Table 2
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
Trees to be considered for retention				
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 150 mm	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

BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

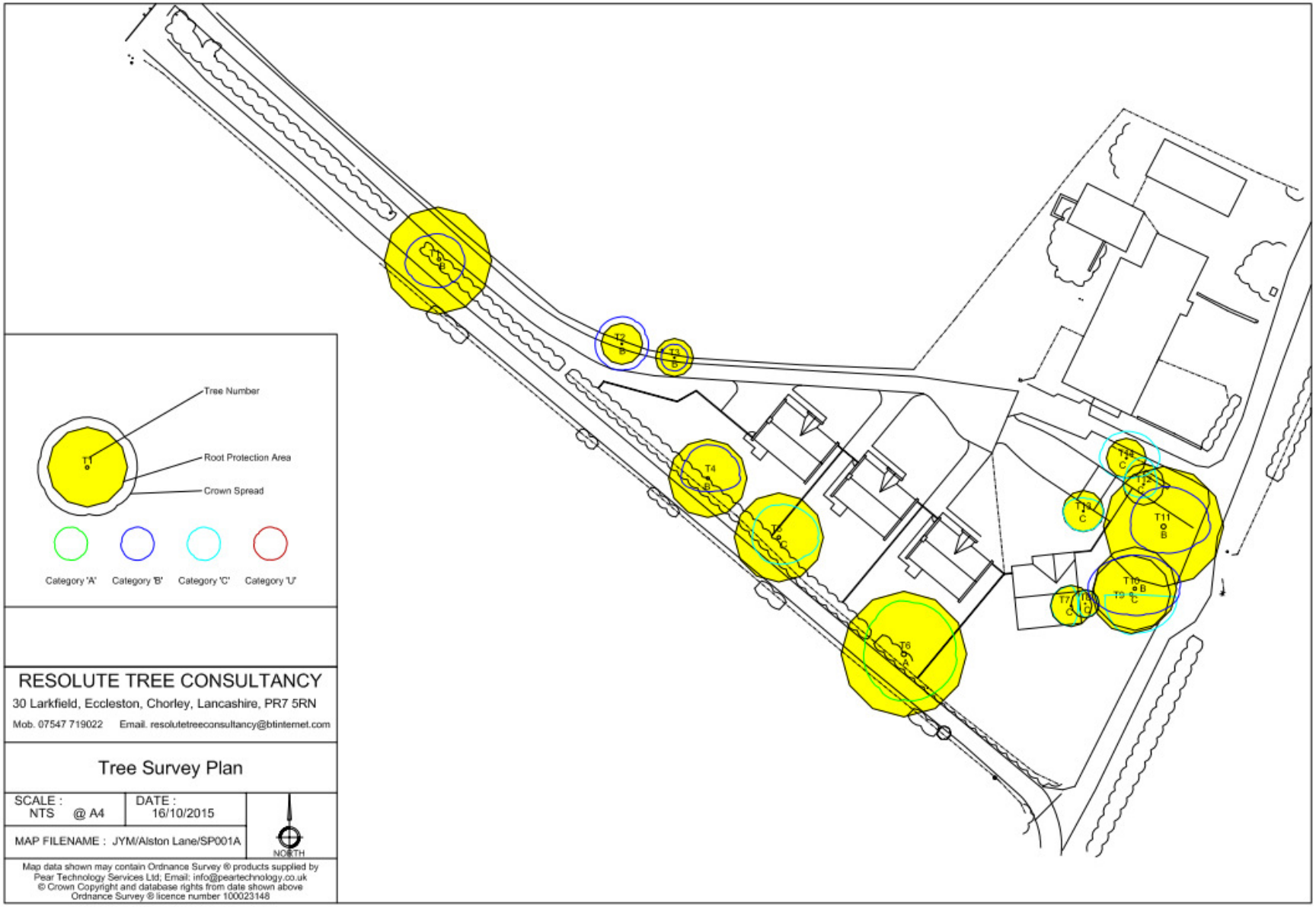
Appendix 2: **Tree Schedule**

TREE NO.	SPECIES	HEIGHT	DBH	CANOPY SPREAD N. E. S. W.				CANOPY CLEARANCE N. E. S. W.				AGE	GENERAL CONDITION	VITALITY	WORK REQUIRED FOR MANAGEMENT	SULE	RPA RADIUS (m)	RPA AREA (m^2)	BS5893 RATING
T1	Oak	8.5	650	4.0	4.0	4.0	5.0	2.5	1.5	4.0	2.5	M	Trunk obscured by hedgerow and dead ivy. Large wound to trunk from base to at least 4m but full extent obscured by ivy will need hedgerow cutting and ivy removing to quantify significance. Major deadwood throughout crown.	F		10+	7.80	191	B[1]
T2	Ash	8.5	250	4.0	4.0	4.0	4.0	1.0	1.0	2.0	1.0	Y	Trunk 0.65m from drive and against wire fence.	G		20+	3.00	28	B[1]
T3	Hawthorn	5.0	100 120 110 100 80	2.0	2.0	2.0	2.0	0.5	0.0	2.0	0.5	SM	Multi-stemmed from base next to drive and against wire fence. Crossing rubbing and including branches.	F	Crown Cleaning	10+	3.00	28	B[1]
T4	Alder	11.0	475	5.0	5.0	2.0	4.0	2.5	3.0	3.0	3.0	SM	Wound to primary branch at 6m with decay.	F		10+	5.70	102	B[1]
T5	Alder	10.0	540	5.0	6.0	4.0	4.0	3.0	2.0	2.0	4.0	M	Large old wound in basal flair very little decay. Sparse crown with light dieback. Few major deadwood.	P		10+	6.60	137	C[1]
T6	Oak	15.0	760	8.0	8.0	7.0	6.0	2.0	3.0	2.0	3.0	M	Sparse crown with little amounts of major deadwood throughout crown.	F		20+	9.3	272	A[1]

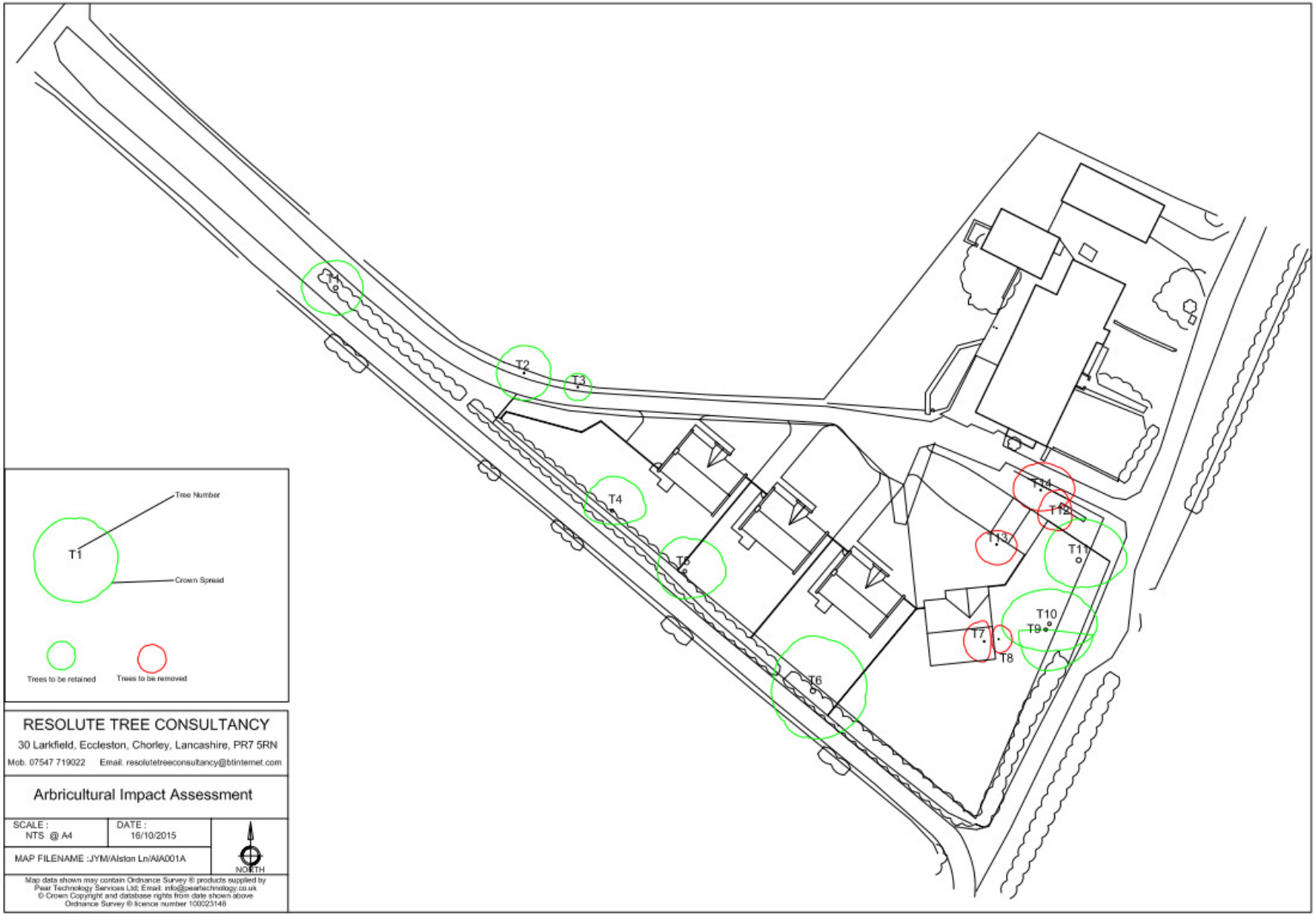
BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com

TREE NO.	SPECIES	HEIGHT	DBH	CANOPY SPREAD N. E. S. W.				CANOPY CLEARANCE N. E. S. W.				AGE	GENERAL CONDITION	VITALITY	WORK REQUIRED FOR MANAGEMENT	SULE	RPA RADIUS (m)	RPA AREA (m^2)	BS5893 RATING
T7	Spruce	12.0	250	3.0	1.0	3.0	3.0	2.0	1.0	0.0	0.0	Y	No buttress roots to northeast which will be a possible wind throw concern.	F		10+	3.00	28	C[1]
T8	Fir	7.0	170	2.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	Y	Major ground disturbance from 1m to east. Slight dogleg at 3m.	F		10+	2.10	14	C[1]
T9	Ash	12.0	360 310	0.0	7.0	6.0	4.0		5.0	5.0	5.0	M	Twin stemmed one stem topped at 2.5m. Base obscured.	F		10+	5.7	102	C[1]
T10	Ash	14.0	250 440	5.0	7.0	4.0	7.0	5.0	5.0	6.0	7.0	M	Twin stemmed one stem topped at 2.5m. Major deadwood throughout crown.	F		10+	6.3	124	B[1]
T11	Ash	14.0	215 440 310 290 330	6.0	7.0	4.0	5.0	1.0	3.0	5.0	5.0	M	Multi stemmed base covered in ivy. Major deadwood throughout crown.	F		10+	9.0	255	B[1]
T12	Ash	9.0	250	4.0	2.0	2.0	3.0	4.0	4.0	4.0	4.0	Y		F		10+	3.00	28	C[1]
T13	Maple	8.0	250	2.0	3.0	3.0	3.0	1.0	1.5	1.5	2.0	Y	Co-dominant compression union at 2.5m.	F		10+	3.00	28	C[1]
T14	Ash	8.0	240	4.0	5.0	3.0	4.0	2.0	1.0	2.0	2.0	Y		F		10+	3.00	28	C[1]

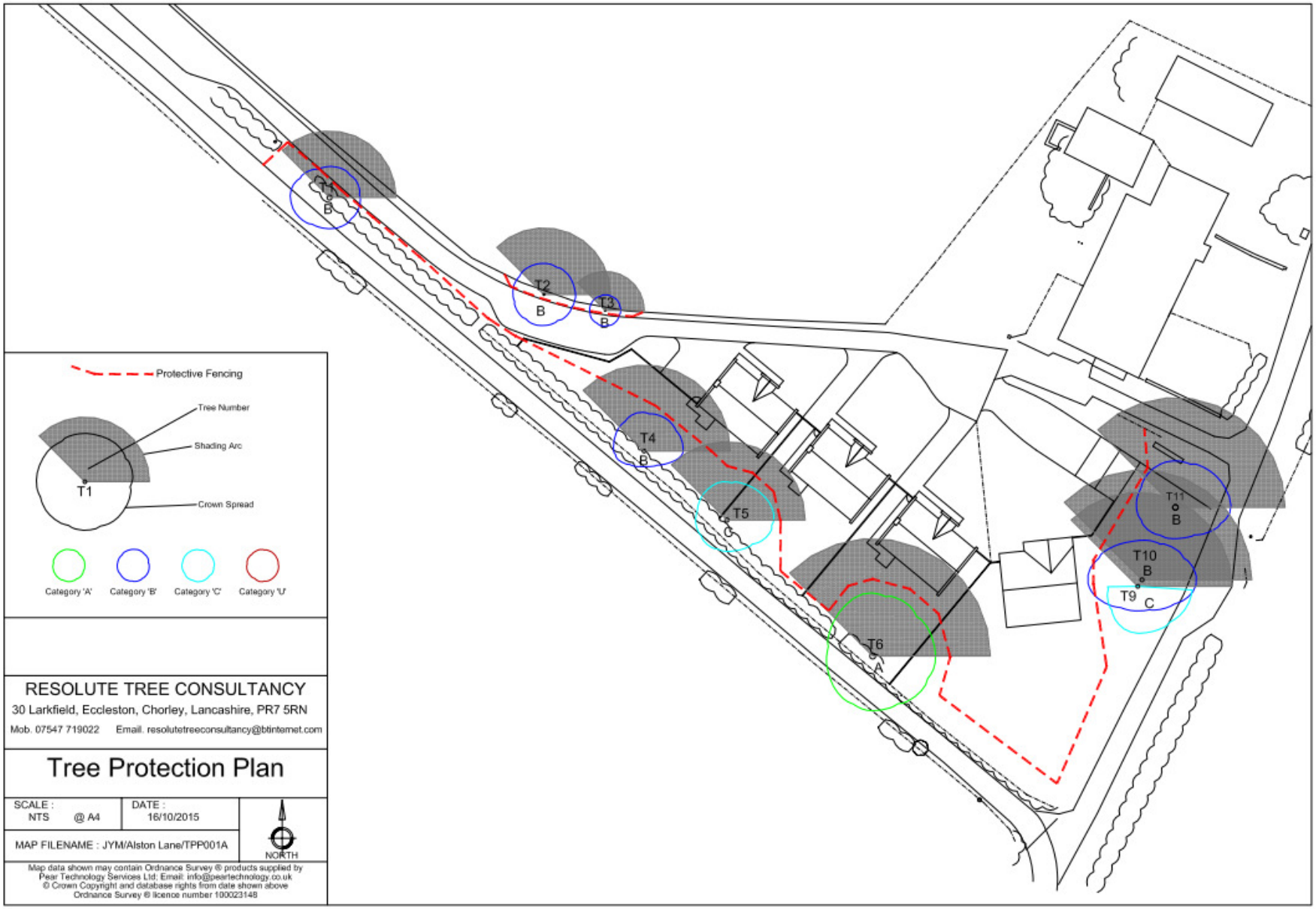
BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com



BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com



BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com



BY Resolute Tree Consultancy, 30 Larkfield, Eccleston, Chorley, Lancashire, PR& 5RN
Tel: 07547 719022 Email: resolutetreeconsultancy@btinternet.com