

ROOT PROTECTION AREA (RPA) CALCULATOR

Single stem trees

Diameter at 1.5m above ground level
 millimetres

RPA m² See Note

equates to circle with radius of m

equates to square with approx m sides

20% Offset m

Site:

Reference:

Date: Surveyor:

▶ Enter field mensuration data into red boxes to commence calculation.
 ▶ All results to be read with reference to the recommendations set out in the *BS5837:2005 Trees in Relation to Construction* and corrections/variations made accordingly.

Multi stem trees

Basal diameter above root flare
 millimetres

RPA m² See Note

equates to circle with radius of m

equates to square with approx m sides

20% Offset m

Multi stem trees using the Helliwell Method

Measure each stem diameter at 1.5m above ground level to calculate basal area in mm²

Stem 1	<input type="text" value="0"/> millimetres	0	RPA <input type="text" value="0.0"/> m ² See Note equates to a circle with radius of <input type="text" value="0.0"/> m equates with a square with approx <input type="text" value="0.0"/> m sides 20% Offset <input type="text" value="0.0"/> m
Stem 2	<input type="text" value="0"/>	0	
Stem 3	<input type="text" value="0"/>	0	
Stem 4	<input type="text" value="0"/>	0	
Stem 5	<input type="text" value="0"/>	0	
Stem 6	<input type="text" value="0"/>	0	
Stem 7	<input type="text" value="0"/>	0	
Stem 8	<input type="text" value="0"/>	0	
Stem 9	<input type="text" value="0"/>	0	
Stem 10	<input type="text" value="0"/>	0	

Total Basal Area (mm²):

Total Basal Diameter (mm):

NOTE: Calculated RPA should be capped to 707m² which is equivalent to a circle with a radius of 15m or a square with 26m sides

▶ Tree Number:

▶ Species:

▶ Notes:

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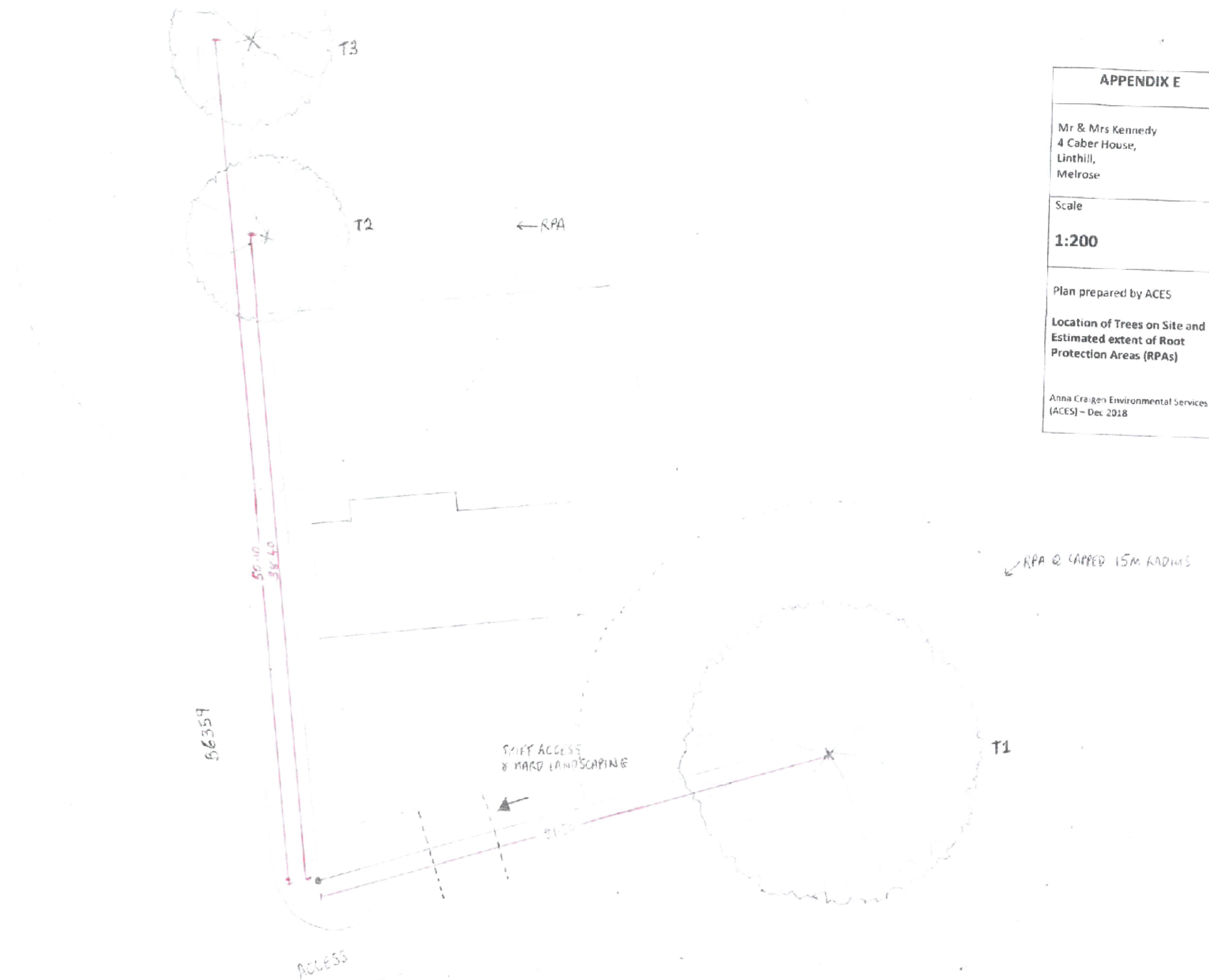
▶ Notes:

TREE NO:	SPECIES	APPROX. HEIGHT (m)	TRUNK DIAMETER (m)	BRANCH SPREAD (m)				AGE CLASS	GENERAL OBSERVATIONS & RECOMMENDATIONS	FUTURE LIFE EXPECTANCY
				Approx						
				N	E	S	W			
1	Sycamore (Acer pseudoplatanus)	28	3.85					mature	Good shape and form, fantastic epiphytic growth – lichens etc. To be retained. NB: Design of driveway to be amended to avoid root compaction.	>50 years
2	Sessile Oak (Quercus petraea)	24	2.75		9.65	5		mature	Some standing deadwood within canopy, but otherwise appears to be in good health. Would benefit long term (stability & safety etc.) from some crown reshaping, i.e. removal of large horizontal side branching.	>50 years
3	Sessile Oak (Quercus petraea)	20	2.30		5	5		mature	In good health – some standing deadwood in canopy	>50 years

Kennedy’s Plot, Linthill Estate, Nr. Lilliesleaf

NOTES: Anna Craigen

Site Visit – simple measuring equipment and visual inspection on 30/11/18



APPENDIX E	
Mr & Mrs Kennedy 4 Caber House, Linthill, Melrose	
Scale 1:200	
Plan prepared by ACES Location of Trees on Site and Estimated extent of Root Protection Areas (RPAs)	
Anna Craigen Environmental Services (ACES) – Dec 2018	

DESIGN STATEMENT

Project: Caber House, Proposed Low Energy Dwelling, Melrose, Scottish Borders

Client: Mr & Mrs Kennedy

Reference number: 1427

Date: 16 July 2018
