

#### **Appendix A15.3: Arboricultural Impact Assessment (AIA)**

#### 1 Introduction

- This appendix provides the Arboricultural Impact Assessment (AIA) which is used to support the Community and Private Assets assessment as reported in Chapter 15 (People and Communities: Community and Private Assets). It is a recommendation of the British Standard 5837: 2012 Trees in relation to design, demolition & construction Recommendations (BSI 2012) (hereafter referred to as 'BS5837') that an arboricultural assessment is produced to inform the development process. This assessment therefore aims to provide an indicative description of the trees potentially affected by the proposed scheme whilst identifying trees that have the potential to be retained.
- An accompanying Tree Constraints Plan (Figure 15.3) displays the location and potential impacts of each feature in relation to the proposed scheme.

#### 2 Methodology

2.1 The surveys were undertaken in July 2018 and delivered in accordance with BS:5837 with features being assessed as individual trees or as groups, as referenced as 'T' or 'G' in Table 2. As shown in Table 1, trees were grouped into one of four categories (A, B, C, U) and for trees in categories A to C, they were also qualified under three subcategories (1, 2, 3).

**Table 1: Arboricultural Classification** 

Category	Sub-category		
	1 – Mainly arboricultural qualities	2 - Mainly landscape qualities	3 - Mainly cultural values, including conservation
A – Trees of high quality with estimated remaining life expectancy of at least 40 years	Trees that are a particularly good example of their species, especially if rare or unusual	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historic or commemorative value (e.g. veteran trees)
B – Trees of moderate quality with estimated remaining life expectancy of 20 years	Trees that might be included in category A1 but are downgraded because of impaired condition such that they are unlikely to be suitable for retention beyond 40 years	Trees present in numbers such that they attract a higher collective rating than they might as individuals	Trees with material conservation or other cultural value
C – Trees of low quality with estimated remaining life expectancy of 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or severe impaired condition	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value	Trees with no material conservation or other cultural value

**U** – Trees that have a serious structural defect, such that their early loss is expected due to collapse, trees that are dead or showing signs of significant and irreversible decline and trees that are infected with pathogens of significance to the health and/or safety to other trees nearby, or very low quality trees suppressing adjacent trees of better quality.

The sensitivity and magnitude of each feature was assigned accordingly, using the criteria detailed in Table 15.10 and Table 15.11 of Chapter 15 (People and Communities: Community and Private Assets).



#### 3 Limitations

- Plotting the location of trees is based predominantly on using a GPS active mapping system. The location is displayed on a tablet with the design scheme footprint layered on top of OS data and aerial photography. However, GPS is not entirely accurate and is considered to represent at best a location within 5m accuracy. Aerial photography, OS data and an online measuring tool was used to rectify any perceived anomalies in tree locations that was provided by the GPS system.
- An RPA provides a circular buffer around a given stem dependant on the diameter taken at 1.5m. However, this is not necessarily representative of a tree root system e.g. the roots may extend beyond the RPA boundary on one side and remain inside it on the opposite. The root network extent is dependent on many factors including species, age, soil conditions, topography and exposure etc. The assessment has taken consideration of these above factors together with root morphology and observations of buttress root formation.
- The assessment is based on the observed health and structural condition of the trees at the time of survey conducted in July 2018. Trees health can change rapidly and there is no definitive way or predicting future growth and health of a tree; particularly after it has been disturbed in some way.
- This document is prepared as an arboricultural assessment to represent the impact on trees within the proposed scheme study area. This assessment is indicative and the results of which largely depend on the contractor's construction methodology. Using this document as reference, the contractor should deliver a site-specific arboricultural method statement which would determine working methods and mitigation employed to mitigate any impact on the trees that are potentially affected but do not require direct removal. This requirement (Mitigation Item CP-AR03) and other arboricultural mitigation is detailed Section 5 of Chapter 15 (People and Communities: Community and Private Assets).

#### 4 Arboricultural Impact Assessment (AIA)

4.1 The results of the AIA are presented in Table 2.



Table 2: Arboricultural Impact Assessment (AIA) Results

						Cro	wn sp	read		Crown		Con	dition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	S	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	s	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
G1 (Sheet 15)	Commercial	Cherry, horse chestnut, silver birch, rowan, hawthorn, Swedish whitebeam, Leyland cypress, oak, beech, ash, elder, poplar	30	15	440	3	3	3	3	0, 0	SM	F	F	Screen planting for business park, trees at 1m centers on embankment. Some trees previously tagged.	5.3	C2 (Low)	No perceived impact (Negligible)	Negligible
T2 (Sheet 15)	Other land	Sycamore	-	11	520	4	4	4	4	1, W1	EM	F	F	Multi stemmed growing next to wall.	6.2	C2 (Low)	No perceived impact (Negligible)	Negligible
G3 (Sheet 15)	Residential	Red oak, walnut, rowan, holly	5	10	350	5	6	6	6	1, E1	EM	F	F	Located in garden of boarded up property. Wall and concrete track road adjacent on north.	4.2	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight

<sup>&</sup>lt;sup>1</sup> Age class can be described as young (Y), semi-mature (SM), early mature (EM), mature (M) and over mature (OM)

<sup>&</sup>lt;sup>2</sup> Structural (S) and Physiological (P) condition can be described as Fair (F) or Poor (P)



						Cro	wn sp	read		Crown		Con	dition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	s	P	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
G4 (Sheet 15)	Residential	Leyland cypress	-	4	150	1	1	1	1	0, 0	EM	F	F	Managed garden hedge.	4	C2 (Low)	No perceived impact (Negligible)	Negligible
G5 (Sheet 15)	Residential	Beech	-	4	100	2	2	2	2	0, 0	SM	F	F	Managed garden hedge.	1.8	C2 (Low)	No perceived impact (Negligible)	Negligible
G6 (Sheet 15)	Other land	Beech, hawthorn	2	9	250	4	4	4	4	0, E0.5	SM	F	F	-	3	C2 (Low)	Potential removal (Low)	Negligible/ Slight
T7 (Sheet 14)	Commercial	Sycamore	-	11	270	3	4	4	4	0.5, W0.5	SM	F	F	-	3.2	C2 (Low)	Removal (Low)	Negligible/ Slight
T8 (Sheet 14)	Commercial	Sycamore	-	9	438	4	5	5	4	0.5, S0.5	EM	F	F	-	6	C2 (Low)	Potential removal (Low)	Negligible/ Slight
G9 (Sheet 17)	Commercial	Scots pine, Norway maple, silver birch, alder, rowan, yew, crab apple, oak, beech, hazel, ash (stool), cherry, hornbeam, holly	100	6	<75	-	-	-	-	-	Y	F	F	Young plantation blocks within Inverness Campus grounds.	-	B2 (Medium)	Partial removal (Medium)	Moderate



						Cro	wn sp	read		Crown		Con	dition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	Е	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
T10 (Sheet 17)	Commercial	Ash	-	14	840	3	6	10	3	2, E2	М	F	Р	Previously heavily pruned, deadwood to upper canopy, habitat holes, bark necrosis and inonotus hispodus (shaggy bracket) bracket at 3m on one large limb.	10	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight
G11 (Sheet 17)	Commercial	Ash, sycamore, hawthorn	20+	11	400	4	5	4	4	1,5, E1.5	SM	F	F	Road side line of trees located near highways boundary fence.	4.8	C2 (Low)	Removal (Low)	Negligible/ Slight
T12 (Sheet 16)	Commercial	Beech	-	22	1040	10	10	7	9	1, E3	M	F	F	Mature tree with historical bark damage at base.	12.5	A2 (High)	Potential removal (Medium)	Moderate/ Substantial
G13 (Sheet 16)	Commercial	Goat willow, crack willow, ash, elder	9	11	361	5	5	5	5	1, E1	EM	F	F	-	4.3	C2 (Low)	Partial removal (Medium)	Slight/ Moderate



						Cro	wn sp	oread		Crown		Con	dition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	s	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
G14 (Sheet 14)	Commercial	Goat willow, ash	3	7	380	4	4	4	4	0, N0.5	М	F	F	One mature goat willow with young willow and ash.	4.6	C2 (Low)	No perceived impact (Negligible)	Negligible
G15 (Sheet 13)	Agriculture	Ash, hawthorn, rowan, oak	15	9	240	4	4	4	4	1, SE1	SM	F	F	-	2.9	C2 (Low)	Removal (Low)	Negligible/ Slight
G16 (Sheet 13)	Agriculture	Oak, ash, crab apple, hawthorn	23	10	220	4	4	4	4	0, N0	SM	F	F	-	2.6	C2 (Low)	No perceived impact (Negligible)	Negligible
G17 (Sheet 13)	Agriculture	ash	8	15	750	6	5	7	6	2, W2	М	F	F	Contains some previously tagged trees, minor deadwood and storm damage fractures.	9.0	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight
G18 (Sheet 12)	Agriculture	ash	2	14	570	6	5	4	5	2, N3	EM	F	F	One tree (tag696) has shaggy brackets at 1 to 1.8m. Consider tree removal due to high risk of stem failure and road target.	6.8	C2 (Low)	Removal (Low)	Negligible/ Slight



						Cro	wn sp	read		Crown		Con	dition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	P	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
T19 (Sheet 12)	Other land	oak	-	11	861	6	6	4	4	2, E1.5	М	F	F	Dual stem with some crown retrenchment and deadwood.	10.3	B2 (Medium)	Removal (Medium)	Moderate
T20 (Sheet 12)	Other land	ash	-	10	800	4	4	3	4	1, N2.5	М	F	F	Contains three major stem fractures at circa 5m with new canopy forming and epicormic growth near base. Habitat hole at 2m on main stem.	9.6	B2 (Medium)	Removal (Medium)	Moderate
T21 (Sheet 12)	Agriculture	oak	-	26	1170	11	9	9	9	2, W2	М	F	F	Large specimen tree with some storm damage fractures in mid canopy and minor deadwood.	14.0	A2 (High)	Potential removal (Medium)	Moderate/ Substantial
G22 (Sheet 12)	Other land	beech	2	21	930	10	10	10	10	1, N2.5	М	F	F	One mature and one early mature beech forming canopy	11.2	A2 (High)	Partial removal (Medium)	Moderate/ Substantial



						Cro	wn sp	read		Crown		Cor	ndition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	s	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
														with minor deadwood.				
T23 (Sheet 12)	Agriculture	oak	-	24	910	7	7	8	7	1, N2.5	М	F	F	Recent branch failures at circa 7m with minor deadwood.	10.9	A2 (High)	No perceived impact (Negligible)	Slight
G24 (Sheet 12)	Agriculture	oak, ash	12	22	1450	12	13	12	12	1, NW2	М	F	F	Ash tree showing sparse foliage suggesting the tree is in decline with a limited future life expectancy. Measured tree is tagged.	17.4	A2 (High)	No perceived impact (Negligible)	Slight
T25 (Sheet 11)	Agriculture	ash	-	11	410	4	5	5	5	2, N3	EM	F	Р	Sparse foliage and storm damage fractures with deadwood.	4.9	C2 (Low)	Potential removal (Low)	Negligible/ Slight
T26 (Sheet 11)	Agriculture	oak	-	16	640	3	8	8	5	5, E4	М	F	F	Lower limb loss with minor deadwood in mid canopy.	7.7	B2 (Medium)	Removal (Medium)	Moderate
T27 (Sheet 11)	Agriculture	oak	-	15	680	6	8	6	7	3, E4	М	F	F	Lower limb loss with deadwood	8.2	B2 (Medium)	Removal (Medium)	Moderate



						Cro	own sp	oread		Crown		Con	ndition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
														in mid and lower canopy.				
T28 (Sheet 11)	Agriculture	oak	-	10	770	4	6	4	5	2, W2	ОМ	F	F	Tree has a reduced canopy size, early signs of retrenchment.	9.2	B2 (Medium)	Removal (Medium)	Moderate
T29 (Sheet 11)	Agriculture	oak	ı	17	1132	6	9	8	7	2, W1.5	М	F	F	Dead limbs in mid canopy and storm damage fractures.	13.6	B2 (Medium)	Potential removal (Medium)	Moderate
G30 (Sheet 11)	Agriculture	sycamore x2, cherry, ash	4	12	900	6	6	6	6	1, N0.5	М	F	F	Dual stem with basal growth. Trees located on opposite side of ditch. Includes young tree and earlmature ash.	10.8	B2 (Medium)	Potential removal (Medium)	Moderate
G31 (Sheet 10)	Commercial	ash silver birch, scots pine	20+	13	300	4	4	4	4	1, N2.5	SM	F	F	2.5m spacing.	3.6	C2 (Low)	No perceived impact (Negligible)	Negligible
G32 (Sheet 10)	Commercial	rowan, alder, ash, beech, scots pine	10+	15	260	3	3	3	3	0, E0.5	SM	F	F	2.5m spacing.	3.1	C2 (Low)	Partial removal (Medium)	Slight/ Moderate



						Cro	wn sp	read		Crown		Con	ndition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	Е	s	W	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
G33 (Sheet 9)	Agriculture	ash, alder x2	3	11	828	5	5	5	5	0, S1	M	F	F	Contains some standing deadwood with habitat holes and basal growth.	9.9	C2 (Low)	Removal (Low)	Negligible/ Slight
G34 (Sheet 9)	Agriculture	alder, ash	2	17	864	8	6	6	7	1, E1	М	F	F	Past storm damage fractures and minor deadwood within the dual stem ash tree.	10.4	B2 (Medium)	Partial removal (Medium)	Moderate
T35 (Sheet 9)	Agriculture	ash	-	14	1007	8	6	3	5	3, W4	М	F	F	Dual stem with one stem snapped off at circa 6m. Small shaggy bracket at circa 8m on remaining main stem. Historical cavity at base on west side.	12.1	C2 (Low)	Potential removal (Low)	Negligible/ Slight
T36 (Sheet 9)	Agriculture	alder	-	11	620	7	4	3	4	2, E2	М	F	F	Contains deadwood and sparse canopy.	7.4	C2 (Low)	Potential removal (Low)	Negligible/ Slight



						Cro	wn sp	read		Crown		Con	ndition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	Е	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
T37 (Sheet 8)	Agriculture	ash	-	9	730	3	3	4	5	0, S1	М	F	F	Large cavity at base on southeast side.	8.8	B2 (Medium)	Potential removal (Medium)	Moderate
G38 (Sheet 8)	Agriculture	oak	2	14	610	4	4	4	4	5, SW2	ОМ	F	F	One standing dead tree and on with circa 5% living canopy.	7.3	U (Low)	Removal (Low)	Negligible/ Slight
T39 (Sheet 8)	Agriculture	oak		8	430	6	5	6	5	1, E1.5	EM	F	F	-	5.2	C2 (Low)	Removal (Low)	Negligible/ Slight
G40 (Sheet 8)	Agriculture	hawthorn, cherry x 2, goat willow, dead elm trees	7	11	380	7	7	7	7	0, N0	М	F	F	Contains standing dead elm trees.	4.6	C2 (Low)	Partial removal (Medium)	Slight/ Moderate
G41 (Sheet 7)	Agriculture	elm, ash	6	15	658	7	7	7	7	2, S2	М	F	F	Mainly dual stem trees.	7.9	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight
T42 (Sheet 7)	Agriculture	oak	-	17	800	8	6	8	7	1, N2	М	F	F	Historical bark damage wound to base on south-west, deadwood in mid canopy.	9.6	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight
T43 (Sheet 7)	Agriculture	elm	-	14	696	6	5	6	4	1, N2	М	F	F	-	8.3	B2 (Medium)	Removal (Medium)	Moderate



						Cro	wn sp	read		Crown		Con	dition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class¹	s	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
T44 (Sheet 7)	Agriculture	oak	-	13		4	5	5	5	1, N2	EM	F	F	-	5.5	B2 (Medium)	Potential removal (Medium)	Moderate
G45 (Sheet 7)	Agriculture	elm, hawthorn, ash	3	15	660	7	7	6	6	1, E0	М	F	F	Multi stem elm.	7.9	B2 (Medium)	Partial removal (Medium)	Moderate
T46 (Sheet 7)	Agriculture	elm	-	17	1000	7	7	8	6	2, E2	ОМ	Р	Р	Very sparse foliage tree in rapid decline.	12.0	U (Low)	Removal (Low)	Negligible/ Slight
T47 (Sheet 7)	Agriculture	elm	-	11	805	5	5	5	5	1, S0	М	F	F	-	9.7	B2 (Medium)	Removal (Medium)	Moderate
T48 (Sheet 7)	Agriculture	elm	-	9	483	6	4	4	4	2, W1	EM	F	F	Tree showing signs of decline with sparse foliage.	5.8	C2 (Low)	Potential removal (Low)	Negligible/ Slight
T49 (Sheet 7)	Agriculture	oak	-	19	1150	8	7	9	9	2, W2	М	F	F	Dense canopy.	13.8	A2 (High)	Potential removal (Medium)	Moderate/ Substantial
G50 (Sheet 8)	Agriculture	ash x4, cherry x5	9	17	1219	6	7	5	6	1, W2	М	F	F	Ditch to north side, storm damage fractures, deadwood. Mature cherry with suckering younger scrub, height 9m,	14.6	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight



						Cro	wn sp	read		Crown		Con	dition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species	Group Count	Height (m)	Diameter (mm)	N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	s	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
														diameter estimated at 300mm				
G51 (Sheet 6)	Agriculture	ash x5, standing dead elm x3, cherry x7, hawthorn, holly, sycamore	18	18	880	8	8	8	8	1, SW2	М	F	F	Ash tree nearest to scheme measured, tree has shaggy fungal brackets on first scaffold limb and large basal cavity to one side.	10.6	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight
T52 (Sheet 6)	Agriculture	sycamore	-	14	710	5	5	5	5	1, N2	М	F	F	-	8.5	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight
T53 (Sheet 6)	Agriculture	sycamore	-	15	620	4	6	5	5	2, S3	М	F	F	Deadwood in lower canopy.	7.4	B2 (Medium)	Potential removal (Medium)	Moderate
G54 (Sheet 6)	Agriculture	ash	2	9	317	3	4	3	3	1, S0	SM	F	F	-	3.8	C2 (Low)	Partial removal (Medium)	Slight/ Moderate
G55 (Sheet 6)	Agriculture	ash x 3, cherry x3	6	11	330	5	5	5	5	2, S2	М	F	F	Early mature ash, two cherries in decline and one standing as deadwood.	4.0	C2 (Low)	Removal (Low)	Negligible/ Slight



Tree Ref. (Fig Ref - Sheet)		Species	Group Count	Height (m)		Crown		spread		Crown		Con	dition <sup>2</sup>					
	Land Use Category				Diameter (mm)	N	E	s	W	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	P	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
G56 (Sheet 6)	Agriculture	ash x 3, holly, hawthorn	5	13	660	4	5	6	4	1, N1	ОМ	F	F	Contains two old coppice ash stools with basal decay, mature holly and early mature ash and hawthorn.	7.9	B3 (Medium)	Removal (Medium)	Moderate
T57 (Sheet 6)	Agriculture	ash	-	17	870	5	8	8	7	1, W3	М	F	F	Minor deadwood throughout with patches of bark necrosis in mid to lower scaffold limbs.	10.4	B2 (Medium)	Potential removal (Medium)	Moderate
T58 (Sheet 5)	Agriculture	oak	-	14	920	6	7	6	6	2, W1.5	М	F	F	Previous storm damage lower limb fracture with minor deadwood in mid to upper canopy.	11.0	A2 (High)	Removal (High)	Substantial
T59 (Sheet 5)	Agriculture	cherry	-	9	580	8	2	1	4	2, W2	ОМ	Р	Р	Past limb failures with poor canopy shape deadwood and sparse foliage.	7.0	U (Low)	Removal (Low)	Negligible/ Slight



		Species	Group Count			Crown s		spread		Crown		Con	ndition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category				Diameter (mm)	N	E	s	W	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
T60 (Sheet 5)	Agriculture	cherry	-	8	500	4	4	2	3	3, W4	ОМ	F	F	Past limb failures with poor canopy shape deadwood and sparse foliage.	6.0	U (Low)	Removal (Low)	Negligible/ Slight
G61 (Sheet 5)	Agriculture	ash	4	11	650	5	5	5	8	1, N2	EM	Р	Р	Previous storm damage with lost leader on one tree at circa 5m and fresh shaggy bracket on main stem at 2m Close to track and ditch.	7.8	C2 (Low)	Partial removal (Medium)	Slight/ Moderate
T62 (Sheet 5)	Agriculture	rowan	-	4	150	2	2	2	2	1, N0	Υ	F	F	-	1.8	C2 (Low)	No perceived impact (Negligible)	Negligible
T63 (Sheet 5)	Agriculture	elm	-	5	120	3	3	3	3	1, W0.5	Υ	F	F	-	1.4	C2 (Low)	No perceived impact (Negligible)	Negligible
T64 (Sheet 4)	Agriculture	oak	-	12	920	6	6	6	6	1, N2	М	F	F	Past limb fractures and minor deadwood.	11.0	B2 (Medium)	Removal (Medium)	Moderate



			Group Count	Height (m)	Diameter (mm)	Cro	wn sp	spread		Crown		Con	ndition <sup>2</sup>					
Tree Ref. (Fig Ref - Sheet)	Land Use Category	Species				N	E	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
G65 (Sheet 3)	Agriculture	elm	2	14	630	8	5	6	4	1, N2	М	F	F	One elm tree is standing dead, the other has minor outer canopy deadwood.	7.6	B2 (Medium)	Potential removal (Medium)	Moderate
G66 (Sheet 3)	Agriculture	cherryX2	2	14	680	8	6	8	7	0, N2	ОМ	Р	F	Root plate movement for both trees with vertical stem crack and collapsed limb on the larger tree.	8.2	B2 (Medium)	Partial removal (Medium)	Moderate
T67 (Sheet 3)	Agriculture	larch	-	20	730	5	6	5	4	1, NW4	М	F	F	Deadwood of lower limbs.	8.8	B2 (Medium)	Potential removal (Medium)	Moderate
T68 (Sheet 2)	Commercial	oak	-	15	660	5	5	5	5	1, SE2	EM	F	F	-	7.9	B2 (Medium)	No perceived impact (Negligible)	Negligible/ Slight
T69 (Sheet 2)	Commercial	beech	-	13	460	5	5	6	7	1, E1.5	EM	F	F	Reaction wood at base of tree.	5.5	C2 (Low)	No perceived impact (Negligible)	Negligible
T70 (Sheet 2)	Commercial	beech	-	16	520	7	7	8	7	1, N1.5	EM	F	F	Dual stem at 1.5m.	6.2	B2 (Medium)	Removal (Medium)	Moderate
T71 (Sheet 2)	Commercial	beech	-	25	1248	10	10	10	10	2, S2	М	F	F	Multi stem with no major	15.0	A2 (High)	Removal (High)	Substantial



Tree Ref. (Fig Ref - Sheet)		Species				Crown sp		oread		Crown		Con	ndition <sup>2</sup>					
	Land Use Category		Group Count		Diameter (mm)	N	Е	s	w	clearance and 1 <sup>st</sup> branch height (m)	Age Class <sup>1</sup>	S	Р	Observations	RPA (m)	BS5837 Category (Sensitivity)	Impact Magnitude	Significance
														defects observed. Possible inclusion at tri stem divide at 1.5m.				
T72 (Sheet 2)	Commercial	beech	-	24	1180	11	10	7	7	1, SE2	М	F	F	-	14.2	B2 (Medium)	Removal (Medium)	Moderate
G73 (Sheet 2)	Commercial	goat willow, silver birch, ash, hawthorn, alder, elder	12	20	540	7	6	6	5	0, W0.5	М	F	F	Mature trees with young self-set scrub. Alder dual stem tree at end of scheme tagged.	6.5	B2 (Medium)	Removal (Medium)	Moderate
T74 (Sheet 2)	Commercial	Alder	100	20	540	3	3	3	3	0, E0.5	М	F	F	-	3.1	B2 (Medium)	Potential removal (Medium)	Moderate
G75 (Sheet 10)	Commercial	rowan, alder, ash, beech, scots pine	30+	15	260	3	3	3	3	0, N0	SM	F	F	2.5m spacing	6.5	C2 (Low)	No perceived impact (Negligible)	Negligible

#### 5 References

British Standard Institution (2012). BS5837. 'Trees in Relation to Design, Demolition and Construction'.