# **Tree Safety Survey and Report**

# South Cave Play Area South Cave

DECEMBER 2018

FOR SOUTH CAVE PARISH COUNCIL& SOUTH CAVE SPORT & RECREATION COMMITTEE

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#### 1. Instructions

To carry out a survey and a safety and management inspection of the trees within the defined playground area, Church Street, South Cave, in the East Riding of Yorkshire.

To advise and make recommendations in relation to the safety and health of the trees, in particular where problems or hazards were noted during the assessment and to make any more general comments relating to their management and maintenance.

The trees were inspected in winter conditions on 20<sup>th</sup> December 2018.

#### 2. Background Information and Consents

The playground is located in the South Cave park and sports area, and is fenced on all sides to create an enclosed and defined space. All the trees were looked at, as indicated on the accompanying Tree Location Plan, including some straddling the boundaries. It is in the centre of the village, associated with land around the Cave Castle estate, with domestic gardens to the east and south, car parking to the west, and sporting spaces to the north.

From discussions with the client it is understood that there have been some recent tree inspections, though these have not necessarily been undertaken in a programmed or structured manner. The tree assessment indicated that there has been work undertaken in the last 10 years or so, and hazards have been responded to and resolved.

The playground is within the South Cave Conservation Area which requires that tree owners, or any neighbour wishing to prune overhanging growth, must give East Riding of Yorkshire Council six weeks' notice of an intention to undertake work on any tree. This includes felling, pruning or root disturbance. In addition there is an area Tree Preservation Order (TPO) covering the mature Beech on site, reference TPO South Cave - 1971 (ref:268) A2. Removal of deadwood or Ivy does not require consent, and removing very small diameter basal growth is normally deemed exempt.

The safety inspection was undertaken from ground level which means that high level crown issues or structural defects are not always apparent. If problems are suspected then aerial climbing surveys can sometimes be suggested in the schedule.

It is recommended that repeat safety inspections are carried out every 3 to 4 years.

#### 3. Schedule of Trees

The accompanying schedule lists all the trees on site and comments on any particular issues or problems. The notes indicate any recommendations for work, suggestions for consideration and/or continued monitoring. Information is detailed and described as follows:

- Tree type, with reference number;
- Species in English and (botanical) Latin;
- Approximate maximum height, and trunk diameter at 1.5m above ground level;
- Age Class;
- Physical and structural condition, with management recommendations;
- Estimated remaining contribution (RC) and Tree Quality Grade

Both the latter columns (RC and Grade) are with reference to British Standard BS:5837; included purely for reference as this British Standard is mainly applicable to trees on development sites and so not necessarily relevant to this survey and report. In addition, photographs were taken and are included at the end of the report.

#### 4. Additional General Notes:

#### 4.1 Risk Assessments & Frequency of Inspections:

A tree risk assessment involves balancing various factors before determining whether any trees are a risk to people, animals or property. This includes identifying high risk locations, predicting the probability of a tree or branch falling, and the likely consequences of these striking people or property. Risks considered *'High'* should be attended to as soon as practical, *'Medium'* can normally be attended to in a 12 month cycle, and *'Low'* are generally noted as 'suggest or consider' - and may be monitored, or addressed in a two year cycle.

It is considered impractical to fully inspect the complete extent of every canopy, or to confirm that if all trees highlighted in this report are dealt with then no other trees or branches will fail or be a possible danger. The assessment is intended to eliminate the appreciable dangers to persons and property, particularly in such a high-risk location as this. During very high winds when the incidence of falling branches or debris will be increased it is suggested that playground access and activity should be assessed - and possibly restricted.

Recommended timetables for tree safety inspections vary, being dependent on tree numbers and ages, category of site and frequency of occupation. Inspection timings can also be determined by insurance companies' specific requirements, and may vary from annually to a 3 or 5 year cycle. For such a public high-risk location such as this site a 2 year cycle may be considered reasonable.

#### 4.2 Wildlife and Countryside Act:

Where birds and bats may be affected by any work to trees and hedges, consideration should be given to the timing of the work and whether the work is essential. Bats are protected and it is an offence to deliberately or recklessly disturb them or damage their roosts. If the presence of bats is suspected when tree works commence then contact should be made with Natural England or The Bat Conservation Trust.

Tree felling and major pruning is also to be avoided in the bird nesting season, generally specified as March 1st to July 31st, though often extending through August.

#### 4.3 Arboricultural Works – General:

Any tree pruning and/or felling is to be undertaken by fully insured, qualified, professional tree contractors and in full accordance with BS 3998: 2010: Recommendations for Tree Work.

Consideration must be given to requirements for any additional protective fencing to ensure the undamaged retention of any adjacent trees, plants or adjacent features. All contractors must leave the work site in a clean and tidy state, free of debris, litter or spillages.

Where applicable, site personnel, employees and contractors are be made aware of any Arboricultural Method Statements (AMS) in place, before works commence and should attend a site induction meeting, if required.

#### 5. Summary

Overall, most of the trees are in relatively good health and they have been monitored and managed on a regular basis. With the exception of T13 and possibly T4 as discussed, the inspection did not discover any defects which would cause a serious or immediate high risk concern for health and safety. But considering the majority are mature Beech, which are often given a reputation for relatively fast decline and root-plate rot, regular and careful ongoing monitoring is strongly recommended.

Clarification on the ownership of the boundary T4 is suggested, notwithstanding the suggested decision on its status pending re-assessment. Approval for removal under TDD criteria has already been given by East Riding of Yorkshire Council.

Assuming T13 is felled then some pruning is also recommended on the adjacent T12, as it will be more vulnerable without the protection from south west winds offered by 13.

The southern boundary hedge initially appears less problematical but because of the previous pruning and the presence of declining Elm some reduction and minor felling is suggested.

A range of lesser-priority management items are suggested, mainly crown lifting where low branches are above or close to equipment. The extent of this work is best agreed on site with specific reference to each tree, but a nominal 4m clear above ground is suggested.

The following table summarises the works proposed and the risk category allocated:

Ref.	Species	Recommendations	Priority
G1	Various	<b>Suggest</b> Sycamore is fully pollarded, Ash and Thorn pruned, and Elm removed	Low/Medium
T1	Beech	<b>Suggest</b> crown cleaning and lifting of branches, to a nominal 4m AGL	Low
T2	Beech	<b>Suggest</b> crown cleaning and lifting of branches, to a nominal 4m AGL	Low
Т3	Beech	<b>Suggest</b> crown cleaning and lifting of branches, to a nominal 4m AGL	Low
T4	Beech	<b>TBC</b> Probable fell. TPO Approval already received.	Low/Medium
T5	Ash	<b>Suggest</b> crown cleaning and lifting of branches, to a nominal 4m AGL	Low
Т6	Beech	<b>Suggest</b> crown cleaning and lifting of branches, to a nominal 4m AGL.	Low
Τ7	Beech	<b>Suggest</b> crown cleaning and lifting of branches, to a nominal 4m AGL.	Low
Т8	Beech	<b>Suggest</b> remove and replace, as part of an overall management plan.	Low
T11	Beech	<b>Suggest</b> crown cleaning and lifting of branches, to a nominal 4m AGL	Low
T12	Beech	Recommend various pruning works, as scheduled.	Low/Medium
T13	Beech	Recommend felling and removal.	Medium/High

### Table:

The following **Schedule** describes the condition of all the trees, summarises their health and details works which may be considered, subject to management objectives. Trees with minor defects or issues which are considered low risk may be noted as 'continue to monitor'.

South Cave Play Area

Tree No.	Species	Approx Height (m)	Diam (mm)	Life Stage	Physiological and Structural Condition. Preliminary management Recommendations		Grade BS5837	Photo
G1	Ash Sycamore Hawthorn Elder	4 - 12	100- 300	М	Old hedge line, degraded and grown out. Heavenly pruned by neighbours o south, including partially-topped Sycamore. Section to north leaning out and towards equipment. Some Elm remaining from stump and leaning north; and minor deadwood throughout length of boundary.		С	1
					<b>Suggest</b> Sycamore is fully pollarded, some Ash reduced and leaning Elm removed (before it dies); all for management reasons rather than high-risk safety issues.			
T1	Beech Fagus sylvatica	22	1000	LM	Apparently sound and healthy, fair form. Minor crossing branches and typical minor deadwood. Fungus in ground to south side, very degraded, but doesn't appear to be <i>Meripilus or Armillaria</i> . Small growth of probable charcoal fungus in buttress to south.	20-30	В	2, 3
					<i>No immediate safety works recommended.</i> <b>Suggest</b> crown cleaning and lifting of branches to nominal 4m AGL. Check junction at 12m AGL. <b>Monitor fungal brackets to confirm</b> .			
T2	Beech Fagus sylvatica	20	900	LM	Apparently sound and healthy, fair form. Self-brace at 12m protects junction. Hanging dead branch at 11m east, plus other very minor deadwood. Low growth over and towards playground.		В	4
					<i>No immediate safety works recommended.</i> <b>Suggest</b> crown cleaning and lifting of branches to nominal 4m AGL.			
Т3	Beech Fagus sylvatica22850LMGood form, foliage health good, may be showing signs of bark disease but not structurally significant. Typical minor deadwood.		20-30	В	4			
	ragas syrvatica				<i>No immediate safety works recommended.</i> <b>Suggest</b> crown cleaning and lifting of branches to nominal 4m AGL.			
T4	Beech Fagus sylvatica	20	1100	LM	<ul> <li>Boundary tree, ownership not confirmed. Fair foliage health and form, significant scar and bark loss to east side ground level to 4m AGL. Wood deterioration appears fairly shallow. Ivy has been cut- possible stem hole? Probable Charcoal fungus brackets at base of stem scar – but may be actual (bark) charcoal caused by adjacent fire? TBC.</li> <li>Note: Approval for felling of this tree has already given by EWRYC under the TDD (dead or dangerous) procedure.</li> </ul>		С	5, 6, 7
T5	Ash	14	150 -	м	Smaller, multi-stem tree in corner, probable hedge remnant. Junctions at ground level all appear sound. Low growth over approach path.	10-20	С	8
	Fraxinus excelsior		300		Suggest crown lifting of branches to nominal 4m AGL			

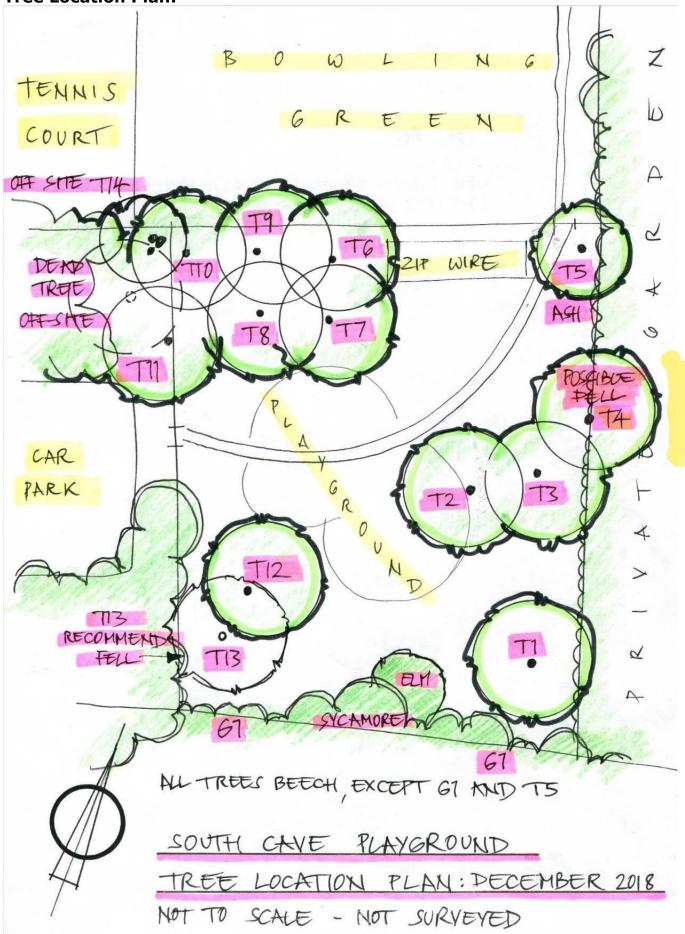
Tree No.	Species	Approx Height (m)	Diam (mm)	Life Stage	Physiological and Structural Condition. Preliminary management Recommendations	Est. RC years	Grade BS5837	Photo
Т6	Beech         18         700         M         Younger mature tree, crown slightly compromised by group location.           Fagus sylvatica         18         700         M         Younger mature tree, crown slightly compromised by group location.		Younger mature tree, crown slightly compromised by group location. Good foliage health, stem splits to 4 at 2m AGL, sound junction at present.	20-30	В	9		
					No immediate safety works recommended. <b>Suggest</b> crown lifting of branches to nominal 4m AGL where towards zip wire.			
Т7	Beech Fagus sylvatica	18	700	м	Younger mature tree, crown slightly compromised by group location. Good foliage health, stem splits to 3 at 2m AGL, sound junctions at present.	20-30	В	10, 15
	ragas syrvatica				No immediate safety works recommended. <b>Suggest</b> crown lifting of branches to nominal 4m AGL where towards playground.			
Т8	Beech Fagus sylvatica	18	450	м	Younger mature tree, crown slightly compromised by group location, thinner stem. Good foliage health, stem splits to 2 at 2m AGL, sound junctions at present. Minor deadwood to be cleaned.	20-30	В	10, 11, 15
					<i>No immediate safety works recommended.</i> <b>Suggest</b> crown cleaning & lifting of branches to nominal 4m AGL where towards playground.			
Т9	Beech 18 550 M Younger mature tree, multi stem form OK. Good foliage health, sound junctions at present. Very minor deadwood.		20-30	В	11, 15			
	, agae ey i aaca				No immediate safety works recommended.			
T10	Beech Fagus sylvatica	18	450	м	Younger mature tree, crown slightly compromised by group location. Stem scar at 500 to 1.5m north side, wood not significantly compromised. Good foliage health, stem splits to 2 at 4m AGL, junction appears sound.		В	11
					No immediate safety works recommended.			
T11	Beech Fagus sylvatica	16	600	М	Boundary tree, ownership not confirmed. Fair foliage health and form, unbalanced growth in places due to location and adjacent trees. Twin-stem is twisted on itself from 1m to 3m, creating some self-bracing.		В	11
					<b>Suggest</b> crown lifting of branches to nominal 4m AGL, and minor reductions of extended branches.			
T12	Beech Fagus sylvatica	20	900	LM	Mature tree, sound and healthy, large callus/burr at 5m AGL south side. Low over playground. Very minor deadwood. Close to T13 – assumed to be removed - and impacted by it.	20-30	В	13
					<b>Suggest</b> crown cleaning and lifting of branches to nominal 4m AGL. <u>Assuming removal of T13</u> , include branch reduction of extended limbs to east and west and (if practical) twisted branches at top of crown. Branch reductions to be nominal 3 to 4m, or maximum 15%, all to suitable branch junctions.			

Tree No.	Species	Approx Height (m)	<b>Diam</b> (mm)	Life Stage	Physiological and Structural Condition. Preliminary management Recommendations	Est. RC years	Grade BS5837	Photo
T13	Beech Fagus sylvatica	22	900	LM	Good foliage health but hollowing stem and possibly structurally unsound within. Risk of failure may be low but location is <u>extremely</u> high risk. <b>Recommend fell</b> including stump grinding. Main tree section could be retained as log feature on the ground, subject to approvals? <b>Replacement tree required; plant in south-west corner.</b>		U	13, 14
T14	Sycamore	18	M/S	М	Just off site, straddling boundary, not owned, not fully inspected. Suggest Ivy is cut, to allow full inspection of stem bases.		-	12

## KEY

Dimensions	Life Stage: (or age class)	Other Headings & Notes	<b>Grade:</b> (Tree Quality based on BS5837:2012, not applicable to this survey)
Ht: Maximum height of tree, in metres. ~ – indicates estimated dimension	Y – Young	<b>Ref:</b> Reference number (which <i>may</i> refer to a tag fixed to a tree). T – Tree, H – Hedge, G – Group	U – Trees in such a condition where any existing value would be lost in 10 years.
<b>Diam:</b> Stem diameter at ~ 1.5m above ground level (AGL), in mm.	SM – Semi-Mature	Species: Common name, plus Latin name where appropriate. Species in brackets () indicate shrub or subsidiary species, in hedges and in groups.	A – Trees of high quality and value.
<b>Spread:</b> Minimum spread of branches to the 4 cardinal points, in metres.	EM – Early-Mature	Est RC: Estimated remaining contribution, in years.	B – Trees of moderate quality and value.
Ht 1st branch: Height AGL of first significant branch, and growth direction where applicable, in metres.	M – Mature	<b>RPA:</b> Root Protection Area, in m <sup>2</sup> , calculated from stem diameter, in accordance with BS5837.	C – Trees of low quality and value. Trees in this category should not be retained where they impose significant constraints on development.
Ht to Crown: Height AGL to lowest significant section of canopy, and direction where applicable, in metres.	OM – Over-Mature V – Veteran	Photo: Photograph reference number, where applicable.	Other Abbreviations: AGL – Above Ground level CEZ – Construction Exclusion Zone TPP – Tree Protection Plan

### **Tree Location Plan:**





**Photo 1** G1, Pollarded Sycamore; Leaning Elm and multi-stem Ash



Photo 2 T1 Beech



**Photo 3** T1 Beech, stem base, toadstool growth (possible Charcoal fungus in buttress to left)

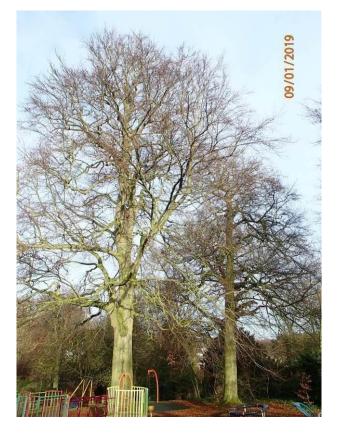


Photo 4 T2 Beech LHS; T3 Beech RHS



Photo 5 T4 Beech, on east boundary. Probable Fell



**Photo 6** T4 Beech, east of stem, from adjacent garden (possible Charcoal fungus in buttress at base)



Photo 7 T4 Beech, possible charcoal fungus



Photo 8 T5 multi-stem Ash

Photographs



Photo 9 Beech T6, growth above zip wire.

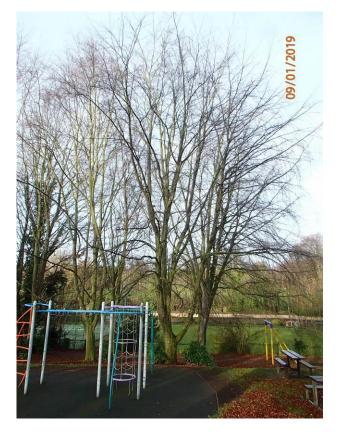


Photo 10 Beech group, T6 RHS to T9 LHS



Photo 11 Beech group, T8 RHS to T11 LHS



**Photo 12** Neighbouring tree, north-west corner, T14, recommend Ivy is cut/removed.



Photo 13 T12 Beech RHS; T13 Beech to fell, LHS



**Photo 14** T13 Beech, stem cavity, north side. Honey fungus in buttress to left side



Photo 15 Beech groups; low growth throughout