



Arboricultural Report

Tree Condition Assessment

Chantry Field
Thornbury

13th December 2022

Compiled for:

Jon Brain

On behalf of

Thornbury Town Council

By

Phil Dye

BSc (hons) Arb, Cert Arb L4 (ABC), BA (Hons), MArborA

Ref: WTC_1040.01

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NOTE

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1:0 INTRODUCTION

I am a consulting arboriculturist with Wotton Tree Consultancy Ltd. I have a BSc (hons) Arboriculture and the AA Technicians Certificate in Arboriculture (Cert Arb L4 (ABC)). I am a LANTRA qualified Professional Tree Inspector. I am a licensed user of Quantified Tree Risk Assessment (QTRA) - license no. 2278, a professional member of the Arboricultural Association and a professional member of the Consulting Arborists Society. I am trained in valuing amenity trees using the Capital Asset Value for Amenity Trees (CAVAT) system. I have been a consulting arboriculturist since 2006.

2:0 SCOPE

I have been instructed by Jon Brain on behalf of Thornbury Town Council to undertake a health and safety survey of the trees within the curtilage of Chantry Field. The risk of harm has been calculated using Quantified Tree Risk Assessment (QTRA). Remedial tree works have been recommended only where appropriate to reduce risk of harm to an acceptable level in line with HSE's *Tolerability of Risk Framework* (HSE 2001).

3:0 REPORT LIMITATIONS

- i. This report is an evaluation of the condition of the trees at the time of inspection. Due to the changing nature of trees and other site circumstances, predictions of their future condition can only be made using the visible signs present at the time of inspection.
- ii. Under certain conditions, roots can affect foundations, drains and other underground services. These issues have not been addressed in this report.
- iii. Trees are dynamic structures that can never be guaranteed 100% safe. Even those in good condition can suffer occasional damage under only average weather conditions. For this reason the contents of this report is valid for 12 months from the date of inspection.
- iv. The inspection was carried out from ground level only. There was no aerial inspection.
- v. No samples were taken away from site for analysis elsewhere.
- vi. Any alterations of or deletions from this report will invalidate it.
- vii. No responsibility is assumed by Wotton Tree Consultancy for legal matters that may arise from this report, and the consultant will not be required to give testimony or attend court unless subsequent contractual arrangements are made.
- viii. Any subsequent works undertaken to the surveyed tree as a result of this report is the responsibility of the land managers.
- ix. I have not contacted the Local Planning Authority to determine whether any Tree Preservation Order (TPO) covers any of the trees, nor to determine if the site is in a Conservation Area. Before undertaking any work to any of the trees, it would be advisable to check whether either of these planning controls are in operation; if they are, it would be necessary to obtain consent (or in the case of a Conservation area give six weeks notice of intent) before undertaking any such work.

4:0 SITE VISIT AND OBSERVATIONS

4.1 Site visit

The survey was carried out on 25th November 2022. All observations were from ground level. A nylon headed mallet was used to sound out decay in the trunks of the trees. A Tru-Pulse 360 laser rangefinder was used to accurately measure the height of the trees.

5:0 EXPLANATORY NOTES

5.1 Method

All trees have been systematically inspected using Visual Tree Assessment (VTA). Where necessary, a nylon headed mallet has been utilised to sound out decay. Any tree works highlighted in the table and on the accompanied plans require works to abate any health and safety issues in the following 18 months.

5.2 Table fields

5.2.1 Tree number

Each of these trees has been allotted a number so that the location on the plan and works recommendations on the table can be cross-referenced.

5.2.2 Species

The common name is recorded. Where the species is uncertain, only the genus is stated followed by the letters spp (species).

5.2.3 Age class

This has been recorded as:

- y = Young
- sm = Semi mature
- em = Early mature
- m = Mature
- om = Over mature
- v = Veteran

These are all relative to the life span of the species.

5.2.4 Diameter at 1.5m

Measured in mm, this is the diameter of the main stem taken at a height of 1.5m from ground level. These have been banded into the following groups:

<75, 75-150, 150-250, 250-350, 350-500, 500-750, 750-1m, 1m+

5.2.5 Ht range (m)

Height of tree measured in metres from the base to the highest part of vegetative growth. These are banded into 5 groups:

0-5, 6-10, 11-15, 16-20 and 20+

5.2.6 Crown clearance

The distance from the ground to the lowest bough or canopy part.

5.2.7 Physiological condition

The condition of the trees' health, looking in particular at vitality and the presence of disease. These are categorised as follows:

Poor = in decline/dying and/or significant faults

Fair = some minor faults but good vitality.

Good = No apparent faults, high vitality, significant life expectancy

5.2.8 Structural condition

The condition of the trees stem and branch structure, looking in particular at branch unions, crossing branches and crown formation. These are categorised as follows:

Poor = structurally compromised showing significant defects beyond remedy

Fair = some minor defects which can be remedied through tree works.

Good = No significant defects.

5.2.9 Works recommendations

See section 5.3 below.

5.2.10 Comments

Observations about the tree or its environment where they are deemed noteworthy.

5.2.11 Safe useful life expectancy

An estimation in years of the remaining contribution the tree can offer, depending on its condition, age, location and size.

5.2.15 Priority

To facilitate the management of tree works a priority is given to each recommendation depending upon its urgency.

Priority 1 = Urgent – mitigate the identified problem as soon as possible

Priority 2 = High risk - mitigate the identified problem as soon as the work schedule allows

Priority 3 = Moderate risk - Retain and monitor the tree and / or mitigate the identified problem as necessary

Priority 4 = Low priority - retain and monitor the tree. Mitigate the identified problem if desired.

5.3 **Recommended works**

The tree works recommended in this report are solely to abate any health and safety issues in the following 18 months. In some cases, advice has been given on general future tree management in the comments section. These have not been assigned a priority as they are not considered health and safety issues at the time of this survey

5.3.1 Monitor

This is the frequent inspection, often by a lay-person, for a specific change in the tree as noted in the report. If these changes are witnessed then a set action is recommended. It may be prudent to contact an arboriculturist if in doubt.

5.3.2 Remove

Where it is considered that a tree is in such a poor condition that it either poses a danger to people or property, or that is unsuitable for its location or that it significantly reduces the amenity of the area by staying *in situ*, its removal is recommended.


5.3.3 Remove stake /tie

Stakes and ties are used to support a young tree for the first 2 or 3 years after planting. After this time, and when it is considered that the tree has established and can support itself against the elements, the stake and tie must be removed. If left *in situ* they can cause direct damage to the trunk and the tie can strangle the tree, stopping the movement of vital water and nutrients around the stem and crown.

6:0 TREE SURVEY DATA

The following trees were inspected for structural integrity and health and safety. Management recommendations were prescribed only where health and safety concerns arose. It is recommended that the tree works are carried out within the following 18 months. A priority has been assigned where works are recommended to help gauge the urgency of the works (see 5.2.15).

Trees highlighted in **red** have been recommended for removal.

 = Tree has been removed since the last survey

Tree No	Species	Age class	Diameter range at 1.5m (mm)	Height range (m)	Crown Clearance (m)	Physiological condition	Structural condition	Comments	Works recommendations	Safe Useful Life Expectancy (SULE) years	Priority
T1	Hawthorn	Mature	150-250	15-20m	3	Dead	Dead	REMOVED	-	0	-
T2	Holly	Young	75-150	5-10m	0	Good	Good	Suppressed by surrounding mature trees.	-	20-40	-
T3	Hawthorn	Mature	150-250	0-5m	2	Poor	Fair	REMOVED	-	0	-
T4	Willow	Early-mature	250-350	5-10m	2	Fair	Fair	3 stems from 0.5m.	-	10-20	-
T5	Willow	Semi-mature	150-250	0-5m	1	Fair	Fair	4 stems from base.	-	10-20	-
T6	Eucalyptus	Early-mature	350-500	10-15m	4	Fair	Fair	Off-site tree overhanging park.	-	10-20	-
T7	Norway maple	Semi-mature	150-250	5-10m	2	Dead	Dead	REMOVED	-	0	-
T8	Norway maple	Semi-mature	150-250	5-10m	2	Fair	Fair	Bifurcated at 0.5m. Localised dieback resulting from poor pruning on neighbour's side. Partially Included branch union at 0.5m	-	10-20	-
T9	Lime	Mature	500-750	10-15m	2	Good	Fair	Partial inclusion on south east stem	-	40+	-
T10	Lime	Mature	500-750	10-15m	2	Good	Fair	Bark included union at 0.5m No natural braces present. Cobra brace installed.	-	20-40	-
T11	Ash	Mature	350-500	10-15m	1	Fair	Fair	REMOVED	-	0	-
T12	Lime	Mature	350-500	10-15m	2	Good	Fair	Bark included union at 1m No natural braces present. Large stem has failed in upper canopy due to Included union. Tree recently reduced and cobra brace fitted .	-	20-40	-
T13	Poplar	Mature	750-1000	15-20m	3	Good	Fair	Reduced to 9m. 3m if regrowth	-	20-40	-
G1	6 x plum trees	Early-mature	75-150	0-5m	1	Fair	Fair	-	-	10-20	-
T14	Poplar	Mature	500-750	10-15m	3	Fair	Fair	Reduced to 6m. 2m of re growth	-	20-40	-

Tree No	Species	Age class	Diameter range at 1.5m (mm)	Height range (m)	Crown Clearance (m)	Physiological condition	Structural condition	Comments	Works recommendations	Safe Useful Life Expectancy (SULE) years	Priority
T15	Horse chestnut	Semi-mature	250-350	5-10m	1	Fair	Fair	Strip of dysfunctional wood from base to 2m, with cracking bark continuing for a further 4m on western trunk. Height recently reduced to lessen end weight. Some adaptive growth present	-	10-20	-
T16	Horse chestnut	Semi-mature	250-350	5-10m	1	Good	Fair	-	-	40+	-
T17	Walnut	Semi-mature	150-250	5-10m	1	Good	Fair	Bifurcated at base. Included bark union. Minimal natural braces.	Inspect after storm events. If inclusion appears to be widening seek arboricultural advice.	20-40	3
T18	Giant redwood	Semi-mature	1000+	15-20m	2	Good	Good	Historic fire damage on west side at base. Flame retardant bark minimises effect on tree's health. Now unnoticeable.	-	40+	-
T19	Leyland cypress	Mature	1000+	15-20m	2	Fair	Fair	Historic limb failure after strong winds. Typical of species	-	10-20	-
T20	Elder	Early-mature	75-150	0-5m	2	Fair	Fair	-	-	20-40	-
T21	Leyland cypress	Mature	1000+	15-20m	2	Fair	Fair	Numerous dead upright stems on south side. Fire damage evident. Approximately 50% of the canopy remains although sheltered by surrounding trees	-	10-20	-
T22	Monterey pine	Mature	350-500	10-15m	2	Fair	Good	-	-	40+	-
T23	Pine	Early-mature	150-250	5-10m	2	Poor	Poor	REMOVED	-	0	-
T24	Leyland cypress	Mature	1000+	15-20m	2	Good	Poor	REMOVED	-	0	-
T24a	Spruce	Semi-mature	150-250	10-15m	1	Fair	Fair	Sparse canopy for species type	-	10-20	-
T25	Leyland cypress	Mature	1000+	15-20m	2	Good	Fair	Historic limb loss at 3m. Numerous vertical limbs interwoven giving added strength to the canopy.	-	20-40	-
T26	Judas tree x 3	Newly planted	<75	0-5m	1	Fair	Fair	Bundle planted	Remove stakes and ties	40	2

Tree No	Species	Age class	Diameter range at 1.5m (mm)	Height range (m)	Crown Clearance (m)	Physiological condition	Structural condition	Comments	Works recommendations	Safe Useful Life Expectancy (SULE) years	Priority
T27	Oak	Newly planted	<75	0-5m	1	Fair	Good	-	-	40+	-
T28	Rowan	Early-mature	150-250	5-10m	2	Good	Fair	3 stems from base. Mistletoe throughout.	-	20-40	-
T29	Beech	Newly planted	<75	0-5m	1	Dead	Dead	-	Remove and replace	0	3
T30	Dawn redwood	Mature	500-750	10-15m	1	Good	Good	-	-	40+	-
T31	Hornbeam	Newly planted	<75	0-5m	1	Fair	Fair	Sparse. Apical dieback although some recovery is evident	-	10-20	-
T32	Scots pine	Mature	250-350	10-15m	2	Good	Good	-	-	40+	-
G2	Stags horn sumach, elder, ash, hawthorn, beech	Young	75-150	0-5m	0	Fair	Fair	Group of trees lining Clare Walk.	-	40+	-
T33	Leyland cypress	Mature	1000+	15-20m	2	Good	Fair	-	-	20-40	-
T34	Austrian pine	Mature	350-500	10-15m	2	Good	Fair	Bifurcates at 8m. Bark inclusion at this point. Cobra brace installed	-	40+	-
T35	Leyland cypress	Mature	1000+	15-20m	2	Good	Fair	-	-	20-40	-
T36	Leyland cypress	Mature	1000+	15-20m	2	Good	Fair	-	-	20-40	-
T37	Horse chestnut	Mature	350-500	10-15m	2	Fair	Fair	Signs of bleeding canker evident. Some bark damage likely resulting from children playing around the tree	-	40+	-
T38	Ash	Early-mature	250-350	10-15m	3	Poor	Fair	REMOVED	-	0	-
T39	Silver birch	Early-mature	150-250	10-15m	3	Fair	Fair	Moderate deadwood. No targets	-	20-40	-
T40	Lime	Mature	350-500	10-15m	2	Good	Fair	-	-	40+	-
T41	Lime	Mature	350-500	5-10m	2	Good	Fair	Poor past pruning of lower branches. Bark inclusion at 3m. Natural braces present. Dense canopy.	-	40+	-
T42	Sycamore	Mature	150-250	10-15m	3	Good	Fair	Multi-stemmed tree growing either side of chain link fence.	-	20-40	-

Tree No	Species	Age class	Diameter range at 1.5m (mm)	Height range (m)	Crown Clearance (m)	Physiological condition	Structural condition	Comments	Works recommendations	Safe Useful Life Expectancy (SULE) years	Priority
T43	Lime	Mature	350-500	5-10m	2	Good	Fair	Poor past pruning of lower branches. Dense and compact canopy	-	40+	-
T44	Willow	Early-mature	250-350	10-15m	2	Good	Fair	Reduced to 6-7m. 3m of re growth	-	20-40	-
T45	Lime	Mature	350-500	10-15m	2	Good	Good	-	-	40+	-
T46	Field maple	Newly planted	<75	0-5m	2	Fair	Fair	In decline	Ensure adequate watering program is adhered to. Especially in drought conditions	10-20	2
T47	Lime	Newly planted	<75	0-5m	2	Good	Good	-	-	40+	-
T48	Lime	Mature	350-500	5-10m	2	Good	Fair	Some bark Included unions although natural braces are present	-	40+	-
G3	3 x poplar	Semi-mature	150-250	10-15m	2	Fair	Fair	-	-	20-40	-
T49	Poplar	Early-mature	250-350	10-15m	3	Fair	Fair	-	-	20-40	-
T50	Lime	Mature	350-500	5-10m	2	Good	Fair	-	-	20-40	-
T51	Silver birch	Semi-mature	75-150	5-10m	4	Fair	Fair	Sparse canopy. Growing through utility lines.	-	10-20	-
T52	Robinia	Early-mature	250-350	10-15m	3	Good	Fair	Fence completely enveloped in trunk.	-	20-40	-
T53	Robinia	Mature	750-1000	15-20m	2	Good	Fair	Bark included union at 2m. No natural braces present. Cobra brace installed.	-	40+	-
T54	Silver birch	Semi-mature	75-150	5-10m	4	Fair	Fair	Previously cut back from power line	-	10-20	-
T55	Whitebeam	Early-mature	250-350	5-10m	3	Fair	Poor	REMOVED	-	0	-
T56	Silver birch	Semi-mature	75-150	5-10m	4	Fair	Fair	-	-	10-20	-
T57	Hawthorn	Early-mature	150-250	5-10m	3	Dead	Dead	Moribund tree. Can be retained for habitat.	-	0	-
T58	Viburnam tinus	Early-mature	75-150	0-5m	0	Good	Good	-	-	20-40	-

Tree No	Species	Age class	Diameter range at 1.5m (mm)	Height range (m)	Crown Clearance (m)	Physiological condition	Structural condition	Comments	Works recommendations	Safe Useful Life Expectancy (SULE) years	Priority
T59	Norway maple	Mature	750-1000	15-20m	3	Good	Good	-	-	40+	-
T60	Holly	Semi-mature	75-150	0-5m	0	Fair	Fair	-	-	20-40	-
T61	Silver birch	Early-mature	150-250	10-15m	2	Good	Good	-	-	40+	-

7:0 IMMEDIATE CONCERNS

The survey identified no immediate (priority 1) health and safety works to the trees within the curtilage of Chantry Field.

8:0 CONSIDERATIONS

8.1 **Timing of works**

The optimum time to undertake tree works are when the tree is in full leaf. At this point the tree has produced enough energy to react positively to the pruning, and will be able to produce more energy before dormancy in winter for bud burst in the following spring.

A full inspection of the tree for birds and bats should be undertaken prior to works. The table below gives an indication of the best times to prune for the tree, the birds and the bats.

Table 1. Phenology of tree pruning

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Trees	√	√	x	x	x	√	√	√	√	x	x	√
Bats	x	x	√	√	√	x	x	x	√	√	√	x
Birds	√	√	x	x	x	x	√	√	√	√	√	√

√ = Optimum time to prune

Note 1: The limitations on tree health are only relevant if the tree is being retained. Time of year is not important for felling. An Ecologist could provide further information about birds and bats.

Note 2: The optimum time to prune a tree is midsummer. If pruning is to be carried in the winter months, then it is important that it is during a period of mild temperatures.

8.2 **Felling licence**

Licences from the Forestry Commission are required when felling more than 5 m³ of timber in one calendar quarter. Works to dead or dangerous trees are exempt from this licence as are any tree surgery works. This covers all works that I have recommended. Permission might be required for any additional works.

9.3 Ivy control

Ivy is a native creeper that has many ecological benefits. It provides shelter for bats, birds and a variety of invertebrates, but can sometimes cause problems for trees and structures. Ivy growth on a tree can hide defects within the tree during tree inspections. Dense ivy within the crown can increase the sail area of the tree, making it more prone to failure in high winds. On the walls of buildings, the adventitious roots of ivy can find their way into existing defects such as holes, cracks or gaps in the mortar, and through circumferential growth of woody tissue, exacerbate these defects. If left to grow to the roof they can dislodge tiles.

Should it be necessary to remove ivy, it is recommended that the ivy is severed at the base of the tree or structure and left to die off before removing. This allows any nesting birds or roosting bats to alight the ivy (it is an offence to disturb nesting birds or roosting bats under the Countryside and Rights of Way Act 2000), and it allows the adventitious roots to release their grip of loose mortar on a structure or bark on a tree, thus reducing damage as the ivy is removed.

8.4 Legal obligations

Tree owners have a legal duty of care to maintain their trees to an acceptable level of safety to ensure that no harm is caused by them to third parties or their property.

The Occupiers Liability Act 1957 and 1984 places a legal duty on the occupier of the house to keep visitors, invited or not, from suffering injury on the premises from a 'concerned danger'. This duty of care is satisfied if the occupier takes reasonable steps to ensure that anyone they might reasonably expect to enter their land is kept reasonably safe from danger whilst on their premises. A tree survey, such as this document is considered a reasonable step, and as long as the tree works that have been prescribed as health and safety have been undertaken, the duty of care has been discharged. Please see section 8.6 for recommended re-inspections.

The Highways Act 1980 places a duty on tree owners to ensure their vegetation does not impede the public highway, which includes footpaths and streetlights. In order to comply with this, a clearance of 2.5m over a footpath, and 5.4m over a road is usually stipulated by the Highway Authority. Actual heights of clearance are not stated within the Act, and the Highway Authority reserve the right to set these clearances depending on use of the road. Under *section 154* of the Act the Highway Authority can serve a notice on the tree owner to undertake any necessary tree works.

The Wildlife and Countryside Act 1981 and its amendments in *The Countryside and Rights of Way Act 2000* makes it an offence to disturb a birds nest which is in use, which is normally

taken to mean under construction, or with eggs, chicks or birds using it regularly - even if they are not actually in it at the time. For this reason, it is prudent to wait until the bird nesting season has finished before undertaking hedge works. A thorough inspection of the hedge for nesting birds should be undertaken prior to any works commencing. Similar checks should be carried out for tree works.

8.5 Common Law Right of Abatement

In English common law a right to abate a legal nuisance exists, enabling a property owner or tenant to prune any overhanging vegetation or trespassing roots entering their land from trees on neighbouring land up to but not beyond, their boundary line. This does not give rights to trespass onto the neighbouring land and so permissions from the land owner must be sought if access to their land is needed to carry out the pruning works. Any arisings from this work must be disposed of responsibly.

8.6 Tree Preservation Orders and Conservation Areas

It is necessary to contact South Gloucestershire Council's Planning Dept to ascertain the presence of any Tree Preservation Orders (TPOs) or Conservation Areas (CAs). Relevant permissions will be required. South Gloucestershire Council will advise further.

8.7 Tree Works

All tree works must be carried out to BS 3998:2010 *Tree work - Recommendations* standards by competent arborists who can show proof of relevant insurances and qualifications.

8.8 Future tree inspections

It is recommended that the trees are **reinspected every two years** for health and safety. These inspections should be carried out by a competent arboriculturist who can show proof of relevant insurances and qualifications.

Sources of Information

BSI Standards Publication (2010) BS3998 *Tree Works – Recommendations* BSI: London

BSI Standards Publication (2012) BS5837 *Trees in relation to design, demolition and construction – Recommendations* BSI: London

Lonsdale, D (1999) *Principles of Tree Hazard Assessment and Management*, TSO: London

Matheny, N.P & Clark, J.R (1994) *Evaluation of Hazard Trees in Urban Areas* 2nd Ed ISA Illinois

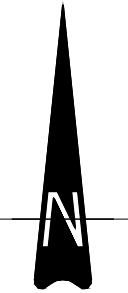
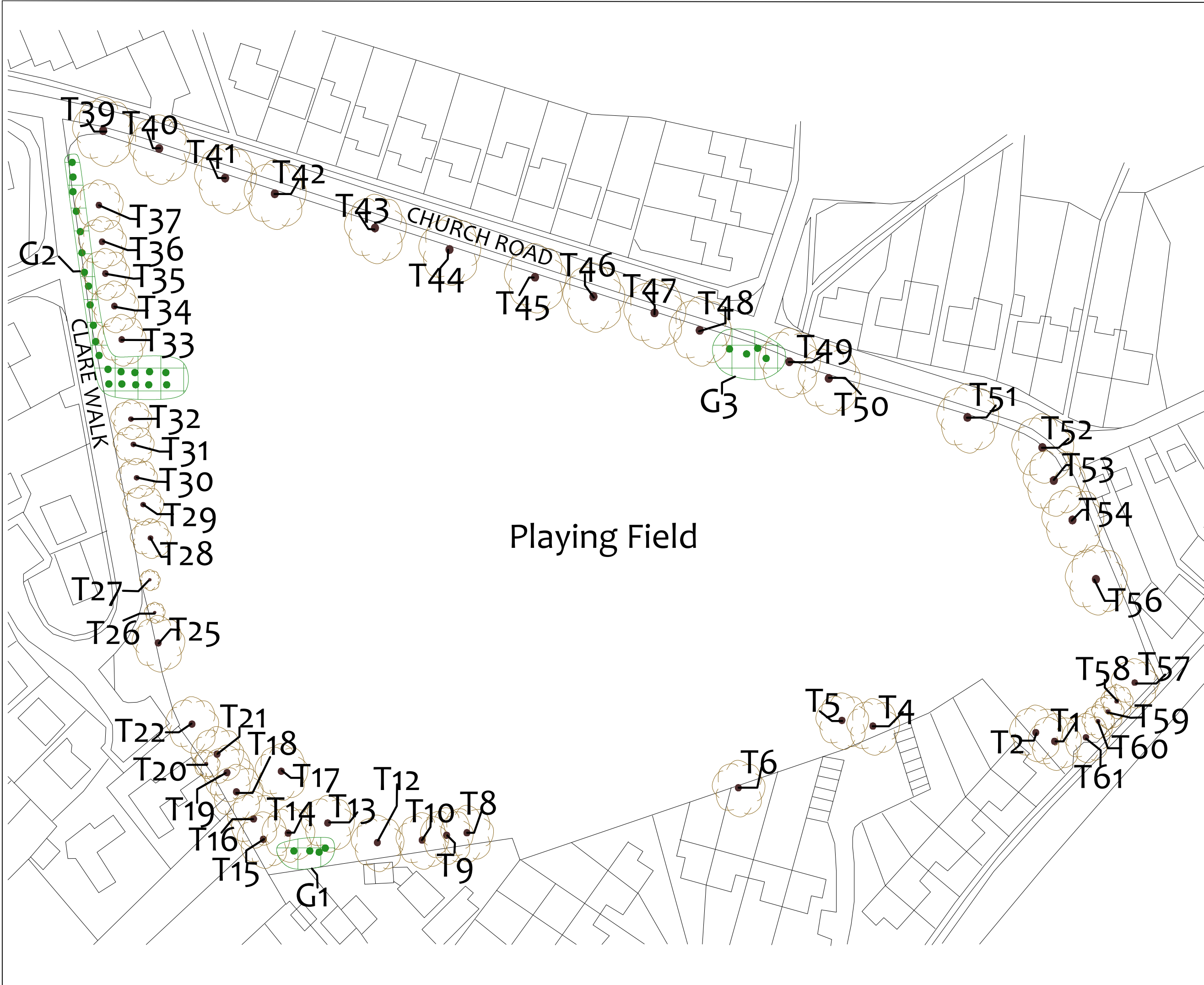
Mattheck, C & Breloer, H (2003) *The Body language of Trees*, TSO: London

Read, H (2000) *Veteran Trees: A guide to good management*, English Nature: London

Strouts, R.G & Winter, T.G (2004) *Diagnosis of Ill-Health in Trees*, TSO: London


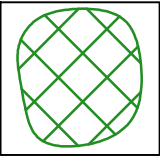
APPENDIX A – Map

WTC_1040.02



Do not scale from this drawing.
 Please check all dimensions on site and notify us of any discrepancies. Wotton Tree Consultancy Ltd (WTC) cannot be held responsible for any discrepancies or inaccuracies in the topographical plan upon which this drawing is based.
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Key

-  Tree
-  Group

Project
**Chantry Fields
 Gloucester Road
 Thornbury**

Title
**Tree Location
 Plan**

		Rev	Rev date
Drg No	WTC_1040.02		
Scale @A3	Not to scale	Drn by	PD
Date	Dec 2022	App	

Phil Dye - BSc (hons) Arboriculture, Cert Arb L4 (ABC) , MArborA

A handwritten signature in black ink, appearing to read 'Phil Dye', written over a horizontal line.

Principal Arboriculturist
Wotton Tree Consultancy Ltd

Date: 13th December 2022

[End of report]