

Arboricultural Report Tree Health Assessment

Property Location

10 View Road, Rainhill, L35 0LQ

On behalf of:



Report Date: 02/05/2022

Survey and Report by:

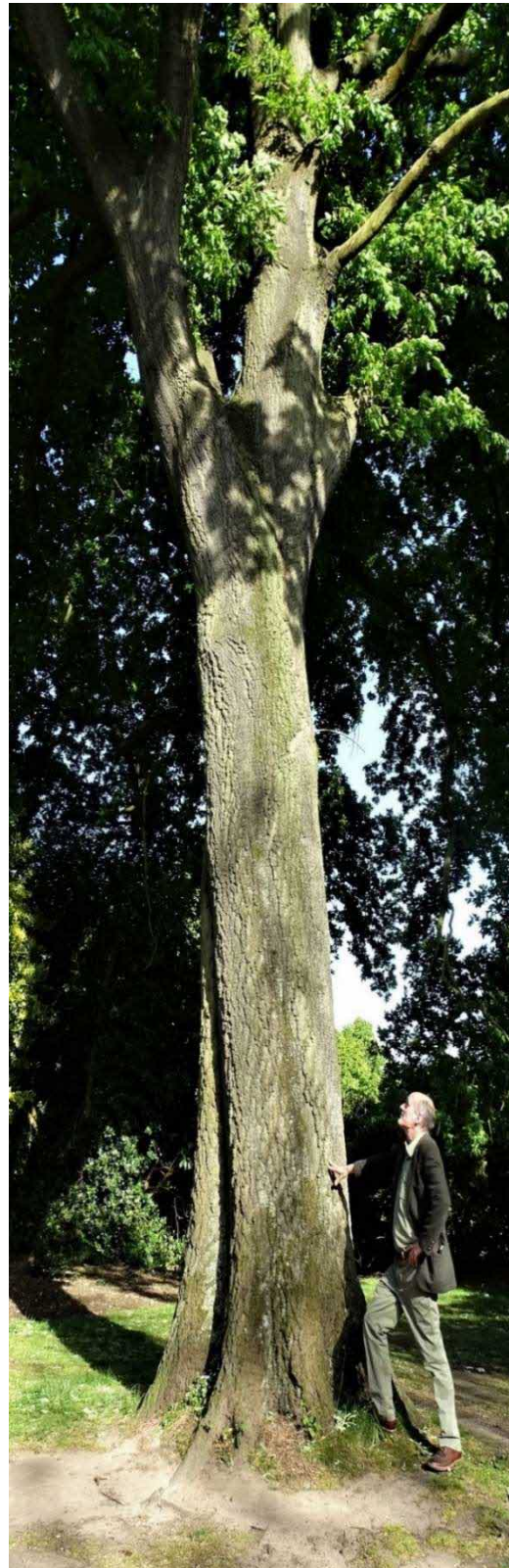
Derek Eames RFS Cert Arb

derek.eames@iros-uk.com

www.iros-uk.com

Contents

- 1 Purpose of report
- 2 Explanatory information
- 3 Survey methodology
- 4 Tree Survey
- 5 Site Overview
- 6 Soil Profile Report (NSRI)
- 7 Physical Soil Assessment
- 8 Subsidence Risk Appraisal
- 9 NHBC 4.2 Requirements
- 10 Underground Amenities
- 11 Tree Preservation Orders
- 12 Tree Notes and Recommendations
- 13 Implementation of recommendations
- 14 Remedial Tree Planting
- 15 Illustrations
- 16 Concluding Comments
- 17 Disclaimers and Limitations
- 18 Time limitation
- 19 Trees as living organisms
- 20 Biodiversity and Habitat
- A1 Tree Schedule
- A2 Tree Plan



1 Purpose of Report

To provide an arboricultural survey in relation to the tree to the front of the property as identified in Appendix 1 and Appendix 2. The purpose of the survey is to carry out a VTA tree health assessment and include for recommended tree works with application for TPO requirements. The report is for the sole use of the client and his agents / consultants and the client upon full payment of fees due has an irrevocable licence to use the intellectual property notwithstanding that such intellectual property shall remain vested in Iros Arb.

2 Explanatory Information

Basis of Report. Visual Tree Assessment. This is the method of surveying trees from ground level for dimensions in accordance with BS5837 using professional equipment. Additional observations will have been added with regards to tree category schedule. Detailed assessment of tree health and vigour including root assessment and technical methods such as Sapflow measure may be included within the scope of this report. Tree categories are limited to categories A, B, C and U. Additional numeral categories (i.e. A1, A2 and A3) will only be used in relation to veteran trees or trees of significant arboricultural or amenity value.

Drawings are taken from OS Masterplan or DWG Autocad and include drawings as listed.

3 Survey methodology

- a) Identification and visual assessment of trees from ground level within proximity to property
- b) Identification of soils profile from National Soils Research Institute or BGS Data
- c) Where a clay is notified, a sample may be taken from 1m depth for preliminary plasticity assessment
- d) Tree Inventory and Schedule including suggested tree works
- e) TPO and Conservation Area Applications if required
- f) Remedial planting schedule if required

4 Feasibility: Tree survey and Constraints

The current existing Tree infrastructure survey is set out in table Appendix 1 and drawing Appendix 2. The BS5837 details as follows including colours as marked on drawings:

*	Category A (Green)	Trees of high quality and amenity value with estimated life expectancy of over 40 years.
*	Category B (Blue)	Trees of moderate or impaired condition with estimated life expectancy of over 20 years
*	Category C (Grey)	Trees of low quality and poor form with low life expectancy or young tree with DBH of 150mm or less
*	Category U (Red)	Trees of poor form with significant defects that would not be reasonable to retain and with very poor life expectancy. No RPA is required.

There are further provision of additional sub-categories but may not be used in this report:

*	Category 1	Of significant arboricultural interest.
*	Category 2	Of important landscape amenity value
*	Category 3	Of important cultural value

Further notes include the following references:

- * Ident - T: Tree; G: Group of Trees; H: Hedge
- * Age Assessment - Y: Young; EM: Early Mature; SM: Semi Mature; M: Mature; LM: Late Mature; V: Veteran

- * DBH - Standard for stem diameter at 1.4m measured in cm
- * Height and Crown - measured in metres.
- * RPA - Root Protection Area; Radius of 12x DBH measured in metres.
- * 1st Branch - Height in metres and Direction i.e - 2.5NW
- * Vigour - G: Good, M: Moderate, P: Poor, D: Dead
- * Amenity Value - 1: Very Good, 2: Good, 3: Moderate, 4: Poor, 5: N/A
- * Further notes based on VTA - Structural, Basal FFB, Stem/Branch FFB, Hollow/Decay, Pathogens, Ivy.
- * QTRA Analysis - Provides an assessment of Risk of Harm

5 Site Overview

Site coordinates: 53.414800, -2.765239

Survey area: As below.

Approximate topography: Site is considered to be level. A detail topographical survey would be by others.

Survey extent



6 Soil profile ref.

Drilling # Casing Program	SAMPLE/TEST Type # No.	Depth(M)	SPT N - value or COHESION	DESCRIPTION	0 0 LEVEL	LEGEND	DEPTH
TST	D 1	0.30		MADE GROUND - Reinforced concrete overlying stone subbase.		[Patterned legend box]	0.0
	C 2	1.20 - 1.65	7	MADE GROUND - Loose very sandy subsoil with some cobbles and small boulders.			0.30
	D 3	1.65					
	U 4	2.20 - 2.65	82.70	Firm medium to dark brown slightly sandy CLAY with some fine to coarse gravel and occasional cobbles.			2.20
	U 5	3.20 - 3.65	55.00				
	D 6	3.75		Dense brown fine to coarse sandy GRAVEL.			3.75
	C 7	4.20 - 4.65	52				
TST - TST						5.00	

The attached detail is from BGS borehole data and refers to shallow layer of sandy clay over sandy gravel from 3.75m

7 Physical Soil assessment carried out to 1 metre depth only.

Not applicable to this survey

Soil Type	ID	Horizon	Moisture	Liquid Limit

8 *Preliminary Subsidence Risk Appraisal (subject to geotechnical report if required)*

Based on the acquired knowledge of the soil profile in relation to the property and tree proximity. This is provided as a preliminary estimate only. Where there is risk of shrinkable clay, an independent geotechnical report would be required.

Preliminary estimated subsidence risk from tree influence: Nil, Very Low, Low, Moderate, High, Very High

Based on the Soil Profile information, subsidence risk would be expected to be: Very Low

9 *NHBC 4.2 Recommendations*

Attention is drawn to NHBC 4.2 - D5 and D6 as setting out the requirements relating to foundations and clay subsoils. Where clay subsoils are present, a geotechnical survey would be required to provide accurate assessment of plasticity which should then be combined with the advice of a structural engineer to ensure compliance with NHBC requirements. Any comments provided in this report are for preliminary estimate only and should not be interpreted as a guidance for structural purposes, such being outside the scope of this report.

10 *Underground amenities*

No information on existing underground amenities and any associated risk has been provided. Any potential risk to amenities from root development would require a specialist survey beyond the scope of this report.

11 *Tree Preservations and Conservation areas*

St Helens BC does not have an interactive tree map. It is understood that T1 however is subject to a Tree Preservation Order.

It should be noted that any works carried out within TPO or Conservation areas, must have planning permission from the local authority as there would be liability for substantial fines for unauthorised work. It would therefore be the responsibility of the client to confirm with the Local Authority the status and if required to obtain relevant planning. IROSARB can assist with this.

The removal of dead trees and branches and management of tree with immediate risk of harm are exempt from planning restrictions, however in TPO and Conservation Areas, it would be normal to provide at least 5 days notice of the intended work backed by photographs demonstrating the particular issues.

12 *Tree Notes and Recommendations*

All notes and recommendations for any tree work to be carried out are contained within Appendix 1 including for any proposed tree works

13 *Implementation of Recommendations*

All tree work must comply with BS3998 guidelines and current professional good practice by a qualified tree work contractor with adequate insurance cover and taking into account statutory protection for birds, bats and any other protected species. All branch removal to be in accordance with target pruning practice and to branch bark ridge. "Topping", flush cuts and stub ends are not to professional standards and can cause extensive damage to the tree physiology. No liability can be accepted for damage and/or failure of tree structure due to unprofessional tree work.

IROS recommends: Poplar Tree Solutions.

14 Remedial Tree Planting

Not Applicable

ID	Standard	Species	Girth	Height	Potential

Planting Study

There are many considerations when planting trees including selecting the right site and species taking into account tree growth and the effect in 50 years or more. Ideally we want trees planted to be able to establish well and grow to maturity. Considerations could include:

- * Tree Planting and maintenance to be in accordance with BS8545
- * Planting to include for GreenBlue RootRain Metro watering systems
- * Tree ties to be hessian and to be adjusted annually
- * Trees selected to be suitable for relative soils profiles as identified
- * Statutory clearance of overhead services
- * Local ecology including native species
- * Tolerance of local climate such as urban or coastal
- * Size and selection of stock
- * Watering must be maintained during dry periods with no rainfall within 7 days.

GreenBlue RootRain Metro Irrigation System



www.greenblue.com

15 Illustrations

T1



Thin upper crown



16 Concluding Comm

- a) A significant tree of very high amenity value to the local area.
- b) T1 has a significant lean to the east elevation of 24 degrees which is quite substantial. However there is evidence of reactive growth both at the base of the stem and also to the higher leading lateral stems which are showing reactive tensional growth pulling the laterals more towards a vertical plane. This would suggest that the lean is likely to be aged and is possibly originally due to prevailing westerly winds.
- c) Substantial tensional growth at the base of the stem is present indicating that the tree has reacted well to the lean and that good tensional support is present to the windward elevation.
- d) A microdrill assessment found that there is no evidence of decay to 180mm of depth. This indicates a minimum t/r ratio of 0.45 which would be deemed to be a stable measure.
- e) However it was noted that the sapwood appeared to be relatively dry and this is also indicated by a thin crown with rather late leaf flush. It is estimated that a tree of this size would need to find about 20 ltrs of water per hour.
- f) Around the area of the tree there is considerable hard landscape and it is noticed that the neighbouring property has created a substantial drive area recently and the relative absence of soft landscape, save only to the front garden of the property, may be contributing to this issue. To the front of the property, the neighbouring properties and the main road the area consists of 680msq of which only approximately 64msq consists of soft landscape.
- g) The QTRA measure is based on a vehicle frequency of up to 470 cars per day, tree stem size of >450mm and Probability of Failure at over 1/100K. Risk of Harm is therefore deemed to be tolerable at <1/1M.
- h) This assessment however is based on average windspeeds. All trees are subject to failure and damage due to storm conditions and IROS do not accept liability for damage due to windspeeds of over 16m/s. in accordance with IROS terms and conditions.

Conclusion

It is deemed that T1 is of tolerable risk and no tree work is proposed due to risk. However due to the thin crown suggested imbalance between crown and root volume **it is proposed to carry out an overall crown reduction of a maximum of 1.4m to reform a more compact crown and encourage more vigorous lateral growth formation. This proposal is the subject of a planning application.**

17 Disclaimer and Limitations

Tree report is provided subject to IROS standard terms and conditions. www.iros-uk.com. Assessment is carried out through visual assessment. Trees are inspected from ground level only. Report based on BS5837. Decay detection, soil sampling, plasticity testing or sapflow measurement or other technical information, are only included if indicated. Soils profile is provided by the National Soils Resources Institute or BGS data and IROS do not accept any liability with regards to the accuracy of the information. All information is provided as preliminary and is subject to more detailed assessment and all measures are approximate only. No advice is given in relation to the structural integrity of the proposed property and underground amenities connected to the property and such advice is deemed to be outside the scope of this report. It will be deemed to be accepted that the information provided is for guidance relating to sound arboricultural management but is not necessarily provided with regards to influencing financial decisions including mortgage or insurance providers.

18 Time Limitation

Any warranty shall be subject to the time limitation of 12 months as set out in the IROS terms and conditions and any client, funder or insurance provider shall be deemed to have accepted unconditionally such limitations as adequate and reasonable.

19 Trees as Living Organisms

Trees are subject to both biotic and abiotic disorders and the health, vigour and stability of a tree can change substantially and very quickly. In particular, all trees are subject to storm damage and windthrow due to severe weather conditions and IROS Arb cannot accept any liability with regards to structural failure due to severe weather including for windspeeds of over 16m/s. Visual tree assessment as carried out may not identify biotic pathogens and where no external evidence is identifiable, non visual biotic disorders are deemed to be outside the scope of this report which is only preliminary.

20 Biodiversity and Habitat

Trees provide extensive biodiversity habitat and are covered by statutory instruments relating to various flora and fauna with particular reference to wild bird nesting, bats, red squirrels and others. This report does not take account of such issues which shall be deemed to be outside of the scope of this report. The client accepts that a separate ecological survey would be necessary to report on related ecological issues.



IROS*ARB*

ARBORICULTURE & URBAN FORESTRY

www.iros-uk.com