



Wellfield Road

BS5837:2012 Tree Survey 11th December 2020

Membership No: TE03654



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11th December 2020

Wellfield Road

Site Location: Land at Wellfield Road	Report Reference: 12/20/WFR/V4
Client: J. A. Rewbridge	Date of Report: 11 th December 2020 Date of Site Visits: 26 th November 2020
Report Prepared By: Liz Phillips	Survey Carried Out By: Liz Phillips

RTAC, 6 COURTYARD FLATS, STABLE YARD, STACKPOLE, PEMBROKESHIRE, SA71 5DE

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1. Introduction

1.1 Site Location

1.1.1 Site Address: Land at Wellfield Road, Baglan, Swansea, SA12 8AB.

1.1.2 Ordnance Survey grid reference: SS760907.

1.2 Instructions

1.2.1 RTAC has been instructed to produce a tree survey in compliance with BS5837:2012 'Design, Demolition and Construction' to accompany a planning application to construct a detached building at this site.

1.3 Documents Provided

1.3.1

Document Description	Reference Number	Produced By	Date
Ecological Appraisal Appendix II – Phase 1 Map			
Preliminary Ecological Report	Doc 01 27/07/2020	David Rees Bay Ecology	26/07/2020
Existing Site Plan	07.20.WR.D2	J. A. Rewbridge Development Services	07.20
Google Earth Image			
Proposed Elevations 1:100	07.20.WR.D3	J. A. Rewbridge Development Services	14.08.20
Proposed Floor Plans 1:50	07.20.WR.D1	J. A. Rewbridge Development Services	14.08.20
Proposed Site Plan 1:100	07.20.WR.D5	J. A. Rewbridge Development Services	14.08.20
Site Location and Block Plans 1:500, 1:1250	07.20.WR.D4	J. A. Rewbridge Development Services	14.08.20
Site Pictures			

1.3.2 No independent verification or assessment of these documents has been made by RTAC. The Existing Site Plan and Proposed Site Plan have been used to form the basis of the plans in this report.

1.4 Scope of Report

1.4.1 The purpose of this report is to survey the trees around the perimeter of the proposed development site.

1.4.2 This report is concerned with the arboricultural features of the site only and including any physical features which directly affect or are affected by the trees.

1.4.3 This survey is a record of the condition of the trees at the time of the survey being carried out, notwithstanding this, the purpose of this survey is to assess the trees in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations and with respect to the proposed development and the survey is not intended to be a full tree condition or hazard survey.

1.5 Survey Methodology and Limitations

1.5.1 The survey was carried out on Thursday 26th November 2020, the weather was dry and sunny, and visibility was good.

1.5.2 No discussion took place between the surveyor and any other party.

1.5.3 The heights of the trees and crown spreads over the site were measured with an SNDWAY SW-1000A Laser Distance Meter Telescope. Stem diameters of trees which could be reached were measured at 1.5 metres above ground level with a diameter tape and the stem diameters of the remaining trees were estimated.

1.5.4 Tree locations were plotted using the existing trees marked on the site plan.

1.5.5 No vegetation has been removed to inspect trees and where trees are not visible or accessible because of vegetation, fences, ditches, or other obstructions a limited assessment has been carried out. The majority of trees are outside the site perimeter and observations have been made from the development side of the boundary.

1.5.6 Observations were made using Visual Tree Assessment (VTA) methodology (Mattheck 1994). The data was recorded using Pear Technology Pocket GIS on a Panasonic Toughbook CF-19.

1.5.7 Two trees within the site were tagged with two-inch diameter aluminium tree tags numbered from 0256 and 0257. The remaining trees were outside the site boundary and have been given the prefix 'X' in this report.

1.5.8 This survey was undertaken in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

1.5.9 The trees have been categorised in accordance with the British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations as listed below:

Category A – trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B – trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C – trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

These categories are subdivided into 1. Arboricultural qualities, 2. Landscape qualities and 3. Cultural values, including conservation.

Trees not suitable for retention have been categorised as U.

See Appendix I for table of categories.

1.5.10 All observations were made from the ground. No climbing surveys were carried out.

1.5.11 No soil samples were taken.

1.5.12 No invasive decay detection techniques have been used.

1.5.13 This report is valid for one year from the date of inspection. Trees are living organisms and no responsibility can be accepted by the surveyor for the failure of a tree or part of a tree due to adverse weather conditions, *force majeure*, or other unpredictable occurrences. It is the responsibility of the tree owner to inspect and maintain his or her trees on a regular basis.

1.5.14 The tree survey was carried out by Liz Phillips TechArborA of RTAC. Liz has worked in the arboricultural industry for 14 years as a tree surgeon, surveyor, local authority tree officer and consultant.

1.6 Planning Policy

1.6.1 Planning Policy Wales Edition 10 December 2018 Chapter 6: Distinctive and Natural Places contains the following policies:

6.4.25 Planning authorities should protect trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial and identified green infrastructure function. Planning authorities should consider the importance of native woodland and valued trees, and should have regard, where appropriate, to local authority tree strategies or SPG. Permanent removal of woodland should only be permitted where it would achieve significant and clearly defined public benefits. Where woodland or trees are removed as part of a proposed scheme, developers will be expected to provide compensatory planting.

1.6.2 Neath Port Talbot County Borough Council's Local Development Plan (2011-2016) adopted January 2016 contains the following policy:

Policy EN 7 Important Natural Features

Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows / field boundaries, watercourses or ponds will only be permitted where:

- 1. Full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or*
- 2. The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed.*

1.7 Statutory Designations

1.7.1 At the time of this report, no confirmation had been received from Neath Port Talbot Council regarding the presence or otherwise of any Tree Protection Orders affecting this site.

1.8 Protected Wildlife

1.8.1 Before any treeworks are carried out, the trees should be inspected for any evidence of bats or nesting birds.

1.8.2 It is an offence under the Wildlife and Countryside Act 1981 to intentionally:

- kill, injure, or take any wild bird;
- take, damage, or destroy the nest of a wild bird included in Schedule ZA1;
- take, damage, or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird,

1.8.3 It is also an offence to:

- deliberately capture, injure, or kill a bat;
- damage or destroy any structure or place which any bat uses for shelter or protection;
- disturb any bat while it is occupying a structure or place which it uses for shelter or protection; or
- obstruct access to any structure or place which any bat uses for shelter or protection.

2. Site Analysis

2.1 Site Description

2.1.1 The site is a steeply sloping building plot situated in the small town of Baglan. The site slopes steeply from north to south and is bordered to the north and east by residential properties and to the south and west by mature and semi-mature trees. The site is currently covered by a turf layer with a single garage in the north-west corner.

2.2 Proposed Works

2.2.1 The existing garage will be demolished, and a detached residential property will be constructed on the highest ground in the northern part of the site. Access will be via the existing road.

3. The Trees

3.1 Twelve trees and one group of Lawsons cypress (*Chamaecyparis lawsoniana*) were recorded during this survey:

3.2 Tree Species

Common Name	Botanical Name	Number of Trees
Sycamore	<i>Acer pseudoplatanus</i>	4
Common hazel	<i>Corylus avellana</i>	2
Common holly	<i>Ilex aquifolium</i>	2
Common ash	<i>Fraxinus excelsior</i>	1
Wych elm	<i>Ulmus glabra</i>	1
Unknown	Dead	1

3.3 All trees are semi-mature and C category with the exception of one dead tree which is U category and not suitable for retention.

4 Arboricultural Impact Assessment

4.1 Tree Constraints Plan

4.1.1 All site plans are in Appendix II.

4.1.2 Above Ground Constraints - current crown spread is marked on the Tree Constraints Plan (TCP). This does not indicate the ultimate crown spread of the individual trees.

4.1.3 Below Ground Constraints – the root protection area (RPA) is a circle of radius 12 x the diameter of the stem of the tree measured at 1.5 metres above ground level. For a multi-stemmed tree, the RPA is calculated using the following formula:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

4.1.4 The RPA is usually depicted as a complete circle; however, this area can be altered in shape to reflect compromised growing conditions such as the presence of buildings, watercourses, etc. In this case, no RPAs have needed to be redrawn.

4.1.5 The shade patterns of the trees have been plotted on the Shade Plan as these can cause significant constraints on the enjoyment of use of a building. The proposed building will not be affected by shade from the retained trees as it will be situated on substantially higher ground.

4.2 Arboricultural Impact Assessment

4.2.1 T257 is in poor condition and will be removed. The development will not have any adverse effect on the retained trees.

4.3 Tree Protection Plan & Method Statement

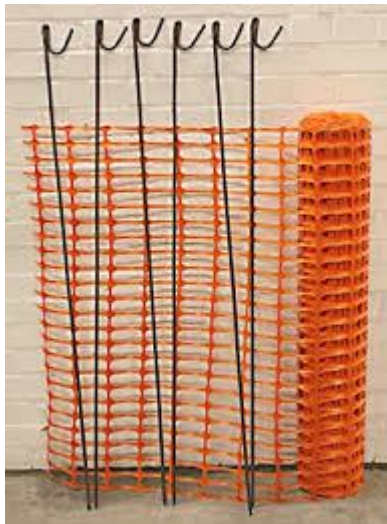
4.3.1 All treeworks must be carried out prior to the commencement of construction works.

4.3.2 Orange mesh fencing as shown below will be erected as marked on the Tree Protection Plan in Appendix II. The existing wire boundary fence will provide additional protection.

4.3.3 The fenced off area will be designated as the construction exclusion zone (CEZ). All fencing must be in place before construction works begin and must not be moved or removed until all construction works have finished.

4.3.4 Works within the CEZ are restricted as follows:

- No excavations to be carried out unless agreed as part of the planning permission.
- No vehicle access.
- No fires to be lit within the CEZ or within 10 metres of the crown of a tree to be retained.
- No storage of construction materials or spoil within the CEZ.
- No mixing of cement or discharge of contaminants such as fuel within the CEZ.
- Soil levels within the CEZ must not be altered unless agreed as part of the planning permission.
- No signs or lighting to be attached to trees to be retained.



Orange mesh barrier fence



11th December 2020

Wellfield Road

APPENDICES

I. Survey Data

Terms used in data tables

BS5837 Survey

Tag No – corresponds to numbered metal tag attached to tree.

Species – common and Latin names are given.

Height - measured with a Suunto PM5/360 clinometer to the nearest metre unless otherwise stated.

Stem diameter - measured at 1.5 metres above ground level with a dbh (diameter at breast height) tape.

Crown spread - measured at the cardinal points to 0.5 metres.

Clear - the lowest height of the crown above ground measured in metres.

Age - NP – newly planted; Y – young, a tree in the first third of life expectancy; SM – semi-mature, a tree in the second half of life expectancy; M – mature, tree in final third of life expectancy; OM – over-mature, tree in decline; V – veteran, tree with major physiological decline, surviving beyond the typical age range for the species.

RP – root protection area; radius and area of circle.

Phys. Condition - physiological condition; poor, fair, good, dead, or dangerous.

Structural condition - crown, stem, and basal area.

Preliminary recommendations - recommendations for remedial works.

Cat - retention category as defined in BS5837:2012 A, B, C and U.

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

BS5837:2012 Tree Survey

RTAC

Client: J. A. Rewbridge Development Services
 Project: Wellfield Road
 Survey Date: 26/11/2020
 Surveyor: Liz Phillips

6 Courtyard Flats
 Stable Yard
 Stackpole
 Pembroke
 SA71 5DE
 Mobile: 07823332279

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
G1												Estimated Measurements		
Lawson Cypress <i>Chamaecyparis lawsoniana</i>		6	1	200	N	2	SM	A: 18.1 R: 2.4	Good	C: Good S: Fair B: Good	No action :: Unspecified Group of Lawson cypress topped at 6m along south boundary.			C.2 >40 yrs
T256														
Common Hazel <i>Corylus avellana</i>		7	9	240 (Eq)	N	3	2 SM	A: 26.1 R: 2.88	Good	C: Good S: Good B: Good	No action :: Unspecified			C.2 >40 yrs
T257												Estimated Measurements		
Sycamore <i>Acer pseudoplatanus</i>		6	1	120	N	2	SM	A: 6.5 R: 1.43	Poor	C: Poor S: Poor B: Poor	Fell :: Unspecified Large pruning stubs; large areas of bark missing.			U n/a
X1												Estimated Measurements		
Common Ash <i>Fraxinus excelsior</i>		11	1	400	N	4	SM	A: 72.4 R: 4.8	Good	C: Good S: Good B: Good	No action :: Unspecified			C.2 >40 yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
X2												Estimated Measurements	
Common Holly <i>Ilex aquifolium</i>	8	2	312 (Eq)	N E S W	4 3 4 3	SM	A: 44.2 R: 3.75	Good	C: Good S: Good B: Good	No action :: Unspecified			C.2 >40 yrs
X3												Estimated Measurements	
Common Hazel <i>Corylus avellana</i>	8	4	120 (Eq)	N E S W	0 5 3 0	SM	A: 6.5 R: 1.43	Good	C: Good S: Good B: Good	No action :: Unspecified			C.2 >40 yrs
X4												Estimated Measurements	
Unknown - -	10	1	260			Dead	A: 30.6 R: 3.12	Dead	C: S: B:	No action :: Unspecified Dead and hung-up - will not fall into site.			
X5													
Wych Elm <i>Ulmus glabra</i>	12	1	280	N E S W	3 4 3 3	SM	A: 35.5 R: 3.36	Good	C: Good S: Good B: Good	No action :: Unspecified			C.2 >40 yrs
X6													
Wych Elm <i>Ulmus glabra</i>	12	1	220	N E S W	2 4 5 3	SM	A: 21.9 R: 2.64	Good	C: Good S: Good B: Good	No action :: Unspecified			C.2 >40 yrs
X7												Estimated Measurements	
Sycamore <i>Acer pseudoplatanus</i>	7	1	200	N E S W	3 4 2 1	SM	A: 18.1 R: 2.4	Good	C: Good S: Good B: Good	No action :: Unspecified			C.2 20 to 40 yrs
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature		Condition:	C S B	Crown Stem Basal area	Stems:	Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition		

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations		Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment		
X8												
Common Holly <i>Ilex aquifolium</i>	7	2	332	(Eq) N	4	SM	A: 50 R: 3.98	Good	C: Good S: Good B: Good	No action :: Unspecified Topped at 7m.	C.2 >40 yrs	
X9												
Sycamore <i>Acer pseudoplatanus</i>	7	1	500	N	4	SM	A: 113.1 R: 6	Fair	C: Fair S: Ivy B: Good	No action :: Unspecified Topped at 7m.	Estimated Measurements C.2 20 to 40 yrs	
X10												
Sycamore <i>Acer pseudoplatanus</i>	7	2	364	(Eq) N	4	SM	A: 59.9 R: 4.36	Fair	C: Good S: Good B: Good	No action :: Unspecified Topped at 7m.	Estimated Measurements C.2 20 to 40 yrs	

Report selection criteria.

Projects.

Wellfield Road

Date Range.

Any Date

Work types.

----> Fell :: Unspecified

----> No action :: Unspecified

Latest Survey.

All surveys for the selected trees.

---> Last survey for each selected tree.

Work Completed.

---> Work Completed

---> Work Not Completed

Number of trees in selected Project(s) **13**

Number of trees in Report selection **13**

Age Classifications:

N	Newly planted	EM	Early Mature
Y	Young	M	Mature
SM	Semi-mature	OM	Over Mature

Condition:

C	Crown
S	Stem
B	Basal area

Stems:

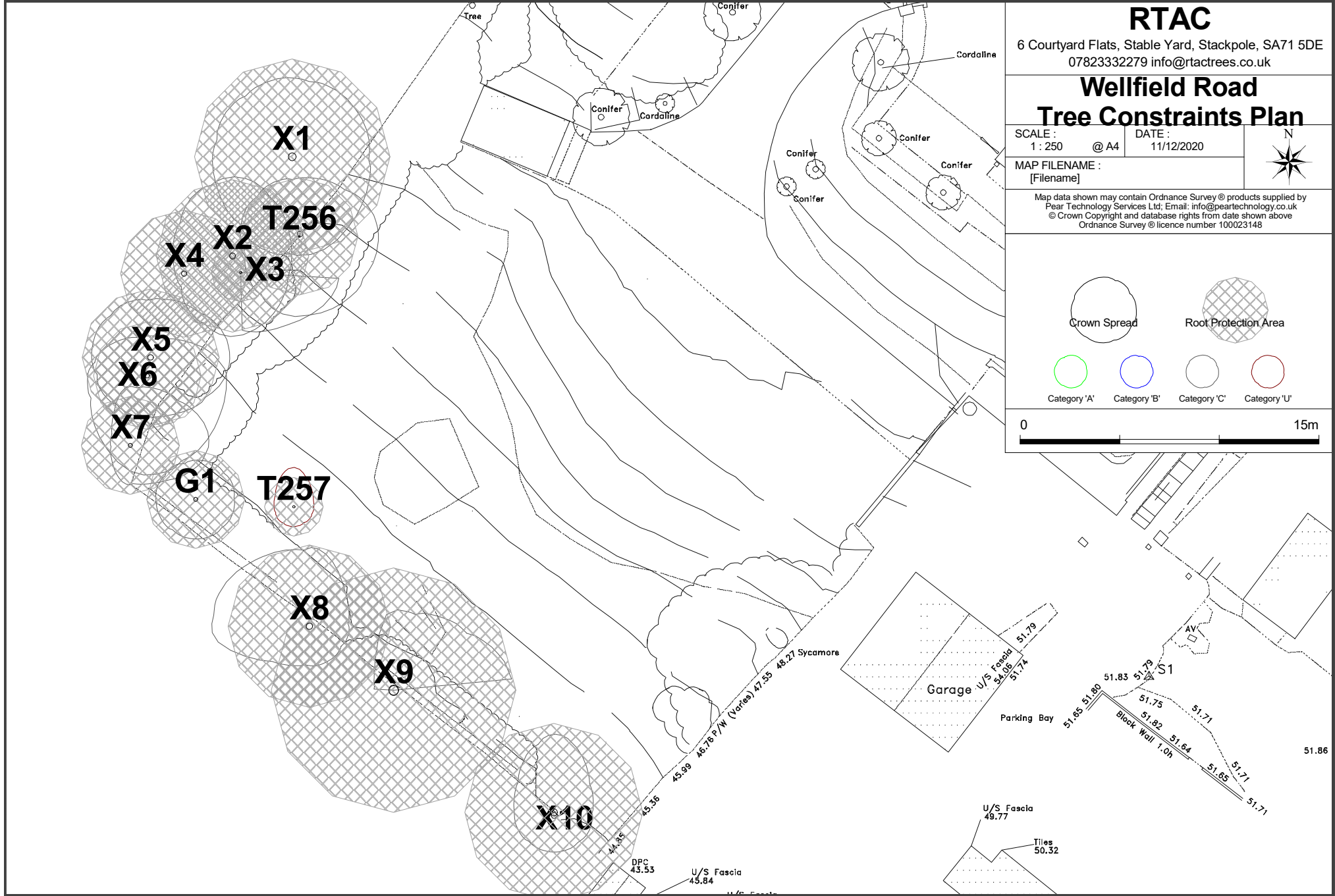
Ø	Diameter
(Eq)	Equivalent stem diameter using BS5837:2012 definition

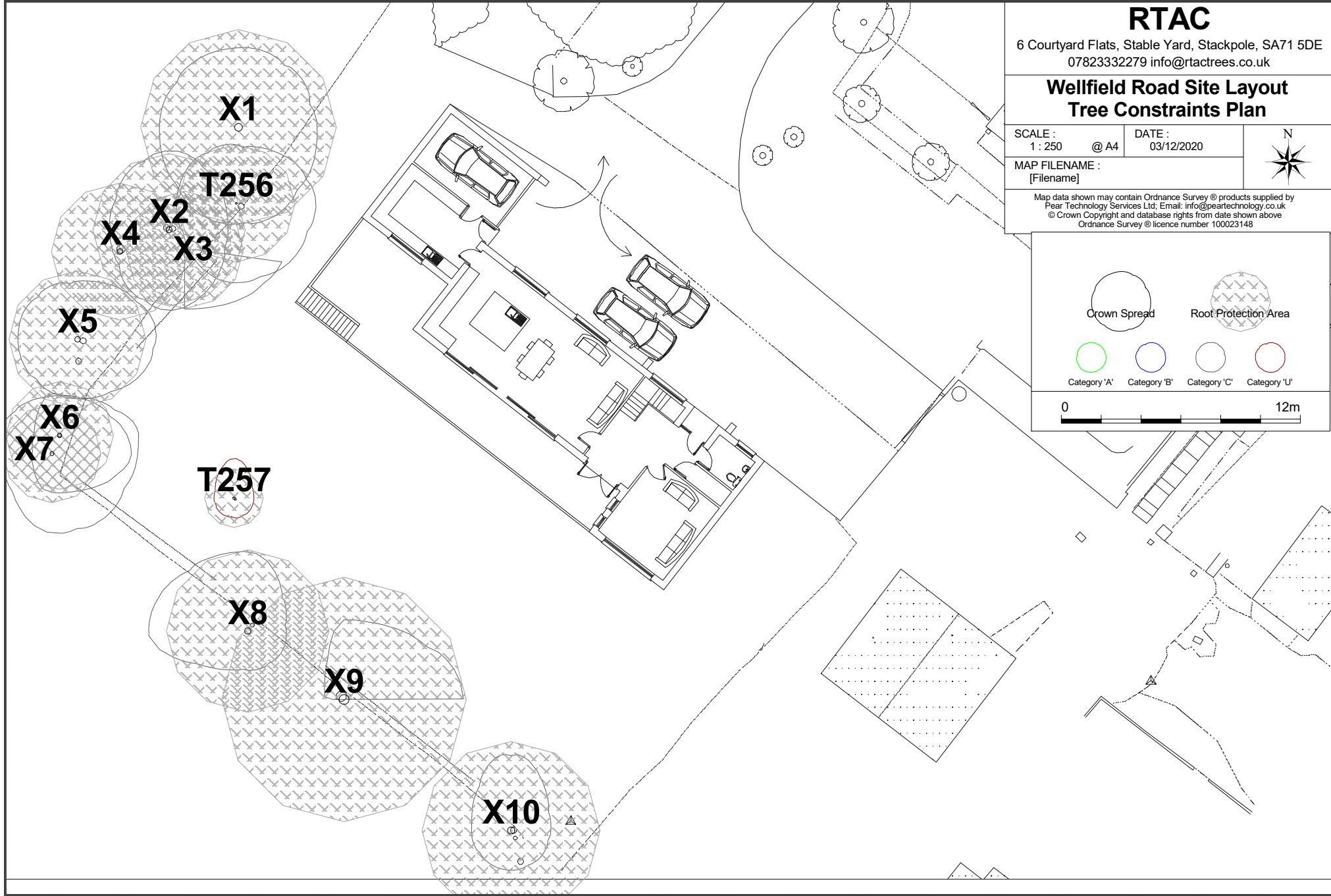


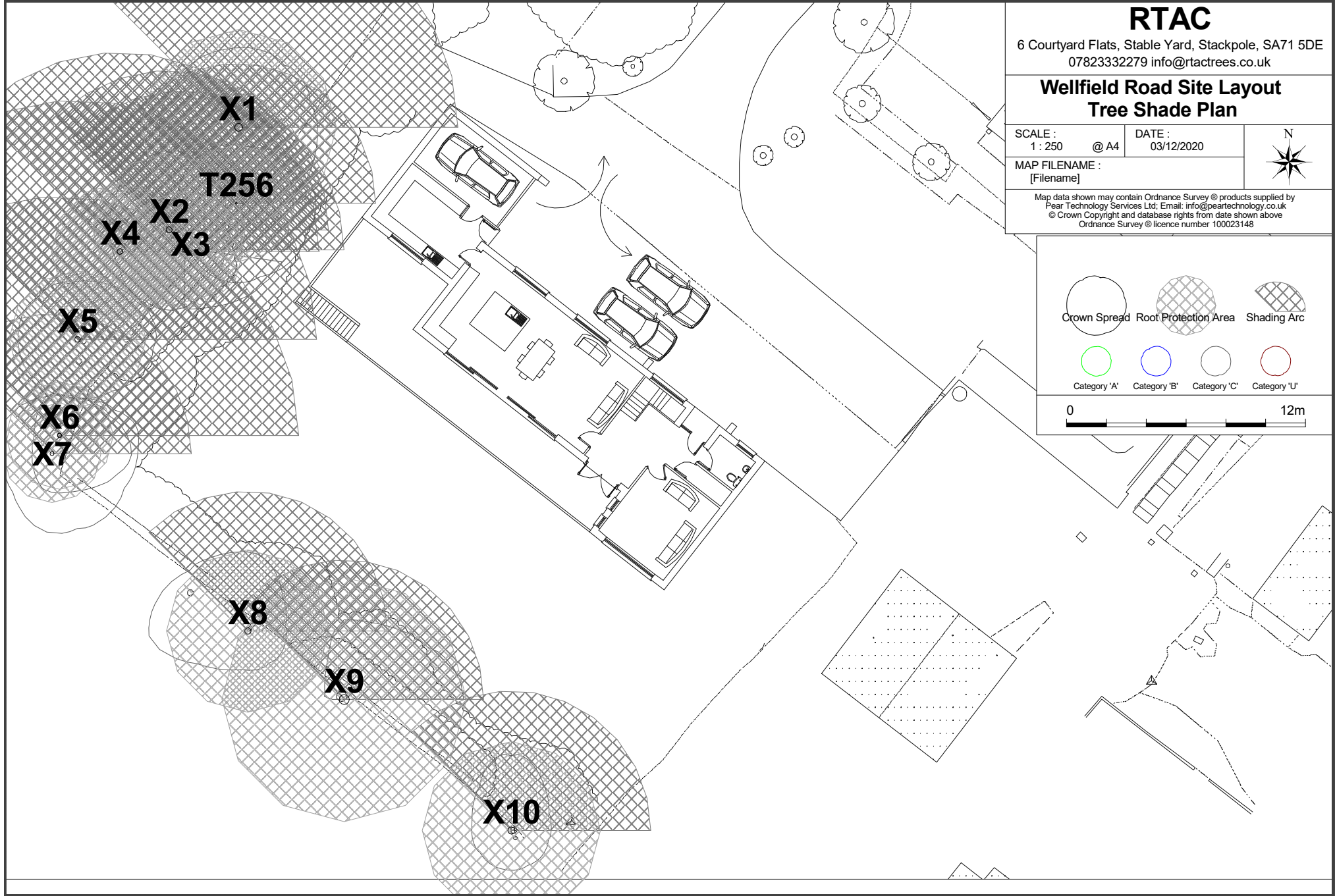
11th December 2020

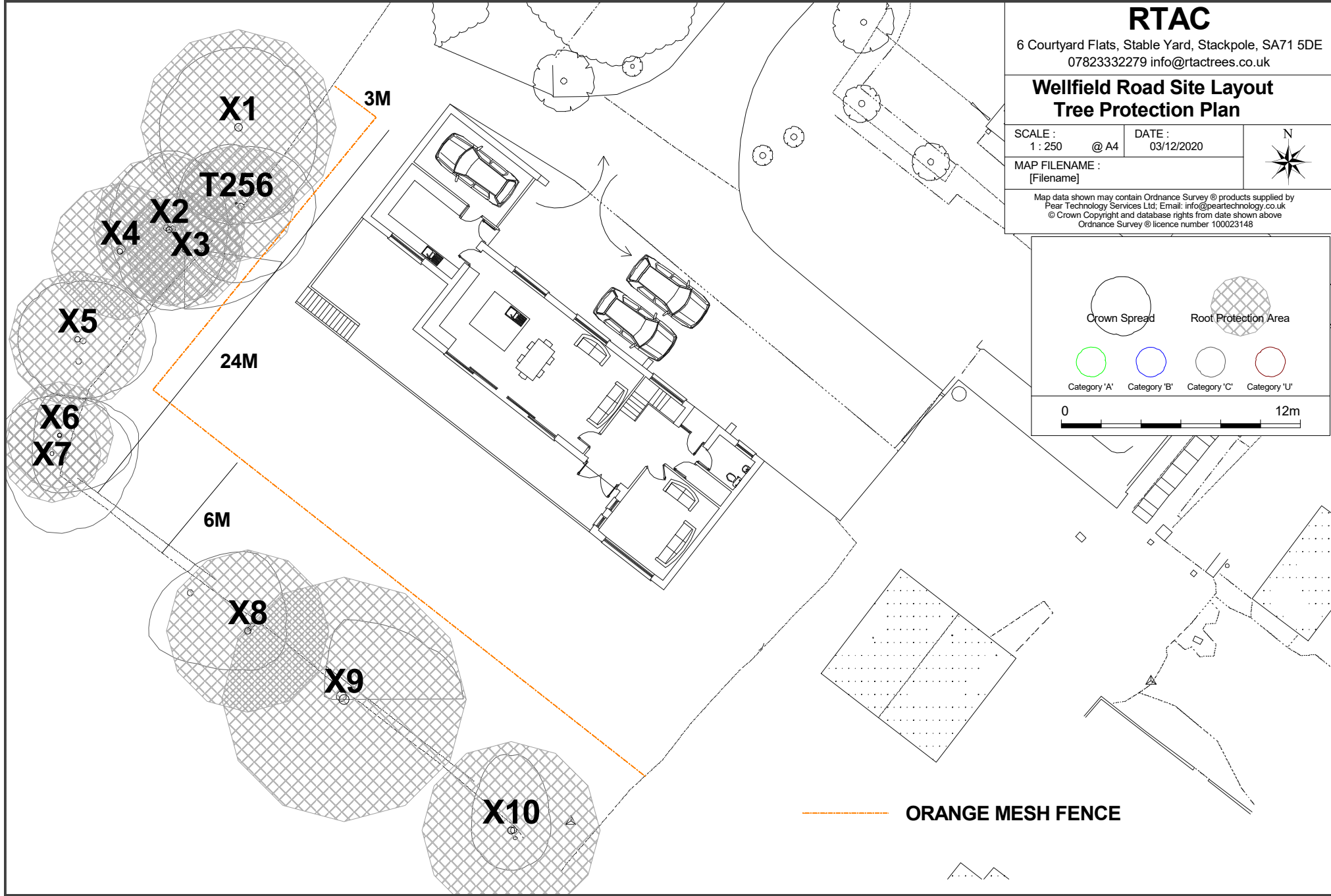
Wellfield Road

II. Site Plans









III. Photographs



West boundary of site



Site looking south-west



Site looking south

IV. Qualifications

Qualifications:

AA Technicians Certificate 2009
BSc. Heritage Conservation 2ii
Electrical Arboriculture Units 1 and 2a
NVQ Level 2 Environmental Conservation
NPTC CS 30, 31, 39, climb trees and perform aerial rescue

CPD:

Bats and Arboriculture: A Practitioner's guide
BS 5837:2012. Tree Surveying and Categorisation
Subsidence 1-day workshop
Assessment of Tree Forks: Assessment of Junctions for Risk Management
The Hollow Tree – Arboriculture
Introduction to Soils

V. Bibliography

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Diagnosis of Ill-health in Trees (1994) Strouts and Winter; TSO.

British Standard 3998:2010 Recommendations for Tree Work UK; British Standards Institution.

The body language of trees (1994) Mattheck & Breloer; TSO.

Principles of tree hazard assessment and management (1999) Lonsdale; Forestry Commission.

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Assessment of Tree Forks: Assessment of Junctions for Risk Management (2016) Slater in association with Myerscough College; The Arboricultural Association.

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Guide to producing a Tree Protection Fencing Plan for straightforward Householder Applications SPG; City and County of Swansea Council.

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