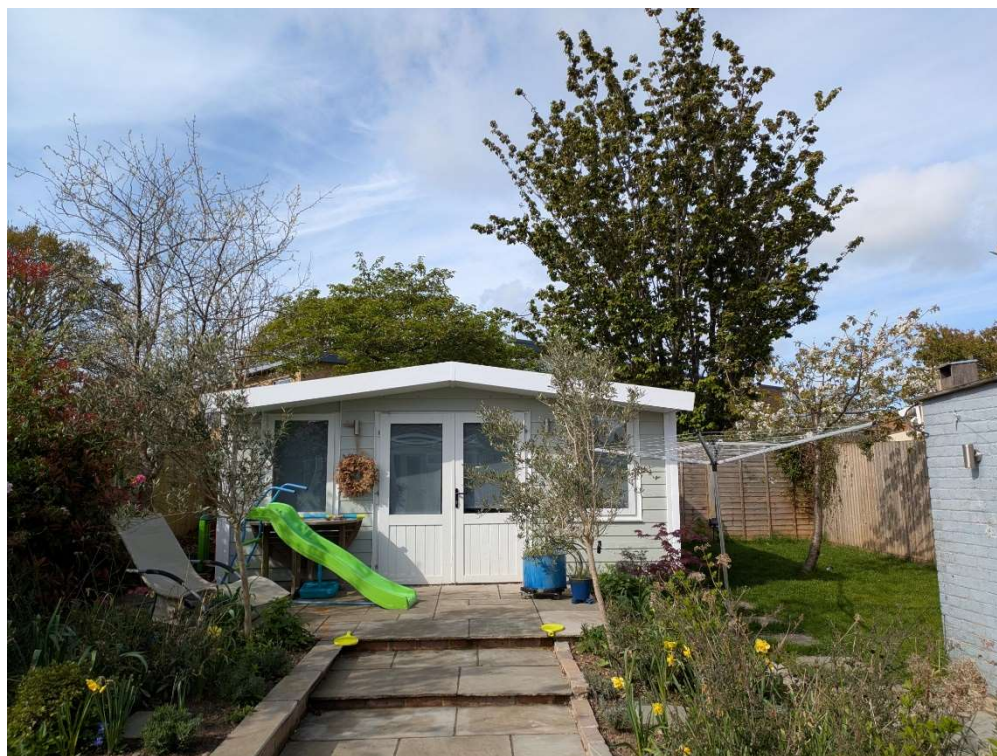




Connick Tree Consultants

TREE DEVELOPMENT REPORT

(BS5837:2012 ARBORICULTURAL IMPACT ASSESSMENT)

OUR REFERENCE	216497
CLIENT	Mr A Hensen
PLANNING AUTHORITY	Mid Sussex District Council
SITE	46 Dale Avenue, Hassocks, West Sussex BN6 8LS
SURVEY & REPORT BY	Mark Haddock BSc (Hons) CEnv
DATE	23d April 2025

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TABLE OF CONTENTS

1	INTRODUCTION	2
1.1	INSTRUCTION	2
1.2	SCOPE OF REPORT	2
1.3	DOCUMENTATION	2
1.4	QUALIFICATIONS AND EXPERIENCE	3
1.5	LIMITATIONS AND USE OF COPYRIGHT	3
2	SITE VISIT AND OBSERVATIONS	4
2.1	SITE VISITS	4
2.2	GENERAL OBSERVATIONS AND BACKGROUND	4
2.3	SOIL TYPE	4
3	TREE SURVEY	5
3.1	TREES SUBJECT TO STATUTORY CONTROLS	5
4	TREE CONSTRAINTS	6
4.1	ROOT PROTECTION AREA	6
4.2	CONSTRUCTION EXCLUSION ZONE	6
4.3	ABOVE GROUND CONSTRAINTS	7
5	ARBORICULTURAL IMPACT ASSESSMENT	8
5.1	HIGH GRADE SIGNIFICANT TREES	8
5.2	TREE LOSS	8
5.3	IDENTIFIED IMPACTS	8
5.4	TREE PROTECTION MEASURES	9
5.5	TEMPORARY GROUND PROTECTION	9
6	SUMMARY	10
7	GENERAL PRECAUTIONS	11
7.1	SITE FACILITIES	11
7.2	STORAGE SPACE	11
7.3	PERIMETER FENCING	11
7.4	HAZARDOUS MATERIALS	11
7.5	TREE SURGERY WORKS	11
8	SITE PHOTOGRAPH	12
APPENDIX I	TREE SURVEY SCHEDULE	1
APPENDIX II	TREE CONSTRAINTS PLAN	3
APPENDIX III	TREE PROTECTION PLAN	4
APPENDIX IV	QUALIFICATIONS AND EXPERIENCE	1

APPENDICES

APPENDIX I	TREE SURVEY SCHEDULE
APPENDIX II	TREE CONSTRAINTS PLAN
APPENDIX III	TREE PROTECTION PLAN
APPENDIX IV	QUALIFICATIONS AND EXPERIENCE



1 INTRODUCTION

1.1 INSTRUCTION

Connick Tree Consultants were instructed by Justine Rattray Architecture to produce an Arboricultural Impact Assessment of the proposed development works at 46 Dale Avenue on behalf of her client Mr A Hensen. This will be undertaken in accordance with BS5837: 2012 Trees in relation to design, demolition and construction - Recommendations.

1.2 SCOPE OF REPORT

This Arboricultural Impact Assessment has been based on the tree survey data obtained during our site visit. Details of all trees within and adjacent to the site can be found in the tree Survey Schedule attached as Appendix I. Their locations are shown within the Tree Constraints Plan attached as Appendix II.

The tree information recorded relates to the tree condition, age, safe useful life expectancy, location, canopy spread, canopy height and tree height and direction of first significant branch as well as any work that is required. Where trees are located within neighbouring third-party properties, the assessment in relation to their condition has been made upon the visible parts of the tree and all measurements estimated.

No information in regard to soil assessment was provided and no investigation was taken on site.

A measured drawing of the site was provided by OS mapping and no liability is accepted for the accuracy of these drawings, and they should not be scaled from.

The report and recommendations relate to the condition of the trees and their surroundings at the time of inspection only. Trees are living organisms whose health and condition can change rapidly and all trees, even healthy ones, are at risk from unpredictable climatic and man-made events. This report and recommendations relate to the condition of the trees and their surroundings at the time of inspection only.

1.3 DOCUMENTATION

I have been provided with the following information in regard to the proposal:

- Existing and proposed block plans
- Existing and proposed elevations
- Existing and proposed floor plans



1.4 QUALIFICATIONS AND EXPERIENCE

I have based this report on my site observations, and I have come to conclusions in the light of my qualifications gained and experience obtained whilst working in the field of arboriculture. I have qualifications and practical experience in arboriculture and list the details of this in Appendix IV.

1.5 LIMITATIONS AND USE OF COPYRIGHT

All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means without our written permission. Its contents and format are for the exclusive use of the person, firm or company to whom it is addressed (and that of any other person, firm or company whose interest was disclosed to us prior to its preparation). It may not be sold, lent out or divulged to any third party not directly involved in this situation without the written consent of Connick Tree Care. It may be submitted to the local planning authority as part of a planning application.

DISCLAIMER: I have no connection with any of the parties involved in this situation that could influence the opinions expressed in this report.



2 SITE VISIT AND OBSERVATIONS

2.1 SITE VISITS

The initial site visit was undertaken on the 22nd April 2025 by the author of this report; Mr M Haddock who is a qualified arboriculturist. The weather at the time of inspections was overcast with good visibility.

2.2 GENERAL OBSERVATIONS AND BACKGROUND

The site of the proposal is situated at 46 Dale Avenue, Hassocks. The works that are of Arboricultural concern are situation in the back garden of the property near to the western boundary.

The site consists of a chalet bungalow with paved driveway to the front and garden to the rear. There is an existing garage and car port on the northern side of the property and a garden room at the rear of the property near to the western boundary.

The site is bordered by Dale Avenue to the east, similar residential properties with associated gardens to the north and south and The Windmills Junior School to the west.

The proposal is for the construction of an extension to the existing garden room and the installation of a shed. Other works include minor demolition and remodelling of the house, garage and car port; these works are well away from any trees as is access to facilitate the construction process and have therefore been omitted from this report.

2.3 SOIL TYPE

No on-site soil analysis was undertaken. Reference has been made to the British Geological Survey maps for an indicative guide to underlying soil characteristics. The online BGS 1:50,000 scale map for the area indicated the site is located on Gault Formation – Mudstone bedrock. No superficial geology information was available.

Mudstone formation can produce a subsoil which is clay based and susceptible to undergoing volumetric change in relation to changes in soil moisture. All clay is described within the BRE Digest 240 Low-rise buildings on shrinkable clay soils (part 1) as having a high to very high volumetric change potential. The proposed works are of a lightweight nature requiring minimal foundations but it is always recommended that a structural engineer is consulted to ensure the proposal is constructed in such a manner to avoid the risk of indirect damage though subsidence or heave resulting from ground water abstraction by nearby trees.

3 TREE SURVEY

In total 6 trees were recorded during the survey process, within or adjacent to the site. Attached as Appendix I is a schedule summarising the information obtained within the survey process. For ease of reference where possible, the tree numbers have been set to match those recorded on the planning application documents.

The trees surveyed have been assessed and categorised in accordance with the cascade chart in section 4 of the BS5837:2012. This has identified that there are the following within or adjacent to the site:

No individual 'A' grade trees of a high quality and value, which are worthy of retention and a high level of protection.

2 individual category 'B' grade trees deemed to be of moderate quality and value, worthy of retention and protection. Trees of 'B' grade should be retained where possible within the proposed development and where necessary designs altered to accommodate them. Both these trees are under 3rd party ownership and therefore require retention.

2 individual trees which have been identified as category 'C' grade trees of low quality and value, which should only be retained and protected when they do not pose a constraint on the development. Where retained they will require tree protection.

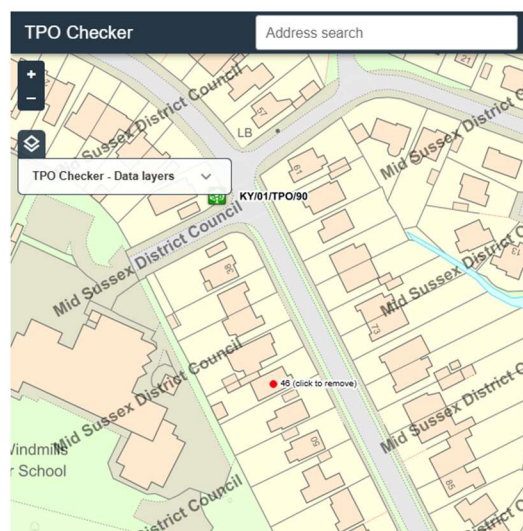
1 individual 'U' grade trees identified as requiring removal for reason of sound Arboricultural management. (Poor location and Ash Dieback Disease identified).

1 uncategorised tree recorded for completeness for the building contractor to be mindful of. (Under 75mm DBH and not required by BS5837).

The location of the trees is shown on the Tree Constraints Plan attached as Appendix II. All trees surveyed have been given a unique identification number and are identified on the schedules and plans by a 'T' prefix for individual trees.

3.1 TREES SUBJECT TO STATUTORY CONTROLS

A desktop assessment via Mid Sussex District Council website identified that the site is not situated within Conservation area and no Tree Preservation Orders are in place on site or nearby.



4 TREE CONSTRAINTS

4.1 ROOT PROTECTION AREA

In order to avoid damage to the tree roots or rooting environment, a minimum area in m² should be left undisturbed around each retained tree (category A, B and C trees).

The root protection area's (RPA's) of the trees recorded within the survey are shown in the Tree Constraints Plan (Appendix II).

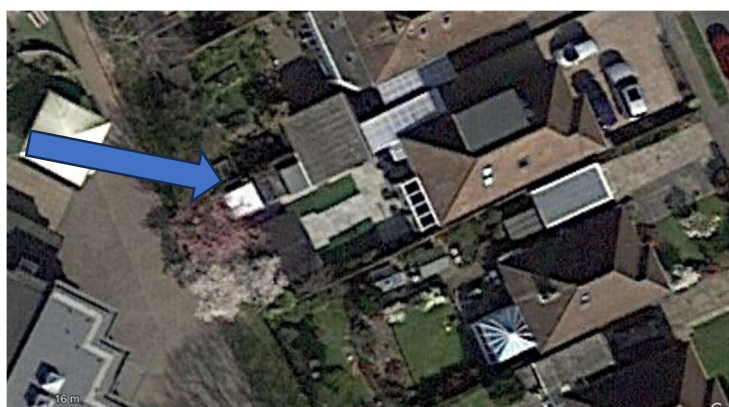
The root protection area has been calculated using the formula specified within section 4.6 of the BS5837:2012 standard and should initially be plotted as a circle centred on the base of the stem.

The RPA can be modified where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically. Any deviation in the RPA from the original circular plot should reflect soundly based Arboricultural assessment of potential restrictions to rooting morphology, and consider the following factors, whilst still providing adequate protection for the root system.

- The morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground services).
- Topography and drainage.
- The soil type and structure.
- The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

The calculated RPA should be capped at 707m², which is equivalent to a circle with a radius of 15m or a square with approximately 26m sides (BS 5837:2012 Trees in relation to design, demolition and construction).

No tree RPA's have been amended or re-drawn to take into consideration existing rooting constraints. It was anecdotally reported that in the location of the proposal a 100mm concrete slab previously existed in the RPA of T1 to support a hot tub. A Google Earth Image from 2022 confirms a structure was present. (image below blue arrow).



The true root morphology is unknown though it is likely to have been restricted in this area by historic/previous works..

4.2 CONSTRUCTION EXCLUSION ZONE

The Construction Exclusion Zone (CEZ) required by the current edition (2012) of BS 5837 relates to the stem diameter of each tree when measured at a height of 1.5m from ground level. The CEZ's are to be delineated and protected by using tree protection fencing.



4.3 ABOVE GROUND CONSTRAINTS

The current height and canopy spread of the trees is an important factor which needs to be considered when deciding the layout of a proposed development. The shading of trees, and/or their size can lead to pressure in the future for excessive pruning or tree removal after developments are completed.

The crown of T2 overhangs the existing garden room. No other crown conflict is present now or predicted in the future. Crown conflict will be no greater than is existing irrespective of the proposal and therefore there are no overhead constraints.



5 ARBORICULTURAL IMPACT ASSESSMENT

The following Arboricultural Impact Assessment has been made in relation to the proposal details that have been provided by our client. This is for the construction of an extension to the existing garden room and installation of a new shed. The block plan of the proposed has been included within the attached Tree Protection Plan (Appendix III).

5.1 HIGH GRADE SIGNIFICANT TREES

The survey identified that there are No individual 'A' grade tree which is of high quality and value within and adjacent to the site.

No other trees of high significance were recorded.

5.2 TREE LOSS

Consideration has been given to retaining all trees. However, ultimately their removal is dependent on their condition and proximity to the development. This has identified that 3 trees require removal. These trees can be separated into those which require removal irrespective of the proposal (Category 'U' trees unsuitable for retention), and those trees that are required to be removed to facilitate the proposal.

Trees indicated for removal irrespective of the proposal:

T3 a self-set Common Ash category 'U' tree.

Trees indicated for removal to facilitate the proposal:

T4 a Cultivar Plumb category 'C' tree

T5 a Flowering Cherry category 'C' tree.

5.3 IDENTIFIED IMPACTS

The survey process and the Tree Protection Plan (Appendix III) has indicated the extent of the theoretical Root Protection Areas (RPA) and crown spreads of the surveyed trees and identifies the potential impacts upon these trees resulting from the proposal. The details of the impacts caused by each construction stage is identified within Table 2 below:

Table 1: Identifying impacts.

Tree No.	Total RPA m ²	Development Section	Impact of proposed development.
T1	72	Foundations for garden room extension	Will encroach upon 5.5m ² of the total RPA, equating to approximately 7.6%.

This intrusion into the RPA has not been reduced to account for potential restrictions to rooting morphology from the previous structure. The impact of this intrusion is at a level deemed tolerable. Should the local authority tree officer disagree an addendum to this document may be conditioned within the planning permission to provide a method statement for detailed construction methods to reduce any impact to negligible levels. Methods will include mini pile and ground screw foundations.

5.4 TREE PROTECTION MEASURES

All trees to be retained should be protected prior to the undertaking of any construction works via the erection of protective barriers to form a construction exclusion zone (CEZ). It will be fit for the purpose of excluding construction activity.

The protective fencing should be sited as shown on the Tree Retention / Protection Plan. Alternatively the following method should be used:

Tree Protection Plan, select the tree by 'T' number

Refer to the Tree Survey Schedule for that tree.

Under column 10 'RP' (root protection), radius in meters from the stem of the RPA.

This is the minimum distance to locate the tree protection fence.

All necessary protection measures are identified within the Tree Protection Plan attached as Appendix III.

The barrier fencing is to be installed as per figure 3 of the BS 5837:2012 using standard 2-metre-tall by 3.5 metres wide welded mesh panels on rubber or concrete feet secured with ground pins.

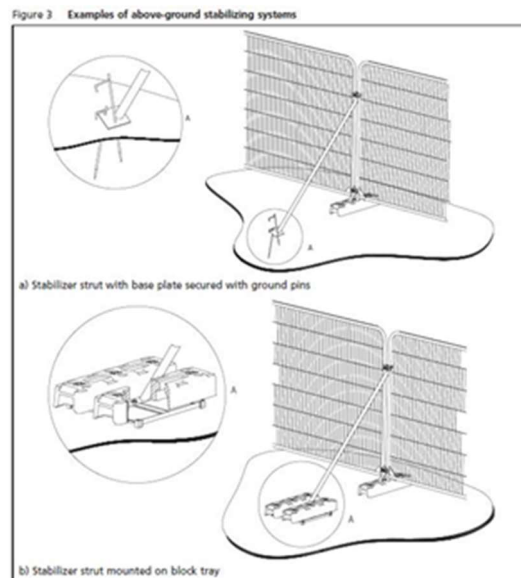


Figure 1 - Identifying tree protection fencing design.

All fencing will need to be erected prior to any construction works commencing and will remain intact until all works are completed on site. The protected area must be regarded as sacrosanct and should not be removed or altered without prior recommendation by the project arboriculturist.

For this project the existing western boundary garden fence serves as tree protection fencing. Should this fence be removed for any reason the above method is required.

5.5 TEMPORARY GROUND PROTECTION

No temporary ground protection is required for this project.



6 SUMMARY

On completion of the site survey and report it is concluded that the proposal has the potential to have a minor impact upon 1 retained tree adjacent to the site. This tree is:

- T1 a category 'B' Wild Cherry. The impact is deemed to be tolerable.

The loss of 2 low grade category 'C' trees will be mitigated through replacement planting of a 2 Flowering Cherry standards in the front garden in the next dormant season after all works have been completed.

The proposal has been designed to minimise the impact upon retained trees being a lightweight timber structure requiring minimal foundations. The intrusion into the theoretical RPA does exceed 5% of the total area and is calculated to be 7.6% though this calculation does not allow for restrictions to rooting morphology from recently removed structures.

No Tree RPA's have been amended or redrawn deviating from the default BS5837 plots.

The default position within the BS5837: 2012 document recommends that any development is situated outside of the RPA of any retained tree. However, where there is a requirement to construct within it, it is required to demonstrate the tree can remain viable and that the area lost can be compensated for elsewhere.

I believe that this proposal achieves this requirement.

The advice given above is a summary of the required precautions to ensure that the proposed development can be constructed with a minimal impact to all retained trees. If required, the exact methods of construction required in and adjacent to the RPA of retained trees and a final Tree Protection Plan can be addressed within a conditioned addendum to this document.



7 GENERAL PRECAUTIONS

7.1 SITE FACILITIES

The position of the site office, compound, toilets and storage space will be sited outside of the RPA of any retained trees or within existing hard standing. Any re-siting of these during the course of the proposed development will need to be approved in writing by the Local Authority Tree Officer.

7.2 STORAGE SPACE

There will be no spoil or construction material stored within the protected sections of the RPA of the retained trees or shrubs on the site. Where possible all storage should be contained within pre-existing hard surfaces.

7.3 PERIMETER FENCING

Works to erect perimeter fencing can have a negative impact upon retained trees. To ensure all retained trees are not impacted it is essential that all fence post holes are formed by hand and away from the base of trees. If roots are identified the hole should be relocated.

7.4 HAZARDOUS MATERIALS

No mixing or storage of materials will take place up a slope where they may leak into a CEZ.

No hazardous materials such as fuels, oils or cement will be stored within the storage area in the rear garden.

Materials which may contaminate the soil will not be discharged within 10m of any tree stem. When undertaking the mixing of materials, it is essential that any slope of the ground does not allow contaminants to run towards a tree root protection area. All wet poor concrete in excavations will be separated from the surrounding soil by an impermeable membrane to prevent leaching of salts and chemicals into soils.

7.5 TREE SURGERY WORKS

All tree works considered necessary for health and safety reasons or to facilitate the development will be undertaken in accordance with British Standard 3998 (2010) Recommendations for Tree Works.

8 SITE PHOTOGRAPH

Photograph showing the site and all significant trees.





APPENDIX I TREE SURVEY SCHEDULE

BS5837 Report

Justine Rattray Architecture

216497 map

Retention Category	No. trees
B	2
C	2
U	1
Not Recorded	1
Total	6

Rem. Contrib.	No. trees
<10 years	1
10+ Years	1
20+ Years	2
40+ Years	1
50+ Years	1

Ref.	Species	Full Structure	Measurements	Survey Notes	Retention Category	RPA	Comments	Measurements2	Recommendations
T001	Wild cherry (<i>Prunus avium</i>)	Tree	Height (m): 11 Stem Diam(mm): 400 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 4 Lowest Branch (m): 3(M) Life Stage: Early Mature Rem. Contrib.: 40+ Years		B	Radius: 4.8m. Area: 72 sq m.	Located 3m from boundary fence.	Physiological Condition: Good Structural Condition: Good Public Amenity Value: Low Inspection Limitations: Access Bat Habitat: None	
T002	Flowering cherry (<i>Prunus Serrulata</i>)	Tree 2 stems	Height (m): 5 2 stems (mm): 160,160 Spread (m): 4.5N, 4E, 3S, 3W Crown Clearance (m): 2.5 Lowest Branch (m): 3(E) Life Stage: Semi Mature Rem. Contrib.: 20+ Years		B	Radius: 2.7m. Area: 23 sq m.	Located 2.5m from boundary fence stem dia est.	Physiological Condition: Good Structural Condition: Good Public Amenity Value: Moderate Inspection Limitations: Access Bat Habitat: None	
T003	Common ash (<i>Fraxinus excelsior</i>)	Tree	Height (m): 3 Stem Diam(mm): 80 Spread (m): 0.5N, 0.5E, 0.5S, 0.5W Crown Clearance (m): 2 Lowest Branch (m): 2(W) Life Stage: Newly planted Rem. Contrib.: <10 years		U	Radius: 1.0m. Area: 3 sq m.	Self set tree evidence of ADB	Physiological Condition: Poor Structural Condition: Good Public Amenity Value: Low Inspection Limitations: Access Bat Habitat: None	
T004	Plum (<i>Prunus domestica</i>)	Tree	Height (m): 4 Stem Diam(mm): 150 Spread (m): 2N, 2E, 2S, 2W Crown Clearance (m): 2.5 Lowest Branch (m): 2.5(M) Life Stage: Semi Mature Rem. Contrib.: 10+ Years		C	Radius: 1.8m. Area: 10 sq m.		Physiological Condition: Good Structural Condition: Good Public Amenity Value: Low Inspection Limitations: None Bat Habitat: None	



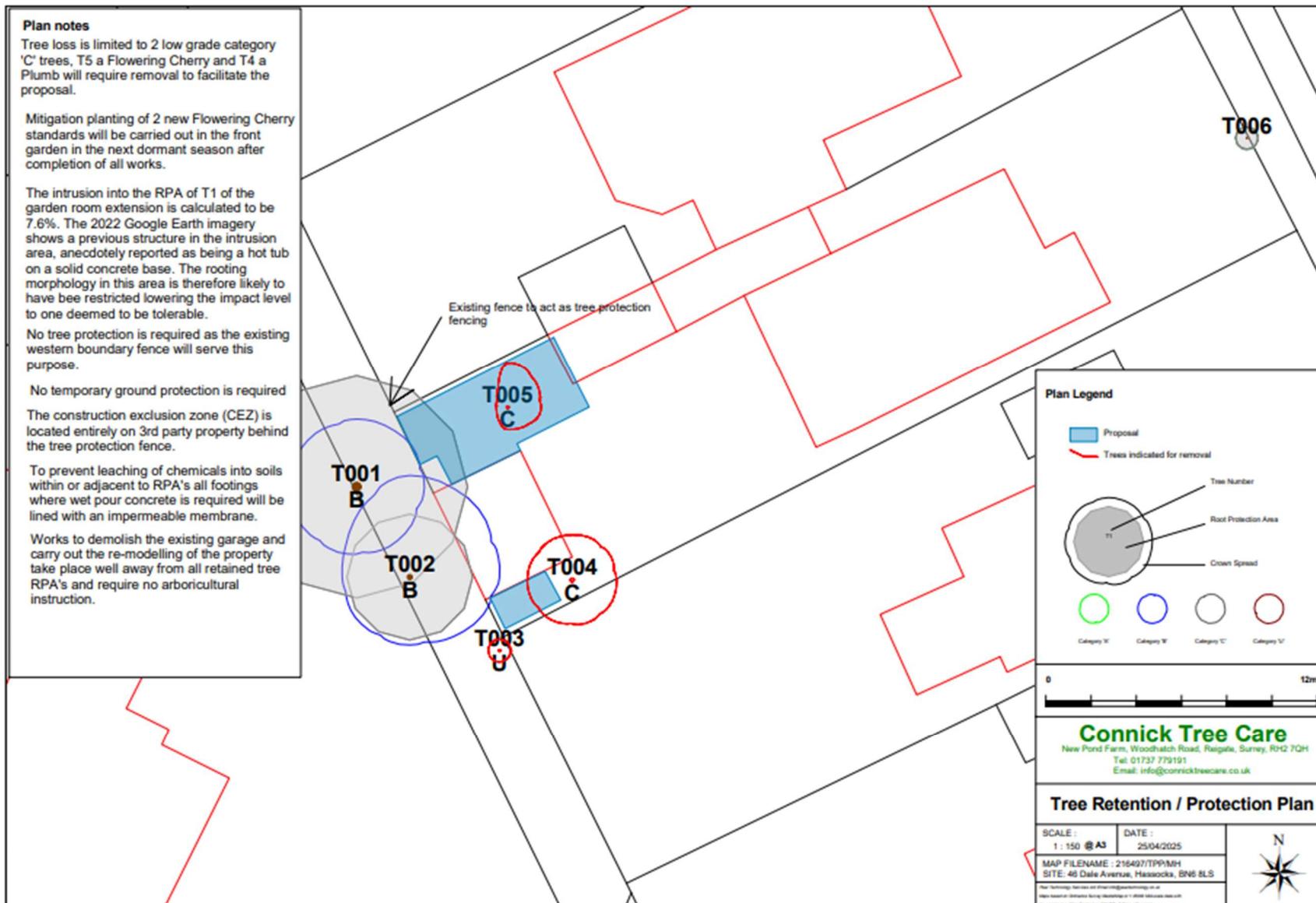
Ref.	Species	Full Structure	Measurements	Survey Notes	Retention Category	RPA	Comments	Measurements2	Recommendations
T005	Flowering cherry (<i>Prunus Serrulata</i>)	Tree	Height (m): 2.5 Stem Diam(mm): 90 Spread (m): 2N, 1.5E, 1S, 0.5W Crown Clearance (m): 2 Lowest Branch (m): 2(N) Life Stage: Young Rem. Contrib.: 50+ Years		C	Radius: 1.1m. Area: 4 sq m.	Young tree. Leader previously snapped out	Physiological Condition: Good Structural Condition: Good Public Amenity Value: Low Inspection Limitations: None Bat Habitat: None	
T006	Rowan (<i>Sorbus aucuparia</i>)	Tree	Height (m): 3.5 Stem Diam(mm): 40 Spread (m): 0.5N, 0.5E, 0.5S, 0.5W Crown Clearance (m): 1.5 Lowest Branch (m): 1.5(E) Life Stage: Newly planted Rem. Contrib.: 20+ Years		NotRecorded	Radius: 0.5m. Area: 1 sq m.	Below 75mm dbh recorded for completeness	Physiological Condition: Good Structural Condition: Good Public Amenity Value: Low Inspection Limitations: None Bat Habitat: None	

TREE CONSTRAINTS PLAN





APPENDIX III TREE PROTECTION PLAN





APPENDIX IV

QUALIFICATIONS AND EXPERIENCE

1. QUALIFICATIONS

Subjects	Level	Dates
Chartered Environmentalist	7 Award	April 2024
Professional Tree Inspection (LANTRA)	Pass	August 2017
Environmental Science BSc (Hons)	2:2	1991
NPTC cs30, cs31, cs38, cs39	Pass	From 1988 ongoing

2. CAREER SUMMARY

Beginning in 1988 between college and University I gained my first competency qualification as a working arborist. I went on to study an Environmental Science honours degree at UEA and had my dissertation published by the Forestry Commission under their own research banner. I worked for 8 years as an estates and project manager for University of London and then within design and build development for a large housing association. I returned to Arboriculture and established my own contracting company. A 'hands on' role directing the business and climbing on a daily basis I traded successfully for 19 years. An academic interest in trees steered a change of direction, qualifying as a professional tree inspector. This progression gave me the opportunity to work as an Arboricultural consultant where I have progressed to Principal Consultant at Connick tree care.

I am a professional member of the Arboricultural Association at consultant level. I am also a Chartered Environmentalist, awarded as a recognition of my professional contribution towards the wider environment at post graduate level.

3. AREAS OF EXPERTISE

Tree hazard risk assessments for tree owners
Decay assessment and mapping
Tree management reports to prioritise maintenance programs
Diagnosis of tree disorders
General Arboricultural advice
Trees in relation to subsidence
Arboricultural surveys to BS5837