



Connick Tree Consultants

TREE DEVELOPMENT REPORT

(BS5837:2012 ARBORICULTURAL IMPACT ASSESSMENT)

OUR REFERENCE	204071 Phase 1
CLIENT	Parker Dann
PLANNING AUTHORITY	Adur & Worthing District Council
SITE	Buckingham Park School, BN43 5UD
SURVEY & REPORT BY	Mr M Haddock Sc (Hons) MArborA
DATE	8 th January 2024

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1 INTRODUCTION

1.1 INSTRUCTION

Connick Tree Consultants were instructed by Parker Dann to produce an Arboricultural Impact Assessment of the proposed pre-development works at Buckingham Park School to install a temporary access road and temporary classrooms. 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 on the 4th December 2023. 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 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 development:

- Plan showing temporary access road route, fire appliance/tender turning circle area, location of temporary classrooms, position of existing site compound.

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.

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 4th December 2023 by the author of this report; Mr M Haddock who is a qualified arboriculturist. The weather at the time of inspections was cold with rain and fair visibility.

2.2 GENERAL OBSERVATIONS AND BACKGROUND

The site of the proposed works are the playing fields and existing playground to the east of Buckingham Park School.

At the far east side of the site to the north is an existing site compound installed for works at the adjacent school. Access to this site is to be provided through this site compound.

The proposed works involve the installation of a temporary access road to enable temporary classrooms to be installed on an existing playground surface. At this stage of the works this is the only aspect of works that is covered by 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 Head – Clay, Sand & Gravel.

The proposed works do not involve excavations and are away from all tree RPA's. Therefore for the purpose of this report soil type is not relevant.

TREE SURVEY

In total 40 trees/groups of 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.

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 or value, which are worthy of retention and a high level of protection.

20 individual and 1 group of 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.

14 individual and 4 groups of 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 tree identified as requiring removal for reason of sound Arboricultural management.

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 and by a 'G' for groups of trees.

2.4 TREES SUBJECT TO STATUTORY CONTROLS

A desktop assessment via Adur and Worthing local authority website has identified that the site is not situated within a Conservation area.

No information in regard to Tree Preservation Orders are available online, a search of the planning portal has not identified any previous applications for works to trees within the grounds.

3 TREE CONSTRAINTS

3.1 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 root disturbance 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 and drawn to take into consideration existing rooting constraints. Groups of trees with similar sized stems have had RPA's plotted by taking the largest tree stem and replicating that stem and RPA at each tree location using GPS.

3.2 CONSTRUCTION EXCLUSION ZONE

The Construction Exclusion Zone (CEZ) required by the current edition (2012) of BS 5837 Trees in Relation to Design, Demolition and Construction relates to the stem diameter of each tree when measured at a height of 1.5m from ground level. The CEZs are to be afforded protection at all times and will be protected by a combination of fencing and ground protection measures.

3.3 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 cause anxiety to residents, leading to pressure for pruning or removal. There are no overhead constraints to the installation of the road or the classrooms.



4 ARBORICULTURAL IMPACT ASSESSMENT

The following Arboricultural Impact Assessment has been made in relation to the proposed development details provided by our client. This is for the installation of the temporary access road and classrooms. The location of the footprint of the proposed road and classrooms has been included within the attached Tree Protection Plan (Appendix III).

4.1 SIGNIFICANT TREES

The survey identified that there are no individual A grade trees which are of high quality and value within and adjacent to the site.

4.2 TREE LOSS

Consideration has been given to retaining all the trees. However, ultimately their removal is dependent on their condition and proximity to the development. This has identified that no trees require removal to facilitate the development.

4.3 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 in relation to the development and identifies the potential impacts resulting from the proposed development. There are no impacts caused by this stage of the works, referred to as 'Phase 1'.

4.4 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). The protective fencing should be sited along the edge of the RPA of the retained trees and be fit for the purpose of excluding construction activity.

The 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.

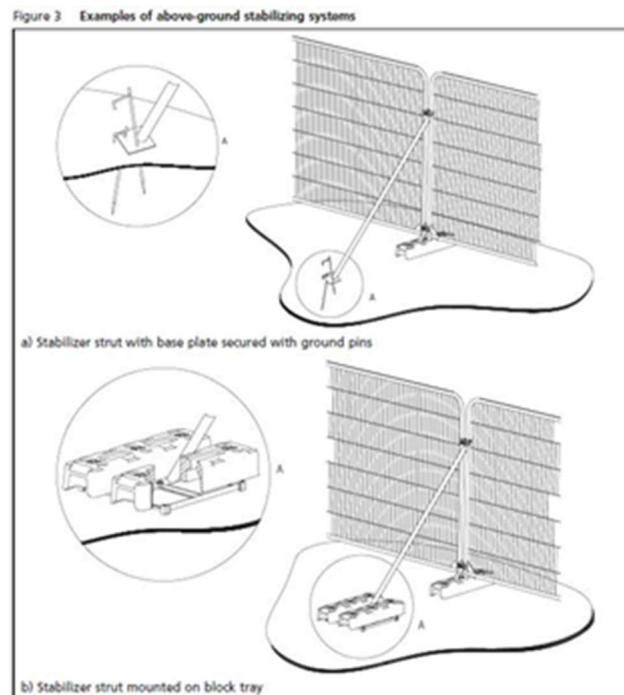


Figure 1 - Identifying tree protection fencing design.

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.

4.5 TEMPORARY GROUND PROTECTION

No temporary ground protection is required for this (phase 1 of the works). The temporary access road is away from all RPA's and all machinery will and vehicles will not stray from the temporary access road during installation and during the installation of the temporary classrooms.



5 SUMMARY

On completion of the site survey and report it is concluded that the proposed works will not have an impact upon any trees within and adjacent to the site.

The default position within the BS5837: 2012 document recommends that any development is situated outside of the RPA of any retained tree. This has been achieved by the proposed route and method taken in the design stage of Phase 1.

Trees near to Phase 1 works will be afforded protection by means of tree protection fencing to ensure that their RPA's are designated as a construction exclusion zone.

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.

6 GENERAL PRECAUTIONS

6.1 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.

6.2 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.

6.3 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.

6.4 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 contaminates to run towards a tree root protection area.

6.5 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.

All works required are outlined within the Tree Survey Schedule.

7 SITE PHOTOGRAPHS

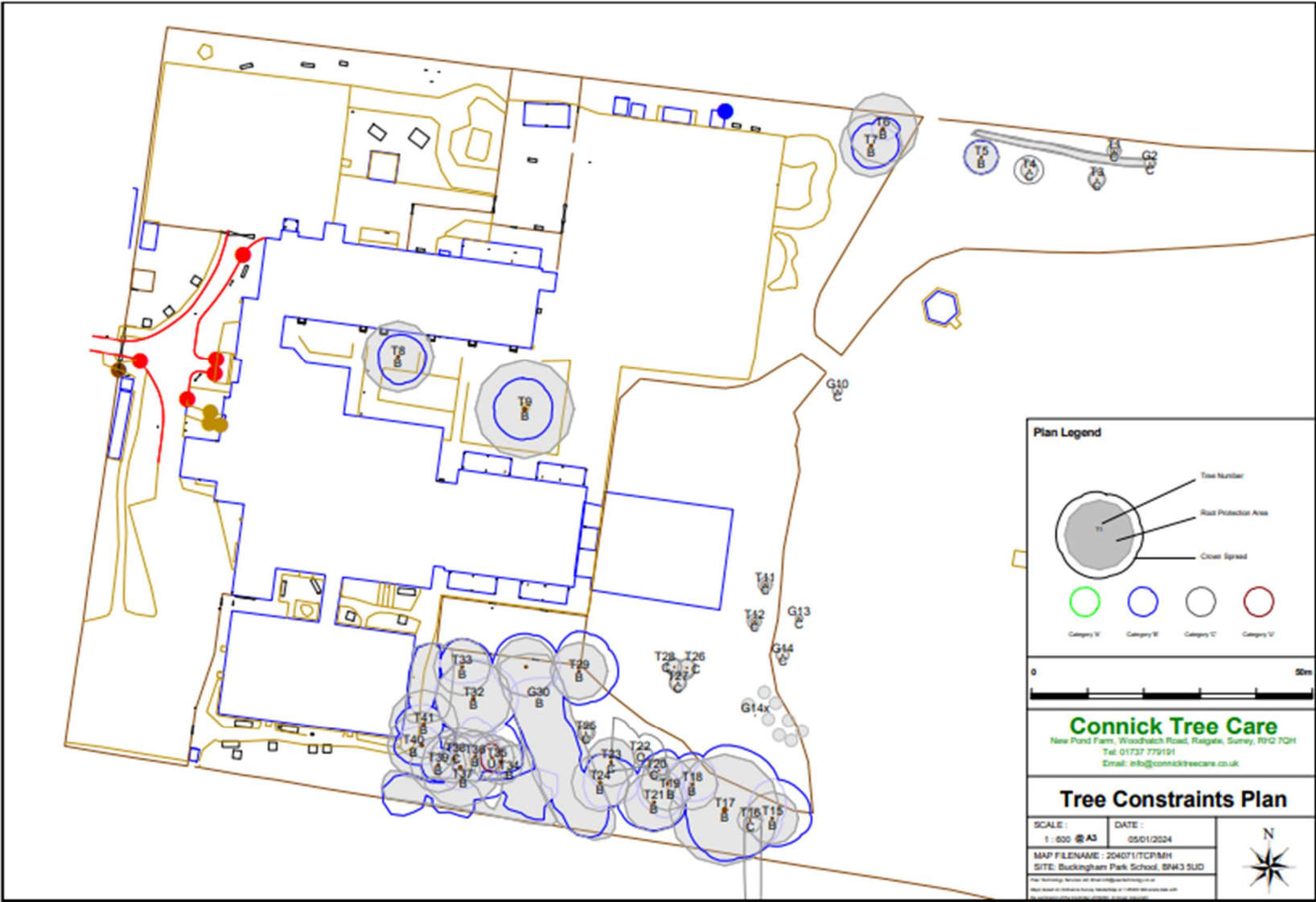
<p>Photograph 1: Showing the existing site compound</p>	<p>Photograph 2: Showing trees t1 – T5 and G2 which will be protected by tree protection fencing</p>
	
<p>Photograph 3: Showing T9 with existing edging acting as a barrier negating the need for tree protection fencing.</p>	<p>Photograph 4: Showing the woodland area where the woodchip path is to be installed to delineate the fire escape route.</p>
	



APPENDIX I TREE SURVEY SCHEDULE

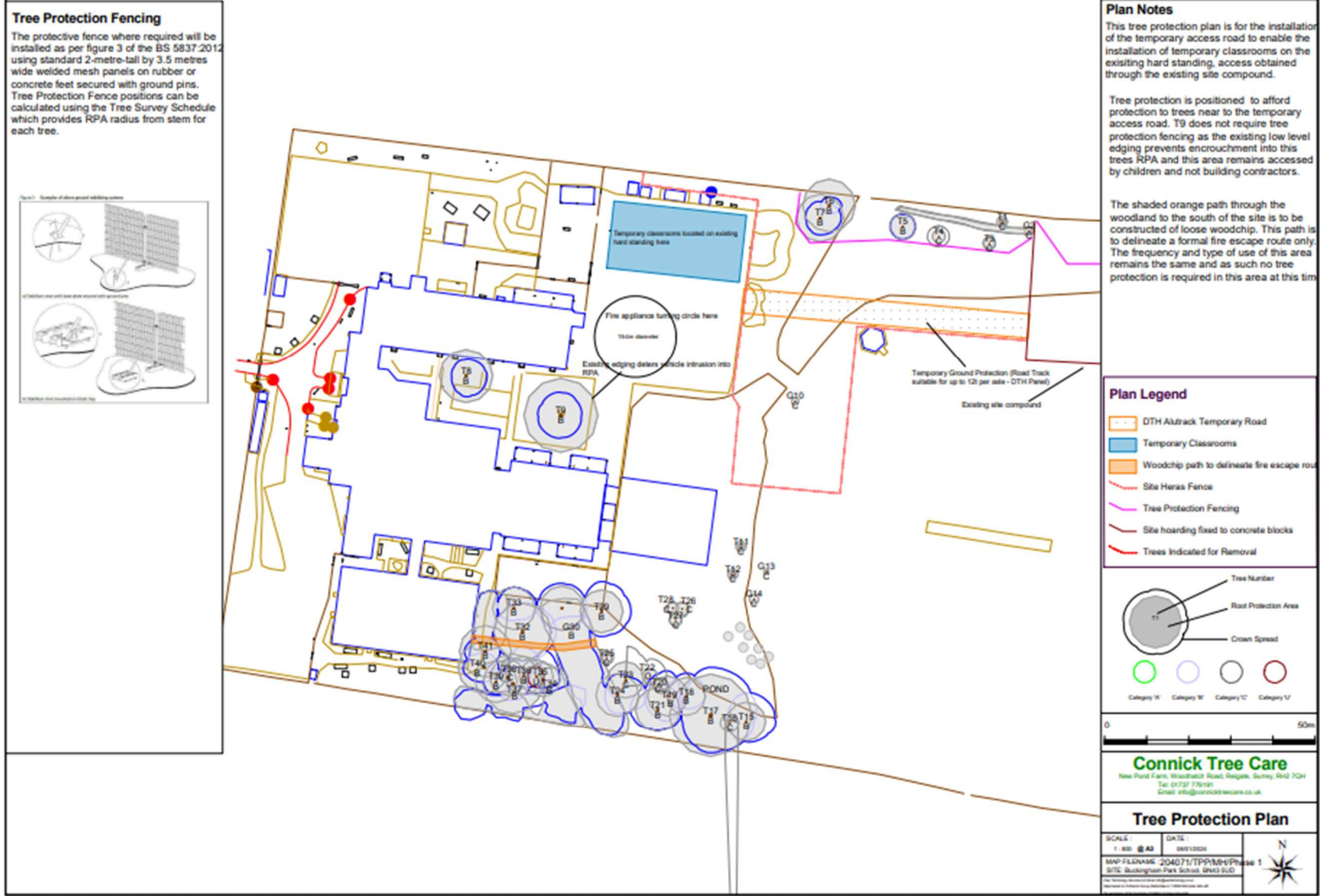
See document: 204071 Appendix I Buckingham Park School Tree Survey Schedule.pdf

APPENDIX II TREE CONSTRAINTS PLAN





APPENDIX III TREE PROTECTION PLAN





APPENDIX IV QUALIFICATIONS AND EXPERIENCE

Mark Haddock

1. QUALIFICATIONS

Subjects	Level	Dates
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 a housing association before returning to the industry and establishing my own contracting Arboricultural 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 at Connick tree care where I am now Principal Consultant.

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