

Nicholas Jones Consultants Limited Independent Professional Arboricultural Consultancy

Arboricultural Assessment and Outline Method Statement

Site: Saffrons Sports Club
Compton Place
Eastbourne
BN21 1EA

Prepared by Nicholas Jones ${\tt BSc.}$ (Hons). ${\tt MSc.}$ M ${\tt Arbor}$ A

On behalf of Saffrons Sports Club

Date: 3rd March 2023

Ref: NJC2035



Executive Summary

Nicholas Jones Consultants Limited were commissioned by Saffrons Sports Club to prepare an arboricultural report to advise on the potential impacts of the proposed development upon the existing tree population located at Saffrons Sports Club, Compton Place, Eastbourne, East Sussex, BN21 1EA.

The proposed development includes an extension to the existing club house facility and creation of additional sports surfacing.

This report confirms that no trees are proposed for removal to facilitate the proposed development.

The tree population in relation to the retention categories defined in British Standard 5837:2012 'Trees in relation to design, demolition and construction - recommendations' are provided in Table 1 along with the quantities proposed for retention and removal.

	Total	Retained	Removed
Category A	1	1	0
Category B	1	1	0
Category C	0	0	0
Category U	0	0	0

Table 1

Construction activity could potentially affect the retained trees. However, by implementing suitable protection measures and monitoring for the retained trees there is ample scope within the site for the construction process and associated activities required to facilitate the proposed development.



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Validation Statement

This report contains supporting information regarding trees in relation to the proposed development at Saffrons Sports Club, Compton Place, Eastbourne, East Sussex, BN21 1EA.

For Local Planning Authority purposes this report contains the following elements:

- A tree survey in accordance with the guidance contained in British Standard 5837:2012 'Trees in relation to design, demolition and construction – recommendations.' The survey has been undertaken by a competent and qualified arboriculturist.
- A plan indicating a North point, at an appropriate scale and containing tree survey information and tree retention categories as defined in British Standard 5837:2012.
- An assessment of the arboricultural impacts of the proposed development and details of all trees to be removed or retained and any associated measures proposed for their protection.
- An Outline Arboricultural Method Statement detailing the means of tree protection and any constraints posed on the implementation and phasing of work.



1. Introduction

- 1.1 Formal details My name is Nicholas Jones I am the Principal Arboricultural Consultant for Nicholas Jones Consultants Limited. I have 33 years' experience in the arboricultural industry with the past 23 years acting as a consultant. I hold a BSc (Hons) in Arboriculture and an MSc in Arboriculture and Urban Forestry awarded by the University of Central Lancashire. I hold Professional Memberships of both The Arboricultural Association and The International Society of Arboriculture. Moreover, I am a Lantra accredited Professional Tree Inspector, giving advice to clients on a wide range of arboricultural and horticultural issues.
- 1.2 This report has been commissioned by Saffrons Sports Club in order to advise on the following:
 - The species, size and position of any trees within the area of the proposed development and within neighbouring and adjoining areas where trees may have some significance to the proposed development.
 - The maturity and condition of the trees surveyed with appropriate recommendations for action.
 - The impact of the proposed development upon the tree population in and around the site, along with the impact of retained trees on the end use of the site.
 - Outline measures required to protect retained trees during the development works and the ongoing monitoring of construction works to ensure that retained trees remain protected effectively.



- 1.3 The site is under the administrative jurisdiction of Eastbourne Borough Council. The council have confirmed that Tree Preservation Order No. (82) 2003 affords statutory protection to two elm trees that are within the influence of the proposed development.
- 1.4 The site was visited on 1st March 2023 and an assessment of two mature elm trees in the vicinity of the proposed development completed, in line with the guidance provided in British Standard 5837:2012 'Trees in relation to design, demolition and construction Recommendations'.
- 1.5 The proposed development includes an extension to the existing club house facility and creation of additional sports surfacing.
- 1.6 This report should be read with refence to the following drawings (Table2):

Origina	ator	Drg No	Title		
Nicholas	Jones	NJC2035_01_030323	Tree Layout Plan		
Consultants	Limited		-		
Nicholas	Jones	NJC2035_02_030323	Preliminary Tree Protection Plan		
Consultants	Limited				

Table 2

1.7 The following technical references are made in this report (Table 3):

Originator	Title/Reference		
British Standards Institute	5837:2012 Trees in relation to design,		
	demolition and construction -		
	Recommendations		
British Standards Institute	3998:2010 Recommendations for Tree		
	Works		

Table 3



2. Arboricultural Impact Assessment

2.1 Development proposals can impact on trees by requiring their removal or by adversely affecting their longevity through disturbance to their rooting environment or the impact of severe pruning. In many cases however it is possible to reduce the levels of disturbance by implementing precautionary measures and by adopting appropriate working practices.

Direct impacts of the proposed development on existing trees

- 2.1.1 This section of the impact assessment uses a matrix to consider the contributory factors that determine an individual trees likely response to disturbance and or root loss as a result of demolition or construction activity within the calculated Root Protection Area.
- 2.1.2 For ease of interpretation the impact assessment matrix largely uses a simple traffic light system to rank the factors in order of their potential impact.
- 2.1.3 Where an impact has a binary outcome then it is determined as either green or red.
- 2.1.4 The individual factors are:
- 2.1.4.1 <u>Tree species:</u> some species show a greater tolerance to disturbance or root loss than others. Species vary greatly in their vigour and ability to compartmentalise decay and dysfunction following wounding/pruning. In determining the tolerance of a species for the purposes of the assessment matrix information has been collated from published work on root pruning and root loss and from personal arboricultural experience and technical knowledge.



2.1.5 <u>Age class (Table 4):</u> Younger trees display a greater tolerance to disturbance or root loss as they have a greater ability to adapt and respond to wounding/pruning.

Age class	Tolerance
Juvenile	
Semi mature	
Early mature	
Mature	
Over mature	
Veteran	

Table 4

2.1.6 <u>Physiological condition (Table 5):</u> Trees with good vitality will be functioning at an optimum physiological level and will be best placed to tolerate disturbance or root loss.

Physiological condition	Tolerance
Good	
Fair	
Poor	

Table 5

2.1.7 <u>Level of incursion (Table 6):</u> It is a generally accepted principle, particularly in British Standard 5837:2012, that incursions of up to 20% are acceptable, on the basis that the other factors considered here are in favour of a positive response from the individual tree.

Level of incursion (%)	Tolerance
Up to 15%	
Between 15-20%	
Greater than 20%	

Table 6



2.1.8 Extent of level alterations (Table 7): Excavation to varying depths has the potential to negatively impact lateral surface roots or roots present deeper within the soil. Increases in soil levels can lead to soil compaction and asphyxiation of roots.

Extent of alteration (mm)	Tolerance
Reduction of 0-300mm	
Reduction of 300-600mm	
Reduction of 600+mm	
Increase of 0-100mm	
Increase of 100-200mm	
Increase of 200+mm	

Table 7

2.1.9 Engineering options available (Table 8): Special engineering options can be employed to reduce the impacts on trees, no dig cellular confinement systems can serve to lessen the impacts of vehicular access routes, pile and beam foundations can be utilised to negate the requirement for extensive foundation excavations.

Engineering options available	Tolerance
Yes	
No	

Table 8

2.1.10 Options for mitigation/enhancements elsewhere in the RPA (Table 9): Impacts can potentially be offset by providing additional rooting volume on an alternative side of the tree or by enhancing the soil conditions in the retained RPA.

Mitigation/enhancement possible	Tolerance
Yes	
No	

Table 9

2.1.11 <u>Additional factors:</u> Elements they may be relevant to either additional weighting or less significance of the factors above.



2.1.12 <u>Final impact level (Table 10):</u> The final level of impact following consideration of all of relevant elements above. On balance, the level of each element will be used to determine the final impact level. If the level is determined acceptable then details of any mitigation or associated protection will be provided. If the level is determined as unacceptable then the tree will be highlighted for removal, the impacts of which are considered fully in the following section.

Final impact level	Tolerance
Acceptable	
Unacceptable	

Table 10

2.1.13 The Impact assessment matrix is provided in Table 11, the matrix only includes those trees with a proposed incursion into their RPA as a result of demolition, construction or associated required access for those activities.



	Impact Assessment Matrix										
Tree number	Tree species	Species tolerance to disturbance/root loss	Life stage tolerance to disturbance/root loss	Physiological condition	Level of incursion (%)	Extent of level alteration (where applicable)	Engineering solutions available	Option of mitigation/remediation elsewhere in the RPA	Additional factors	Comments and observations	Final Impact Level
T1	Elm (<i>Ulumus</i> spp.)					N/A			Proposed incursion is within acceptable limits	Establish a Precautionary Area (PA) and ensure arboricultural supervision is completed on all excavation work and periodically for ongoing works within the PA	
T2	Elm (<i>Ulumus</i> spp.)					N/A			Proposed incursion is within acceptable limits	Establish a Precautionary Area (PA) and ensure arboricultural supervision is completed on all excavation work and periodically for ongoing works within the PA	

Table 11



Potential construction impacts

- 2.1.14 The proposed development involves an incursion into the Root Protection Areas (RPA's) of trees T1 & T2. The incursion is well within the notional and widely accepted 20% limit associated with British Standard 5837:2012. As a result, the associated incursions relating to the proposed development are considered to be within acceptable limits, subject to the precautionary measure of the associated excavations being undertaken by hand following the principles contained within section 7.2 of BS5837:2012 'Avoiding physical damage to the roots during demolition or construction'. To ensure that the principles are adhered to, it is recommended that the works within RPA's (Defined as the Precautionary Area), are carried out under direct arboricultural supervision.
- 2.1.15 The proposed development also makes allowance for a change of surfacing beneath the trees from grass to gravel. This will maintain the existing permeability and likely enhance soil aeration and drainage which will benefit the trees.

Impacts of the proposed tree pruning

- 2.1.16 The locations of the trees proposed for pruning are provided on the Tree Layout Plan (Ref: NJC2035 01 030323 **Appendix 2**).
- 2.1.17 The impact of the proposed tree pruning is fully assessed in Table 12.

Impacts of the retained trees on the proposed development

- 2.1.18 The location and orientation of the proposed development obtains full benefit from available sun light.
- 2.1.19 The proposed pruning detailed in the Tree Survey Schedule Appendix 1, increases the distances between the built elements of the proposal and the retained trees, ensuring that there are not likely to be significant issues relating to shading or seasonal nuisance.



Tree Number(s)	Reason for tree pruning	Impact of tree pruning	Photographs		
T1 & T2	Picus assessment completed in November 2022, recommendations within that report are relevant to the proposed development application, see preliminary management recommendations Appendix 1 .	Low impact as the proposed pruning of the moderate quality T1 (B Category tree) and high-quality T2 (A category tree) is limited to crown lifting and reduction pruning of the crowns overhanging the application site. The recommended works are as a result of a detailed tree inspection report and sonic tomography assessment of each of the trees completed in November 2022. These works should be implemented regardless of any proposed development activity on site. Whilst there will be some initial loss of amenity associated with the pruning this will be short term (<12months) and will facilitate the retention of the trees within the landscape in the longer term. The extent of the proposed pruning accords with the general principles contained in British Standard 3998:2010 Tree work – recommendations.			

Table 12



3. Outline Arboricultural Method Statement

- 3.1 The principal purpose of an Arboricultural Method Statement is to ensure the preservation of retained trees through setting out appropriate working practices, construction techniques and tree protection measures that will be adopted when construction work is undertaken.
- 3.2 The following Outline Arboricultural Method Statement includes a reference to a Preliminary Tree Protection Plan (Ref: NJC2035_02_030323 Appendix 2) which identifies the following:
- 3.2.1 Trees to be retained.
- 3.2.2 Proposed Construction Exclusion Zone.
- 3.2.3 Precautionary Area.
- 3.2.4 Tree Protection Measures.

Proposed Construction Exclusion Zone

3.2.5 British Standard 5837:2012 recommendations provide a formula for calculating the Root Protection Area which indicates the area around a tree deemed to contain sufficient roots and soil rooting volume to maintain the trees viability. The protection of the roots and soil within these areas should be treated as a priority. The shape of the RPA and its exact location will depend upon arboricultural considerations and the area will normally be represented on a constraints plan as a circle or polygon. This information will inform the extent of the CEZ. No work should be undertaken within any of the defined CEZ's that may cause compaction to the soil or the severance of any tree roots.



Precautionary Area

3.2.6 The Precautionary Area is deemed any area inside the RPA of a retained tree that is subject to construction activity. The Precautionary Areas are indicated on Drg No. NJC2035_02_030323 Preliminary Tree Protection Plan **Appendix 2**. All excavation work within the Precautionary Area should be completed under the supervision of the Project Arborist.

Tree Protection Measures

3.2.7 Protective fencing should be erected in accordance with section 6 of BS5837:2012 and as indicated in Figure 1. The proposed location of the protective fencing is indicated on Drg No. NJC2035_02_030323 Preliminary Tree Protection Plan Appendix 2.

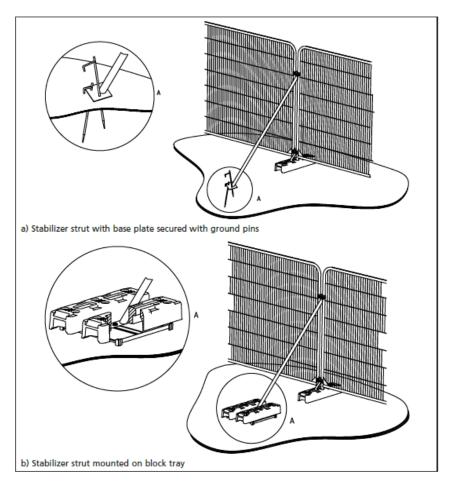


Figure 1



- 3.2.8 In addition, ground protection measures will be installed within the RPA's to facilitate pedestrian construction access around the proposed development. The location of the temporary ground protection is indicated on Drg No. NJC2035_02_030323 Preliminary Tree Protection Plan **Appendix 2**.
- 3.2.9 The ground protection should consist of a single thickness of scaffold boards or exterior grade ply sheeting placed compression-resistant layer (e.g., 100 mm depth of woodchip), laid onto a geotextile membrane.

Detailed Arboricultural Method Statement

- 3.2.10 Pursuant to the Council's preference to ensure confident tree retention during development, a detailed Arboricultural Method Statement should be prepared, which expands on the outline detail provided above. This could reasonably be requested by Condition.
- 3.2.11 Within a Detailed Arboricultural Method Statement, Heads of Terms are advised to include:
 - a detailed method statement for the installation of the foundations within the Precautionary Area
 - details of all external hard landscaping and a detailed method statement for the replacement of the existing grass with a gravel surfacing
 - details of the phasing of work and a scheme for auditing tree protection, site supervision and monitoring with subsequent reporting to the LPA



4. Summary & Conclusions

- 4.1 British Standard 5837: 2012 contains clear and current recommendations for a best practice approach to the assessment, retention and protection of trees on development sites. The proposed development has followed this guidance by:
 - Seeking arboricultural advice to inform the layout and design of the proposal
 - Respecting the constraints posed to development of the site by the retained trees, and taking proactive steps to ensure their protection during development
 - Continuing to take advice on all aspects of the proposal that may impact upon the retained trees
- 4.2 It is my professional opinion that the proposals put forward allow for confidence in the long-term retention of the existing tree cover and would not result in any detriment to the character of the local area and the wider treescape.
- 4.3 From an arboricultural perspective the principle of the proposed development is therefore considered supportable in terms of Local Policy relating to trees. This opinion is strongly subject to the adoption of future safeguards for protecting trees.
- 4.4 In summary, I consider that there are no valid arboricultural issues that reasonably restrict the proposed development of the site.



AH

Prepared by Nicholas Jones BSc (Hons). MSc. M Arbor A.

Date: 3rd March 2023





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Appendix 1 – Tree Survey

The trees within the area of the proposed development, and within neighbouring and adjoining areas where trees may have some significance to the proposed development, have been assessed and are recorded in the tree schedule (**Appendix 1**). Tree locations are plotted onto Drg No. NJC2035_01_030323 Tree Layout Plan (**Appendix 2**). The trees have been visually assessed from ground level only using non-invasive methods of inspection. Tree height is an estimation, crown spread and height to underside of canopy are measured with a laser range finder.

The survey information collated for each tree is as follows:

- Tree reference number: As recorded on the site plan.
- Tree species: Common name and full botanical classification
- Life stage: (J) Juvenile, (SM) Semi mature, (EM) Early mature, (M) Mature, (OM) Over mature, (V) Veteran
- Estimated remaining contribution in years e.g.: Less than 10, 10-20, 20-40, more than 40
- Height: In metres
- Stem diameter measured in millimetres as follows:
 - Single stem trees measured at 1.5m above ground level
 - Multi stem trees (less than five stems) total of all stem diameters measured at 1.5m above ground level
 - Multi stem trees (more than five stems) mean stem diameter measured at 1.5m above ground level
- Crown Spread: Measured at the four cardinal points (Metres)
- Height to underside of canopy: Measurement from ground level to the lowest branch (Metres)
- Physiological condition: Good, Fair, Poor, Dead



- Structural condition: Assessed as previous item on presence of decay and potential structural defects
- Quality assessment category: As defined in Table 1.1
- Comments and observations: Information regarded as relevant by the assessing arborist
- Preliminary management recommendations: Details of any remedial action required to address significant defects and or facilitate development
- Adjusted root protection area radius (Metres) calculated in accordance with the formulas provided in chapter 4.6 and Annex D of BS5837:2012

A full hazard assessment of the trees, such as decay detection and mapping, has not been undertaken as this is considered beyond the scope of this report. Obvious hazards and defects that would reasonably affect the trees contribution to the landscape have been fully considered and are detailed in the tree survey schedule.

British Standard 5837:2012 provides guidance for the assessment of trees on development sites and suggests four primary quality assessment categories and three associated sub-categories into which trees should be placed. These categories are defined in Table 1.1:



Category & Definition	Criteria											
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 (i.e., 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 NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve											
Trees to Be Considered for Retention												
Onto some O Definition	Criteria - Subcategories											
Category & Definition	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	Identification on Plan								
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 semiformal arboricultural features (e.g., The dominant and/or principal trees within an avenue)	Trees, groups or woodlands or 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)	Light Green								
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 as groups or woodlands, such that they attract a higher collective rating that 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	Mid Blue								
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	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present on groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefit	Trees with no material conservation or other cultural value	Grey								

Table 1.1



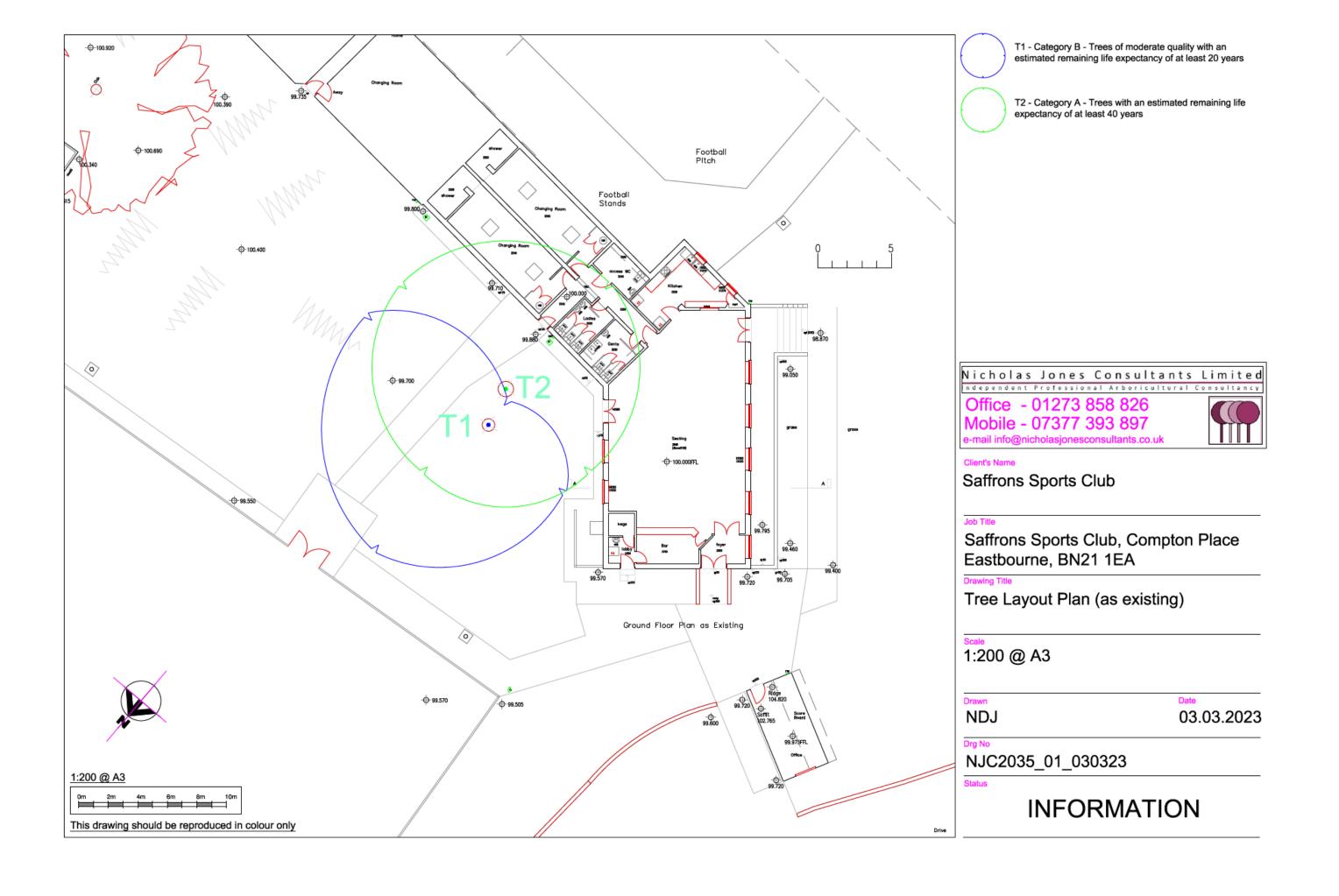
Notes: Root Protection Areas have been omitted for Category U trees and others proposed for removal as it is assumed they will not be subject to retention. RPA's are capped at a 15m radius (707m²) in accordance with British Standard 5837:2012.

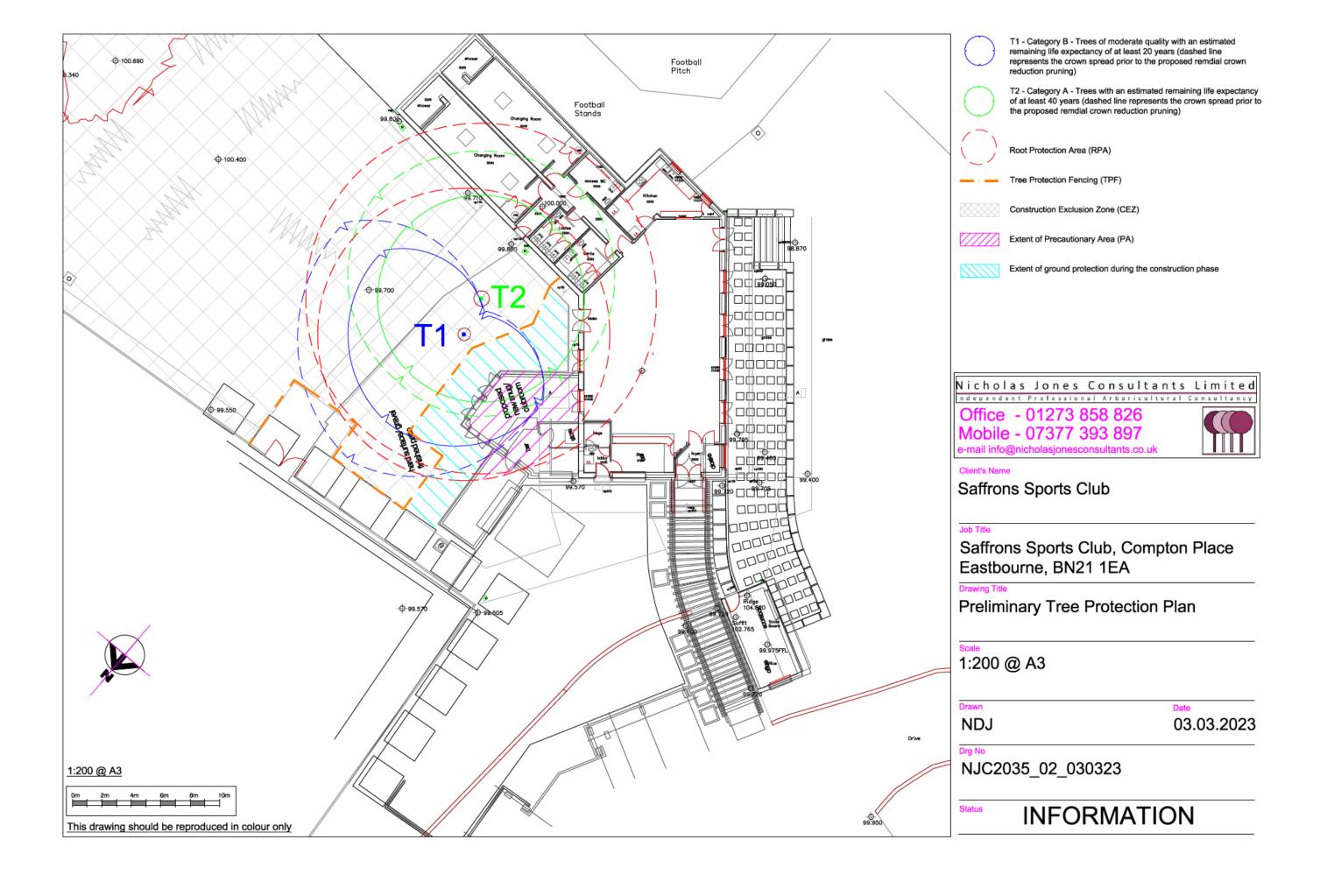
Site:	The Saffrons Sports Ground	D	Oate: 01.03.2023		Reference No:			NJC2035				Surveyor:	N D Jones					
number	Tree species	Life stage	Estimated remaining contribution (years)	Tree Height (m)	Number of stems	diameter (mm)	Crown spread (m)			underside of opy (m)	al condition	Structural condition	Assessment ategory	Comments and	Preliminary Management	ction Area ained trees	ection Area for retained ees	
Tree n						Stem diam	N	E	ø	w	Height to unders canopy (m)	Physiological condition	Structural	Quality Assessr Category	observations	Recommendations	Root Protection (m²) for retained	Root Protection Radius (m) for ret
T1	Elm (<i>Ulumus</i> spp.)	M	<20	18	1	825	11.5	11.0	2.2	7.0	4.0	Good	Fair	B 1	Fair specimen, bias to the north as a result of T2 with a lean on the main stem. Picus assessment completed in November 2022, recommendations within that report are relevant to the proposed development application, see preliminary management recommendations adjacent	Reduce and reshape the crown by no more than 3 – 3.5m, to suitable growth points, remove component deadwood from the crown and raise the low crown to provide a clearance of approximately 5m above ground level	308	9.9
T2	Elm (<i>Ulumus</i> spp.)	M	<40	24	1	990	10.0	10.0		8.0	4.0	Good	Fair	A1	Fair specimen, decay evident in the upper stem. Picus assessment completed in November 2022, recommendations within that report are relevant to the proposed development application, see preliminary management recommendations adjacent	Reduce and reshape the crown by no more than 3 – 3.5m, to suitable growth points, remove component deadwood from the crown and raise the low crown to provide a clearance of approximately 5m above ground level	443	11.9



Appendix 2 - Drawings

*Do not scale from the drawings reproduced within this report





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