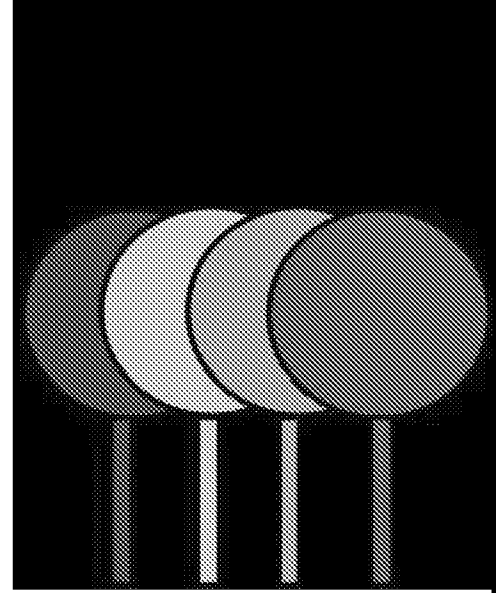




Nicholas Jones Consultants Limited

Independent Professional Arboricultural Consultancy

Arboricultural Assessment and Method Statement

Site: 58 Ferringham Lane

Ferring

Worthing

West Sussex

BN12 5LU

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

On behalf of: Summerdown Homes Ltd

Date: 22nd January 2018

Ref: NJCL 214

Executive Summary

Nicholas Jones Consultants Limited were commissioned by Summerdown Homes Ltd to prepare an arboricultural report to advise on the potential impacts of the proposed development upon the existing tree population located at 58 Ferringham Lane, Ferring, Worthing, West Sussex, BN12 5LU.

The proposed development includes the demolition of the existing dwelling on site and the construction of a new apartment building.

This report confirms that there are four trees proposed for removal to facilitate the proposed development. A further three trees are proposed for removal on the grounds of sound arboricultural management.

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	0	0	0
Category B	0	0	0
Category C	11	4	7
Category U	3	0	3

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 58 Ferringham Lane, Ferring, Worthing, West Sussex, BN12 5LU.

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 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 28 years' experience in the arboricultural industry with the past 18 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 am a Professional Member of both the Arboricultural Association and the Consulting Arborist Society and 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 Summerdown Homes Ltd 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.
 - Specific 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 was visited on 30th November 2017 and a survey carried out identifying and locating the relevant trees.

- 1.4 The site is under the administrative jurisdiction of Arun District Council.
- 1.5 An assessment of the trees in the vicinity of the proposed development has been made in line with the guidance provided in British Standard 5837:2012 'Trees in relation to design, demolition and construction Recommendations'.
- 1.6 The online facility available at Arun District Councils website advises that Tree Preservation Order Ref: TPO/FG/6/60 is in force on site. However, reference to the TPO document clarifies that the trees listed are not present on the application site. Moreover, the site is located outside the Ferring Conservation Area.
<http://www1.arun.gov.uk/webapps/wml/>
- 1.7 This report should be read with reference to the following drawings (Table 2):

Originator	Drg No	Title
MJ Zara Associates	8487	Site Survey
Turner Associates	TA1078/10	Proposed Site Plan
Nicholas Jones Consultants Limited	NJCL 214 A-1	Tree Layout Plan
Nicholas Jones Consultants Limited	NJCL 214 B-1	Tree Protection Plan

Table 2

- 1.8 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

1.9 The following abbreviations may be used throughout this report (Table 4):

Terminology	Abbreviation
Tree Preservation Order	TPO
Arboricultural Method Statement	AMS
British Standard 5837:2012 – Trees in relation to design, demolition and construction – Recommendations	BS5837
Tree Protection Plan	TPP
Root Protection Area	RPA
Construction Exclusion Zone	CEZ
Precautionary Area	PA
Tree Protection Fencing	TPF
Local Planning Authority	LPA
Cellular Confinement System	CCS

Table 4

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.
- 2.2 An assessment of the trees affected by the proposed development is summarised in Table 5 below. Full details of all the trees assessed are provided in the tree survey schedule in **Appendix 1**.
- 2.3 Tree locations are provided in the Tree Layout Plan (Ref: NJCL 214 A-1 **Appendix 2**).

	BS5837 2012 Assessment Category			
	A	B	C	U
Trees to be removed	0	0	7	3
Trees to be retained & protected	0	0	4	
Trees to be protected through special precautions	0	0	0	

Table 5

- 2.4 The proposed tree removal is limited to low quality trees of limited amenity value. Their removal will have no detrimental impact on the character of the wider area.
- 2.5 There are no trees located off site that will be impacted by the proposed development.
- 2.6 The proposed development is located outside the RPA's of the retained trees.

3. 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 Arboricultural Method Statement includes a tree protection plan (Ref: NJCL 214 B-1 **Appendix 2**) which identifies the following:

- 3.2.1 Trees to be retained.
- 3.2.2 Construction Exclusion Zone.
- 3.2.3 Tree Protection Measures.

3.3 Construction Exclusion Zone

3.3.1 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 this area 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 shall be undertaken within any defined CEZ's that may cause compaction to the soil or the severance of tree roots.

3.4 Protective Fencing

3.4.1 Protective fencing will be erected in accordance with section 6 of BS5837:2012 and as indicated in Figure 1. The location of the protective fencing is indicated on Drg No. NJCL 214 B-1 **Appendix 2**.

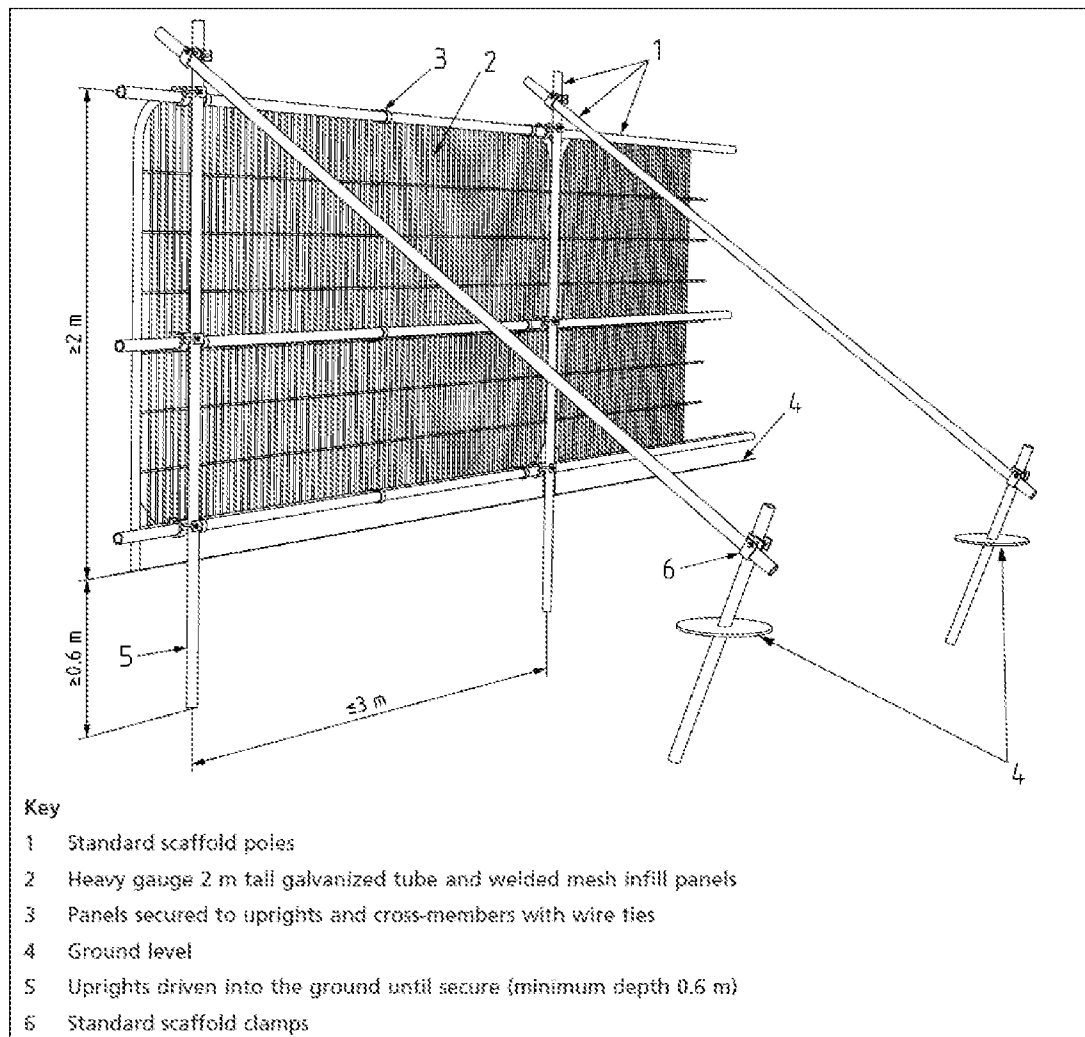


Figure 1

- 3.4.2 All protective fencing shall be erected prior to the commencement of any works on site.
- 3.4.3 Any accidental damage to the retained trees or any associated protection measures must be reported to the site manager immediately. Works occurring in the vicinity must cease immediately until adequate remediation has been completed. A record of any damage will be made by the site manager and in consultation with the project arborist any remediation undertaken.

3.5 Precautions in Respect of Temporary Works

- 3.5.1 If temporary access is required within the CEZ then access may only be gained following consultation with the LPA and the placement of any agreed additional protection measures, such as ground protection matting.

3.6 Access Details

- 3.6.1 There is no requirement for any special measures related to the retained trees as all access for construction vehicles will be from the existing access drive.

3.7 Contractors Car Parking

- 3.7.1 No car parking will be available within the CEZ.

3.8 Site Huts and Toilets

- 3.8.1 No site offices or welfare facilities will be located within the CEZ.

3.9 Storage Space

- 3.9.1 No materials will be stored within the CEZ.

3.10 Additional Precautions

- 3.10.1 There are no services planned within the CEZ.
- 3.10.2 No storage of materials, lighting of fires will take place within the CEZ. No materials shall be stored or mixed in a location where they may leach into the CEZ.
- 3.10.3 No fires shall be lit within 20 metres of any retained tree.
- 3.10.4 If cranes and or high sided vehicles are required during the construction period, then a separate method statement shall be supplied and agreed by the LPA to ensure that there is no damage to any retained trees.
- 3.10.5 No site notices, cables or other services shall be attached to any tree.

3.11 Site Gradients

3.11.1 No alterations of soil levels will take place within the CEZ.

3.12 Demolition

3.12.1 All demolition required to facilitate the proposed development is located outside the RPA's of the retained trees.

3.13 Hard Surfaces

3.13.1 No hard surfaces are to be constructed within the CEZ.

3.14 Soft Landscaping

3.14.1 No soft landscaping is scheduled to be carried out in the CEZ.

3.15 Use of Herbicides

3.15.1 No herbicide use is required on site.

3.16 On site Monitoring Regime

3.16.1 Monitoring will involve a schedule of visits, frequency to be agreed with the LPA, and completion of a standard form an example of which is provided in **Appendix 3** which must be completed by the project arborist and signed by the client, site manager or their representative and the project arborist. A copy is then kept by the client, the project arborist and an additional copy forwarded to the LPA.

3.16.2 Any construction works required within the CEZ will be completed under the periodic supervision of the project arborist.

3.16.3 If the task is to be prolonged, provided the project arborist is satisfied, the supervision may be reduced to telephone contact between the site manager and the project arborist.

3.16.4 The supervision may require the project arborist to be present throughout the tasks to ensure all of the arboricultural objectives are met.

3.20.4 The Local Authority Arborist shall have free access to the site and pass any observations and recommendations directly to the project arborist.

3.21 Contact details

3.21.1 Table 7 contains the contact details of the key parties involved in ensuring this AMS is adhered to.

Position	Name	Company	E-mail	Telephone Number
Main Contractor	TBC	TBC	TBC	TBC
Project Arborist	Nick Jones	Nicholas Jones Consultants Limited	info@nicholasjonesconsultants.co.uk	01273858826 07377393897
LPA Arborist	TBC	Arun District Council	TBC	01903737711

Table 7

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 The proposed development is located outside the root protection areas of the retained trees. The proposed development will have no detrimental impact on the retained trees.

4.3 By implementing suitable protection measures for the retained trees, it is my considered opinion that there is ample scope within the site for the construction process and associated activities required to facilitate the proposed development.

4.4 In summary, I consider that there are no valid arboricultural issues that reasonably restrict the proposed development of the site.

Signed:



Nicholas Jones *BSc (Hons). MSc. M Arbor A.*

Date: 22nd January 2018



Arboricultural
ASSOCIATION
Professional Member
No. PRO 1672

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Appendix 1 – Tree Survey

All trees on site have been assessed and are recorded in the tree schedule (**Appendix 1**) with all key trees plotted onto Drg No. NJCL 214 A-1 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 Disto laser measure.

The survey information collated for each tree is as follows:

- Tree reference number: As recorded on the site plan.
- Tree species: Common name only
- Age class: (J) Juvenile, (SM) Semi mature, (EM) Early mature, (M) Mature, (OM) Over mature, (V) Veteran
- Estimated remaining contribution in years eg: 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
- Adjusted root protection area radius (Metres) calculated in accordance with the formulas provided in chapter 4.6 and Annex D of BS5837:2012
- 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: Excellent, 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
 - Comments and observations: Information regarded as relevant by the assessing arborist
 - Recommended works: Details of any remedial action required to address significant defects and or facilitate development

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:

Category & Definition	Criteria			Identification on Plan
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 (ie. 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			Dark Red
Trees to Be Considered For Retention				
Category & Definition	Criteria - Subcategories			Identification on Plan
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
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 (eg. 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 (eg. 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

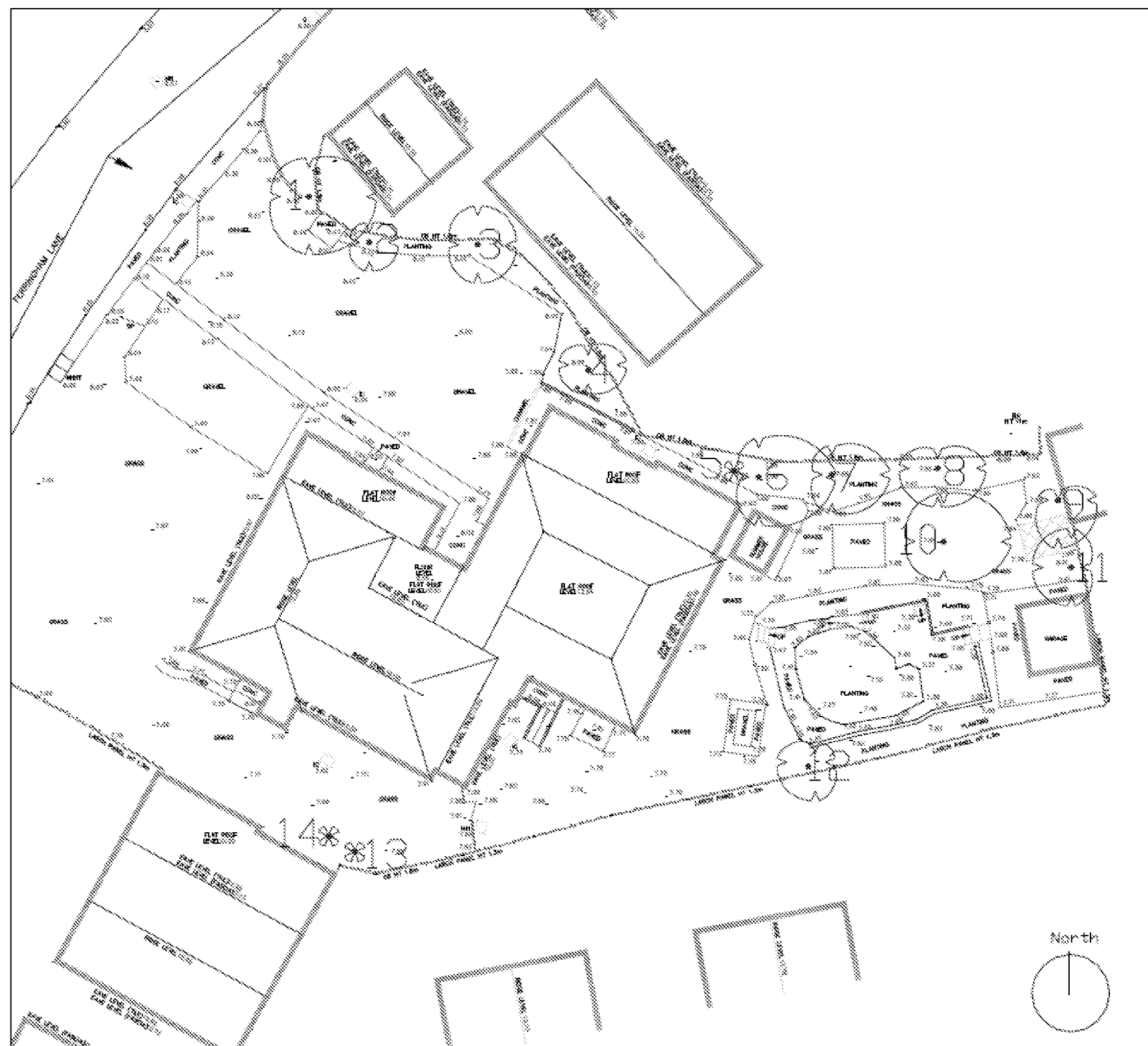
Notes: Root Protection Areas have been omitted for Category U trees and others proposed for removal as it is assumed they will not be subject to retention. RPA's are capped at a 15m radius (707m²) in accordance with British Standard 5837:2012.

Tree number	Tree species	Age class	Estimated remaining contribution (years)	Tree Height (m)	Number of stems	Stem diameter (mm)	Crown spread (m)				Height to underside of canopy (m)	Physiological condition	Structural condition	Quality Assessment Category	Comments and observations	Recommended works	Root Protection Area Radius (m) for retained trees
							N	E	S	W							
1	Cherry	M	<15	6	1	275	2.0	3.5	3.0	2.0	2.0	Fair	Fair	C	Fair specimen located on the northern boundary	Fell to facilitate the proposed development	N/A
2	Apple	SM	<15	3	2	75	1.0	1.5	1.5	1.0	2.0	Fair	Fair	C	Fair specimen located on the northern boundary	Fell to facilitate the proposed development	N/A
3	Apple	SM	<15	5	5+	60	2.0	2.0	2.0	1.5	2.0	Fair	Fair	C	Fair specimen located on the northern boundary	Fell to facilitate the proposed development	N/A
4	Apple	EM	<15	4	1	75	1.0	2.0	1.5	1.5	1.0	Fair	Fair	C	Fair specimen located on the northern boundary	Fell to facilitate the proposed development	N/A
5	Holly	M	<15	3	4	100	0.5	0.5	0.5	0.5	1.5	Fair	Poor	U	Poor specimen	Fell to ground level	N/A
6	Portugal Laurel	M	<15	6	2	310	2.0	4.0	2.5	1.0	2.5	Fair	Fair	C	Fair specimen located on the northern boundary	Fell to facilitate the proposed development	N/A
7	Bay Laurel	M	<15	7	2	250	1.5	3.0	2.0	1.0	2.0	Fair	Fair	C	Fair specimen located on the northern boundary	Fell to facilitate the proposed development	N/A
8	Pittosporum	M	<15	5	2	175	1.0	2.5	2.0	2.0	2.0	Fair	Fair	C	Fair specimen located on the northern boundary	Fell to facilitate the proposed development	N/A

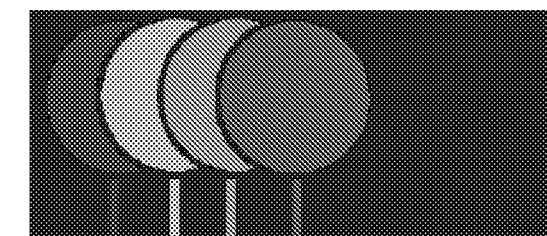
Notes: Root Protection Areas have been omitted for Category U trees and others proposed for removal as it is assumed they will not be subject to retention. RPA's are capped at a 15m radius (707m²) in accordance with British Standard 5837:2012.

Tree number	Tree species	Age class	Estimated remaining contribution (years)	Tree Height (m)	Number of stems	Stem diameter (mm)	Crown spread (m)				Height to underside of canopy (m)	Physiological condition	Structural condition	Quality Assessment Category	Comments and observations	Recommended works	Root Protection Area Radius (m) for retained trees
							N	E	S	W							
9	Plum	M	<15	3	1	100	0.5	2.0	2.5	1.0	2.0	Fair	Fair	C	Fair specimen located on the eastern boundary	No work required	1.2
10	Apple	OM	<15	3	2	300	2.5	3.5	2.0	2.0	1.0	Fair	Poor	C	Fair specimen located within the lawn area	No work required	4.7
11	Holly	M	<15	6	3	200											
						150											
						100	2.0	1.0	2.0	2.0	2.0	Fair	Fair	C	Fair specimen located on the eastern boundary	No work required	3.2
12	Bay Laurel	M	<15	7	1	300	1.0	1.0	2.0	2.0	1.5	Fair	Fair	C	Fair specimen located on the southern boundary	No work required	3.6
13	Pittosporum	M	<5	4	1	100	0.5	0.5	0.5	0.5	0.5	Fair	Fair	U	Poor specimen	Fell to ground level	N/A
14	Bay Laurel	OM	<5	4	1	220	0.5	0.5	0.5	0.5	1.0	Poor	Poor	U	Poor specimen	Fell to ground level	N/A

Appendix 2 - Drawings



- 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
- Category U - Trees in such a condition that their retention in the context of the current land use cannot reasonably exceed 10 years



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Client's name

Summerdown Homes Ltd

Job Title

**58 Ferringham Lane, Ferring, Worthing
 West Sussex, BN12 5LU**

Drawing Title

Tree Layout Plan

Scale

1:200 @ A3

Drawn

NDJ

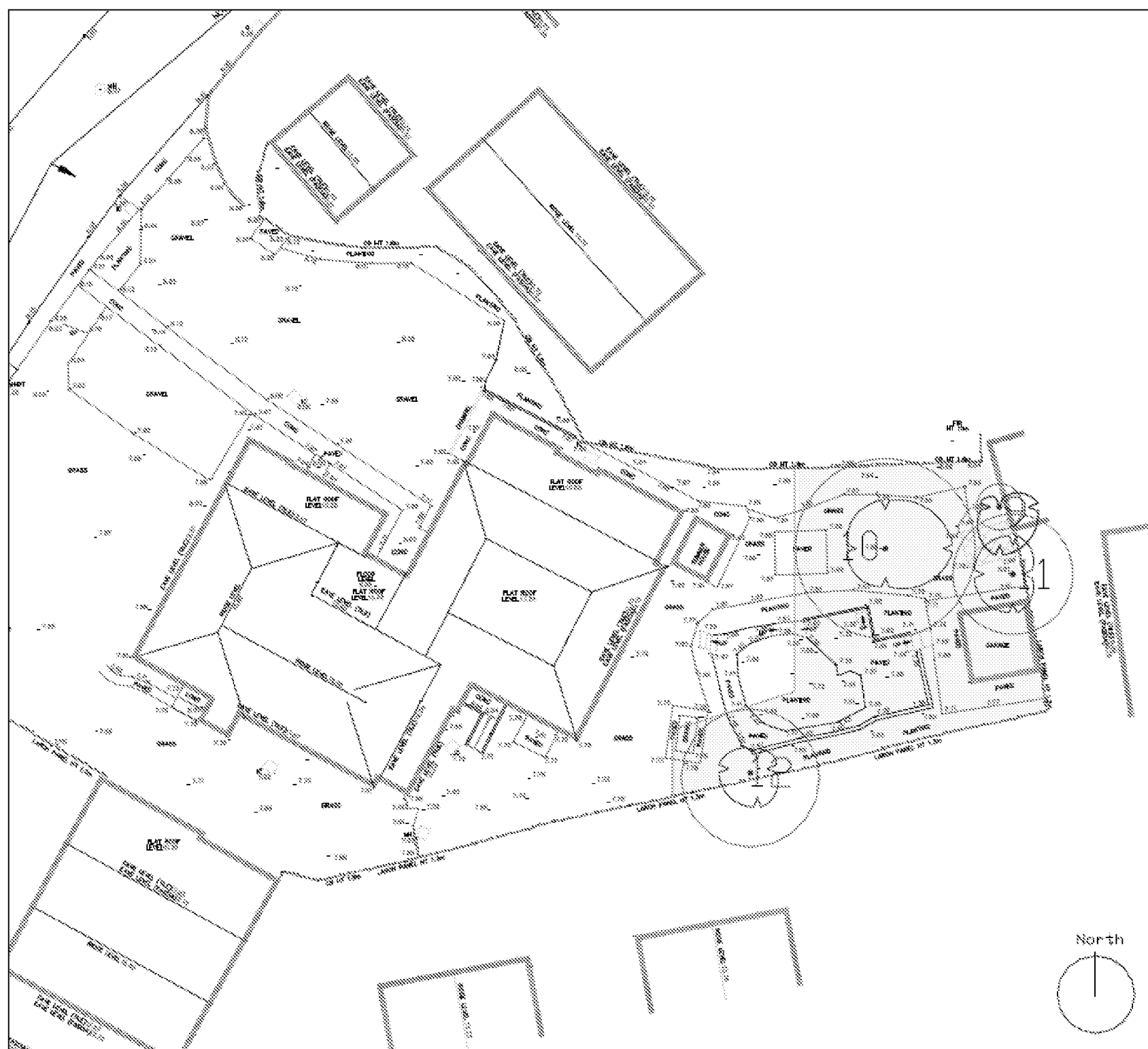
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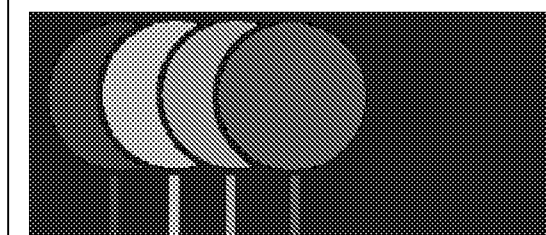
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NJCL 214 A-1

INFORMATION



-  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
-  Root Protection Area (RPA)
-  Tree Protection Fencing (TPF)



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Client's Name

Summerdown Homes Ltd

Job Title

**58 Ferringham Lane, Ferring, Worthing
 West Sussex, BN12 5LU**

Drawing Title

Tree Protection Plan

Scale

1:200 @ A3

Drawn

NDJ

Date

22.01.2018

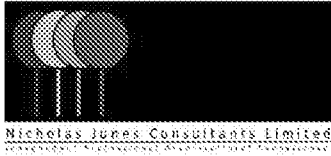
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NJCL 214 B-1

Sheet

INFORMATION

Appendix 3 – Site Supervision & Monitoring Record



Site Supervision and Monitoring Record

Site:

Sheet no.....

Visit date	Visited by	Observations	Recommendations

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1 Spring Gardens
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