



6 December 2019

**Our Reference:** DS/11419/AL  
**Client:** Mr & Mrs Palmer

## Arboricultural Impact Assessment and Method Statement for Proposed Development at 47 Clifton Road, Poole, BH14 9PW

### Introduction

Treecall Consulting is instructed by BeMa Architects, on behalf of the clients, to survey the trees at 47 Clifton Road, Poole and produce an arboricultural impact assessment and method statement for proposed development. This report is for the sole use of the client and was produced in line with the above terms of reference. It should not be used for any other purposes or by any other parties.

The following appraisal of the likely impacts of the proposed development on existing trees and recommendations for appropriate tree protection measures are based on the guidance in British Standard 5837:2012<sup>1</sup>. Details of my qualifications and experience in arboriculture are included in Appendix A.

The proposal is for alterations and extensions to the existing dwelling. The following information was provided by BeMa Architects to aid in preparing this report and is assumed to be accurate:

- Proposed Location Plan & Site Plan 097.P.01.G01 - 04.04.2017
- Proposed Lower Ground Floor Plan 097.P.01.G02 - 04.04.2017
- Proposed Ground Floor Plan 097.P.01.G03 - 04.04.2017
- Proposed First Floor Plan 097.P.01.G04 - 04.04.2017
- Proposed Second Floor Plan 097.P.01.G05 - 04.04.2017
- Proposed Roof Plan 097.P.01.G06 - 04.04.2017
- Proposed Elevations 097.P.03.G01, 097.P.03.G02, 097.P.03.G03, 097.P.03.G04 - 04.04.2017

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<sup>1</sup> British Standards Institution, 2012. *Trees in relation to design, demolition and construction – Recommendations*. London: BSI Standards Limited.

One individual tree and five tree groups located on and adjacent to the site were inspected from ground level and these are plotted on plan TC1, Appendix B. No samples of trees or soil were taken and no internal investigations of the trees were carried out. All trees were categorised according to the system set out in British Standard 5837:2012. Tree T1, T2g, T5g & T6g are in the 'B' category and the remainder of the trees are in the 'C' category. Details of all these trees are included in Appendix D.

### **Arboricultural Impact Assessment**

Trees T4g are small, low quality trees. Consent to remove them was approved under grant of planning permission APP/19/00080/F. They are growing near the adjacent property and should be removed, regardless of the proposed scheme.

The existing driveway is hard surfaced and can be reused. If it is to be upgraded, to remedy disruptions, it can be resurfaced or reinstalled using an above ground cellular confinement system, finished with a permeable surface. This will reduce the likelihood of root damage, soil compaction and future issues with roots displacing the surface. Providing the arboricultural method statement, included on plan TC1, Appendix B is followed during installation, damage to tree roots can be kept to acceptable levels.

The remainder of the proposed development is located a significant distance away from tree root protection areas and crown spreads. Therefore, potential impacts are limited to soil compaction or contamination and damage to stems and branches resulting from general construction activities. These impacts can be minimised with the use of protective fencing. The arboricultural method statement included on plan TC1, Appendix B sets out all of the tree protection measures and working methodology for the site.

Andy Luddington  
Dip Arb L6 (ABC), Tech Cert (ArborA), NDF (Btec), MArborA

Arboricultural Consultant



## Appendix A: Qualifications and Experience

### Andy Luddington

**Dip Arb L6 (ABC), Tech Cert (ArborA), NDF (Btec), MArborA**

Andy has achieved the Awarding Body Consortium Level 6 Diploma in Arboriculture, which is endorsed by the Royal Forestry Society and is the premier qualification within the arboricultural profession. He also holds the Arboricultural Association Technician's Certificate in Arboriculture, the BTEC National Diploma in Forestry, the LANTRA professional tree inspection certificate and the International Society of Arboriculture (ISA) Tree Risk Assessment Qualification (TRAQ). He is a Professional member of the Arboricultural Association

He has worked in the arboricultural industry for 17 years, starting as a climbing arborist with an Arboricultural Association approved tree contractor based in the New Forest.

Between 2003 and 2012 he worked for Southampton City Council, New Forest District Council and the Borough of Poole where he gained valuable experience in managing council owned trees, making and administering tree preservation orders, consulting on development proposals and attending court as an expert witness.

In 2012 Andy joined Treecall Consulting as an Arboricultural Consultant bringing his public-sector planning and enforcement expertise to the private sector.

The information presented in this report is based on the information provided and site observations. Conclusions and recommendations are the result of experience within the arboricultural industry.



## Appendix B: Plan TC1

Plan TC1

**Title:** Plan TC1, Tree Protection Plan and  
Arboricultural Method Statement

**Date:** 6 December 2019

**Scale:** 1:200 @ A1





**Arboricultural Method Statement**

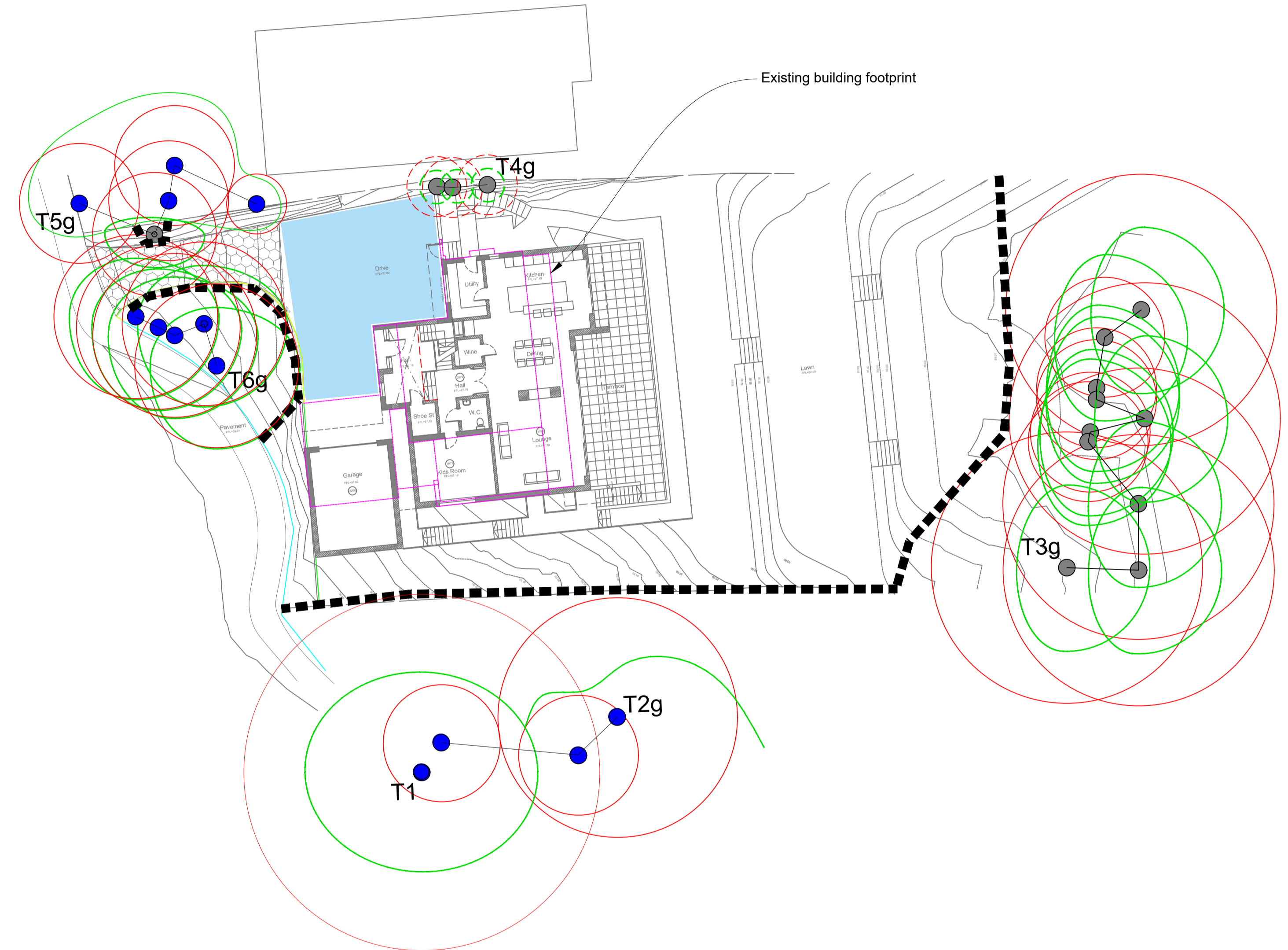
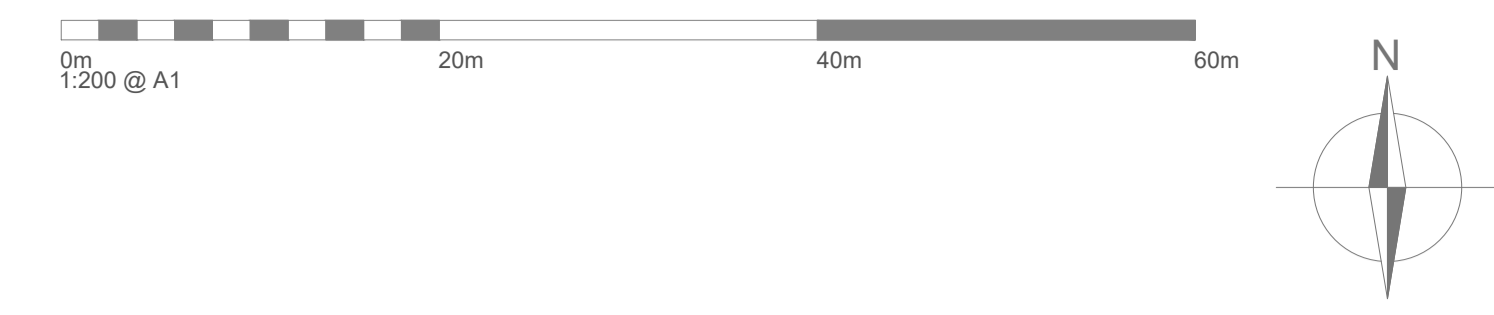
- 1 This report is a working document to aid in finalising an effective specification for tree-sensitive operations. It must be retained on site and be available to the site manager/foreman as a reference during construction.
- 2 The details in this method statement may include work to protected trees, consent for which is deemed to be granted if it is approved as part of a planning decision.
- 3 Failure to comply with the details in this arboricultural method statement could result in enforcement action being taken by the local planning authority.
- 4 **Tree Surgery**
- 4.1 The following works to trees are necessary:
  - T4g - Fell to ground level.
- 4.2 The legal Duty of Care requires that all works specified in this report should be carried out by qualified, arboricultural contractors working according to Health & Safety Executive guidelines. All work must be carried out to arboricultural industry best practice and in accordance with BS 3998:2010 'Tree work - Recommendations'. All tree management work must take account of the Wildlife and Countryside Act, 1981, as amended by the Countryside and Rights of Way Act 2000, and the Conservation of Habitats and Species Regulations 2017. This legislation makes it a criminal offence to disturb the nests and to injure or kill nesting birds or bats.
- 5 **Tree Protection Fencing**
- 5.1 Tree protection fencing, complying with British Standard 5837:2012 'Trees in relation to design, demolition and construction - Recommendations', must be erected in the positions shown on the plan, opposite, prior to commencement of any works on site and remain as an effective barrier and in position until the end of the construction phase or until the project arboriculturalist, or local planning authority provides written authority for its removal.
- 5.2 See illustrations below for specification of the tree protection fencing to be erected. Illustration showing tree protection barrier must be installed around trunk of Scots pine in T5g.
- 6 **Installation of a Cellular Confinement System**
- 6.1 The existing drive must be upgraded using a cellular confinement system. The minimum area subject to this treatment is shown hatched in grey.
- 6.2 The cellular confinement system specification below is a general one and a qualified structural engineer or system supplier must provide definitive details about the appropriate specification. This depends on the soil characteristics and expected loads and so is beyond the remit of this report.
- 6.3 There is a variety of cellular confinement products available, but only those constructed of high density polyethylene (HDPE) with a rigid and robust construction should be used. It is important to only use products which have been independently tested and been found to preserve the bulk density of underlying soils.
- 6.4 Any surface vegetation must be removed using a herbicide suitable for the specific vegetation and that is not harmful to the tree root system. All herbicides must be used in accordance with current regulations and to best industry practice.
- 6.5 If there are signs that tree roots are growing within the profile of the proposed footpath or workshop base, they must be exposed using hand tools only for inspection by the project arboriculturalist. If roots are to be retained, sharp sand or grit must be backfilled around them before any further surfacing work is carried out.
- 6.6 Any roots of diameter greater than 25mm that are not to be retained must be pruned under the supervision of the project arboriculturalist using sharp tools and in accordance with BS 3998:2010 'Tree work - Recommendations'. (Roots of smaller diameter must also be removed carefully but do not specifically require the presence of the project arboriculturalist.)
- 6.7 Hollows must be filled using sharp sand to provide a level surface onto which the geotextile can be laid.
- 6.8 The prepared ground must be covered using a non-woven geotextile fabric, overlapping all joints by 300mm.
- 6.9 The cellular confinement panels must be expanded to their full length and pinned with staking pins to keep the cells open. Adjacent panels must be stapled together to create a continuous mattress. Each open cell must be filled with a no fines fill of crushed stone (granite, flint or basalt). Where panels of 200mm depth are used, a stone of 20-40mm diameter must be used and where panels of 100mm depth are used 4-20mm diameter stone must be used. (Panels of 150mm may use either size of stone.) Cells must be overcharged by approximately 50mm to protect the top edges of the panel from wear. A whacker plate must not be used to compact the stone.
- 6.10 Timber edging can be installed using treated timber boards held in place by wooden pegs. Soil should be placed against the timber edge and battered to provide a slope between the final surface and the existing soil level. Where there is an existing edge that can be used this will avoid or minimise excavations and tree root damage.
- 6.11 **Surfacing Options**
- Porous Asphalt:  
Place 50mm surcharge of the granular material above the cellular confinement panels and lay the bitumen base and wearing courses onto this rough surface.
- Loose Gravel:  
Place second layer of geotextile fabric over the infilled cellular confinement panels. Place decorative aggregate to required depth. NOTE: A treated timber edge must be provided to restrict gravel movement.
- Resin Bound Gravel:  
Place 50mm surcharge of the granular material above the cellular confinement system and lay a binder course of porous asphalt onto this rough surface, before adding the final resin bound wearing course.
- 7 **General Construction Management**
- 7.1 There must be no changes to soil levels within tree root protection areas.
- 7.2 All materials must be transported to site using manual methods only. No machinery or vehicles are permitted within root protection areas of trees.
- 7.3 No fires are permitted to be set within the site.
- 7.4 Cement mixing must be carried out only where there is no significant risk of contamination of tree root systems. No cement mixing is allowed within 10m of trees to be retained. If cement mixing is unavoidable within 10m of any retained tree it must be contained in a banded area, as illustrated below.
- 7.5 Cranes must only be used where there is no possibility of them damaging overhanging branches.

- 8 **Underground Services**
- 8.1 Existing underground services must be reused wherever practicable. Excavations for new underground services must be carried out in a way that avoids significant damage to tree root systems. At the time of planning this installation work the project arboriculturalist must be consulted.
- 8.2 New underground services must be installed using either trenchless insertion methods, such as moiling, with entry and retrieval pits being located outside of tree root protection areas or hand dug using the guidance provided by National Joint Utilities Group Volume 4 'Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees'.
- 8.3 Surface water drains and soakaways must be located outside tree root protection areas to avoid damage to roots during excavation. Suitable locations for new soakaways and a suggested route for new services are shown on the plan.
- 8.4 NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees - Issue 2

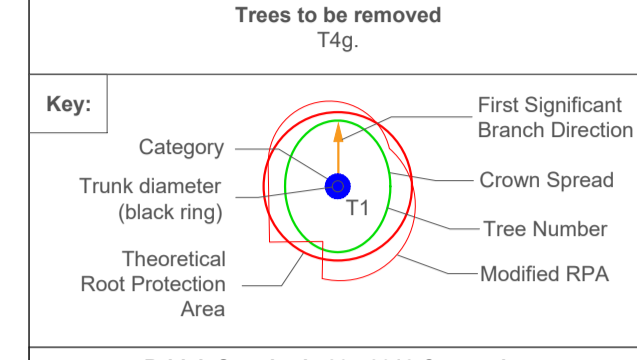
**PROHIBITED ZONE - 1m from trunk.**  
Excavations of any kind must not be undertaken within this zone unless full consultation with Local Authority Tree Officer is undertaken. Materials, plant and spoil must not be stored within this zone.

**PRECAUTIONARY ZONE - 4 x tree circumference.**  
Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult with local authority tree officer if in any doubt.

**PERMITTED ZONE - outside of precautionary zone.**  
Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.



<b>Title:</b>	Plan TC1, Tree Protection Plan & Arboricultural Method Statement
<b>Site:</b>	47 Clifton Road, Poole, BH14 9PW
<b>TC Ref:</b>	DS/11419/AL
<b>Date:</b>	6 December 2019
<b>Scale:</b>	1:200 @ A1



British Standard 5837:2012 Categories	
<span style="color: green;">●</span>	'A' category trees are those of high quality.
<span style="color: blue;">●</span>	'B' category trees are those of moderate quality.
<span style="color: grey;">●</span>	'C' category trees are those of low quality or young trees with a stem diameter below 150mm.
<span style="color: red;">●</span>	'U' category trees are those that are unsuitable for retention.

Tree protection fencing to be erected prior to the commencement of any works on the site.

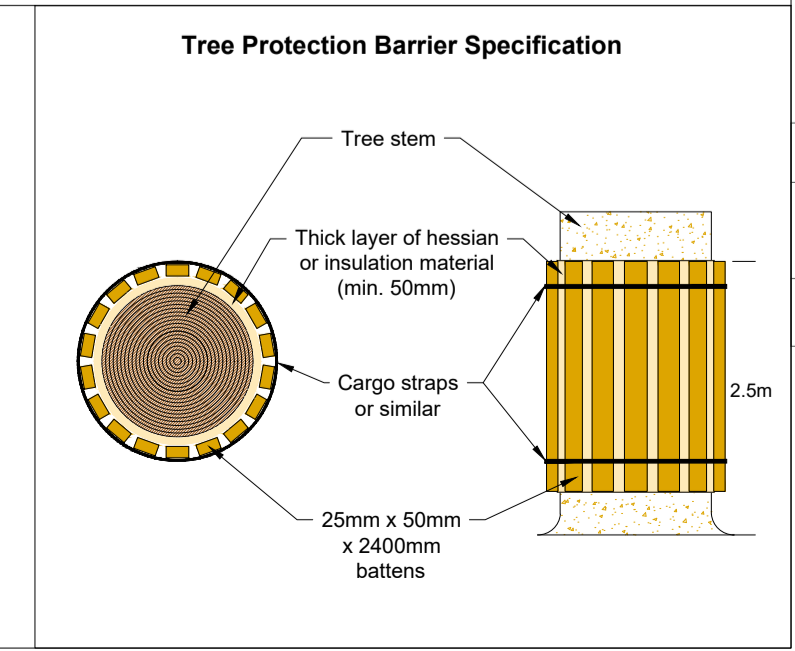
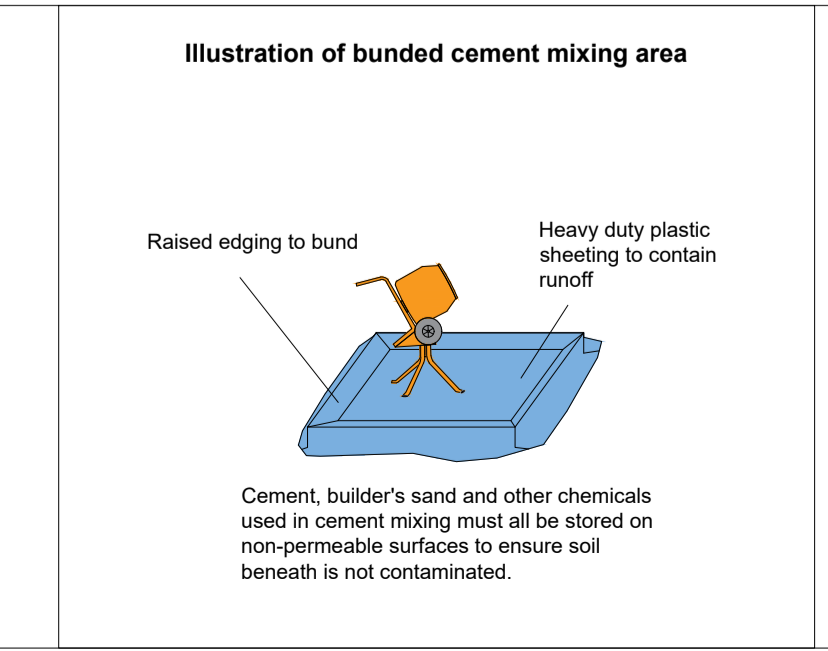
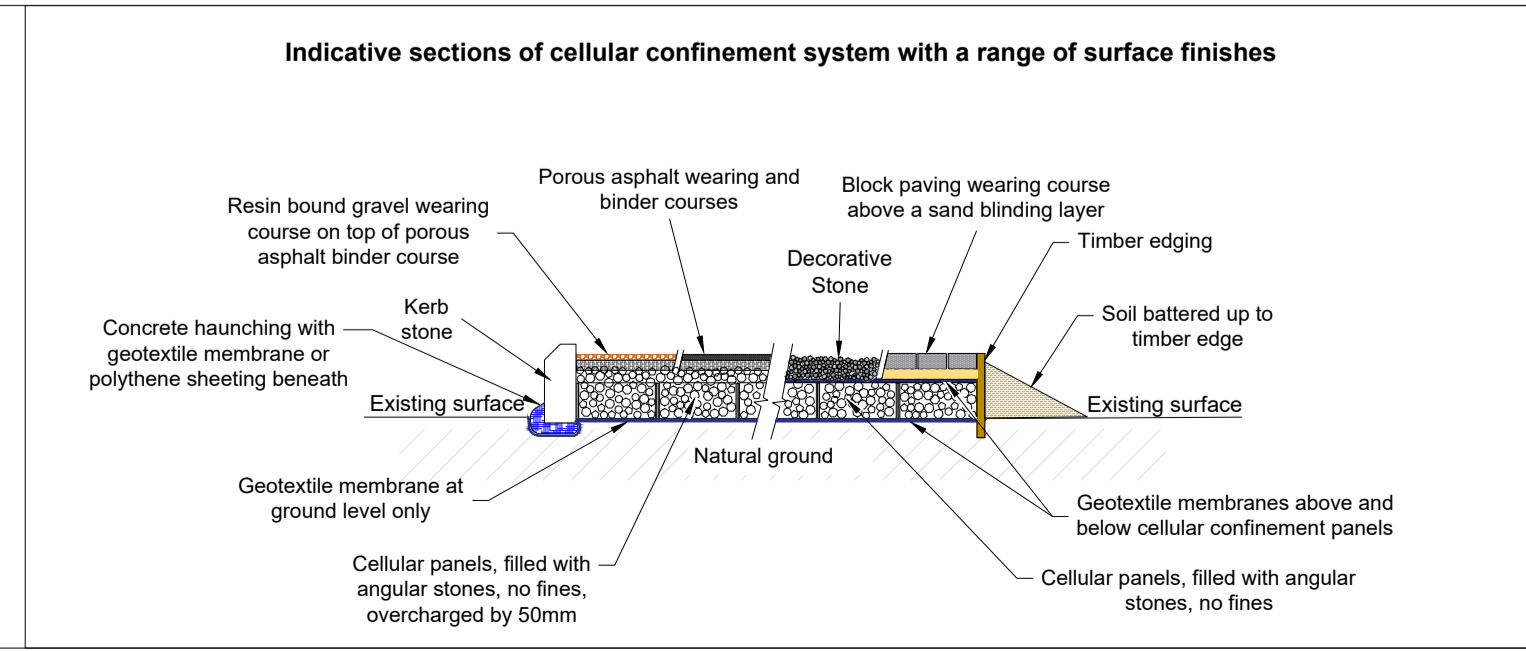
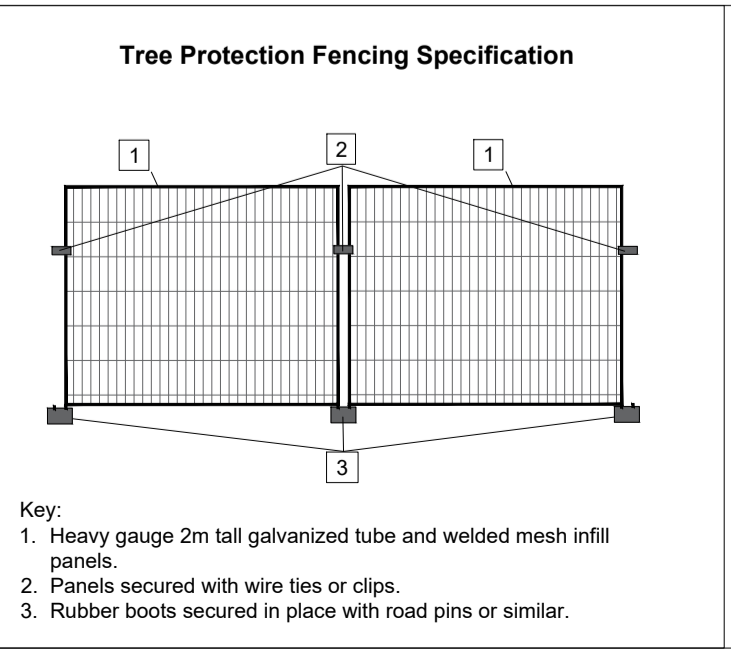
Minimum area where a cellular confinement system must be installed.

Suggested location for materials, worker facilities and site cabins.

Phasing of Arboricultural Operations	
Steps	Operation
1	Carry out tree work.
2	Install tree protection fencing in the positions shown on the plan.
3	Hold pre-commencement site meeting.
4	Install site cabins and work welfare facilities.
5	Construct approved alterations and extensions to the existing building.
6	Install underground services.
7	Remove site cabins and materials from site.
8	Install cellular confinement system in the position shown on the plan.
9	Remove tree protection measures.

Highlighted rows show stages requiring supervision by the project arboriculturalist.

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**Limitations of Use**

This plan is based on the topographical and site layout plans provided. All measurements must be checked with these plans and appropriate documents.

This plan has been prepared in colour. If printed in black and white some details may be obscured.

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## Appendix C: Contact Information and Supervision

### C1 Contact information (complete as required):

Role	Company / Organisation	Name	Phone Number
Contractor			
Architect	BeMa Architects	Becky Smith	07989 535796
Arboricultural Consultant	Trecall Consulting Ltd	Andy Luddington	01202 462602
Planning Officer	BCP Council		
Arboricultural Officer		Andrew Osborne	01202 633348
-	Wrekin Products Ltd	-	01543 440440
-	Geosynthetics	-	01455 617139
-	New Milton Sand & Ballast	-	01425 610566
-	DAY Group Ltd	-	0845 065 4655

### C2 Supervision & Arboricultural Support

C2.1 The project arboriculturist must supervise or be involved during the following points in the construction process;

Operation	TC Ref	Date Issued
Pre-commencement site meeting.		
At the time of planning all underground services within the site.		
As any other arboricultural issues arise.		

C2.2 Following each site visit a site note must be issued to the client and the local planning authority.





## Appendix D: Tree Schedule & Key

Key:

<b>Tree no.</b>	Number assigned to tree from survey. Refer to plan for tree location.	
<b>Species</b>	Tree species, identified as clearly as possible according to common or botanical name.	
<b>Stem diameters</b>	Stem diameter measured in millimetres, to the nearest 10mm, and number of stems, taken at 1.5m above ground level, unless indicated otherwise within 'Note'.	
<b>Canopy spread</b>	Extent of crown spread in the four cardinal directions.	Measurements are estimated to the nearest half metre for dimensions up to 10m and the nearest whole metre for dimensions over 10m. Dashes in FSB columns indicate that no individual branches were identified as being more significant than others.
<b>C Ht</b>	Canopy height above ground level.	
<b>Ht</b>	Height.	
<b>Life stage</b>	Estimated age of the tree. Chosen from the following categories;	
	<b>Young:</b> Tree only recently planted or established.	
	<b>Semi Mature:</b> Established tree, still young and in the first third of its safe useful life.	
	<b>Early Mature:</b> Tree in the middle third of its safe useful life, still with significant capacity for future growth.	
	<b>Mature:</b> Tree in the last third of its safe useful life and with no significant capacity for future growth.	
	<b>Over Mature:</b> Tree nearing the end of its safe useful life expectancy.	
<b>Observations</b>	Tree issues and general comments along with any appropriate management requirements.	
<b>BS Cat</b>	Relates to Table 1 of BS5837:2012 'Trees in relation to design, demolition and construction - Recommendations'	
	<b>A:</b> Trees of high quality with an estimated remaining life expectancy of at least 40 years.	
	<b>B:</b> Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	
	<b>C:</b> Trees of low quality with an estimated remaining life expectancy of at least 10 years.	
	<b>U:</b> Trees that have an expected safe useful life of less than 10 years regardless of any development proposals.	
	<b>1, 2, 3:</b> Sub-categories relating to tree, landscape or cultural values.	
<b>RPA</b>	Minimum root protection radius in metres.	
<b>Site Visit</b>	25 November 2019	
<b>Weather</b>	Clear, dry and calm. Visibility reasonable.	



**Tree Schedule**

Tree no.	Species	Stem diameters (mm)			Canopy spread (m)				C Ht (m)	Ht (m)	Life stage	Observations	BS Cat	RPA (m)
		(mm)	No of Stems	Note	N	E	S	W						
1	Maritime pine	900	1	Over ivy at 1.5m	7	6	7	6	12	21	Mature	On adjacent land. Ivy covering trunk to 12m above ground level. Large diameter deadwood in crown.	B2	10.8
2g	Sweet chestnut, Scots pine, maritime pine	500	1	Maximum	4	4	4	4	7	14	Early mature	One of each species. No apparent defects noted.	B2	6.0
3g	Monterey cypress, sweet chestnut, Scots pine, Portugal laurel, Lawson cypress	480,480	2	at 1.5m	3	5	5	5	2	16	Early mature	Four sweet chestnuts, three Lawson cypress, three laurel, one pine.	C2	8.1
4g	Holly, Lawson cypress	150	1	Maximum	1	1	1	1	0.5	8	Semi mature	One small cypress, two topped holly growing near boundary fence.	C2	1.8
5g	Scots pine, western red cedar	310	1	Maximum	3	1	3	2	7	12	Semi mature	Four Scots pines, one western red cedar. Four located on adjacent land, no access to bases. Small, suppressed crowns. Small diameter deadwood in crowns.	B/C2	3.7
6g	Scots pine	410	1	Maximum	4	3.5	5	5	3	16	Early mature	Five trees. Crown height over drive recorded. Small diameter deadwood in crowns.	B2	4.9

Tree Schedule





## Common Tree Names

Common Name	Scientific Name
Holly	<i>Ilex aquifolium</i>
Lawson cypress	<i>Chamaecyparis lawsoniana</i>
Maritime pine	<i>Pinus pinaster</i>
Monterey cypress	<i>Cupressus macrocarpa</i>
Portugal laurel	<i>Prunus lusitanica</i>
Scots pine	<i>Pinus sylvestris</i>
Sweet chestnut	<i>Castanea sativa</i>
Western red cedar	<i>Thuja plicata</i>

Tree Schedule: common tree names

V1. 6.12 AC  
V2. 6.12  
V3.

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