

Berewood, Waterlooville – Phase 3B and 5A

Construction Environmental Management Plan (CEMP)

October 2021

Rev -



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1. Introduction

The parcels of the development under this Reserved Matters application are phases 3B and 5A of the Grainger PLC Berewood Development in Waterloo.

The works undertaken relate to the construction and implementation of 266 units over these two phases. The two phases will be run simultaneously and will be managed the same, in line with our standard procedures, this CEMP and the currently approved CEMP. We will seek to build an initial circa 20 units in the first year and an approx. 65units per year thereafter, giving an approx. 2.5 year build programme (subject to planning approval(s)).

2. CEMP information

Prior to works commencing, all relevant legislation, including requirements for licences, permits and/or consents shall be identified, and the appointed main contractor will be required to provide details of how compliance is to be achieved, as part of the delivery of the CEMP. Grainger CEMP will also be referred to at all times for site wide construction management

3. Construction Logistics and Site Organisation Plan

All liaison in the first instance should be directed to the Construction Director who will be office based until a site manager is appointed. Once appointed, the site manager will be responsible for the day to day running of the development.

Should the Site Manager be uncontactable, the Contracts Manager will form a backup to ensure that the day to day running of the development is in line with this document and any issues that the Site Manager is unable to resolve are dealt with in a proficient manner.

3.1. Contact List

Construction Director: Paul Cummins

Contracts Manager: Mobile : TBC

Regional Office Number Office: 01635 31555

3.2. Parking and turning of operative, construction and visitor vehicles

Within the compound/storage area all loading and unloading will be undertaken via forklift. All contractors and visitors will be issued instruction to ensure they use the correct routes for access to the parcels via London Road/Houghton Avenue.

Any large vehicles, that are required to reverse will be supervised when reversing via a banksman, but within the development boundary. All deliveries or construction traffic will use the dedicated routes as shown in Appendix 1. Site deliveries will only take place during the hours of site operation.

4. Movement and Storage of Plant and Materials

4.1. Loading and Unloading of plant and materials

All deliveries will enter the development via Houghton Avenue and Winston Lane as per the outline permission. Once at the compound all loading and unloading will be undertaken via forklift or hiab. Materials will be moved around the development via forklift/telehandler on designated haul roads.

4.2. Storage of Plant and Materials

Plant and Materials will be stored on hardstanding in a designated area as per the Appendix 1. All possible pollutants will be stored and handled in the correct manor with spill kits available. All static plant will be stored with drip trays in place where possible to prevent ground contamination. Plant and machinery will be kept within the compound and secure containers for materials outside of the approved working hours.

5. Piling Techniques

Piling will be engineered by a specialist and will most likely consist of vibro-ground improvement measures rather than traditional piling, specifically to phase 5a only. Prior to commencement a detailed scope of works and designs will be produced by the specialist for use on site.

6. Programme of works including traffic management

All construction traffic will access the development via the previously approved route (Houghton Avenue) to deliver materials to the Bloor Homes compounds. Deliveries will be unloaded within the compound and escorted out via a banksman.

The construction route is shown within appendix 1 along with the haul roads. The haul roads will evolve overtime with construction and as such this document will be also be updated to show these.

All deliveries and building works will only be carried out between the hours of 0800 and 1800 hours Monday to Friday and 0800 and 1300 hours Saturday and no time on Sundays or recognised public holidays.

7. Boundary Hoarding and Lighting

Timber hoarding and heras fencing will be used to enclose the development whilst construction works are on-going. Drawings in Appendix 1 indicates the proposed fencing locations around the development.

During construction, no external lighting will be used on the site generally with the exception of security lighting to the compound and sales areas.

It is company policy that no construction works are undertaken with external floodlighting in place. During winter months dark working will be restricted to the permitted working times on internal plot works only.

8. Protection of Trees, Hedgerows and other natural Features to be retained.

Trees to be retained are illustrated within the Arboricultural Methods Statements included in Appendix 2. It is proposed that throughout construction works the tree protection fencing will be in place and will be integral to the site security.

9. Details of Dust and Noise Mitigation

9.1. Dust Suppression

The construction works will include various construction activities, which all have the potential to generate particulate emissions arising from dust. The following dust suppression measures will be utilised on site throughout the duration of all works.

- Minimise dust generating activities;
- Use water as dust suppressant where applicable;
- The Site will be damped down by bowser with an appropriate spray attachment when required;
- All stockpiles of materials for reuse will be “thatched” to remain in best condition for reuse and to prevent wind erosion; and

- Re-vegetate earthworks and exposed areas.

9.2. Noise Reduction

Due to the nature of the building process it is inevitable that a temporary increase in noise will be experienced during the construction phase. It is anticipated that there will be short-term noise level implications for nearby residential properties, but noise levels will be within acceptable construction levels. The construction works will comply with BS 5228: Noise and Vibration control on construction and open sites and will be monitored by Mayor Brown in line with the previously approved CEMP documents. Noise from our construction activities will be reduced/controlled by utilising the following methods:

- Plant and Equipment
 - Modern, silenced and well maintained plant will be used at all times, conforming to standards set in the EU Directives;
 - Equipment and vehicles to be shut down when not in use;
 - All stationary plant is to be located as far as possible from occupied dwellings as agreed with the site manager
 - Generators and water pumps required for 24-hour operation will be silenced or screened as appropriate; and
 - Where possible, mains electricity to be used instead of generators.
- On-site haul roads will be constructed and maintained so that the road surface is smooth and the gradient minimal to minimise noise and vibration.
- Localised, temporary noise screening may be erected within the site between the groundwork's zones and adjacent properties. So that the screening is affective, the screening should be erected near to the noise source and should interrupt the line of sight between source and receiver. An imperforate barrier, such as site hoarding some 2 to 2.5m high may achieve this. Once construction works in this area have been completed, the temporary noise screening could be removed.

9.3. Method of working

- Best Practice means would be employed as defined in Section 72 of The Control of Pollution Act 1974 to minimise noise and/or vibration.
- A representative of the Contractor or Site Manager should regularly liaise with the neighbouring community in the area of the proposed development and advise the community of forthcoming works.

9.4. Management of works programme

- Wherever practicable, noisy works, which are audible at the site boundary, will be undertaken during the following hours; between 08:00 and 18:00 Monday to Friday and between 08:00 and 13:00 on Saturdays
- Routes and programming for the transport of construction materials, fill, personnel etc. are to be carefully considered in order to minimise the overall noise impact generated by these movements; and
- Shouting and raised voices shall be kept to a minimum.
- Due to the distance from the school located on the wider development, deliveries to the phase will be programmed in to avoid school arrival and departure times
-

10. Measures to Protect the Listed Building as necessary

This does not form part of our works within the phase we are looking to discharge.

11. Mud prevention measures for vehicles leaving site.

The use of a wheel wash facility will be employed at the construction site entrance / exit with no vehicles leaving the site until the vehicles wheels are clean. The use of road sweepers will also be employed to keep roads inside and outside the development clean and tidy. Due to the size of the phase, road sweeper will be used once a week.

The facility will be available for use at the site entrance (of any build phase) when the construction phase commences. For indicative positioning please refer to Appendix 1. All vehicles will be inspected when leaving site by a site operative positioned at the site entrance/exit

12. Watercourse prevention measures

Materials used in the construction process such as oil, chemicals, cement, lime, cleaning materials and plant have the potential to cause serious pollution. Therefore, the Environment Agency's Pollution Prevention Guidance (including Pollution Prevention Guidance 5 (Works and Maintenance in or Near Water)) and other relevant guidance will be followed during the handling and storage of such materials.

Refuelling of plant will take place in designated areas on an impermeable surface and away from any drains or watercourses. A spill kit will be available for use in the event of an accident. Refuelling will always be carried out in a controlled manner with absorbent materials available to clean and spillages. All deliveries on site will be supervised by a responsible person and storage tank levels will be checked before and during delivery to prevent overfilling and that the produce that is delivered is to the correct storage tank.

A bunded storage area will be located on site and will be provided for the duration of the construction period for the storage of oils, fuels, chemicals and other hazardous construction materials (if required). The base and bund walls will be impermeable to the material stored and will be of adequate capacity. Storage containers will be clearly labelled and a notice displayed. Storage areas and containers will be protected against vandalism and unauthorised interference and will be turned off and securely locked when not in use.

Leaking or empty oil drums will be removed from the site immediately and disposed of via a licensed waste disposal contractor.

Procedures will be set in place to respond to any emergency incidents, which may occur on site. All appropriate staff will be trained and made aware of the spill contingency plan set in place. In the event of an incident the Environment Agency will be notified immediately.

Suitable measures will be put in place to prevent silt contamination of any water course i.e. the use of materials to protect gulley's, regular inspections of drainage and toolbox talks with site personnel.

13. Handling and Management of Construction Waste

A monitoring and auditing procedure will be implemented to ensure the environmental protection measures outlined within the CEMP are executed, and to aim for continual improvement of environmental performance during the construction works.

Should updates or questions be raised before this timeframe all liaison in the first instance should be directed to the Site Manager who will be site-based and be responsible for the day to day running of the development.

Each contractor will be responsible for training their workforce on waste management procedures.

The Principal Contractor will ensure that the site workers are provided with a suitable site induction and encourage contractors to include appropriate waste reduction and recycling training for their workers.

Where possible, the Principal Contractor will arrange for 'toolbox talks' on waste management practices at the site.

The Principal Contractor will appoint a Waste Champion who will be the main point of contact should any site workers have queries regarding the management of waste materials at the project.

Waste streams will be segregated on-site to aid in the recycling of materials, in line with our standard practices. The waste management contractor(s) will be responsible for the training of their workforce to enable effective segregation of materials for reuse or recycling.

To promote the waste management message at the project there will be signs and posters around the site and welfare and office areas showing waste containers and waste reduction messages.

14. Surface Water Run Off

Due to topography of the sites, a natural overland flow of surface water may occur toward existing watercourses/drainage networks, this may result in minor contamination collection, due to the mitigation mentioned above, any contamination of existing systems should be limited to accidents only and dealt with accordingly. If sources of contamination are identified during construction, suitable interceptors and treatment areas will be identified and implemented as soon as possible.

15. Summary

This document has been developed in order to support a planning application for Phases 3B & 5A. This document outlines the specific measures that will be adopted in order to minimise the environmental impacts associated with construction processes and describes the specific measures that will be adopted in order to minimise the environmental impacts associated with construction processes.

The following key environmental issues will require consideration/ protection during the construction works;

- Protection of valuable ecological features including trees, hedgerows and the local water course
- Emissions of dust from the construction works and pollutants from construction vehicle movements;
- Increase in noise levels as a result of the construction works and construction movements;
- Community disturbance, including to residents within and near the site, users of the surrounding highway network and nearby schools and local businesses;

This CEMP identifies a series of management methods and procedures that needs to be implemented during the construction works to protect the features listed above, in accordance with the legal requirements and best practice measures.

Appendix 1 – CEMP Plans

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THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SEPARATE GROUP / SITE SPECIFIC CONSTRUCTION NOTES AND MATERIALS SPECIFICATION TOGETHER WITH THE GENERIC HOUSE TYPE DESIGN RISK ASSESSMENT.

- Site Location
- A3(M) Access
- Site Access
- Compound Location



Rev	Amendments	Drn	Chk	App	Date
Bloor Homes Southern River View House, First Avenue, Newbury Business Park, London Road, Newbury, Berkshire, RG14 2PS Telephone: 01635 31555 Web: www.BloorHomes.com					
Job Title		BEREWOOD WATERLOOVILLE			
Drawing Title		BEREWOOD - CEMP SITE ACCESS 3B			
Scale		Date			
NTS @ A1		OCTOBER 2021			
Drawn		Checked			
CH		CH			
Job No		Drawing No		Rev	
SO141		SO141-CEMP-001		-	

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THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SEPARATE GROUP / SITE SPECIFIC CONSTRUCTION NOTES AND MATERIALS SPECIFICATION TOGETHER WITH THE GENERIC HOUSE TYPE DESIGN RISK ASSESSMENT.

- Site Location
- A3(M) Access
- Site Access
- Compound Location



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Rev	Amendments	Drn	Chk	App	Date

BLOOR HOMES

Bloor Homes Southern
River View House, First Avenue, Newbury
Business Park, London Road, Newbury,
Berkshire, RG14 2PS

Telephone: 01635 31555
Web: www.BloorHomes.com

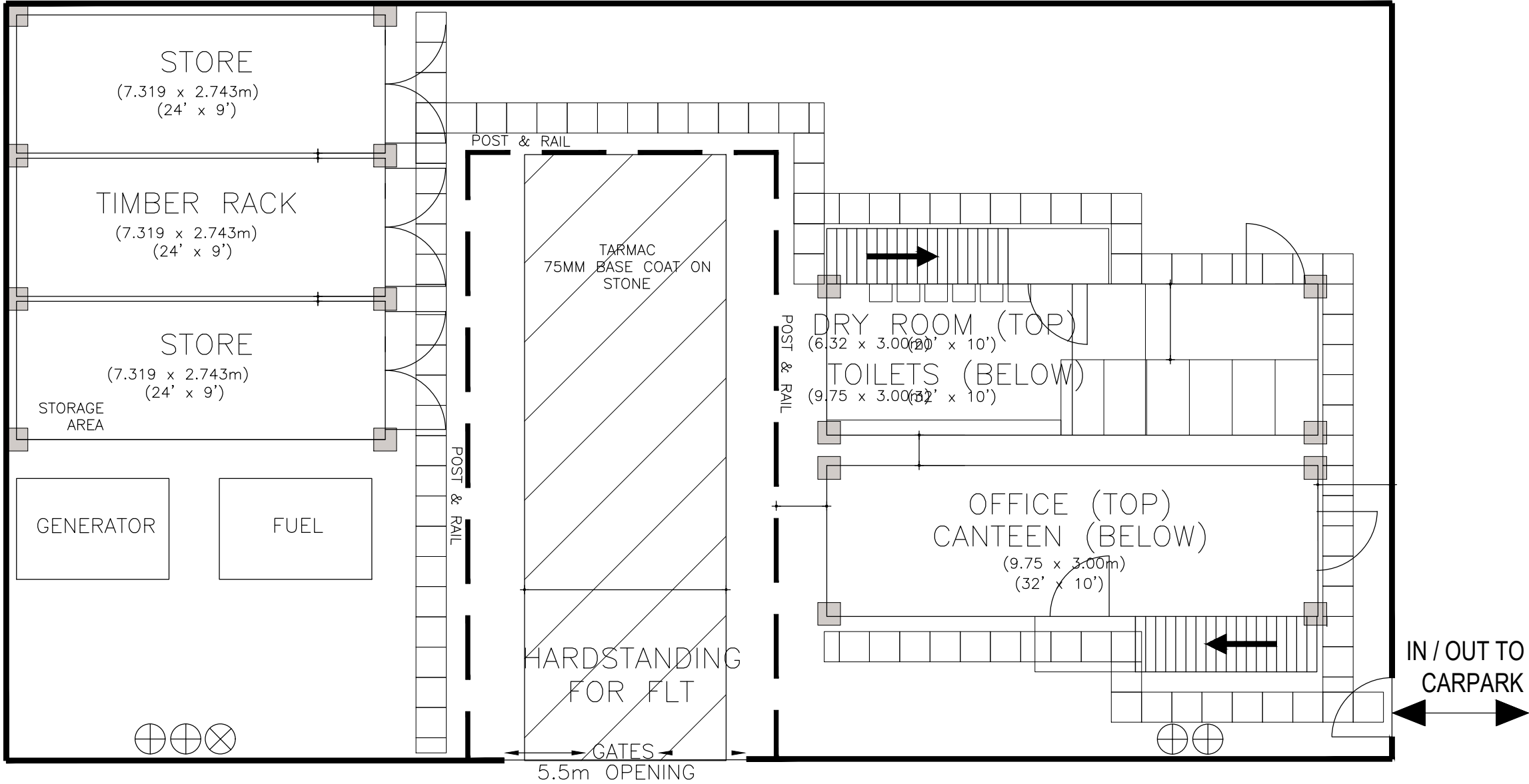
Job Title
BEREWOOD
WATERLOOVILLE

Drawing Title
BEREWOOD - CEMP
SITE ACCESS 5A

Scale	Date	
NTS @ A1	OCTOBER 2021	
Drawn	Checked	
CH	CH	
Job No	Drawing No	Rev
SO141	SO141-CEMP-002	-

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THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SEPARATE GROUP / SITE SPECIFIC CONSTRUCTION NOTES AND MATERIALS SPECIFICATION TOGETHER WITH THE GENERIC HOUSE TYPE DESIGN RISK ASSESSMENT.



Rev	Amendments	Drn	Chk	App	Date

BLOOR HOMES

Bloor Homes Southern
River View House, First Avenue, Newbury
Business Park, London Road, Newbury,
Berkshire, RG14 2PS
Telephone: 01635 31555
Web: www.BloorHomes.com

Job Title
BEREWOOD
WATERLOOVILLE

Drawing Title
BEREWOOD - CEMP
TYPICAL COMPOUND LAYOUT

Scale	1:100 @A3	Date	OCTOBER 2021
Drawn	CH	Checked	CH
Job No	SO141	Drawing No	SO141-CEMP-003
		Rev	-

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SEPARATE GROUP / SITE SPECIFIC CONSTRUCTION NOTES AND MATERIALS SPECIFICATION TOGETHER WITH THE GENERIC HOUSE TYPE DESIGN RISK ASSESSMENT.

Compound

Sales area

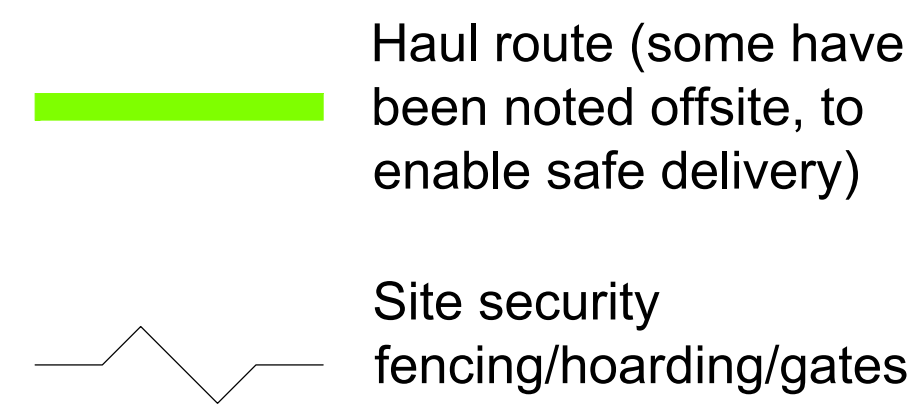
Allotment Gardens

ACCESS LINK INTO FUTURE DEVELOPMENT

RPA fencing installed
inline with Barrel
Arboreal Assessment

Rev	Amendments	Drm	Chk	App	Date
					
Bloor Homes Southern River View House, First Avenue, Newbury Business Park, London Road, Newbury, Berkshire, RG14 2PS					
				Telephone: 01635 31555 Web: www.BloorHomes.com	
Job Title		BEREWOOD WATERLOOVILLE			
Drawing Title		BEREWOOD - CEMP BUILD ROUTE 3B			
Scale		Date			
1:500 @A1		OCTOBER 2021			
Drawn		Checked			
CH		CH			
Job No		Drawing No		Rev	
SO141		SO141-CEMP-004		-	

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SEPARATE GROUP / SITE SPECIFIC CONSTRUCTION NOTES AND MATERIALS SPECIFICATION TOGETHER WITH THE GENERIC HOUSE TYPE DESIGN RISK ASSESSMENT.



BLOOR HOMES

Job Title	BEREWOOD
	WATERLOOVILLE

BEREWOOD - CEMPT

BUILD ROUTE 5A

Drawn	Checked
CH	CH

Job No	Drawing No	Rev
SO141	SO141-CEMP-005	-

Appendix 2 – Arboricultural Method Statements



Arboricultural assessment & method statement

Berewood, Waterlooville, Hampshire

David Cashman DipArb CUEW FARborA MICFor RCarborA

12th October 2021

21154-AA-DC

Site location and report purpose

Site location



This aerial image is supplied courtesy of Google. The yellow line shows the approximate site boundary and is illustrative only.

Report purpose

This arboricultural assessment report provides sufficient information for the Local Planning Authority (LPA) to consider the effect of the proposed development on local character from a tree perspective. It is fully compliant with the BS 5837 advice relating to the planning application stage of the process and it meets national standard planning application validation requirements.

More specifically, the development proposal is to construct a mixed residential use development at Phase 3 as part of the wider development at Berewood, Waterlooville, Hampshire.

This report includes:

- A **Tree protection plan** illustrating tree locations, categories, the location of the proposed development, and the proposed tree protection measures.
- An **Arboricultural assessment** (section 1 of the report) providing an analysis of the tree issues to assist the LPA in assessing the impact on local character.



Site location and report purpose

- An **Arboricultural method statement** (section 2 of the report) describing how retained trees will be protected and managed during the development activity.
- **Appendices** (**Appendix 1** – Background administrative information and data collection; **Appendix 2** – Tree schedule and explanatory notes; and, **Appendix 3** – QR Codes for SGNs).
- A companion document to supplement the main report titled ***Manual for managing trees on development sites (Version 3.0)***, which provides explanations of how retained trees will be managed on site in the form of Site Guidance Notes (SGNs) covering the relevant issues.

1 Arboricultural assessment

1.1 Relevant background information

Barrell Tree Consultancy have carried out several tree surveys and provided tree reports for the various phases of the Berewood Development in recent years.

1.2 Table 1: Summary of trees affected and protected by the proposal

From our review of the constraints and the proposed layout, our assessment of the impact on trees, both during and after development, and those that need protection using special precautions, is summarised in Table 1:

	British Standard 5837 Category		
	A (High quality)	B (Moderate quality)	C (Low quality)
Remove	None	None	H6 (part)
Prune	None	None	H1, G5, H6, G8
Protect using special precautions See Notes below	None	T7	None
Post development considerations	None	None	None

T = Tree; H = Hedge; G = Group

Note on types of protection: All retained trees will be protected during development by using fencing, and only those requiring special precautions to limit the impact of encroachment are listed in Table 1.

1.3 The impact of tree removals on local character

No trees will be removed because of this development, a small section of H6 will be removed to facilitate the new pedestrian access to the east. There will be no impact on local character for that reason.

1.4 The impact of tree pruning on local character

The hedges on the eastern boundaries of the site comprise of mainly native mix. H1 borders the allotments and has been managed in the past to create a tight hedge. Regular trimming will be required in the longer term and is sensible management. H6 and G5 and G8 are less well managed and routine hedge management to cut back to create a restored boundary hedge will be required. This is sensible management and is required irrespective of the development proposal.

1.5 The impact of works in precautionary areas

Our assessment of the impact of encroachment into RPAs that will be managed by special precautions, is as follows:

Tree 7

There will be minor encroachment into the RPA of this tree in the form of new no-dig surfacing. We have carefully reviewed the levels in these areas and it would be feasible to install custom designed no-dig specification surfacing without causing any significant disturbance to the RPA. From our previous experience at installing such surfacing (www.barrelltreecare.co.uk/case-studies/SurfacingNearTrees.pdf), we are confident that this can be implemented without any long term detrimental impact on tree health, with the detail to be agreed as part of a planning condition. This surfacing solution is within the advice set out in BS 5837 (8.6) and would be appropriate in this situation.

1 Arboricultural assessment

In summary, if the guidance set out in SGN 7 *Excavating in RPAs* and SGN 9 *Installing/upgrading surfacing in RPAs* is observed, we believe that the proposed works can be implemented without any long-term detrimental impact on tree health, and therefore local character. All new surfacing must be installed before any construction access to prevent damage to the RPA from the construction activity.

1.6 Post development considerations

Our assessment is that there will be no adverse impacts on retained trees once the development is completed and occupied.

1.7 New tree planting to enhance local character

New tree planting is feasible as a means of supplementing retained trees and enhancing local character, which could include heavy-standard or semi-mature specimens. The final selection of species, size, and location, would be matters to be agreed with the LPA through a planning condition. All new trees will be specified and planted in accordance with the recommendations in BS 8545 (2014) *Trees: from nursery to independence in the landscape –Recommendations*. Our preliminary assessment is that there is sufficient space for new trees to be planted in locations where they will have the potential to reach a significant height without excessive inconvenience and be sustainable into the long term, significantly improving the potential of the site to contribute to local character.

1.8 Unanticipated upgrading of existing services or installation of new services

Retained trees may be adversely affected by the installation of new services and / or the upgrading of existing services if that work encroaches into their RPAs. However, it is often difficult to know the detail of service locations until the construction is in progress, and sometimes encroachment into RPAs is unavoidable. Where possible, the default approach must be to use any existing service runs and keep all new services outside RPAs. Where existing services within RPAs require upgrading, or new services must be installed in RPAs, great care must be taken to minimise any disturbance. Trenchless installation will be the preferred option, but if that is not feasible, any excavation must be carried out by hand according to the guidelines in SGN 11 *Installing services in RPAs*.

1.9 Summary of impact on local character

This proposal will only result in the loss of a small section of hedge to facilitate a new pedestrian access. There is space for tree planting and a landscaping scheme will be feasible in response to an appropriate condition. The construction activity has the potential to adversely affect further trees if proper protective measures are not taken. However, if adequate precautions to protect the retained trees are specified and implemented through the arboricultural method statement included in this report, the development proposal will have no long-term detrimental impact on tree health or the contribution of trees to character in the wider setting. Indeed, the new sustainable planting proposals will increase the potential of the site to contribute to local character well beyond the short term.

For these reasons, we conclude that the proposed development would not cause an unacceptable or adverse impact on the character and appearance of the area from a tree perspective.

2 Arboricultural method statement

2.1 Site Guidance Notes (SGNs)

This section of the report identifies which trees on this site will be protected and managed, and by what means. This site-specific summary is supplemented by more detailed explanations and descriptions of specific operations set out in the accompanying *Manual for managing trees on development sites*. That document is a compilation of 12 individual SGNs addressing the following tree protection and management issues that regularly arise in the construction phase of development:

- SGN 1 *Monitoring tree protection* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn01?stage=Stage>)
- SGN 2 *Fencing protected trees* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn02?stage=Stage>)
- SGN 3 *Ground protection* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn03?stage=Stage>)
- SGN 4 *Pollution control* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn04?stage=Stage>)
- SGN 5 *Site cranes & piling rigs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn05?stage=Stage>)
- SGN 6 *Height restrictions* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn06?stage=Stage>)
- SGN 7 *Excavating in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn07?stage=Stage>)
- SGN 8 *Removing surfacing and structures in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn08?stage=Stage>)
- SGN 9 *Installing/upgrading surfacing in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn09?stage=Stage>)
- SGN 10 *Installing structures in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn10?stage=Stage>)
- SGN 11 *Installing services in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn11?stage=Stage>)
- SGN 12 *Landscaping in RPAs* (<https://www.barrelltreecare.co.uk/resources/technical-guidance/sgn12?stage=Stage>)

NOTE: Each individual SGN can be downloaded by using the links above and the QR Code links in Appendix 3.

2.2 Identification of areas to be protected

The tree protection plan shows the areas where protective measures are necessary. The fencing location is shown by the heavy black dashed lines, with the construction exclusion zone behind as the lighter black diagonal hatch. Precautionary areas are shown by a yellow fill.

2.3 Arboricultural supervision

An arboricultural consultant will be appointed to advise on the tree management for the site and to attend:

- a pre-commencement meeting before any work starts;
- regular supervision visits to oversee the agreed tree protection, as agreed at the pre-commencement meeting; and

2 Arboricultural method statement

- further supervision visits, as necessary, to oversee any unexpected works that could affect trees.

The detail of how the arboricultural supervision will be carried out is explained in SGN 1 *Monitoring tree protection* in the accompanying Manual.

2.4 Table 2: Summary of the site operations requiring arboricultural input

For this site, arboricultural input will be needed for the following operations:

Brief operation summary	Trees affected	Location of detailed explanations
Pre-commencement meeting: Meeting on site with all parties to agree protective measures, as described in SGN 1. <u>Will be carried out before any significant site works begin.</u>	All retained trees	SGN 1 <i>Monitoring tree protection</i>
Tree felling and pruning: Contractor will carry out agreed works as described in Appendix 2. <u>Will be completed before any significant site works begin.</u>	Fell section of H6 Prune H1, G5, H6, G8	Appendix 2
Installing fencing: Agreed tree protection measures will be installed and checked, as described in SGN 2 and SGN 3. <u>Will be completed before any significant site works begin.</u>	All retained trees	Tree protection plan, SGN 2 <i>Fencing protected trees</i>
Pollution control near retained trees: Any pollution control measures identified during risk assessment will be installed as described in SGN 4. <u>Will be completed before any potential pollutants arrive on site.</u>	All retained trees	SGN 4 <i>Pollution control</i>
Regular arboricultural supervision: Provision will be made to carry out and record agreed arboricultural supervision, as described in SGN 1.	All retained trees	SGN 1 <i>Monitoring tree protection</i>
Installing surfacing in RPAs: These operations will be carried out as described in the SGN 9.	T7	SGN 9 <i>Installing/upgrading surfacing in RPAs</i>
Landscaping in RPAs: These operations will be carried out with care, as described in SGN 12.	All retained trees	SGN 12 <i>Landscaping in RPAs</i>
Removing tree protection: <u>Protection can only be removed when there is no risk of damage to retained trees, as described in SGN 1.</u>	All retained trees	SGN 1 <i>Monitoring tree protection</i>

The operations summarised in this table, and supplemented by the more detailed explanations set out in the SGNs and the rest of this document, form the arboricultural method statement for this site. The Site Manager will ensure that its details and any agreed amendments are known and understood by all site personnel. Copies of the agreed documents will be available on site. All personnel who could have an impact on trees will be briefed on the specific tree protection requirements as part of the site induction procedures. This requirement will be written into the site management documentation.

2 Arboricultural method statement

2.5 Construction method statement (heads of terms summary)

A construction method statement is a description of how operations that may affect trees will be carried out to minimise any adverse impact on them. The details of how the site will be managed are construction and contractual matters that can only be finalised once the post-consent detailed planning begins. For that reason, at this stage in the planning process, as explained in clause 5.5.6 of BS 5837, it is normally sufficient to list a heads of terms summary of the issues requiring more detailed consideration once consent is issued. On this site, those issues are likely to include:

Preparation of a written site management protocol for dealing with tree issues, to be incorporated into formal site management procedures, and to specifically include induction training for all operatives related to tree protection.

1. The order of work on site, including site clearance, the installation of protective measures, the phasing of successive work locations, the installation of new surfacing, the removal of tree protection, and any necessary reinstatement.
2. Erection and maintenance of tree protection measures.
3. Who will be responsible for protecting the trees on site.
4. Detailed proposals for inspecting and supervising the tree protection.
5. How accidents and emergencies involving trees will be managed, including accidental damage to roots and their treatment.
6. Details of facilitation pruning and access into site. What size vehicles will be used under canopies and will large machinery be lifted over trees.
7. The parking arrangements for workers and visitors.
8. A schedule of emergency contact numbers relating to trees.
9. Areas for loading and unloading of materials and storage of materials and plant.
10. Where site facilities will be located and when will they be installed.
11. How machinery and equipment (such as excavators, cranes and their loads, concrete pumps and piling rigs) will enter, move on, work on, and leave the site.
12. Pollution control to specifically consider chemical storage and wheel washing facilities in relation to trees.
13. Recycling and storage of waste in relation to trees.
14. Details of earthworks, grading and mounding and removal of spoil, including any planned lowering or raising of ground levels.
15. Precise services locations, including the method of excavation when near trees.
16. How post-construction impacts through compaction to soil near trees will be ameliorated.

Appendix 1: Background administrative information and data collection

A1.1 Table 3: Background administrative information

	Background administrative information
Report date & reference	12 th October 2021; 21154-AA-DC
Tree protection plan reference	21154 – 1
Instructing client	Bloor Homes Limited
Instructions	Visit the site, assess the relevant trees, prepare a schedule of their details, describe the impact of the proposal on those trees and identify the tree protection issues in an arboricultural method statement with a tree protection plan.
Provided documents	Topographical survey, drawing reference 01WQ01, received by email on 17 th September 2021, and layout drawing reference BLOO190707 – SL01 Rev P2, received by email on 24 th September 2021.
Report author and credentials	Dave Cashman is a Chartered Forester (www.charteredforesters.org), and a Registered Consultant of the Arboricultural Association (www.trees.org.uk), and is fully qualified to undertake the assessments in this report (https://www.barrelltreecare.co.uk/who-we-are/).
Report limitations	• We have not checked if there is any statutory protection on the trees because this can delay the production of the report. If any tree works are proposed before a planning consent is given, then the possible existence of any statutory protection must be checked with the LPA. • This report does not consider ecological or archaeological issues, or any other matter beyond the assessment of the trees.
Technical references	In preparing the analysis in this report, we considered the guidance and advice in the following technical references: • Climate Change Act (2008) www.legislation.gov.uk/ukpga/2008/27/contents • Town and Country Planning Act 1990 www.legislation.gov.uk/ukpga/1990/8/contents • National Planning Policy Framework, published by the MHCLG www.gov.uk/government/publications/national-planning-policy-framework--2 • BS 5837 (2012) <i>Trees in relation to design, demolition and construction – Recommendations</i>, https://shop.bsigroup.com/ProductDetail?pid=000000000030213642 • BS 8545 (2014) <i>Trees: from nursery to independence in the landscape – Recommendations</i>, https://shop.bsigroup.com/ProductDetail?pid=000000000030219672 • BS 3998 (2010) <i>Tree work – Recommendations</i>, BSI https://shop.bsigroup.com/ProductDetail?pid=000000000030089960 • <i>Trees in the Townscape: A Guide for Decision Makers</i>, published by the Trees & Design Action Group http://www.tdag.org.uk/ • <i>Trees in Hard Landscapes: A Guide for Delivery</i>, published by the Trees & Design Action Group www.tdag.org.uk/ • National Joint Utilities Group (2007) Volume 4, Issue 2: <i>Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees</i> www.njug.org.uk/publications/

Appendix 1: Background administrative information and data collection

A1.2 Table 4: Data collection

	Data collection
Date of site visit	21 st September 2021
People present during site visit	Dave Cashman
Weather & visibility	Clear, still, and dry with average visibility
Limitations to observations	- The inspection of the trees for the purposes of assessing their condition and work requirements was made on the basis that they will be annually inspected in the future to identify any changes in condition and review the original recommendations. For these reasons, the tree assessment advice only remains valid for one year from the date that the trees were last inspected. - All observations were of a preliminary nature and did not involve any climbing or detailed investigation beyond what was visible from accessible points at ground level. - Observations of trees outside the site boundaries are confined to what was visible from within the site. - All dimensions were estimated unless otherwise indicated.
Statutory protection through Tree Preservation Orders and Conservation Areas	Our assessment of the trees has been made independently of any statutory protection that may apply. However, if any tree works are proposed before a planning consent is issued, then a check with the LPA must be carried out before any tree works are carried out.
Tree location and numbering	Each tree, hedge, and group, was inspected, and the numbering scheme is shown on the tree protection plan. Where significant trees were found on site that were not included on the provided land survey, their approximate positions are illustrated as a brown dot on the tree protection plan.
Crown spreads	From checking a sample of the crown spreads on the land survey, we believe that the spreads annotated represent a reasonable interpretation of the viable canopy spreads on
Recording of tree data	For each identified tree, hedge, and group, the information collected was recorded on the tree schedule in Appendix 2 and the tree protection plan.
Compliance of data collection with BS 5837	The data collection is fully compliant with the advice in subsection 4.4.2 of BS 5837. When collecting this information, specific consideration was given to any low branches that may influence future use, age class, physiological condition, structural condition, and remaining contribution. Where appropriate, crown spreads were also noted where they differed from those shown on the provided land survey.
Calculation of RPAs	Following the recommendations in Table D1 of BS 5837, the diameter of each tree was rounded up to the next 2.5 cm increment, with the radius of a nominal circle and the resultant RPA taken directly from that table. This information is listed for each tree in the tree schedule in Appendix 2.



Appendix 2: Tree schedule and explanatory notes

NOTE: Colour annotation is A & B trees with green background; C & U trees with blue background; trees to be removed in red text.

Tree No	Species	Height (m)	Diameter (cm) @ 1.5m	Maturity	Low Branches	Category	Notes	Tree Works	RPA radius (m)	RPA area (m2)
All retained trees & hedges								Carry out safety check and lift over site to 3-4 m as necessary.		
H1	Thorn, sycamore, field maple, elm	3	30	Mature	-	C	Regularly clipped hedge borders allotment	-	3.6	41
T2	Field maple	7	35	Maturing	-	C	Outgrown from H1	-	4.2	55
T3	Oak	8	35	Maturing	-	B	Off site, no access, potential	-	4.2	55
T4	Ash	6	40	Maturing	-	C	Signs of ash die back	-	4.8	72
G5	Ash, blackthorn	6	40	Mature	-	C	Signs of ash die back	-	4.8	72
H6	Hazel, thorn	4	35	Mature	-	C	Boundary hedge, more informal than H1	Fell small section for access	4.2	55
T7	Ash	18	75	Mature	-	B	Off site, no access, stem not surveyed	-	9.0	254
G8	Ash, alder	18	85	Mature	-	C	Off site, no access, stem not surveyed, ash of poor form	-	10.2	327
T9	Oak	9	45	Maturing	-	B	Boarderline B, sparse crown	-	5.4	92
G10	Ash, sycamore	9	45	Maturing	-	C	Poor form, ash die back	-	5.4	92
T11	Oak	7	90	Mature	-	U	Fallen	-	10.8	366
T12	Oak	16	85	Mature	-	B	Decay at base, high ecological value - tag 0930	-	10.2	327
T13	Oak	18	150	Mature	-	A	Dead wood	-	15.0	707
T14	Ash	16	80	Mature	-	U	Decay - leaning	-	9.6	290

Appendix 2: Tree schedule and explanatory notes

Explanatory Notes

- **Abbreviations:**

G: Group
H: Hedge
T: Tree

- **Botanical tree names:**

Alder	: <i>Alnus glutinosa</i>
Ash	: <i>Fraxinus excelsior</i>
Blackthorn	: <i>Prunus spinosa</i>
Elm	: <i>Ulmus</i> sp
Field maple	: <i>Acer campestre</i>
Hazel	: <i>Corylus avellana</i>
Oak	: <i>Quercus robur</i>
Sycamore	: <i>Acer pseudoplatanus</i>
Thorn	: <i>Crataegus</i> sp

- **BS 5837 (2012) compliance:** All data has been collected based on the recommendations set out in subsection 4.4 of BS 5837.
- **Tree inspections and site limitations:** Each tree was subjected to a quick visual check level of inspection. Where there is restricted access to the base of a tree, its attributes are assessed from the nearest point of access. Climbing inspections are not carried out during this level of inspection and, if heavy ivy is present, tree condition is assessed from what can be seen from the ground. A separate note is recorded if further investigation may be required to clarify its status.
- **Crown spreads:** Where crown spread dimensions on the land survey are checked on site and found to be reliable, they are used as shown on the original survey plan. Where they are found to be unreliable, they are estimated to the four compass points, listed in the schedule, and shown on our plan. All crown spreads are estimated to the viable branch extent, i.e., the spread that would be sustainable if the tree was under a normal garden management pruning regime.
- **Dimensions:** All dimensions are estimated unless otherwise indicated with an asterisk (*) after the figure.
- **Species:** Species identification is based on visual observations. Where there is some doubt over tree identity, sp is noted after the genus name to indicate that the species cannot be reliably identified at the time of the survey. Where there is more than one species in a group, only the most frequent are noted and not all the species present may be listed.
- **Height:** Height is estimated to provide a broad indication of the size of the tree.
- **Trunk diameter:** Trunk diameter is estimated or measured (with a diameter tape), at the discretion of the consultant, and is normally rounded up and recorded in 2.5 cm increments as advised in BS 5837 Table D1. Estimates may be made where access is restricted, direct measurement is prevented because of ivy on the trunk, or the tree is assessed as low quality. The point of measurement and the adjustments for stem variations are as advised in Figure C1 of BS 5837. Individual diameters for multiple stems are recorded in the notes, with the calculated cumulative diameter recorded in the diameter column.
- **Maturity:** In planning context, maturity provides a simplistic indication of a tree's ability to cope with change and its potential for further growth. For the purposes of this report, young indicates a potential to significantly increase in size and a high ability to cope with change, maturing indicates some potential to increase in size and a medium ability to cope with change, and mature indicates little potential to increase in size and limited ability to cope with change.
- **Low branches:** Any low branches that would not be feasible for removal during normal management and should be considered as a design constraint are noted here and explained in the notes.
- **Category:** Our assessment automatically considered tree physiological/structural condition (BS 5837, 4.4.2.5h), and so these are not listed separately in the schedule. Additionally, the category accounts for the remaining contribution (BS 5837, 4.4.2.5i) as greater than 40 years for A trees, greater than 20 years for B trees, at least 10 years for C trees and less than 10 years for U trees, so this is also not listed separately in the schedule. Category A, B and C trees are automatically listed as sub-category 1 unless otherwise stated.

Appendix 2: Tree schedule and explanatory notes

- **Notes:** Only relevant features relating to physiological or structural condition and low branches that may help clarify the categorisation are recorded. If there are no notes, then the presumption should be that no relevant features were observed.
- **Tree works:** The recommended tree works are based on the quick visual check level of inspection and only intended to address significant hazards identified during that inspection. The following points should also be considered before carrying out any works:
 1. **Reporting during work operations:** In the context of the preliminary nature of the tree inspection, any defects that may affect tree safety discovered by the contractor when carrying out the work recommendations should be reported to the supervising officer. Modification to the schedule of works may be required because of these reports. The contractor should be specifically instructed on this point.
 2. **Implementation of works:** All tree works should be carried out to BS 3998 *Recommendations for Tree Work* as modified by more recent research. It is advisable to select a contractor from the local authority list and preferably one approved by the Arboricultural Association. Their Register of Contractors is available free from The Malthouse, Stroud Green, Standish, Stonehouse, Gloucestershire GL10 3DL; phone 01242 522152; website www.trees.org.uk.
 3. **Statutory wildlife obligations:** The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 provides statutory protection to birds, bats and other species that inhabit trees. All tree work operations are covered by these provisions and advice from an ecologist must be obtained before undertaking any works that might constitute an offence.
 4. **Stumps:** Stumps to be removed within the RPAs of retained trees should be ground out with a stump grinder to minimise any disturbance unless otherwise authorised by the supervising officer.
- **Future tree safety inspections:** Due to the time that may elapse between the original survey and the start of development, all trees should be re-inspected as part of the standard risk management process before any works start on site. Our assessment of the trees was carried out on the basis that a re-inspection would be carried out within a year of the assessment visit and our advice on tree condition must be reviewed annually from the date of that visit.

Appendix 3: QR Codes for SGNs (Scan with reader to download)

		
SGN 1 <i>Monitoring tree protection</i>	SGN 2 <i>Fencing protected trees</i>	SGN 3 <i>Ground protection</i>
		
SGN 4 <i>Pollution control</i>	SGN 5 <i>Site cranes & piling rigs</i>	SGN 6 <i>Height restrictions</i>
		
SGN 7 <i>Excavating in RPAs</i>	SGN 8 <i>Removing surfacing and structures in RPAs</i>	SGN 9 <i>Installing/upgrading surfacing in RPAs</i>
		
SGN 10 <i>Installing structures in RPAs</i>	SGN 11 <i>Installing services in RPAs</i>	SGN 12 <i>Landscaping in RPAs</i>



Field House Fordingbridge Business Park Fordingbridge Hampshire SP6 1BD
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Tree protection plan

Location of trees, categorisation & protection/management proposals

Berewood, Waterlooville, Hampshire

Barrell Plan Ref: Z1154-1

barrell

Tree Consultancy

Permission is granted to scale from this drawing for Local Authority Planning Approval purposes relating to tree protection measures only. Where applicable this drawing is to be read in conjunction with the arboricultural report. This drawing is the copyright of Barrell Tree Consultancy 2021. ©

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TX

BS category A

Tree of high quality

TX

BS category B

Trees of moderate quality

TX

BS category C

Trees of low quality

TX

BS category U

Trees unsuitable for retention

TX

Trees to be removed

Proposed layout

Estimated tree positions not included on original land survey and/or adjusted crown spreads

Protective barrier/fencing

Construction exclusion zone (CEZ)

Special precautions when installing new parking bays using a cellular confinement system

Root protection area (RPA) boundaries for category A and B trees

Root protection area (RPA) boundaries for category C trees

SGN 1

Monitoring tree protection

Always:

have a pre-commencement meeting with the tree consultant before development starts

use the tree consultant to regularly check that protection remains fit for purpose

use the tree consultant to supervise work in RPAs

keep a written record of supervision

SGN 2

Fencing protected trees

Always:

install protection before development starts

make sure protection is fit for purpose, i.e. it prevents damage to trees and soil

keep protection in place until there is no risk to trees

get written permission to move or remove any protection

SGN 3

Ground protection

Always:

install protection before development starts

make sure protection is fit for purpose, i.e. it prevents damage to trees and soil

keep protection in place until there is no risk to trees

get written permission to move or remove any protection

SGN 9

Installing/upgrading surfacing in RPAs

Always:

use the tree consultant to supervise work in RPAs

minimise damage to roots and disturbance to soil in RPAs

minimise excavation when installing or upgrading surfacing in RPAs

How to use plan

More detailed guidance on each Site Guidance Note (SGN) can be found in a printed hard copy compilation of all the SGNs, **Manual for Managing Trees On Development Sites version 2.1**, issued to the Site Manager at the pre-commencement site meeting (Note: This should be retained on site throughout the duration of works). Additionally, an electronic pdf compilation of all the SGNs, was submitted with this drawing to the local planning authority and the client. Alternatively, a pdf of each SGN can be downloaded by:

1. clicking the image links in the electronic pdf version of this plan;

2. holding a mobile phone QR (Quick Response) code reader over the QR code in the paper version of this plan; or,

3. visiting our website at <https://www.barrelltreecare.co.uk/resources/technical-guidance>

Tree No	Species	Category	RPA Radius	Tree Works
All retained trees & hedges				
H1	Thorn, sycamore, field maple, elm	C	3.6	-
T2	Field maple	C	4.2	-
T3	Oak	B	4.2	-
T4	Ash	C	4.8	-
G5	Ash, blackthorn	C	4.8	-
H6	Hazel, thorn	C	4.2	Fell small section for access
T7	Ash	B	9.0	-
G8	Ash, alder	C	10.2	-
T9	Oak	B	5.4	-
G10	Ash, sycamore	C	5.4	-
T11	Oak	U	10.8	-
T12	Oak	B	10.2	-
T13	Oak	A	15.0	-
T14	Ash	U	9.6	-

Drawing References:
Topo - (September-17-2021) 01W001
Layout - (September-24-2021) BLD0190707 - SL01 Rev P2

0 Meters 5 10 15 20 25

Scale: 1:500 @ A0

Attention LPA Tree Officer - if you would like a 'to scale' printed version of this plan please contact us on 01425 651470 or email 'enquiries@barrelltreecare.co.uk'

Tree Survey Report



Bloor Homes



Site:
Phase 5A, Berewood



Ref:
September 2021
JFA9503



TREE SURVEY NOTES

This Tree Survey has been undertaken in accordance with the recommendations set out in British Standard 5837:2012 and current arboricultural best practice.

- Each tree has been numbered sequentially and recorded on the Tree Survey Plan.
- Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in millimetres (mm) at 1.5 metres above ground level, using a diameter measuring tape, unless otherwise stated.
- Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which is recorded on the tree survey plan.
- An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:

Y	=	young trees
SM	=	semi-mature trees
EM	=	early mature trees
M	=	mature trees
OM	=	over-mature trees

- An assessment of a tree's physiological condition is defined as:

Good	=	fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound closure
Fair	=	fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure

Poor = a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure

Dead = dead

➤ An assessment of a tree's structural condition is defined as:

Good = no significant structural defects

Fair = structural defects which could be alleviated through remedial tree surgery or management practices

Poor = structural defects which cannot be alleviated through tree surgery or management practices

Dead = dead

➤ An assessment of a tree's future life expectancy is defined as: **<10, 10+, 20+ or 40+ years.**

Categorisation of Trees

The category for each tree is assessed in accordance with the recommendations of BS5837:2012. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

Category U		Identification colour on plan		
Trees 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 (e.g. 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			RED
Category A	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
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 (e.g. the dominant and/or principal trees within an avenue	Trees, groups of woodlands of 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	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
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 down-graded because of impaired condition (e.g. presence of significant through 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 growing as groups or woodlands, such that they attract a higher collective rating than 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 value or other cultural value	MID BLUE
Category C	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
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 in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	GREY

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. It will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either “*full ground level inspection*” or “*climbing inspection required*”. There may also be a further reference to the need for “*decay detection equipment*” to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

	BS5837 – Tree Survey			
	Client:	Bloor Homes	Site:	Phase 5A, Berewood
	Date:	14 th September 2021	Consultant:	James Fuller FdSc Arb, BTEC Nat.Dip Forestry & Arb, M.Arbor.A
	Tagged:	No	Weather:	Clear

Notes:-

1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base.
2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access.
3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised.
4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals.
5. Tree Groups have been assessed with estimated and representative data.
6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner.
7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species, which needs consideration prior to any tree surgery works commencing.
8. Any tree numbers that are followed by a * are indicatively plotted and their locations should be verified on site by a land surveyor.
9. Tree data colours: -
 - U Grade Trees Highlighted in RED
 - A Grade Trees Highlighted in Green
 - B Grade Trees Highlighted in Blue
 - C Grade Trees Highlighted in Grey

James Fuller Arboriculture has checked Winchester City Councils website and has been informed that the site is not located within a Conservation Area.
 James Fuller Arboriculture has checked Winchester City Councils website and has been informed that Trees 1 and 2 and Groups 1 and 2 are protected by a Tree Preservation Order (TPO).

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physiological Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
1 TPO	Pedunculate Oak <i>Quercus robur</i>	14	S	1060	508	12.7	N 9 E 8 S 8 W 8	N 2 E 3 S 3 W 4	Mature	Good	Structural Condition - Fair Large buttress roots, Old pruning wounds, Major deadwood in crown Growing in open Field, Ganoderma fungal fruiting body at base on east side, Ganoderma fungal fruiting body on trunk at 0.5m on west side, Wasp nest in trunk at 1.5m on north side	Full ground level inspection with decay detection equipment – 1 Month	20+	B1 Interim
2 TPO	Pedunculate Oak <i>Quercus robur</i>	12	S	1100	547	13.2	N 6 E 7.5 S 9 W 8.5	N 5 E 5 S 4 W 4	Veteran	Poor	Structural Condition - Fair Bark wound, Epicormics on trunk and in crown, Major deadwood in crown, In decline Located in Field, Plough around base, decay at base, Bifurcated at 2m, Consider use of area around base, possible fence, Wildlife holes in trunk	None required at time of survey	10+	C1
Grp 1 TPO	Pedunculate Oak <i>Quercus robur</i> X 4	20	S	-	-	-	N 8 E 8 S 8 W 8	N - E - S - W -	Mature	Good	Structural Condition - Good Crown shape distorted due to group pressure, Major deadwood in crown	See individual trees	20+	B2
G1.1 TPO	Pedunculate Oak <i>Quercus robur</i>		S	1000	452	12	N - E - S - W -	N - E - S - W -	Mature	Good	Structural Condition - Good Ivy on trunk, Crown shape distorted, Deadwood in crown, Low hanging branches, long heavily weighted branch on north side	Reduce long heavily weighted branch on north side by 3m	20+	B1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m ²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physiological Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
G1.2 TPO	Pedunculate Oak <i>Quercus robur</i>		S	1020	471	12.2	N - E - S - W -	N - E - S - W -	Mature	Good	Structural Condition - Good Trunk and crown shape distorted, Major deadwood in crown	None required at time of survey	20+	B1+2
G1.3 TPO	Pedunculate Oak <i>Quercus robur</i>		S	850	327	10.2	N - E - S - W -	N - E - S - W -	Mature	Good	Structural Condition - Good Large buttress roots, Crown shape distorted, Deadwood in crown	None required at time of survey	20+	B1+2
G1.4 TPO	Pedunculate Oak <i>Quercus robur</i>		S	1110	557	13.3	N - E - S - W -	N - E - S - W -	Mature	Good	Structural Condition - Good Multi-stemmed at 5m, Major deadwood in crown, Broken hanging branches in crown	Remove deadwood, Remove Broken hanging branches	20+	B1+2
Grp 2 TPO	Oak Ash Willow	20	S	1250	707	15	N - E - S - W -	N - E - S - W -	Mature	Good	Structural Condition – Good Mixed species strip of woodland running in a north south direction. Mainly Oak and Ash, Ash is mainly end of life specimens Major deadwood in crown, Trunk and crown shapes distorted	None required at time of Survey	20+	B2







Qualifications of James Fuller

James Fuller, has over 17 years experience within the field of Arboriculture and has attained a Foundation Degree in Arboriculture (FDSc Arb.) and a BTEC National Diploma in Forestry & Arboriculture (BTEC Nat.Dip. Forestry & Arb.).

James is also a Professional Member of the Arboricultural Association (MArborA) and has successfully completed the Professional Tree Inspector's, Capital Asset Value for Amenity Trees (CAVAT), Quantified Tree Risk Assessment (QTRA) and Visual Tree Assessment (VTA) Courses.

James previously worked as an Arboricultural Consultant, providing professional advice in relation to trees for one of the leading arboricultural consultancy practices in the country. As part of this role James was instrumental in providing clients with advice from the initial Tree Survey through to site completion and sign off.

James has experience of working on a variety of sites throughout the UK, from individual Visual Tree Assessments (VTA) to large development sites (BS5837: 2012) with 1'000s of trees.

James is now building an ever-growing portfolio of private clients whilst providing consultancy advice to local arboricultural companies and their clients.