

Arboricultural Method Statement (AMS): a Construction Specification for trees

Proposed development Bartons Road Havant PO9 5EY

Report reference Bartons Road 0201911/AMS/1

Client Fortitudo Ltd

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1 Summary

This report provides site-specific mitigation...	It is based on the Arboricultural Impact Assessment data for soil, species, Sensitivity of the trees to damage and the Magnitude of the impacts of the proposed development
...in order to reduce the likelihood of damage to trees...	The guidance in BS5937:2012 <i>Trees in relation to design, demolition and construction- Recommendations</i> Technical Design stage Sections 6-8 applies
...and in order to comply with any planning conditions	Planning conditions typically require adherence to an Arboricultural Method Statement (AMS) and may require a pre-commencement meeting.

2 General precautions

The area within the tree protection fence is a **construction exclusion zone** from which access is prohibited for the duration of a project unless agreed by the Arboriculturist and Local Planning Authority Tree Officer.

Fires should be avoided	Where they are unavoidable, they should not be lit in a position where heat could affect foliage or branches, so take wind direction and potential size of the fire into account.
Materials must not be stored and handled near trees	Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the canopy of a tree

3 Construction specifications (CS)

The following construction specifications are specific to the construction activities on this site. These are arboricultural specifications based on the physiological needs of the trees and are not engineering specifications. BS5827:2012 *Trees in relation to design, demolition and construction – Recommendations* is the arboricultural reference.

CS1 Install tree protection fencing (barriers)

The fencing should be erected before anything is bought to site and should not be moved	All trees should be protected by barriers before any materials or machinery are brought onto the site, and before any demolition, development or stripping of soil commences The Tree Protection Plan (RNapc/020/TCP/TPP/v4 shows the location and specification of the barriers. Once installed, barriers should not be removed or altered without prior agreement of the arboriculturist and the local planning authority
Parking vehicles or storing materials in the exposed area can damage trees.	If parking or material storage is unavoidable, consult the Arboriculturist about temporary ground protection before using the area.

CS2 Tree removal

The tree work is listed in the Arboricultural Impact Assessment (AIA) document Tree Survey schedule Appendix A	Two trees, Maple T003 and Horse Chestnut T005 are shown to be removed. I have not checked the ownership of these trees and the owner's permission is required before removal.
The tree work should be carried out by competent persons	All tree work should be carried out by suitably qualified Tree Contractors and all works should be undertaken in accordance with BS3998:2010
Stumps must be ground out, not grubbed out	Grubbing stumps out with an excavator can damage nearby trees as the roots will be grafted. Only use a mechanical stump grinder

CS3 Ground work

Ground works	All groundworks should be carried out using a toothless bucket
New services and soakaways	Any service trenches should avoid the RPA of retained trees, unless agreed by the Arboriculturist. Soakaways should not be located within the RPA of a retained tree.

CS4 Landscaping within a tree's root protection area

Changes in levels must be approved by the Arboriculturist	Any soil removal or replacement, excavation for hard landscape or installing any structure including lighting, water, electric gates etc must be approved by the Arboriculturist.
The tree protection should be retained	No plant or materials should drive over unprotected ground. The fencing can only be removed with the agreement of the Arboriculturist and may have to be reinstalled during a break in operations.
Only use hand held tools, NOT A ROTOVATOR	Unwanted vegetation can be removed using hand held tools avoiding damage to the stems of retained trees.
Post holes should be dug by hand	If any roots >25mm diameter are encountered, either the post hole shall be moved and the hole backfilled.
Use sharp sand for levelling...	...but not marine-derived sand
Do not plant shrubs within 1m of tree stems	Planting holes for shrubs shall be dug by hand and will be repositioned if woody roots are encountered

A Appendix: Install a hard surface

Install hard surfacing (Not site specific)

A cellular confinement system will be used for the drive/parking area

Appendix A shows a typical **non site-specific** example. We will use a system like the one described to restrict the impact on trees.

1 Information

These notes are for information or a discussion on site... The suggested method of installation based on Industry Standards, is for information only. This is not a specification: the structure should be designed by an Engineer.

...because they are general guidelines The manufacturer's recommendations should always be followed.

2 Preparation

Do not drive vehicles onto the area Do not drive machinery onto the area. All machinery to be kept outside root protection areas unless using ground protection as agreed by the Arboriculturist.

Use only a toothless bucket Remove all debris and reduce surface levels to the allowable reduced dig (///). If build-up is necessary on existing surface levels, use a no fines permeable material.

Do not roll or consolidate the area Ensure that the prepared surface is reasonably even and fill any localised depressions with sharp sand to achieve an even surface profile.

3 Edging

Choose an edge that doesn't need an excavation Use tanalised timber edging boards or other approved edge retention to the perimeter of the construction zone as appropriate to the total layer profile thickness. Avoid damage to tree roots when placing fixing posts and pegs.

4 Installation

Use a geotextile to stop materials mixing Install a layer of suitable geotextile across the site, over lapping adjacent rolls by a minimum of 150mm. Lightly pin the geotextile in place until the overlying layers are installed as required.

Grid or no grid? If the Engineer has specified a layer of geogrid (it depends on the soil strength and the traffic loading/loading) place the geogrid layer over the geotextile layer. Fix using steel pins to hold flat. Overlap adjacent rolls by minimum 150mm.

Stretch and pin the panel avoiding tree roots Open out the cellular confinement panel between the edging and pin (1m-2m centres) around the perimeter and where panels join using steel fixing pins or similar. The pins hold the fully expanded cells during the filling process. Drive the pins in so that they are just touching the top of the cells.

Cut the panel to fit Alternatively fold up against the edgings, following manufacturers' instructions.

Use the correct type of fill Use a clean, open graded angular non-calcareous aggregate (4mm - 20mm). Work towards the tree from the furthest point away using the filled panel as a platform. Overfill the panel by 25mm.

Do not use... ...single sized, rounded aggregate or DoT Type 1. Do not roll the surface, a light vibratory compaction plate will settle the stone into the cells. Do not contaminate the filled cells with site debris, soil or mud.

5 Wearing course

Permeable surfacing only Install the specified permeable surface layer on top of the panel according to the manufacturer's recommendations. The type of bedding layer will

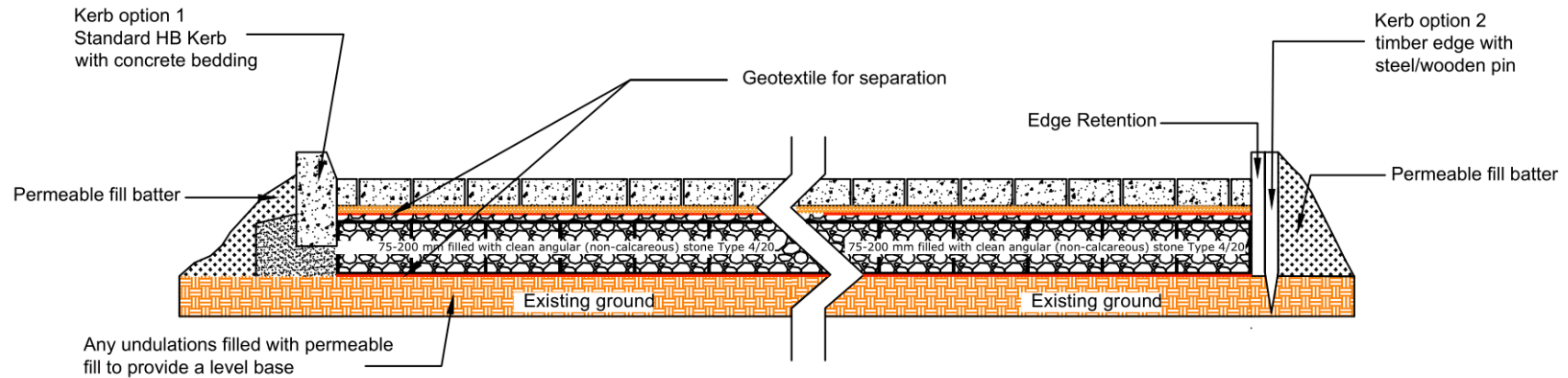
depend upon the specification of the porous surface. An additional layer of geotextile may be required over the filled panel to prevent loss of the bedding layer material into the voids. Refer to the manufacturers' guidance for other surfacing materials.

7 Final grading

Batter the edge using hand tools only Once installed, use a good quality topsoil to grade between the finished surface level and the base of the trees.

Wearing Course Options

1. Block paviors on sand (shown)
2. Porous Tarmac on permeable sub-base
3. Gravel
4. Grasscrete or similar on sand



Depth of cellular confinement system panel to Engineers specifications based on CBR% and type of traffic using the surface

Illustrative design for a no-dig drive based on a cellular confinement system	Scale: NTS	Drawn by: SA	Richard Nicholson Arboricultural Planning Consultant Email: apcnicholson@protonmail.com www.rnapc.co.uk Mobile: 07964865189 14 Main Road Tolpuddle Dorchester DT2 7EW
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