

**Arboricultural Impacts** Trees to be removed roups / Hedges to be removed (Partial removal of groups) roups / Hedges with proposed incursions into RPAs Trees that will require pruning A Group Hard surface RPA RPA A Group RPA A Group Hard surface A Group A Group Hard surface A Group Hard surface RPA RPA Boundary wall RPA Chestnut RPA Holm Oak Corsican Pine Garage RPA Corsican Pine Dwelling RPA Corsican Pine RPA T29 Sycamore Norway Maple Hard surface Norway Maple Norway Maple Norway Maple

# Arboricultural Impacts - RPAs (Area) A Group

# Tree Work Schedule

13.1

Norway Maple

Partial removal of group: Fell 2x trees to B12 A Group ground level; grind out stumps. G01A Scots Pine Fell tree to ground level; grind out stump U T03 Common Beech | Fell tree to ground level; grind out stump | B12 T08 | Common Beech | Fell tree to ground level; grind out stump | U T09 Common Beech | Fell tree to ground level; grind out stump T23 Red Oak Fell tree to ground level; grind out stump C12 T38 Myrobalan Plum Fell tree to ground level; grind out stump U

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations. All arising's are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death. No. of individual trees to be removed

## No. of groups / hedges to be removed 0 (0) 0 (0) ) = Partial removal of a groups

### All tree work is to be undertaken in accordance with British Standard Please refer to Arbtech Consulting Ltd. Tree Schedule, Arboricultural

surveyed trees and how all aspects of the development maybe mplemented without detriment to retained trees. Foundations within RPAs

#### and as such should be avoided. Designs for foundations that would minimize the adverse impact upon trees sould include particular attention to the existing levels, proposed

finished levels and cross sectional details. Site specific and specialist advice should be sought from the project engineers and arboriculturist. Root damage can be minimised by using: Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability

Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

Where a slab for minor structures (e.g. shed base) is to be formed within the RPA, it should bear on the existing ground level, and should not exceed an area greater than 20% of the existing unsurfaced Slabs for larger structures (e.g. dwellings) should be constructed with a

ventilated air space between the underside of the slab and the existing soil surface (to enable gas exchange and venting through the soil surface. In such cases, a specialist irrigation system should be employed (e.g. roof run-off redirected under the slab). The design of the foundation should take into account of the effect on the load bearing properties of the underlying soil from the redirected roof run-off. Approval in principle for a foundation that relies on topsoil retention and roof run-off under the slab should be sought from building control authority prior to this approach being relied upon.

diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters for ground boarding. Use of the smallest practical piling rig is also mportant where piling within the branch spread is proposed, as this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and

adjacent roots from the potentially toxic effects of uncured concrete, e.g. sleeved bored piles or screw piles. This information is compliant with British Standard BS5837:2012 Trees in relation to design demolition and

# 'No Dig' Surfacing

Trees can be affect by construction within the RPAs either through the direct damage caused by the removal of roots, compaction of the rooting environment or secondary damage such as poisoning through leaks and spills (oils, fuels, etc.) or through de-icing (road salt, etc.). Proposed hard surfacing within the RPAs of retained trees is to be designed so that it can be situated above the existing soil level and to minimise any adverse impact upon the tree RPAs, as the use of

## beneath the excavation, as such this 'traditional' type of sub-base should be avoided.

Multi-dimmensional confinement system Existing vegetation may be removed with hand tools or sprayed with an approved non residual herbicide such as 'Glyphosate'. The new hard surfacing will be constructed using a 'No Dig' surfacing situated entirely above the existing soil surface and where needed using a proprietary cellular confinement system (GeoWeb or similar) laid over a bi-axel geo-grid (tensar TriAx or similar). Proir to this any small hollows on the surface may be filled with clean sharp sand (not builders sand) to a maximum depth of 150mm. The 'GeoWeb' is to be back filled by hand with a no-fines aggregate of 20mm - 30mm. The area of 'GeoWeb' will be covered with a permeable geotextile fabric and the finished wearing course laid on top. Edge supports of an appropriate size and strenght should be set above ground level and secured with haunching or steel pins driven into the ground, the outer edge of the supports may be banked up with clean top soil.

NB: The use of a multi-dimensional confinement system will affect the finished level of the hard surfacing by raising the levels and needs to be taken into consideration when designing foundations and setting the finished floor levels of adjacent buildings.

# Utility apparatus

Mechanical trenching for the installation of underground apparatus and drainage severs any roots present and can change the local hydrology in a way that adversely affects the health of the tree. For this reason, particular care should be taken in the rout and methods of installation of all underground apparatus. Wherever possible, apparatus should be routed outside of RPAs. Where this is not possible, it is preferable to keep apparatus together in common ducts, all inspection chambers should be sited outside of the RPAs. Where underground apparatus is to pass within the RPAs, detailed plans showing the proposed route should be drawn up in conjunction with the project arboriculturist. In such cases trenchless insertion methods should be used with entry and retrieval pits being located outside of the RPAs. If this option is not feasible and providing roots can be retained and protected excavations should be undertaken using hand held tools (air-spade, forks, shovels) or a combination of trenchless and manual excavation (broken trench). Any design and installation should be undertaken in accordance with the National Joint Utilities Guidelines (NJUG). Above-ground utility apparatus Above-ground apparatus(including CCTV cameras and lighting) should be sited to avoid the need for detrimental tree pruning, as such the

current and future crown size of the tree should be assessed. Tree branches can be pruned back with care to provide space, though it is not appropriate for repetitive and significant tree work to bean initial design solution unless this is a suitable management outcome for the tree. Any pruning should be undertaken in accordance with

Rev: Date: Notes



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Arboricultural Impact Assessment

Hants,

P01-Rev.A Drawing No:

Arbtech AIA 01					
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larch 2022		1:125 @ A0		JCH	
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:	T01	Tree Canopies:		Trunks:	$\bigcirc$
s:	()	Category 'U' trees:		Category 'A' trees:	
gory ees:		Category 'B' groups:		Category 'C' trees:	
s to be oved:	T03	Existing site plan:		Proposed site plan:	
rsion - ctures:	# # # # # # # # # # # # # # # # # # #	Incursion - Hard surfacing:	000		

his drawing is not to be read as a definitive part of the engineering or construction designs or method stateme n architect or structural engineer should be contacted over any matters of construction, detailing or specification In or any standards or regulatory requirements relating to proposed structures, hard surfacing or underground his drawing was produced in colour - a monochrome copy should not be relied upon.