Issue: Proposed dwelling situated within the RPA of tree 2.
Solution: Foundations are to be designed to an engineering specification in conjunction with arboricultural advice and site investigations.

Indicative only

grass
PLOT 3 Garden
PLOT 3 Garden
grass
Patio
Patio
Kitchen
Utility
Dining
Plant
PLOT 3
W.C
Family
Study
Hall
Living
PLOT 3 Car Port
Cycle/ Garden Store
PLOT 2 Car Port
PLOT 2 Garden
58.47
58.66
58.66
58.47
skip
Patio
Cycle/ Garden Store
Utility
Plant
Study
Kitchen
W.C
Hall
Family
Dining
Living
PLOT 4
PLOT 4 Garden
PLOT 3 Drive
PLOT 2 Drive
60.58
PRF ht 1.6m
60.68
60.72
G1
Patio
Bedroom 2
Bedroom 3
Study/ Bedroom 4
Hall
Bathroom
W.C
C
Plant
Utility
PLOT 2
58.68
58.38
PLOT 4 Car Port
PLOT 4 Drive
Planting Area
Kitchen
Dining
Living
Family
Plant
Utility
W.C
Ensuite
Bedroom 1
Hall
Ensuite
Bedroom 2
Bathroom
Bedroom 3
C
Linen
Study/ Bedroom 4
Living
Kitchen
Dining
PLOT 1
PLOT 1 Garden
60.32
h 8m
2
brick wall ht 1.20m
60.20
60.23
60.37
60.28
60.33
foliage ht 2.0m
3
4
5
H1
6
7
60.29
60.16
foliage ht 3.0m
grass
PLOT 5
PLOT 5 Garden
Patio
Living
Family
Dining
W.C
Hall
Kitchen
Study
Utility
Plant
PLOT 5
PLOT 5 Car Port
Cycle/ Garden Store
PLOT 5 Drive
Patio
Study
Living
Hall
W.C
Utility
Plant
Family
Dining
Kitchen
PLOT 6
PLOT 6 Drive
PLOT 6 Car Port
Cycle/ Garden Store
Visitor Parking
PLOT 1 Car Port
PLOT 1 Drive
PLOT 6 Garden
59.34
57.37
dense foliage
Access Road
8
H1
9
60.03
grass

Proposed hard surface situated within RPAs of trees 4 & G1.
Solution: Proposed surfacing to be designed in conjunction with an arboriculturist ensuring:

- A sub-base constructed above ground level.
- A permeable, load-bearing surface to allow gaseous exchange and water infiltration.
- Root-friendly edging solutions.

0m 1m 3m 5m 10m 15m 20m

Arboricultural Impacts

Impacts	Nos. of trees
Trees to be removed	0
Groups / Hedges to be removed (Partial removal of groups)	0 (0)
Trees with proposed incursions into RPAs	2
Groups / Hedges with proposed incursions into RPAs	1
Trees that will require pruning	0
Groups / Hedges that will require pruning	0
Trees to be transplanted	0
Groups / Hedges to be transplanted	0

No.	Species	Proposed structure	Incursion
G1	Elder	Hard surface	RPA
4	Apple	Hard surface	RPA
2	Common walnut	Proposed dwelling	RPA

Arboricultural Impacts - RPAs (Area)

No.	Species	RPA	Incursion (m² / %)	
G1	Elder	4.52	Insignificant	0.0
4	Apple	91.61	11	12.0
2	Common walnut	28.27	4	14.1

Tree Work Schedule

No.	Species	Works	Category
2	Common walnut	Prune the northern aspect of the crown to the legal boundary to facilitate the construction of the proposed dwelling.	C1

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

U	A	B	C
0	0	0	0

No. of groups / hedges to be removed

U	A	B	C
0 (0)	0 (0)	0 (0)	0 (0)

() = Partial removal of a groups

Arboricultural Method Statement

All tree work is to be undertaken in accordance with British Standard Please refer to Arbtech Consulting Ltd. Tree Schedule, Arboricultural Method Statement and Tree Protection Plan, for full details of all surveyed trees and how all aspects of the development maybe implemented without detriment to retained trees.

'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 traditional foundations can result in excessive root loss through direct removal of roots during excavation and by compaction of the soil beneath the excavation, as such this 'traditional' type of foundation should be avoided.
When designing hard surfacing that is to be situated within RPAs, the design team need to pay particular attention to the proposed usage (pedestrian, domestic traffic, delivery vans, Emergency vehicles, HGVs etc.), the existing and proposed levels of hard surfacing and finished floor levels, edging types and details, proximity to tree trunks and surface rooting, contamination capture, SUDs, etc.

Possible sub-bases (foundations systems) for hard surfacing situated within the RPAs of retained trees could include:

- A proprietary system such as a multi-dimensional confinement system (Cellweb TRP or similar);
- Engineered solution such as a road deck, bridge, etc.

An engineered solution is likely require a level of excavation for site specific investigations to locate roots to aid in foundation design so that a suitable foundation can be designed to avoid roots and for the installation the structure.

NB: The use of a multi-dimensional confinement systems and or an engineered solution 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

Underground 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 BS3998:2010

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Project:
Barn to the west of Lordship Farmhouse
Pirton Road
Holwell
Hertfordshire
SG5

Client: Netherdown (Herts) Ltd

Drawing: Arboricultural Impact Assessment

Based on: 25-058-11

Drawing No: Arbtech AIA 01

Rev:

Date: Sept 2025

Scale: 1:100 @ A0

Drawn: DM

Key:

Tree Nos.:	1	Tree Canopies:		Trunks:	
RPAs:		Category 'U' trees:		Category 'B' trees:	
Category 'B' groups:		Category 'C' trees:		Category 'C' groups:	
Pruning extent:		Incursion - Hard surfacing:		Incursion - Structures:	

All dimensions should be checked on site. No dimensions are to be scaled from this drawing.
Please notify us of any discrepancies found. Arbtech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based.
This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.
This drawing is not to be read as a definitive part of the engineering or construction designs or method statement. An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.
This drawing was produced in colour - a monochrome copy should not be relied upon.

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