

No.	Species	Proposed structure	Incursion
G2	A Group	Retaining Wall	RPA
G2	A Group	Hard Surfacing (Patio)	RPA
6	Common Oak	Dwelling	RPA & Crown
6	Common Oak	Retaining Wall	RPA
6	Common Oak	Hard Surfacing (Patio)	RPA

Tree Work Schedule			
No.	Species	Works	Category
G1	A Group	Fell-Remove, Grind stumps.	C2
G3	Leyland Cypress	Fell-Remove, Grind stumps.	C2
G4	A Group	Fell-Remove, Grind stumps.	C2
G5	A Group	Fell-Remove, Grind stumps.	C2
6	Common Elm	Small: Remove stumps, topped by 1m and western aspect by 1.5m	C2
8	Goat Willow	Fell-Remove, Grind stumps.	C2
9	Goat Willow	Fell-Remove, Grind stumps.	U
10	Goat Willow	Fell-Remove, Grind stumps.	C2
11	Maple	Fell-Remove, Grind stumps.	B2
12	Elm	Fell-Remove, Grind stumps.	C2
13	Common Beech	Fell-Remove, Grind stumps.	B2
14	Goat Willow	Fell-Remove, Grind stumps.	C2
15	Goat Willow	Fell-Remove, Grind stumps.	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.

U	A	B	C
0 001	0 001	0 001	4 001

Site investigations are to be undertaken within the RPAs of retained trees to determine the size, depth and location of any roots that may be present for the purpose of informing foundation design.

[illegible]

The use of traditional strip foundations can result in excessive root loss and as such should be avoided. Designs for foundations that would minimize the adverse impact upon trees should 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 of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm;
 - Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation

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.

Where piling is to be installed near to trees, the smallest practical pile 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 important 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.

Mechanical trenching for the installation of underground
 Aboveground trenching is a common method to change the local hydrology in a way that adversely affects the health of the riparian habitat. Mechanical trenching is a more effective and less costly method of installing underground RPA's. However, proper methods of installation of all underground apparatus. Wherever possible, apparatus should be routed outside of RPA's. If the apparatus must be installed within the RPA, they should be together in common ducts, all inspection chambers should be installed in common.

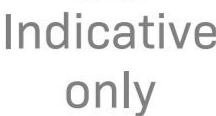
Where underground apparatus is to pass within the RPA's, detailed plans showing the proposed route should be drawn up in consultation with the local authority. The plans should show the trenchless insertion methods should be used with entry and exit points clearly marked. The plans should also show the feasible and providing roots can be retained and protected excavations should be undertaken using hand held tools (shovels, pickaxe, etc.) to ensure the trench is made and manual excavation (broken trench).

Wherever possible, the RPA's should be undertaken in accordance with the National Joint Utilities Guidelines (NJUG)

Above-ground utility apparatus
 Aboveground utility apparatus (e.g. CCTV cameras and lighting) should be sited to avoid the need for detrimental tree pruning, as the present and future crown size of the tree to provide access should be assessed.

Tree branches can be pruned back with care to provide space, but should not be cut back to the point where the tree work to be initial design solution which is a suitable method of ensuring the RPA's can be undertaken in accordance with BS3998:2010

The Arboricultural Method Statement (Arbtech AMS 01) is an accumulation of documents: Arbtech AIA 01(PC); Arbtech AIA 01; Arbtech TPP 01(PC) and Arbtech TPP 01. It provides full details of all surveyed trees and how the development can be implemented without detriment to retained trees. All documents mentioned must therefore be read in conjunction with each other and must not be considered as stand alone documents.



Note: The proposed balcony will be cantilevered to avoid any further incursions of foundations.

Issue: Proposed dwelling situated within the RPA of retained tree 6.

Solution: Specialised foundation design in the form of piles and beams will be utilised. The proposed pile locations within the RPA of retained tree T6 will be subject to supervised investigations. As this area is subject to the infill of the existing pond and therefore increase in the existing soil level, the beam height may be below the newly proposed soil level but must be above the existing soil level.

Issue: Proposed retaining wall situated within the RPAs of retained trees 6 & G2.
Solution: Use of specialised foundations designed to an engineering specification guided by arboricultural advice and site investigations.

Issue: New hard surfacing situated within the RPAs of retained trees 6 & G2.

Solution: The proposed hard surfacing will be supported by the infill of the existing pond which will raise the existing ground levels. The hard surfacing will therefore be constructed entirely above the existing soil level without any requirement for excavation. The hard surfacing is to be constructed from permeable materials so as to allow water penetration and gaseous exchange. This will ultimately improve the rooting area from its existing condition.



Rev:	Date:	Notes:	
→	→ / ← / →	N/A	


arbtech

Unit 3, Well House Barns, Chester, CH4 6DH
<https://arbtech.co.uk> 01244 681170

Project:

10 Romney Chase Hornchurch RM11 3BJ

Client:

Nick Wassell

Drawing:

Arboricultural Impact Assessment (Construction)

Based on:

PL-04

Drawing No:	Rev:
Arbtech AIA 01	
Date: Mar 2024	Scale: 1:100 @ A0
Key:	Drawn: PDG

Tree Numbers:	1	Trunks:	
RPA's:		Category VI Trees:	
Category C Groups:		Category VI Trees:	
Proposed Site Layout:		Proposed Canopy Pruning:	
Incursion Structures:		Hard Surfacing:	
Site Investigation:		Incursions - Level Change:	

All drawings shall be checked and signed by the Designer. All drawings shall be signed by the Designer. The Designer shall be responsible for the accuracy of the information provided. The Designer shall be responsible for the accuracy of the information provided.

This drawing is designed to be used for the purpose of the design of the project and is not to be used for any other purpose. The Designer shall be responsible for the accuracy of the information provided.

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Arboricultural Impacts			
Measures	No. of trees		
Trees to be removed	4		
Groups / hedges to be removed (Partial removal of groups)	4 (0)		
Trees with proposed incursions into RPAs	0		
Groups / hedges with proposed incursions into RPAs	0		
Trees that will require pruning	3		
Groups / hedges that will require pruning	0		
Trees to be transplanted	0		
Groups / hedges to be transplanted	0		

Tree Work Schedule			
No.	Species	Works	Category
01	A Group	Fell Remove; Grind stumps	C2
03	Lupinus Cypripis	Fell Remove; Grind stumps	C2
04	A Group	Fell Remove; Grind stumps	C2
05	A Group	Fell Remove; Grind stumps	C2
6	Common Oak	Prune; Reduce surface aspect by 50%; Incisions aspect by 7m and western aspect by 3.5m	C2
8	Goat Willow	Fell Remove; Grind stumps	C2
9	Goat Willow	Fell Remove; Grind stumps	U
10	Goat Willow	Fell Remove; Grind stumps	C2
11	Maple	Fell Remove; Grind stumps	B2
12	Elm	Fell Remove; Grind stumps	C2
13	Common Beech	Fell Remove; Grind stumps	B2
14	Goat Willow	Fell Remove; Grind stumps	C2
15	Goat Willow	Fell Remove; Grind stumps	U

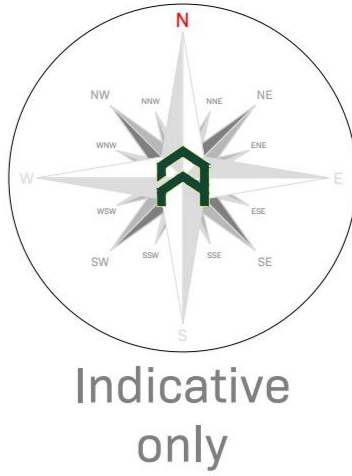
All tree work is to be undertaken in accordance with British Standard BS 3988:2010 Tree work - Recommendations. All arisings are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree 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	
2	0	2	4	

No. of groups / hedges to be removed				
U	A	B	C	
0 (0)	0 (0)	0 (0)	4 (0)	

11 = Partial removal of a group

Arboricultural Method Statement			
The Arboricultural Method Statement (Arbtech AMS 01) is an accumulation of documents: Arbtech AA 01(PC), Arbtech AA 01, Arbtech TFP 01(PC) and Arbtech TFP 01. It provides full details of all surveyed trees and how the development can be implemented without detriment to retained trees. All documents mentioned must therefore be read in conjunction with each other and must not be considered as stand alone documents.			



Tanda

Issue: Prior to any construction works the existing pond will require dredging. This includes areas within the RPAs of retained trees 1-6; 18-21 as well as G2 & G6.
Solution: It will not be possible to determine the rooting activity within the projected RPAs of retained trees that incur into the pond. Dredging operations will therefore be conducted under direct arboricultural supervision and provide site investigation into these areas. Any plant/machinery used will be positioned outside of the RPAs of retained trees (indicated by the turquoise hatch).



Rev: -- | Date: --/--/-- | Notes: N/A



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<https://arbtech.co.uk>, 01244 661170

Project:

10 Romney Chase
Hornchurch
RM11 3BJ

Client:

Nick Wassell

Drawing:

Arboricultural Impact Assessment
(Pre-Construction)

Based on:

021-022-10 Romney Chase_SK01

Drawing No:

Arbtech AIA 01(PC)

Date:

Mar 2024

Scale:

1:100@ A0

Drawn:

PDG

Key:

Tree Numbers:

1

Proposed Canopy Pruning:

Category 'B' Groups:

Category 'U' Trees:

Existing Site Layout:

Trunks:

RPAs:

Category 'C' Trees:

Category 'U' Groups:

Incursion - Dredging:

Tree Canopies:

Category 'B' Trees:

Category 'C' Groups:

Trees to be removed:

Arbtech reserves the right to be checked or alter the information and to be issued from the client. Any use of the information without the written consent of Arbtech is strictly prohibited. This drawing is designed to reflect the principles of the layout or design only, and relates only to the information contained herein. It is not intended to be used for any other purpose, including design or construction. An architect or structural engineer should be consulted over any details of construction. Any use of the information without the written consent of Arbtech is strictly prohibited. This drawing was produced in color - a monochrome copy should not be relied upon.

Arbtech Consulting Ltd 024

Arboricultural Method Statement

Nick Wassell

10 Romney Chase
Hornchurch
RM11 3BJ
19 March 2024

Phil Gower Dip Arb Lv4 (ABC) MArborA

Table of Contents

If this report has been released electronically the appendices referred to herein can be found in the annexed zip folder/s as .pdf files. If this report has been released in hard copy the appendices will be bound into the back of this report. Plans are annexed separately as A0, A1, A2 or A3 as appropriate.

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Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 07 February 2024 from John Pittaway on behalf of Nick Wassell to attend 10 Romney Chase, Hornchurch, RM11 3BJ; grid reference, TQ550883 to undertake an arboricultural survey a to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

Executive Summary

This report describes the extent and effect of the proposed development at Site on individual trees and groups of trees within and adjacent to the site.

Trees within the site were surveyed; using a methodology guided by British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' ("BS5837").

Subsequently, this report has been produced, balancing the layout of the proposed development against the competing needs of trees. This report comprises all of the requisite elements of an arboricultural implications assessment, method statement and supporting plans.

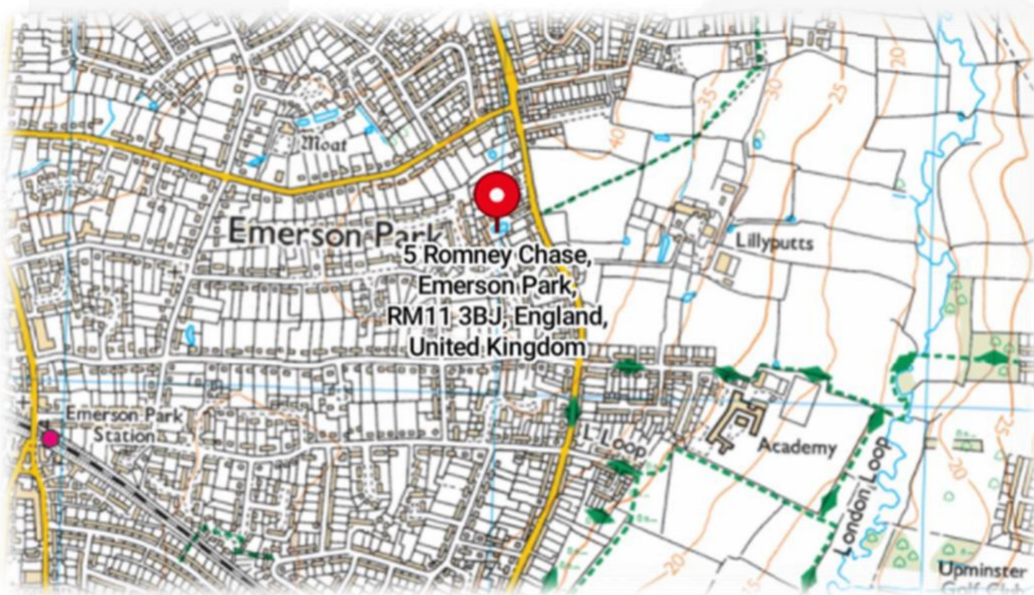


Figure 1: OS Map (Bing Maps)

Proposed scheme

The proposal is to construct a two-storey extension to the rear incorporating a single storey-extension / conversion to the front of the existing property.



Figure 2: Proposed scheme, PL-04 (Johnpittaway: architecture).

Checklist for Submission to Local Planning Authority

Tree survey	✓
Tree constraints plan	✓
Arboricultural impact assessment	✓
Arboricultural method statement	✓
Tree protection plan	✓

This report and its appendices precisely follow the strategy for arboricultural appraisal intended to provide local planning authorities with evidence that trees have been properly considered throughout the development process.

It is the conclusion of this report that the overall quality and longevity of the amenity contribution provided for by the trees and groups of trees within and adjacent to the site will not be adversely affected as a result of the local planning authority consenting to the proposed development. It is considered that any issues raised in this report, or beyond the scope of it can be dealt with by planning conditions.

General Information

Client: Nick Wassell

Site: 10 Romney Chase, Hornchurch, RM11 3BJ

Table 1: Documents referred to.

Document	Reference No.
Survey base drawing	021-022-10 Romney Chase_SK01
Proposed layout drawing	PL-04
British Standard 5837:2012	"BS5837"
Arboricultural Impact Assessment (Pre-Construction)	Arbtech AIA 01(PC)
Arboricultural Impact Assessment (Construction)	Arbtech AIA 01
Tree Protection Plan (Pre-Construction)	Arbtech TPP 01(PC)
Tree Protection Plan (Construction)	Arbtech TPP 01

Tree Survey

An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Anthony Jones on 12 February 2024.

A total of 26no. individual trees and 7no. groups of trees were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 1).

Table 2: Documents upon which this tree survey has been based.

Document	Originator	Reference Number	Title
Survey base drawing	Land and Satellite Ltd	021-022-10 Romney Chase_SK01	Topographical Survey

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser, and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (*i.e. not in relation to the proposed development*).

Legal Status: No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without, stating at Annex B:

*The potential effect of development on trees, **whether statutorily protected** (e.g. by a tree preservation order or by their inclusion within a conservation area) **or not**, is a material consideration that is taken into account in dealing with planning applications.*

Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

For more information on the surveyed trees please see Arbtech Consulting Ltd, Tree Survey Schedule (**Appendix 1**), Tree Survey Report and Tree Constraints Plan.

Arboricultural Impact Assessment

Table 3: Documents upon which this assessment has been based.

Document	Originator	Reference Number	Title
Survey base drawing	Land and Satellite Ltd	021-022-10 Romney Chase_SK01	Topographical Survey
Proposed layout	Johnpittaway: architecture	PL-04	Site Plan Illustrated
Elevations	Johnpittaway: architecture	PL-03	Elevations

Several issues may need to be addressed in an arboricultural impact assessment between the trees and the proposed development; these are as follows:

- The effect and extent of the proposed development within the root protection areas (RPAs) of retained trees;
- The potential conflicts of the proposed development with canopies of retained trees; and
- The likelihood of any future remedial works to retained trees beyond which would have been scheduled as a part of usual management.

Table 4: Impacts upon the RPAs of retained trees.

Tree Number	Species	Structure	RPA (m ²)	Incursion (m ²) (%)	
G2	A Group	Retaining Wall	18.1	0.1	0.5
G2	A Group	Hard Surfacing (Patio)	18.1	0.3	1.5
6	Common Oak	Dwelling	241.1	12.0	5.0
6	Common Oak	Retaining Wall	241.1	2.0	0.8
6	Common Oak	Hard Surfacing (Patio)	241.1	23.3	9.7

These impacts can be seen on the Arboricultural Impact Assessment drawings numbers Arbtech AIA 01(PC) & Arbtech AIA 01.

Trees to be removed

8no. individual trees and 4no. groups of trees require removal as a part of this development.

A breakdown of all tree removals and pruning works can be seen in Table 8: Summary of Tree Works

Table 5: Number of individual trees to be removed.

U	A	B	C
2	0	2	4

Table 6: Number of groups to be removed.

U	A	B	C
0 (0)	0 (0)	0 (0)	4 (0)

() = partial removal of a group

Canopy cover is ecologically important and the loss of canopy cover by this tree will be mitigated with planting within the development.

Arboricultural Method Statement

The purpose of this method statement is to demonstrate how any aspect of the development that has potential to result in loss or damage to a tree may be implemented and provide an adequate level of protection for those trees that are to be retained during the proposed works.

Details of key site personnel, including site/project manager will be submitted to the Council's Tree Officer before the commencement of site works.

This method statement is to be approved and agreed to in writing by all key personnel before the commencement of site works.

No site personnel are to be present and no demolition, site clearance, building work or delivery of materials is to occur until the protective measures are in accordance with this method statement and the Tree Protection Plans, drawing numbers Arbtech TPP 01(PC) & Arbtech TPP 01.

Protective measures will be in accordance with this method statement and the Tree Protection Plans; drawing numbers, Arbtech TPP 01(PC) & Arbtech TPP 01 which will remain unaltered and in situ, unless otherwise specified, for the entire duration of the construction.

Table 7: Documents upon which this assessment has been based.

Document	Originator	Reference Number	Title
Survey base drawing	Land and Satellite Ltd	021-022-10 Romney Chase_SK01	Topographical Survey
Proposed layout	Johnpittaway: architecture	PL-04	Site Plan Illustrated
Elevations	Johnpittaway: architecture	PL-03	Elevations

Tree Works

For reasons of public safety, all tree works referred to herein must be carried out before any site personnel commencing works or any building materials being delivered.

Table 8: Summary of Tree Works.

No.	Species	Works	Category
G1	A Group	Fell: Remove; Grind stumps.	C2
G3	Leyland Cypress	Fell: Remove; Grind stumps.	C2
G4	A Group	Fell: Remove; Grind stumps.	C2
G5	A Group	Fell: Remove; Grind stumps.	C2
6	Common Oak	Prune: Reduce northern aspect by 2m; southern aspect by 1m and western aspect by 1.5m	C2
8	Goat Willow	Fell: Remove; Grind stumps.	C2
9	Goat Willow	Fell: Remove; Grind stumps.	U
10	Goat Willow	Fell: Remove; Grind stumps.	C2
11	Maple	Fell: Remove; Grind stumps.	B2
12	Elm	Fell: Remove; Grind stumps.	C2
13	Common Beech	Fell: Remove; Grind stumps.	B2
14	Goat Willow	Fell: Remove; Grind stumps.	C2
15	Goat Willow	Fell: Remove; Grind stumps.	U

Notes

All tree work is to be undertaken in accordance with British Standard BS 3998:2010, Recommendations for tree work. 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.

Tree removal

A tree should be felled in one piece only when there is no significant risk of damage to people, property, or protected species (see Annex A).

Where restrictions (e.g. lack of space, buildings, other features, land ownership or use, or other trees which are to be retained) cannot be overcome, trees should be dismantled in sections.

This also applies where a tall stump is being retained but where branches are to be removed/pruned.

Extensively decayed trees can be unpredictable when they are being felled, and special precautions should, therefore, be taken, such as the use of a winch to guide the direction of fall.

Stump removal – stump grinding

Stump grinding will be to a minimum of 300mm deep or to extend through the base of the stump leaving the major roots disconnected if the intention is to reduce the potential for the spread of Honey fungus.

The grinding residue will be treated as arising's and removed from site.

NOTE: Mechanical destruction of a stump by stump grinding is less disruptive to the site than digging out.

The hole left by stump removal will be filled with soil or other material. The filling should be appropriate for future site usage, and for any surface treatment that is to be installed.

Where future plant growth is desired, the backfill material will be firmed in 150 mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

After stump removal

The hole left by stump removal, whether by digging out or grinding, will be filled with soil or other material. The filling will be appropriate for future site usage and for any surface treatment that is to be installed.

Where future plant growth is desired, the back-fill material will be firmed in 150mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

Protected Species (general informative for tree works)

Conservation Status of British Bats

The consensus in Britain and Europe is that virtually all bat species are declining and vulnerable. Our understanding of population status is poor as there is very little historical data for most bat species. Certain species, such as the horseshoe bats, are better understood and have well-documented contractions in range and population size.

Given this general picture of decline in UK Government within the UK Biodiversity Action Plan has designated five species of bats as priority species (greater and lesser horseshoe bats, barbastelle, Bechstein's and pipistrelle). These plans provide an action pathway whereby the maintenance and restoration of the former populations' levels are investigated.

Legal Status of British Bats

Given the above position, all British bats, as well as their breeding sites and resting places, enjoy national and international protection.

All bat species in the UK are fully protected under the Wildlife and Countryside Act 1981 (as amended) through inclusion in Schedule 5. All bats are also listed on Annex IV (and some on Annex II) of the EC Habitats Directive giving further, European protection. Taken together, the Act and Conservation of Habitats and Species Regulations 2012 (as amended)* make it an offence to; intentionally or deliberately kill, injure or capture (take) bats;

- Deliberately disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Possess or transport a bat or any part of a bat, unless acquired legally;
- Sell, barter or exchange bats, or parts of bats

The legislation although not strictly affording protection to foraging grounds does protect roost sites. Bat roosts are protected at all times of the year whether or not bats are present. Any disturbance of a roost due to development must be licenced.

**the regulations that delivered by the UK's commitments to the Habitats Directive.*

Breeding birds

All nesting birds are protected under the Wildlife and Countryside Act (as amended) 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. Furthermore, several birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate “no-go” buffer zones around such nests – typically out to 100m.

Planning policy guidance on the treatment of species identified as priorities under the biodiversity action programme suggests that local authorities should take measures to protect the habitats of these species from further decline through policies in local development documents and should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The conservation of these species should be promoted through the incorporation of beneficial biodiversity designs within developments.

Sequencing of works

A logical sequence of events is to be observed and shall be phased as follows.

Table 9: Sequence of Events

Stage	Event
Stage 1	Carry out tree works as specified within the summary of tree works
Stage 2	Installation of protective measures in accordance with tree protection plan, Arbtech TPP 01(PC)
Stage 3	Pre-commencement site meeting
Stage 4	Undertake site preparation works (dredging)
Stage 5	Re-location and instillation of protective measures in accordance with tree protection plan Arbtech TPP 01
Stage 6	Undertake and complete construction works
Stage 7	Undertake external landscaping works outside of the construction exclusion zones
Stage 8	Removal of all machinery and materials from site
Stage 9	Dismantle and removal of protective measures
Stage 10	Undertake external landscaping works within the construction exclusion zones
Stage 11	Sign off from Project Arboriculturist

Protective Measures

Protective measures are to be installed immediately following the completion of the tree works and are to be sited and aligned in accordance with the tree protection plans (Arbtech TPP 01(PC) & Arbtech TPP 01) before the commencement of any works or the introduction of any machinery or material to Site.

Upon installation of the protective measures around the retained trees, the Project Arboriculturist will visit the site to inspect and document the position and specifications of the protective measures.

If the protective measures and their positions do not comply with this arboricultural method statement document number Arbtech AMS 01 (19 March 2024) and tree protection plans drawing numbers Arbtech TPP 01(PC) & Arbtech TPP 01, the Project Arboriculturist shall inform the client and fencing contractor so adjustments can be made.

When the protective measures comply with document number Arbtech AMS 01 (19 March 2024) and tree protection plans drawing numbers Arbtech TPP 01(PC) & Arbtech TPP 01, the Project Arboriculturist will sign off the protective measures in writing to the client and will send a copy to the fencing contractor, site agent and local authority tree officer.

If the protective measures become damaged or there is any accident or emergencies involving trees, these areas are to be cordoned off immediately with high visibility plastic mesh fencing. The site agent is to photograph and document the damage and inform the Project Arboriculturist immediately after the incident and all work within this area is to cease until the Project Arboriculturist has visited the site. Any damaged sections of protective measures shall be replaced within 48 hours of the initial incident.

The protected area is sacrosanct and will not be invaded by the storage of materials, mixing of concrete or other products, accessed by machinery, equipment, or pedestrians or in any other way disturbed by construction activity.

The protective measures will remain in place until the completion of stage 6 (see Sequencing of Works), thereafter they will be carefully dismantled only with the agreement of the Project Arboriculturist and or the local authority tree officer.

The existing site boundary measures are to be retained for the duration of the development. If for any reason the existing boundary measures are not to be used protective barrier fencing is to be installed along the line of the boundaries and is only to be removed upon the written permission of the Project Arboriculturist upon the completion of the development or immediately before the installation of the permanent boundary measures.

The proposed hard surfacing is to be installed immediately to act as ground protection, where it is decided that this is not a viable option these areas are to be covered by ground boarding as designed by the project engineer to cope with any likely loading.

No equipment, vehicles or plant shall operate beyond the tree protection fencing. Booms, hoists, and rigs should be kept as far away from the canopies of retained trees at all times. Where it is necessary to operate within 5m of a tree canopy, it will be done with the utmost caution and under the control of a banks man. Damage to trees will be considered a breach of this tree protection plan, which in turn could be a breach of planning permission.

Construction Exclusion Zone

A construction exclusion zone (CEZ) as designated by the protective barrier fencing, is an area where there is to be no construction activity. Access to the area for construction personnel or machinery is strictly prohibited, unless detailed in the tree protection plan, and there is no scope for materials or waste storage; welfare facilities etc. There may be some construction activities planned for these areas (e.g. the installation of service trenches) these activities will be undertaken under direct, on-site arboricultural supervision.

Protective Barrier Fencing

Protective barrier fencing should be appropriate for the intensity and proximity of the development to protect trees where development activity is nearby.

Default specification: To comprise either 2.4m wooden site hoarding; or a 2.3m high scaffold framework, well braced to resist impacts, with uprights to be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. On to this, standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffold framework with wire.

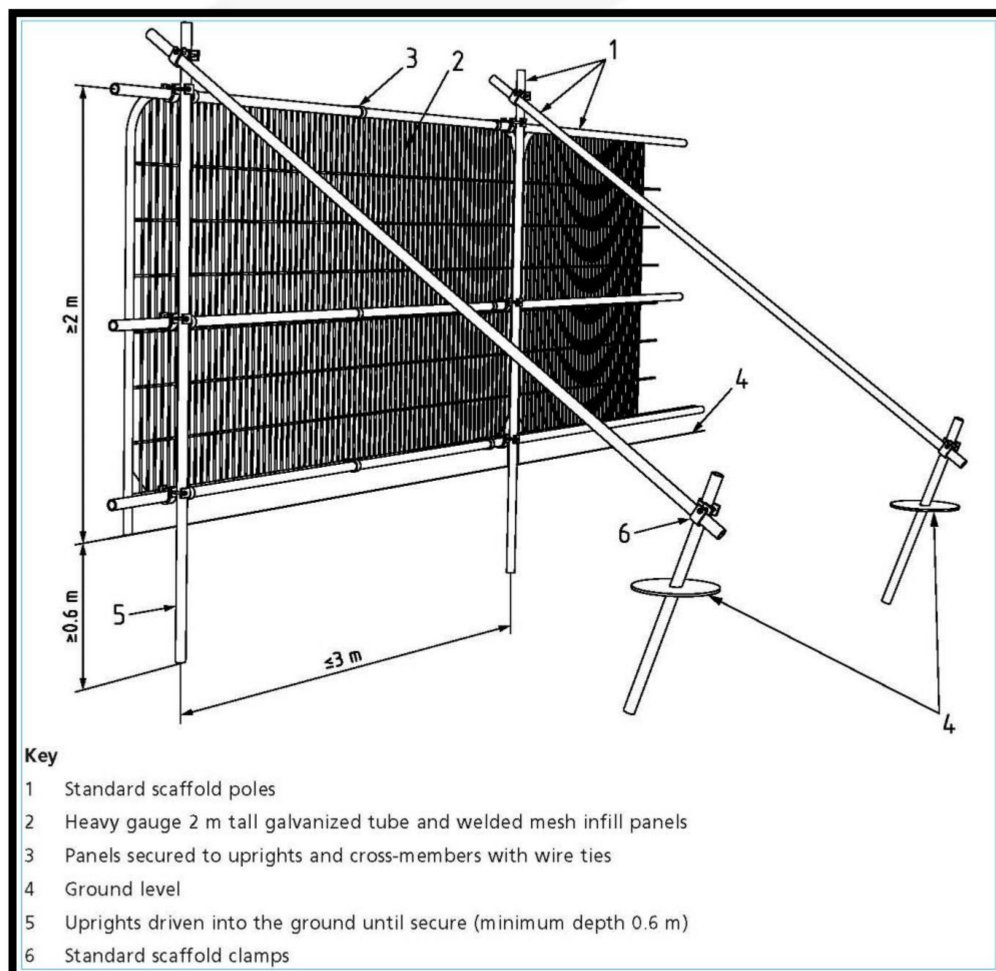


Figure 3: Default specification for protective barrier fencing (BS5837).

Secondary specification: To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels will be supported on the inner side by stabiliser struts, which will be attached to a base plate and secured with ground pins.

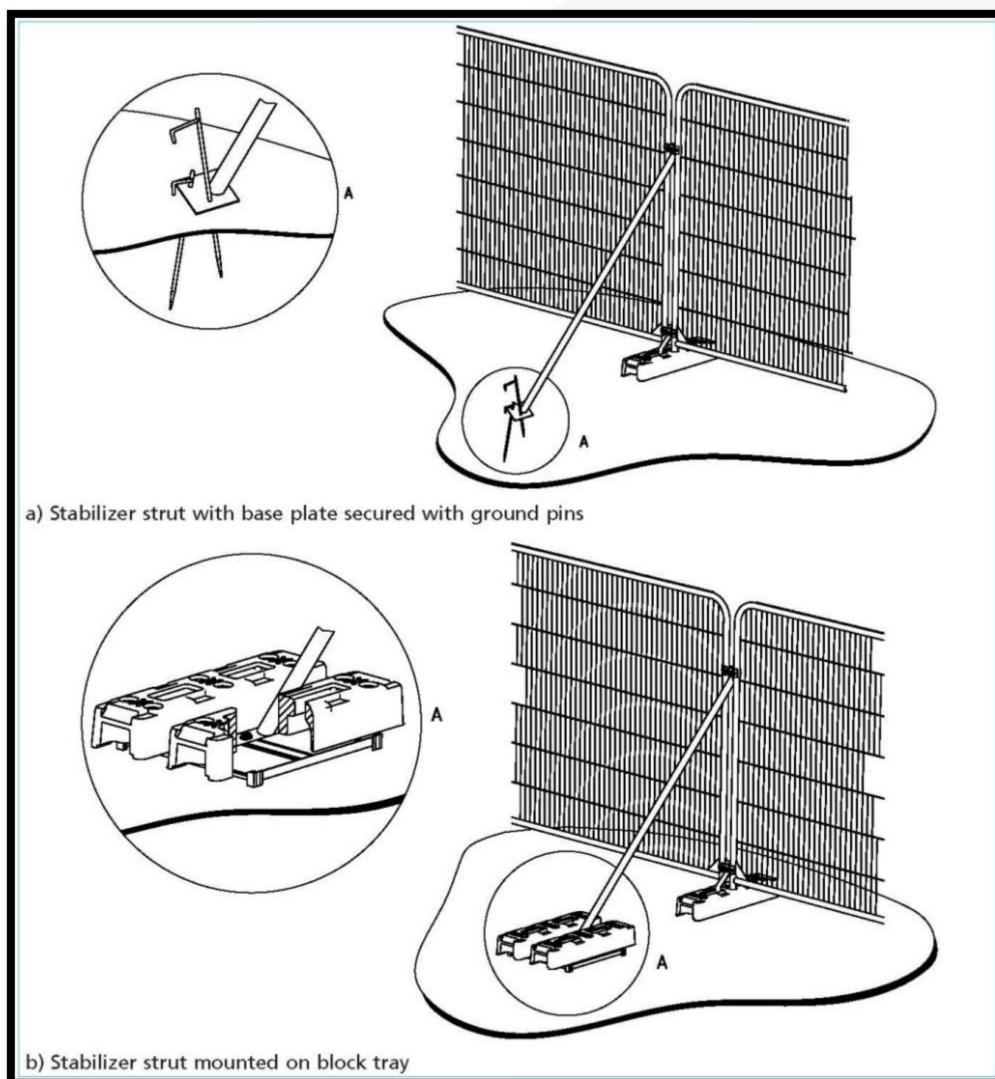


Figure 4: Examples of protective barrier fencing with above-ground stabilising systems (BS5837).

Signage denoting the words “*tree protection area*” at 5.0m intervals will be fixed to the protective barrier fencing (See Appendix 2).

Protective fencing is to be removed **ONLY** with the written permission of the Project Arboriculturist.

Ground boarding

Temporary ground boarding will be used until the new hard surfacing is installed. This will then provide passive protection against compaction to the underlying soil within the RPAs of retained trees G2 & T6 and therefore must be retained for the remainder of the project. If this is removed, it shall be done so under direct arboricultural supervision and replaced with suitable ground protection, capable of withstanding the likely loading for the site. Areas of soil not covered by the new hard surfacing will retain the temporary ground boarding throughout the development.

New temporary ground protection will be capable of supporting any traffic entering or using the site without being distorted or causing compaction of the underlying soil.

Where it is determined by the project engineer that any hard surfacing is not adequate protection from any expected loading, ground boarding is to be installed to the engineer's specification on top of the hard surfacing within the root protection areas of retained trees.

Where machinery will be stored or used from the ground boarding within the RPAs of the retained trees an impervious barrier and or bunding to prevent oils, fuel or chemicals is to be installed to prevent leaching into the soil within or adjacent to the RPAs.

Note The ground protection might comprise one of the following:

- a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
- b) for pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
- c) for wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

For any situations other than those described in a) or b) (as above), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice, to be suitable of supporting the expected loading to be placed upon it.

In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath, so that tree root functions remain unimpaired.

At this stage, no contractors have been approached so it is not possible to know exactly what equipment they have available and will be using.

Due to the various sizes of demolition and construction plant available and the potential requirements for material storage within the site, the final specifications for the ground boarding is to be designed and supplied to the Project Arboriculturist for their approval by the project engineer a minimum of ten (10) working days before its installation.

Pre-Construction Works

Before construction can start, the site will require specific preparation works to prepare the existing pond for development.

Dredging

All dredging works that are to be carried out within the RPAs of retained trees (as depicted in the Tree Protection Plan, Arbtech TPP 01(PC)) will be done so under the direct supervision of the project arboriculturalist. The use of plant/machinery in the form of excavators may be used but should be restricted to the smallest size machine required to undertake the task. Any excavator or other machinery that is to be used will be situated outside of the RPAs of all retained trees or on top of suitable ground protection.

If any plant/machinery is to be used such as an excavator, it will be fitted with a suitably sized toothless grading bucket using a grading/scraping motion rather than digging. If any roots are discovered, mechanical excavation will immediately be stopped and manual excavation will take over to expose the root. Upon the root being uncovered and either severed or protected the excavations can then continue.

Where an excavator or any other machinery is to be used within RPAs or beneath canopies the project arboriculturalist will clearly instruct the operator about what they want and expect to happen prior to any works may commence.

Construction

Before the construction of the proposed development, a copy of the construction method statement will have been submitted and approved by the Project Arboriculturist to ensure that there is no conflict with this method statement.

All excavations and construction work within or immediately adjacent to RPAs or canopies of retained trees is to be undertaken under the direct on-site supervision of an arboriculturist.

Foundations design

New foundations for buildings, structures and hard surfacing situated within the RPAs of retained trees are to be designed in conjunction with arboricultural advice to accommodate the likely loading of the structure. The foundations will be designed to limit the amount of excavation required within RPAs to retain significant roots as identified during the site investigations.

The use of strip foundations within RPAs of retained trees can cause extensive root loss and as such are to be avoided.

Design of foundations for the new dwelling and retaining wall within the RPAs of trees G2 & T6 are to be designed to minimise the adverse impact upon trees and should pay particular attention to the existing ground levels and proposed finished floor level. Foundation design will be undertaken using site-specific information in conjunction with the Project Arboriculturist and engineer.

Root damage can be minimised using:

- Piles, with a site investigation it is possible to determine their optimal location whilst avoiding damage to roots important for the stability of the tree. Investigative excavations are to be undertaken with the use of hand tools or compressed air displacement to a minimum depth of 600mm;
- Beams laid at or above ground level and or cantilevered as necessary to avoid tree roots identified by the site investigation

These are just an example of a few types of foundations that can be used to minimise root damage. To arrive at a suitable solution, site-specific and specialist advice regarding foundation design should be sought from the Project Arboriculturist and engineer.

Large structures

Slabs for larger structures, such as the dwelling, should be designed and constructed with a ventilated air space between the underside of the slab and the existing soil surface. A specialist irrigation system is to be installed underneath the slab e.g. rainwater runoff from the roof.

Where piling is to be installed near to trees, the smallest practical pile diameter will 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 will conform to the specification for ground boarding.

All and any excavations that may be required for foundations within the RPAs of retained trees will initially be undertaken manually under arboricultural supervision (see Manual excavation).

Hard Surfacing

The new hard surfacing to be situated within the RPAs of retained trees G2 and T6 will be supported by the infill of the existing pond which will raise the existing ground levels. The hard surfacing will therefore be constructed entirely above the existing soil level without any requirement for excavation.

The hard surfacing is to be constructed from permeable materials so as to allow water penetration and gaseous exchange. This will ultimately improve the rooting area from its existing condition.

Concrete foundations

Before concrete being poured to form the foundations within or immediately adjacent to the RPAs of retained trees the excavation is to be lined and sealed to prevent any leaching of the concrete into the soil and causing desiccation of retained roots by concrete runoff.

Manual excavation

Excavation within RPAs will be undertaken by hand under direct on-site arboricultural supervision of the required depth of the foundation; Or to a minimum of 600mm deep of any excavation, whether for proposed foundations, hard surfacing, or underground services. The total depth of the manual excavation will be determined by the arboriculturist whilst on site.

The soil is to be loosened with the aid of a fork or pickaxe and then cleared with the aid of an Air-spade, Air-vac and or shovel. Any roots found will be cleanly severed by the Project Arboriculturist with either a hand saw or secateurs.

Any roots found with a diameter of less than 25mm shall be cleanly severed by the Project Arboriculturist. Any roots of 25mm and above shall be excavated around without damaging them; the Project Arboriculturist shall decide if it is feasible or necessary to retain the root, if not it shall be severed.

The edge of the excavation closest to the trees will be covered with damp hessian to prevent soil collapse or contamination by concrete.

The soil beneath the depth may be sheet piled, regular piled or excavated deeper. Machinery may be used for this providing that it is situated outside of the RPA or has appropriate ground protection in place to move around on and work upon.

Prohibition

- Mechanical digging or scraping is not permitted within a defined root protection area or areas cordoned off by protective barrier fencing.
- No access will be permitted within the protected areas;
- No materials, equipment or debris will be stored within any of the fenced areas, or against the fencing;
- Fires are not permitted within 10m of any vegetation.
- Leaning objects against or attaching of objects to a tree is not permitted.
- Machinery, plant, and vehicles are not permitted to be washed down within 10m of vegetation.
- Chemicals and materials are not to be transported, stored, used, or mixed within a root protection area or areas cordoned off by protective barrier fencing.
- Cement silos, mixing site to be situated within a bunded area to prevent spillage/leaking of chemicals harmful to trees. These areas are to be sited well clear of protected trees.
- Refuelling of plant or machinery is prohibited within 10m of the construction exclusion zones.
- Allowance must be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.
- Where machinery is to be used within 5m of retained tree canopies a banks man will be required at all times whilst setting up, moving, or operating within this distance of retained trees canopies.
- Storage of all caustic material and chemicals are to be situated well clear of protected areas and preferably on lower ground if slopes are present, or to be situated within a bonded area to prevent any spills or leaks entering the ground.

Site Management

The site manager will be responsible for briefing and inducting all personnel who will be working on any stage of this development and especially those who will be working within or adjacent to the canopies or RPAs of retained trees, and will make them aware of, and provide a copy of this method statement and tree protection plans drawing numbers Arbtech TPP 01(PC) & Arbtech TPP 01; this is to include but not exclusively the movement and or operation of plant, excavations, unloading deliveries, mixing and or pouring of cement and concrete.

The site manager will be responsible for the day to day running and protection of all retained trees and for liaising with the project arborist about any tree-related matters and before any works that may or will affect the RPAs or canopies of retained trees; this is to include but not exclusively the movement and or operation of plant, excavations, unloading deliveries, mixing, pouring and storage of all caustic materials that may cause harm to retained trees.

Any incidents of damage to retained trees or tree protection measures will be documented by the site manager who will then report these incidents to the Project Arboriculturist immediately and make sure that works within this area cease until the project arborist has had an opportunity to inspect the damage and where appropriate, agree on a mitigation plan with the local planning authority tree officer.

The site manager may designate another person to take charge of briefing and inducting process of new site personnel or visitors in his absence.

If the site manager is replaced or is absent from the site for more than three consecutive working days, the project arborist will be informed, and a prestart meeting will be held with the new or acting site manager.

It is the responsibility of the site manager to ensure that the planning conditions attached to the planning consent are adhered to at all times and that a monitoring regime and supervision of any works within or adjacent to the RPAs are adopted.

If at any time pruning works are required other than those previously approved, permission must be sought from the LPA tree officer and once permission is granted, they are to be carried out by a suitably qualified person in accordance with BS3998:2010 Tree work – Recommendations.

Services

Detailed drawings of proposed underground services are not available at this time; hence it is not possible to identify any specific potential impacts associated with the scheme at this stage.

Existing services within the site will be retained wherever possible. Where existing services within RPAs require upgrading, the utmost care must be taken to minimise disturbance, and where feasible trenchless techniques are to be employed, and only where necessary should open excavations be considered.

Where new services are to be introduced into the site they will be located outside of RPAs, where they will not interfere with tree roots. If any excavations are required within the RPAs all trenches are to be excavated by hand and radially to the tree trunks under direct on-site arboricultural supervision and are to be carried out under NJUG guidelines.

Final positions of any proposed services will be verified and approved by the Project Arboriculturist and local authority tree officer before implementation.

New Underground services

Trenching for installation of underground services and drainage routes could sever any roots that may be present and as such adversely affects the health of the tree. For this reason, particular care will be taken in routing and methods of installation of all underground services. All underground services and drainage routes will be located so that no excavations are required within RPAs.

Where it has been impossible to keep underground services from passing through RPAs or within proximity to trees, these sections are to be installed in one of three ways in accordance with the guidance set out in National Joint Utilities Group guidelines (NJUG 4), under on-site arboricultural supervision.

Trenchless Techniques

There are three main types of trenchless techniques, these include, guided and unguided boring and pipe replacement by lining or bursting. These allow for the installation, maintenance, or renewal of underground services, without the disturbance of soil in which roots are likely to be growing. Starting and receiving pits for the boring machinery are to be located outside of the RPAs of any retained trees, with the bore depth being maintained at a minimum depth of 600mm below the existing ground level.

Techniques involving external lubrication of the equipment shall use no material other than water as other lubricants could contaminate the soil (e.g. oil, bentonite, etc.).

Manual Excavation

Excavation within RPAs will be undertaken by hand under direct on-site arboricultural supervision of the required depth of the foundation; Or to a minimum of 600mm deep of any excavation, whether for proposed foundations, hard surfacing, or underground services. The total depth of the manual excavation will be determined by the arboriculturist whilst on site.

The soil is to be loosened with the aid of a fork or pickaxe and then cleared with the aid of an Air-spade, Air-vac and or shovel. Any roots found will be cleanly severed by the Project Arboriculturist with either a hand saw or secateurs.

Any roots found with a diameter of less than 25mm shall be cleanly severed by the Project Arboriculturist. Any roots of 25mm and above shall be excavated around without damaging them; the Project Arboriculturist shall decide if it is feasible or necessary to retain the root, if not it shall be severed.

The edge of the excavation closest to the trees will be covered with damp hessian to prevent soil collapse or contamination by concrete.

The soil beneath the depth may be sheet piled, regular piled or excavated deeper. Machinery may be used for this providing that it is situated outside of the RPA or has appropriate ground protection in place to move around on and work upon.

Broken Trench – Hand Dug

This technique combines both trenchless techniques and manual excavation where excavation is unavoidable. Excavations will be limited to where there is clear access around and below the roots. All trenches shall be excavated by hand with the same precautions taken as for manual excavation. The open section of the trench will only be large enough to allow access for linking to the next section.

Landscaping

Landscaping around retained trees may only be carried out once all tree protection measures have been removed (planting, turfing, fencing etc.).

All excavations within the Root Protection Areas shall be undertaken by hand and without reducing current ground levels unless it is agreed in writing with the LPA. At no time is the use of a rotavator permitted within the RPAs of retained trees.

Any tree roots discovered will be left in-situ and shall not be cut or otherwise damaged. Where possible, the soil structure within the Root Protection area shall be preserved.

No works will be carried out within the RPAs of any trees if the soil moisture is of such a level that soil compaction may be likely. Should the soil become compacted or has a poor structure which would hinder the development of the existing trees and plants or any new plantings the arboriculturist will be consulted about soil decompaction techniques.

Monitoring and Supervision

Where trees have been identified within this method statement and tree protection plans drawing numbers Arbtech TPP 01(PC) & Arbtech TPP 01 for retention, there will be an auditable system of arboricultural monitoring. This is to extend to arboricultural supervision whenever demolition or construction activity is to take place within or adjacent to any canopy or RPA.

The development's tree protection measures are to be monitored and all demolition and construction works are to be undertaken within or adjacent to the RPAs of retained trees are to be supervised by Project Arboriculturist, who will be retained to record and report observations to the council at appropriate intervals.

Pre-commencement site meeting

Before the commencement of any works or machinery and materials arriving on site a pre-commencement site meeting involving the project arborist, landowner or agent, site manager, contractors and engineer (as appropriate) and the relevant LPA officers will be held to ensure that all aspects of the arboricultural method statement and tree protection are understood and for all parties to swap contact details (see Appendix 3).

Monitoring and supervision schedule

The initial monitoring visit will be to check that the tree protection measures are in the correct location and as specified within the approved method statement, if so to sign off their installation.

Thereafter, monitoring visits are to take place at regular intervals, to ensure that tree protection measures are in place and are functioning as designed or whenever necessary to undertake works to be carried out under arboricultural supervision. The frequency of the monitoring visits is to be agreed with the LPA tree officer at the pre-commencement site meeting.

A record of all arboricultural monitoring and supervision visits will be kept, and any faults will be logged, this will then be copied to the site agent, developer, and local planning authority in a digital format.

If during the development areas must be re-designed so that they would require changes to the approved arboricultural method statement or tree protection plan and so affecting retained trees the project arborist and LPA tree officer will be invited to attend a site meeting with all relevant parties. Before any changes being implemented these must have been approved in writing by the LPA tree officer.

Supervision

The Project Arboriculturist will be required to attend site to directly supervise all demolition and construction works that are to be undertaken within or adjacent to the RPAs of all retained trees and will be advised a minimum of 72 hours before the commencement of any works that require his attendance, these will include:

1. Pre-commencement site meeting;
2. Location of protective measures;
3. Supervised dredging of the existing pond;
4. Supervised excavation for the investigation and instillation of specialised foundations for the retaining wall within and immediately adjacent to the RPAs of retained trees;
5. Supervised excavation for the investigation and instillation of specialised foundations for the proposed dwelling within and immediately adjacent to the RPAs of retained trees;
6. Any excavations within and immediately adjacent to RPAs, including foundations, hard surfacing, or underground services (a non-exhaustive list);
7. Removal of protective measures and sign-off.

Completion meeting

Once all construction works have been completed all materials and machinery has been removed from site the project arborist shall be informed and will invite the LPA tree officer to meet on site to discuss the process and discuss any final remedial works that may be required and to sign the development off so that the protective measures may be removed.

Arboricultural Monitoring and Supervision Sign-Off Checklist

10 Romney Chase, Hornchurch, RM11 3BJ

Tree Number	Task	Date Completed	Signed (Project Arboriculturist)	Signed (Site Manager)
All	Pre-commencement site meeting			
All	Sign off of the location and specification of the protective measures in accordance with Arbtech TPP 01(PC)			
T1-6, T18-21, G2 & G6	Supervised dredging works			
All	Sign off of the location and specification of the protective measures in accordance with Arbtech TPP 01			
G2 & T6	Manual excavation for foundations (retaining wall)			
T6	Manual excavation for foundations (dwelling)			
	Additional excavations (if required)			
All	Completion of groundworks			
All	Completion of construction			
All	Removal of machinery and materials from Site			
All	Dismantle & removal of protective measures			
All	Completion of Landscaping			
All	Sign off from Project Arboriculturist			

Appendix 1: Tree Survey Schedule

BS5837:2012 Tree Survey

Arbtech Consulting Ltd

Client: Nick Wassell
 Project: 10 Romney Chase, Hornchurch, RM11 3BJ
 Survey Date: 12/02/2024
 Surveyor: Anthony Jones



3 Well House Barns
 Chester Road
 Bretton
 Cheshire
 CH4 0DH
 Phone: 01244661170

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
G1												Estimated Measurements		
A Group		4.5	1	120	N	2	0	SM	A: 6.5	Fair	C: Fair		C.2	
See comments for details					E	2	0		R: 1.43		S: Fair	Group of semi mature- young trees. Species consist of hawthorn, plum and ash. Ivy covered stems up to 3 m from ground level restricting survey. Measurements estimated and indicative of largest individual tree in group. Stem diameter measurement over ivy.	10+ yrs	
					S	1	0				B: Fair			
					W	2	0							
G2													Estimated Measurements	
A Group		4.5	1	200	N	2	1	EM	A: 18.1	Fair	C: Fair		C.2	
See comments for details					E	4	0		R: 2.4		S: Not visible	Group of trees located on southern boundary, approx. 1 m from pond bank. Species consist predominantly of hawthorn and yew. Ivy covered stems restricting survey. Historic coppicing to south side of group 1 m from ground level. Measurements estimated and indicative of largest individual tree in group. Stem diameter measurement over ivy.	10+ yrs	
					S	2	1				B: Not visible			
					W	0.5	1							
G3													Estimated Measurements	
Leyland Cypress		7.5	1	200	N	2	1	SM	A: 18.1	Fair	C: Fair		C.2	
X Cupressocyparis leylandii					E	2	1		R: 2.4		S: Not visible	Group of leylandii trees on eastern boundary within property, approx. 1.5 m from pond bank. Ivy covered stems up to 5 m from ground level, restricting survey. 1 tree has a failed top, 4 m from ground level. Trees north side of group historically topped at 5 m from ground level. Measurements estimated and indicative of largest individual tree in group. Stem diameter measurement over ivy.	10+ yrs	
					S	2	1				B: Not visible			
					W	2	1							
Age Classifications:		N	Newly planted	EM	Early Mature		Condition:		C	Crown	Stems:		Ø	Diameter
		Y	Young	M	Mature				S	Stem			(Eq)	Equivalent stem diameter using BS5837:2012 definition
		SM	Semi-mature	OM	Over Mature				B	Basal area	ERC:		Estimated Remaining Contributio	

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
G4												Estimated Measurements		
A Group		6	1	600	N	2	2	M	A: 162.9	Fair	C: Poor			C.2
See comments for details					E	2	2		R: 7.2		S: Fair	Group of leylandii trees on north/ north east property boundary, approx. 3 m from pond bank. Historically topped at 5 m from ground level leaving 200- 500 mm diameter pruning wounds. 50-150 mm diameter deadwood present throughout crowns. measurements estimated and indicative of largest individual tree in group.	10+ yrs	
					S	4	1				B: Good			
					W	2	2							
G5												Estimated Measurements		
A Group		8	1	200	N	2	22	SM	A: 18.1	Good	C: Good			C.2
See comments for details					E	2	2		R: 2.4		S: Good	Linear group of leylandii trees within northern property boundary, approx. 1 m from pond bank. Measurements estimated and indicative of largest individual tree in group.	10+ yrs	
					S	2	1				B: Good			
					W	2	2							
G6												Estimated Measurements		
A Group		6	1	140	N	2	2	SM	A: 8.9	Fair	C: Fair			C.2
See comments for details					E	2	2		R: 1.68		S: Good	Group of young- semi mature tree located between northern boundary and pond bank. Species consist predominantly of ash and plum. Minor dieback present in ash trees. Measurements estimated and indicative of largest individual	10+ yrs	
					S	2	1				B: Good			
					W	2	1							
G7												Estimated Measurements		
A Group		5.5	1	150	N	2	2	EM	A: 10.2	Fair	C: Fair			C.2
See comments for details					E	2	2		R: 1.8		S: Not visible	Group of semi mature- early mature trees and shrubs. Species consist predominantly of oak, red robin and plum. Plum tree in group has been topped at 4 m from ground level. Restricted access survey measurements estimated and indicative of largest individual tree in group. Category grading based on the assumption that trees are of sound structure.	10+ yrs	
					S	2	1				B: Not visible			
					W	2	2							
1												Estimated Measurements		
Common Oak		10	1	260	N	4.5	5	SM	A: 30.6	Fair	C: Fair			C.2
Quercus robur					E	2	5		R: 3.12		S: Not visible	Tree located within property boundary on pond bank. Ivy covered stem up to 6 m from ground level restricting survey. Historic pruning consistent with height reduction at 10 m. Stem diameter measurement over ivy.	10+ yrs	
					S	1	3.5				B: Not visible			
					W	1	5							
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
2														
Common Oak <i>Quercus robur</i>		19	1	710	N E S W	6.5 3.5 7 5	10 8 4.5 6	M	A: 228.1 R: 8.52	Fair	C: Fair S: Not visible B: Not visible	Tree located within property boundary on pond bank. Ivy covered stem up to 8 m from ground level restricting survey. Historic pruning consistent with crown reduction at 19 m from ground level. Stem diameter measurement over ivy.		B.2 20+ yrs
3														
Common Oak <i>Quercus robur</i>		18	1	600	N E S W	5 6 6.5 0.5	6 3 6 7	M	A: 162.9 R: 7.2	Fair	C: Fair S: Fair B: Good	Tree located within property boundary on pond bank. Hazard beam crack present on 100 mm diameter lower limb on east side of crown. Partially ivy covered stem restricting survey. Historic pruning consistent with crown lifting up to 6 m and selective pruning within crown leaving multiple stub pruning wounds 100-200 mm diameter.		B.2 20+ yrs
4														
Common Oak <i>Quercus robur</i>		10	1	350	N E S W	6 3 0.5 3	2.5 2.5 8 8	EM	A: 55.4 R: 4.19	Fair	C: Fair S: Good B: Good	Tree located within property boundary on pond bank. 250 mm diameter pruning decay wound on east side of crown, 3 m from ground level. Asymmetrical crown due to neighbouring trees. Historic pruning consistent with height reduction at 9 m from ground level and branch reduction pruning on west side of crown.		B.2 20+ yrs
5														
Common Hawthorn <i>Crataegus monogyna</i>		5.5	1	300	N E S W	2.5 2.5 2 2	1 1 2 1	M	A: 40.7 R: 3.59	Fair	C: Good S: Not visible B: Not visible	Tree located within property boundary on pond bank. Ivy covered stem up to 3 m from ground level restricting survey. Stem diameter measurement over ivy.		C.2 10+ yrs
6														
Common Oak <i>Quercus robur</i>		19	1	730	N E S W	6.5 5 6.5 6.5	4.5 8 4.5 4.5	M	A: 241.1 R: 8.76	Good	C: Fair S: Not visible B: Not visible	Tree located on south side of pond approx. 1 m from pond bank. Historic pruning consistent with crown reduction, 18 m from ground level. Ivy covered stem up to 7 m from ground level restricting survey. Stem diameter measurement over ivy.		B.2 20+ yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio	

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
7														
Robinia <i>Robinia pseudoacacia</i>		14	1	200	N	1	7	EM	A: 18.1 R: 2.4	Fair	C: Fair S: Not visible B: Good	Tree located on southern boundary approx. 1.5 m from pond bank. Asymmetrical crown due to neighbouring trees. Ivy covered stem up to 6 m from ground level, restricting survey. Stem diameter measurement over ivy.	C.2 10+ yrs	
					E	3	6							
					S	4.5	7							
					W	2	7							
8														
Goat Willow <i>Salix caprea</i>		15	7	397 (Eq)	N	4.5	1	M	A: 71.3 R: 4.76	Fair	C: Fair S: Fair B: Not visible	Tree located within property boundary on pond bank. 200 mm longitudinal cavity present on eastern stem, 1 m from ground level. Failed 200 mm limb south side of crown, 4 m from ground level. Dense crown with multiple crossing limbs with visible friction damage. 3 of 7 stems covered in ivy up to 8 m from ground level, restricting survey. Average stem diameter recorded. Stem diameter measurement over ivy.	C.2 10+ yrs	
					E	3.5	3							
					S	7	2							
					W	4	3							
9														
Goat Willow <i>Salix caprea</i>		6	5	500 (Eq)	N	1	2	M	A: 113.3 R: 6	Poor	C: Poor S: Poor B: Poor	Tree located within property boundary on pond bank. Major longitudinal decay throughout tree on all stems. Suspected Ganoderma sp present on north side of basal area. Historic pruning consistent with pollarding at 2.5 m from ground level.	U <10 yrs	
					E	3	2							
					S	1.5	2							
					W	1	2							
10														
Goat Willow <i>Salix caprea</i>		5	2	127 (Eq)	N	3	1	SM	A: 7.3 R: 1.52	Fair	C: Good S: Good B: Fair	Tree located within property, partially submerged in pond. Asymmetrical crown due to neighbouring trees.	C.2 10+ yrs	
					E	3	1							
					S	0.5	1							
					W	3	1							
11														
Maple <i>Acer sp.</i>		15	1	240	N	2.5	2.5	M	A: 26.1 R: 2.88	Good	C: Good S: Not visible B: Not visible	Tree located within property boundary on pond bank. Ivy covered stem up to 6 m from ground level, restricting survey. Stem diameter measurement over ivy.	B.2 20+ yrs	
					E	2	4							
					S	3.5	1							
					W	4.5	1							
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition	ERC:	Estimated Remaining Contributio

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
12														
Elm	16	2	237	(Eq)	N	2.5	7	M	A: 25.4	Fair	C: Fair			C.2
Ulmus sp.					E	2	7		R: 2.84		S: Not visible	Tree located within property on pond bank. Suspected Rigidoporus ulmarius bracket fungus on east side of basal area with visible 200 mm basal decay. Historically coppiced at 1 m from ground level. Ivy covered stem up to 8 m from ground level restricting survey. Stem diameter measurement over ivy.		10+ yrs
					S	3	2				B: Poor			
					W	5	3							
13														
Common Beech	18	1	610		N	6.5	5.5	M	A: 168.4	Fair	C: Good			B.2
Fagus sylvatica					E	4.5	6		R: 7.32		S: Fair	Tree located on northern boundary within property, approx. 1 m from pond bank. 400 mm longitudinal decay wound on north side of main stem, 2.5 m from ground level. Multiple deadwood throughout crown, 100-200 mm diameter. Historic pruning consistent with crown lifting up to 6 m from ground level. Basal area engulfed in ivy restricting survey.		20+ yrs
					S	6.5	5.5				B: Not visible			
					W	4.5	5.5							
14													Estimated Measurements	
Goat Willow	8	6	392	(Eq)	N	3	1	M	A: 69.5	Good	C: Good			C.2
Salix caprea					E	4.5	0		R: 4.7		S: Good	Tree located on pond bank. Minor basal decay wound almost completely occluded. Stem measurement indicative of average stem.		10+ yrs
					S	6.5	0				B: Fair			
					W	2	0							
15													Estimated Measurements	
Goat Willow	6	1	110		N	4	2	M	A: 5.5	Poor	C: Good			U
Salix caprea					E	2	2		R: 1.32		S: Fair	Tree located on pond bank. Major basal decay from previously removed stems/ coppicing. Suspected Daedaleopsis confragosa bracket fungus present.		<10 yrs
					S	1	1				B: Poor			
					W	1	1.5							
16														
Plum	6.5	1	180		N	3	2	EM	A: 14.7	Good	C: Good			C.1
Prunus Domestica					E	2	3		R: 2.16		S: Good	Tree located on north west boundary approx. 2.5 m from pond bank. Dense crown with multiple crossing limbs. Historic pruning consistent with selective reduction cuts on north side of crown.		10+ yrs
					S	2.5	2				B: Good			
					W	2	2							
Age Classifications:	N	Newly planted	EM	Early Mature	Condition:			C	Crown	Stems:	Ø	Diameter		
	Y	Young	M	Mature				S	Stem		(Eq)	Equivalent stem diameter using BS5837:2012 definition		
	SM	Semi-mature	OM	Over Mature				B	Basal area	ERC:	Estimated Remaining Contributio			

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
17														
Common Oak <i>Quercus robur</i>		9	1	350	N E S W	0.5 3 1 1	7 7 7 7	M A: 55.4 R: 4.19	Fair	C: Poor S: Fair B: Good	Tree located in neighbouring property, west of site next to public footpath. Tree has been heavily topped at 9 m from ground level.			C.2 10+ yrs
18														
Common Oak <i>Quercus robur</i>		12	1	480	N E S W	2 2 3 3	7 7 7 7	M A: 104.2 R: 5.75	Poor	C: Poor S: Fair B: Good	Tree located in neighbouring property, west of site next to public footpath. Tree has been heavily topped at 12 m from ground level.			C.2 10+ yrs
19														
Common Oak <i>Quercus robur</i>		13	1	550	N E S W	2 2 3.5 3.5	7 7 7 7	M A: 136.9 R: 6.6	Poor	C: Poor S: Fair B: Good	Tree located in neighbouring property, west of site next to public footpath. Tree has been heavily topped/ height reduced at 13 m form ground level.			C.2 10+ yrs
20														
Common Oak <i>Quercus robur</i>		19	1	500	N E S W	5 8 5 5.5	6 3 3 3	M A: 113.1 R: 6	Good	C: Good S: Good B: Good	Tree located in neighbouring property east of site next to public footpath. 50- 150 mm diameter deadwood on west side of crown.			B.2 20+ yrs
21														
Common Oak <i>Quercus robur</i>		18	1	590	N E S W	8 8 3 4	6 10 8 6	M A: 157.5 R: 7.08	Fair	C: Fair S: Good B: Good	Tree located in neighbouring property east of site next to public footpath. Historic pruning consistent with selective branch reductions on south and south west side of crown.			B.2 20+ yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
22														
Common Hawthorn <i>Crataegus monogyna</i>		7	1	320	N	3.5	3	M	A: 46.3	Good	C: Good			B.1
					E	4	2		R: 3.83		S: Fair	Tree located in neighbouring property east of site. 150 mm diameter decay wound on west side of main stem, 2 m from ground level. 200 mm longitudinal decay wound west side of main stem almost completely occluded, 3 m from ground level. Historic pruning consistent with crown lifting up to 3 m from ground level.	20+ yrs	
					S	2.5	2				B: Good			
					W	3.5	3							
23													Estimated Measurements	
Myrobalan Plum 'Nigra'		5	1	250	N	1	3	M	A: 28.3	Poor	C: Poor			C.2
<i>Prunus cerasifera 'Nigra'</i>					E	1	3		R: 3		S: Good	Tree located in neighbouring property north of site. Tree historically topped at 5 m from ground level leaving multiple stub decay wounds 50-100 mm diameter.	10+ yrs	
					S	1	3				B: Good			
					W	1	3							
24													Estimated Measurements	
Myrobalan Plum 'Nigra'		5	1	240	N	1	3	M	A: 26.1	Poor	C: Poor			C.2
<i>Prunus cerasifera 'Nigra'</i>					E	1	3		R: 2.88		S: Good	Tree located in neighbouring property north of site. Tree historically topped at 5 m from ground level leaving multiple stub decay wounds 50-100 mm diameter.	10+ yrs	
					S	1	3				B: Good			
					W	1	3							
25													Estimated Measurements	
Lawson Cypress		18	1	800	N	5	4	M	A: 289.6	Good	C: Good			B.1
<i>Chamaecyparis lawsoniana</i>					E	6	4		R: 9.6		S: Not visible	Tree located in neighbouring property south east of site. Hard surface access road between site boundary and tree. Significant curb and tarmac displacement at base of tree. Restricted access survey measurements estimated. Category grading based on the assumption that tree is structurally sound.	20+ yrs	
					S	5	2.5				B: Not visible			
					W	6	4							
26													Estimated Measurements	
Common Ash		18	2	640	(Eq) N	6	6	M	A: 185.5	Fair	C: Fair			B.1
<i>Fraxinus excelsior</i>					E	7	6		R: 7.68		S: Not visible	Tree located in neighbouring property south east of site. Hard surface access road between site boundary and tree. 100-150 mm deadwood present on west side of crown. Restricted access survey measurements estimated. Category grading based on the assumption that tree is structurally sound.	20+ yrs	
					S	3	6				B: Not visible			
					W	6	7							
Age Classifications:		N	Newly planted	EM	Early Mature	Condition:		C	Crown	Stems:		Ø	Diameter	
		Y	Young	M	Mature			S	Stem			(Eq)	Equivalent stem diameter using BS5837:2012 definition	
		SM	Semi-mature	OM	Over Mature			B	Basal area	ERC:		Estimated Remaining Contributio		

Appendix 2: Tree Protection Notice

(To be printed at A3 or larger)

Tree Protection Area **KEEP OUT**

Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)

**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS
AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER.**

**CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL
PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN
PERMISSION OF THE LOCAL PLANNING AUTHORITY**



Unit 3, Well House Barn, Chester Road, Chester, CH4 0DH
<https://arbtech.co.uk> - 01244 661170

Appendix 3: Contact Details

Name	Position	Company	Contact
	Client		
	Agent / Project Manager		
	Tree Officer		
	Project Arboriculturist	Arbtech Consulting Ltd.	01244 661170 https://arbtech.co.uk
	Site Manager		
	Main contractor		

Document Production Record

Document number	Editor	Signature	Position	Issue number	Date
Arbtech AMS 01	Phil Gower		Arboricultural Consultant	01	19/03/24

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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.

To be erected prior to the commencement of all works on site, and retained in place throughout construction.

Detail Specification: To comprise either 2.4m wooden site boarding, or a 2.3m high scaffolded framework comprising of vertical and horizontal framework, well braced to resist impacts, with all heights to be secured to the ground by 3.0m intervals and driven into the ground by a minimum of 600mm. On this, standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffold structure.

Secondary Specification: To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The fence panels should be supported on the inner side by stabiliser struts which should be attached to a base plate and secured with ground pins.

All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone".

Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS
AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL
PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN
PERMISSION OF THE LOCAL PLANNING AUTHORITY



Temporary ground boarding will be used until the new hard surfacing is installed. This will then provide passive protection against compaction to the underlying soil within the RPAs of retained trees G2 & T6 and therefore must be retained for the remainder of the project. If this is removed, it shall be done so under direct arboricultural supervision and replaced with suitable ground protection, capable of withstanding the likely loading for the site. Areas of soil not covered by the new hard surfacing will retain the temporary ground boarding throughout the development.

Temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

Note The ground protection might comprise one of the following:

- a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
- b) for pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
- c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

For situations other than those described in a) or b), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice to be able to support the expected loading to be placed upon it.

In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath, so that tree root function remains unimpaired.

All excavations within and immediately adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision.

Any roots that are to be cut will be cleanly severed by the project arboriculturist using a suitable hand saw or secateurs. The edge of all excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by concrete. If appropriate soil beneath the depth of the excavation may be sheet piled, regular piled or have individual piles installed.

Manual excavation:
Excavations within the RPA's will be initially undertaken by hand under direct on-site arboricultural supervision to a minimum of 600mm deep (to be confirmed by the project arboriculturalist), whether it is for proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and or air-spade and then cleared with a shovel and or the aid of an air-spade and air-vac.

Excavation within the RPAs will consist of a mixture of mechanical and manual excavation.

Where an excavator is used it will be fitted with a suitably sized toothless grading bucket; using a grading / scrapping motion rather than digging. During each motion the excavator will not be permitted to removing no more than 10 - 20mm deep of soil in any one pass.

If any roots are discovered, mechanical excavation will immediately be stopped and manual excavation will take over to expose the root. Upon the root being uncovered and either severed or protected the excavations can then continue. Any excavator or other machinery that is to be used will be situated outside of the RPA's of all retained trees or on top of a suitable, non-protective structure.

Where an excavator or any other machinery is to be used within RPAs or beneath canopies the project arboriculturist will clearly instruct the operator about what they want and expect to happen prior to any works may commence.

The use of traditional strip foundations can result in excessive root loss and as such should be avoided.

Designs for foundations that would minimize the adverse impact upon trees should 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 minimized by using:
 - Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm;
 - Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

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.

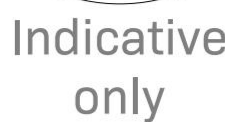
Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters for ground boarding. Use of the smallest practical piling rig is also important 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.

The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:

- 1) Pre-commencement site meeting;
- 2) Location of protective measures;
- 3) Supervised dredging of the existing pond;
- 4) Supervised excavation for the investigation and installation of specialised foundations for the retaining wall within and immediately adjacent to the RPAs of retained trees;
- 5) Supervised excavation for the investigation and installation of specialised foundations for the proposed dwelling within and immediately adjacent to the RPAs of retained trees;
- 6) Any excavations within and immediately adjacent to RPAs, including foundations, hard surfacing, or underground services (a non-exhaustive list);
- 7) Removal of protective measures and sign-off.

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The Arboricultural Method Statement (Arbtech AMS 01) is an accumulation of documents: Arbtech AIA 01(PC); Arbtech AIA 01; Arbtech TPP 01(PC) and Arbtech TPP 01. It provides full details of all surveyed trees and how the development can be implemented without detriment to retained trees. All documents mentioned must therefore be read in conjunction with each other and must not be considered as stand alone documents.



Arboricultural supervision: Supervised excavation for the installation of specialised foundations within the RPA of retained tree 6.

Protective fencing

Protective fencing

Ground protection:
Temporary ground boarding will be used until the new hard surfacing is installed. This will then act as passive ground protection within the RPAs of retained trees 6 & G2 for the remaining duration of the development. If removed this will be done under direct arboricultural supervision and replaced with temporary ground boarding.

Arboricultural supervision:
Supervised excavation for the installation of specialised foundations within the RPAs of retained trees 6 & G2.

Rev:	Date:	Notes:
--	--/--/--	N/A



Project: 10 Romney Chase
Hornchurch
RM11 3BJ

Client: Nick Wassell

Tree Protection Plan
(Construction)

Based on: PL-04

Drawing No:
Arbtech TPP 01

Date:	Scale:
Mar 2024	1:100@A

Key:					
Tree Numbers:	1	Trunks:		Tree Canopies:	
Pruned Canopies:		RPAs:		Category 'B' Trees:	
Category 'C' Trees:		Category 'C' Groups:		Category 'F' Trees:	
Existing Site Layout:		Proposed Site Layout:		Trees Removed:	8
Protective Fencings:		Ground Protection:		Arboricultural Supervision - -	

All dimensions should be checked on site. No dimensions are to be scaled from this drawing.
 Do not rely on any discrepancies found. ARCHTECH 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 used as a definitive part of the engineering or construction designs or method
 statements. An experienced 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 color - a monochrome copy should not be relied upon.

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