

Tree Planting & Maintenance Scheme

Land at
Bunker Hill
Bersham
Wrexham

Ref:
TPS/BHC/03/24

Date:
19th March 2024

Commissioned by:
Mr D. Edwards
on behalf of
Blueprint Architectural LTD

Prepared by
S. Shields

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Introduction

- 1.1 Shields Arboricultural Consultancy received instructions from Mr D. Edwards on behalf of Blueprint Architectural LTD. The client or their agents may copy and distribute this report as required for the purpose of applying for planning permission for or preparing any documents or plans for this or future applications at this site.
- 1.2 Planning permission has been conditionally granted to allow the construction of a detached dwelling under planning reference ESC P/2021/0199. This report is provided to discharge condition 8 of this permission. The planning permission is to be per the approved site drawings EL073/007 Rev A & EL073/008 Rev A.

Scope & Limitations

- 2.1 The purpose of the report is to provide a Tree Planting Scheme for the above site.
- 2.2 The report takes account of the recommendations of the British Standard Document BS 8545: 2014 Trees: from nursery to independence in the landscape – Recommendations and BS 5837: 2012 Trees in relation to design, demolition and construction.
- 2.3 This report is not an ecological assessment and does not identify habitats or constitute a protected species survey.

Policy & Strategy

Planting objectives

- 3.1 Replace trees lost through development to improve canopy cover and landscape quality in the local area and provide an attractive setting for the dwelling.

Statutory controls

- 3.2 Trees are planted subject to a condition of planning permission.

Environmental considerations

- 3.3 The local landscape is rural. No specific environmental constraints affect tree planting in this area.

Site Evaluation & Constraints

General

- 4.1 The site is at Bunker Hill Cottages, Bersham. It is accessed via a private drive from Berse Road to the west. The site has boundaries with an agricultural field to the north, neighbouring residential properties to the east and west and Bersham Road to the south. The site, which had become overgrown has recently been cleared of ruderal trees and vegetation that have become established through lack of maintenance. In addition, there is a group of trees along the south boundary that provide a screen from the road.
- 4.2 The site is generally level and at an elevation of 105m AOD and is reasonably sheltered.

Ground assessment

- 4.3 The site has recently been cleared of ruderal vegetation. It is free draining with no evidence of waterlogging. Geological maps indicate a glacial till drift over an underlying mudstone lithology. Some structures at the site could influence root development.
- 4.4 Soil was assessed manually and classed as a loam.
- 4.5 Soil pH of 6.5.
- 4.6 No drainage, percolation test was undertaken, but soils appear to be reasonably free draining, but water retentive.

Climatic conditions

- 4.7 The site is reasonably sheltered and well-lit receiving full or partial sunlight for the majority of the day during the growing season.

Site features and existing vegetation

- 4.8 There are a variety of trees present in the area including oak and sycamore.
- 4.9 There is adequate space available for crown development of medium to large-sized trees at the selected planting locations.
- 4.10 No evidence of underground services in the planting location, however care should be taken when excavating the planting pits.

Species / Planting Stock Selection

- 5.1 Selected species must be capable of becoming attractive, long-lived specimens that can tolerate the prevailing site conditions. It is proposed to plant three Field Maple (*Acer campestre* 'Elsrijk') light standard trees in the locations indicated on the planting plan. The north site boundary will be planted with a native species hedgerow comprising Common Beech (*Fagus sylvatica*). The trees must be selected and planted per the following specifications. The trees should be inspected and selected in the nursery before delivery on-site.

5.2 Planting Stock Specification

Species	Shape	Stem Girth @1m	Height	Container Volume	Production Method
Field Maple	Light Standard	6cm – 8cm	2.0m – 2.5m	25 lts.	Container grown
Beech	Whip		40cm/60cm		Bare Root

- 5.3 The tree should be supplied packed following the recommendations of BS 8545: 2014. The trees must be delivered in good condition and be free from damage, if transported in open lorries, trees must be protected by opaque sheeting. Root systems must be moist and protected during transport. Trees should be inspected and approved before accepting delivery. If planting is not undertaken immediately

after delivery, the tree should be placed in a sheltered location and the container covered with sand to prevent drying or freezing. Trees will be inspected on delivery in accordance with the standards set out in table 1 BS 8545: 2014. Trees that do not meet the standard will be rejected and returned to the nursery.

Planting, Protection & Maintenance

- 6.1 To ensure that the landscape planting is to the highest standard, it is recommended that a quality planting materials and products are used. This report specifies the use of the GreenBlue Urban Arborsystem® www.greenblue.com as the preferred planting product and Barcham Trees www.barcham.co.uk as the preferred supplier for the planting stock.

Site Preparation

- 6.2 The proposed planting sites are situated in areas currently set to soft landscaping. All tree planting areas are to be protected from compaction and contamination during the felling and construction operations following the Arboricultural Method Statement BHC/AMS/03/24.

Soil Addition and Improvement

- 6.3 Not required at this site.

Tree Pits

- 6.4 All trees are to be pit planted in the locations identified on the attached Tree Planting Plan ref: BHC/TPS/12/23. Tree planting pits are to be prepared as follows, in accordance with the drawings (GBU2002) shown in Figure 1 below. As services are not required beneath the pits then the design can be amended to remove the root barrier and the root irrigation system is not required in this location. Once the soil has consolidated, the tree pits are to be excavated to the size of 1.5m diameter and to the depth of the root container of the planting stock. The bottom and edges of the pit are to be lightly broken up to using a fork, to improve root penetration. Tree pits are to be backfilled with excavated soil, which must be stored loose-tipped adjacent to the tree pit. Care must be taken to ensure that topsoil and subsoil are stored in separate piles. The base plate of the guying system is to be installed in the base of the pit following manufacturer recommendations. Alternatively, the trees can be secured using a double low stake method utilising fabric tree ties.

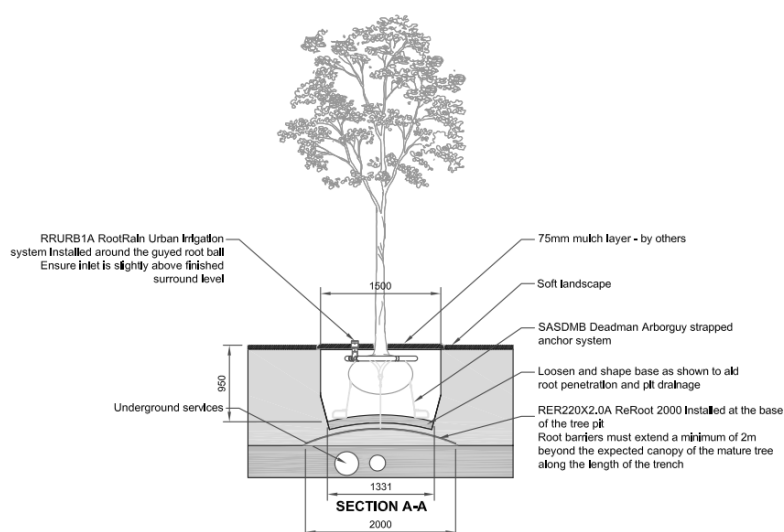


Figure1 Soft Landscape Tree Pit © GreenBlue Urban

Planting - Trees

- 6.5 Trees should not be planted when the ground is frozen or waterlogged. It is recommended that trees be planted during the winter period. Before planting, remove any damaged or rubbing branches following BS 3998: 2010 good practice guidelines. Remove tags or labels and any stem wrapping. The tree **must** be planted at its original root collar soil depth. The soil mark on the stem is an indication of this and it should be maintained on the finished level, allowing for settling of the soil after planting. If required, the pit should be partially backfilled to 'bed up' the tree to the desired height. The compost / growing medium in container-grown trees must be moist before planting and before containers are removed. The growing medium in the soil cells should be thoroughly watered before planting.
- 6.6 Once the container is removed and immediately before planting, any broken or damaged roots must be cut back to sound growth and to an appropriate point; heavily coiled or spiralling roots should be eased from the rootball or pruned back. Once the tree is satisfactorily positioned the pit should be backfilled using the excavated soils, **it is important to ensure that topsoil is not used below the depth of the original topsoil layer**. The backfill should be added in layers of around 150mm and lightly firmed to ensure close contact with the roots. Trees should have 20 lts of water applied through the irrigation system after planting. Once planted and firmed the tree must be secured using the Arboguy® system as specified in the drawing or the double low-stake method.
- 6.7 A woven, water-permeable polypropylene mulch mat (600mm x 600mm) is to be placed around the base of the tree and secured using pegs or pins and then overlaid with 20mm of sterilised bark chippings. Chippings should be pulled back from the base of the stem of the tree.

Planting - Hedge

- 6.8 Hedging is to be planted in a double offset row at 50cm x 50cm centres. Whips are to be notch planted. The notch is to be cut to accommodate the spread and depth of the root system. Care must be taken to ensure that the notch is not too deep as the plants must be planted at the original root collar depth. Tree roots must be protected from elements until planted, this usually requires that they are kept in their delivery bag. Shrubs are to be protected using fine mesh shrub guards and secured using canes or stakes. Pit planting requires a small pit excavated to accommodate the root ball and should be planted per directions given in section 6.5. Whips are to be protected using spiral guards secured by canes and holly plants are to be protected using fine mesh shrub guards and secured using canes or small stakes.
- 6.9 A woven, water-permeable polypropylene mulch mat or weed control fabric is to be placed around the base of the plants and secured using pegs or pins.
- 6.10 Remove all debris leaving the site clean and tidy.

On-going maintenance

- 6.11 All newly planted trees should be inspected in the first few weeks after planting and after periods of frost or strong winds. The trees should be re-firmed where heave or movement has occurred, and the guying system adjusted as necessary.
- 6.12 The mulch mats around each tree are to be inspected and maintained in good condition and the area they cover is maintained free from weeds, grasses or other vegetation for 3 years after planting.
- 6.13 The trees are to be watered during dry spells. Trees are to be inspected following periods of more than 10 days without significant rainfall. This inspection should assess the moisture content of the soil and, if required sufficient quantities of water are to be applied through the irrigation system to ensure soil reaches field capacity. This should be repeated every second day until the dry spell ends.
- 6.14 Trees are to be formatively pruned to remove crossing, dead and rubbing branches and to single any multiple leaders. This is a one-off operation and should be performed in the third year after planting.
- 6.15 Trees which fail to establish or become weakened, damaged or die must be replaced in the following planting season.
- 6.16 Trees should be inspected annually for the first 5 years following planting. This should be undertaken in mid-summer and any problems rectified as required.

On-going maintenance – hedge

- 6.17 All newly planted hedging should be inspected in the first few weeks after planting and after periods of frost or strong winds. The plants

should be re-firmed where heave or movement has occurred, and the guying system adjusted as necessary.

- 6.18 The mulch mats or weed control fabric around the plants are to be inspected and maintained in good condition and the area they cover is maintained free from weeds, grasses or other vegetation for 3 years after planting.
- 6.19 At year 2, winter hedging plants are to be cut back by 30% if they have become 'leggy' and lack side branches. Any weed growth is to be removed from the hedge.

Schedule of Operations

Date / Stage	Operation
Prior to commencement of planting	Complete construction work and clear site.
On completion of construction and clearing activities	Take delivery of trees and store correctly on site. (5.3). Trees to be inspected at time of delivery.
On completion of construction and clearing activities	Prepare tree planting pits. (6.4)
On completion of construction and clearing activities	Plant trees & Hedging. (6.5 – 6.8)
On completion of construction and clearing activities	Install any hard landscape and fencing.
Two weeks after planting	Undertake inspection of trees and check for instability. Re-firm soil and check tree ties
Three months following planting, and then every April, August and October	Check and adjust tree ties. Check mulch mat and bark chippings, make good if required
Annually every August	Inspect trees to establish if there are any health or growth problems.
August of third year	Carry out formative pruning of the trees. This should be in accordance with BS 3998 guidelines. Remove tree ties and stake, remove mulch mat.
Winter of second year following hedgerow planting	Cut- back plants by 30%. (6.19)
As required during the summer months	Water trees as specified. (6.11).
As required	Trees that become seriously weakened, damaged or die are to be replaced.

Inspections

- 7.1 Trees should be inspected annually until established and independent in the landscape.

S.J.A. Shields

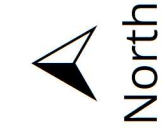
Uni Cert For. & F.P. (Bangor)

P. Dip. Arb. (RFS), MSc. Arb. & Urban For. (UCLan)

M.Arbor.A, MICFor.

Chartered Forester

19th March 2024



Tree Planting Plan
Overlay
Bunker Hill Cottages
Berse Road
Bersham
Wrexham

- Existing Cat B Tree
- Existing Cat C Tree
- New Tree

T1 is protected by existing retaining
wall and hard standing

Beech Hedgerow

T1-C1

Driveway

Parking

Foxglove Lodge

B 5098

Amenity

T4-B2

3 x Field Maple

G2-B2

T3-C2

Existing MF
to mains dr

Drawing No: BHC/TPS/OL/12/23

Drawn By: S. Shields

Scale: 1:200 @ A2

Date: 19th March 2024

Revision:

Do not scale from this drawing all dimensions to be checked
on site
Drawing is colour coded and a monochrome copy should not
be relied upon