

1:200 PROPOSED BIO ENHANCEMENT PLAN

PLANNING

THE PLANNING CONSULTANCY LTD		
Project Name: The Cottage		
Drawing Title: ECO Dwelling		
Date Drawn: 05/03/2023	DRG NO: 002	

Species	No.	Height (m) + Form	Pot Size or Girth(cm)	Root Conditio
Birch - Betula pendula	2	Selected Standard 3.00 / 3.50	12-14	Bagged
Beech - Fagus sylvatica	1	Selected Standard 3.00 / 3.50	12-14	Bagged
Oak - Quercus robur	2	Selected Standard 3.00 / 3.50	12-14	Bagged
Hazel - Corylus avellana	1	Feathered Tree 1.50/ 2.00	10ltr	Bare Roc
Hornbeam - Carpinus	1	Feathered Tree 1.50 / 2.00	10ltr	Bare Roc
Sorbus torminalis	2	Feathered Tree 1.50 / 2.00	10ltr	Bare Roc
Native Crab Apple - Malus sylvestris	1	Feathered Tree 1.50 / 2.00	10ltr	Bare Roc
Bird Cherry - Prunus padus	2	Feathered Tree 1.50 / 2.00	10ltr	Bare Roo
Common Hornbeam - Carpinus betulus	2	1.20 / 1.50	5 Itr	
Mixed Native Hedge - 15 % Hazel 60% Field maple 5% Common privet 15% Guelder rose (Viburnum opulus) 5% Dog rose Planting Size 600-900mm		0.80 / 1.00	2 ltr	

Landscaping Specification

Soil conditions - cultivate and plant into moist friable soil that is not waterlooged. Do not plant into frozen or snow covered soil.

Climate conditions – carry out the work while soil and weather conditions are suitable for the relevant operations. Do not plant during periods of frost or strong

Plant during the following periods: Bare root deciduous trees and shrubs; late October to late March. Container grown plants; at any time if ground and weather conditions are favourable. Ensure that adequate watering and weed control is provided.

Machines and tools - use only machinery and tools suitable for the site conditions and the work to be carried out. Use hand tools around trees, plants and in confined

Underground services - Contractor is responsible for knowing the ascertaining the position of any underground services and shall take precautions to prevent any damage occurring to them. Immediately inform the appropriate body if damage occurs. The contractor shall be responsible for any claims resulting from such damage.

PLANT MATERIAL

within the plant schedule.

Plant quality in general – to comply with the relevant part of BS 3936 and BS 5236 for any advanced nursery stock where applicable. Materially undamaged, sturdy, healthy, vigorous, of good shape and without elongated shoots. Grown in a suitable environment and hardened off. Free from pests, diseases, discoloration, weeds and physiological disorders. With balanced root and branch systems. True to the names and sizes indicated

Bare root plants – all bare root plants shall have vigorous fibrous root systems which are reasonably equally developed in all directions and of adequate extent to support the growth of the plants root system.

Container grown plants - supplied in a growing medium with adequate nutrients for the plant to thrive until permanently planted. Centred in the container, firmly and well watered. With root growth substantially filling the container, but not root bound, and in a condition conducive to successful transplanting. Grown in the open for at least two months before being supplied. Grown in containers with holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

Planting trees - spread a minimum of 75mm thick layer of well-rotted manure in the bottom of each pit and fork over. Lay 50mm min. mixture of peat substitute/leaf mould/sharp sand 6: 3: I by volume, the peat being well moistened. All manure is to be covered so that none comes in direct contact with the tree roots. Soak the roots of bare-rooted trees in water for at least an hour before planting. Continue backfilling with top soil into which 170gm of bonemeal has been mixed (per tree). Firm down well by heeling as filling proceeds. The tree must be planted to the same depth as in the nursery and to the same orientation. Before unloading, the depth and diameter of the rootball shall be measured to facilitate the digging of the pit to the correct size. Back filling shall be done in layers of 150-225mm depth with each stage firmly consolidated to eliminate air pockets.

Staking - to be requisite length, pressure impregnated (with preservative non injurious to plants) de barked softwood 75mm diameter.

Tree ties - to be plastic ties 'Toms' pattern, nalled to stake with large head galvanised nails.

Watering - at the time of planting, each tree shall be well watered in. If there is a risk of frost within the 24 hours the watering shall be delayed until such risk has passed.

Lighting Specification

External Lighting

- I. Minimising spill of light with the use of directional luminaires, shields, baffles and louvers to direct light where it is needed and prevent overspill.
- 2. Minimise light spill by eliminating any bare bulbs and upward pointing light fixtures. The spread of light should be kept near to or below the horizontal plane, by using as steep a downward angle as possible
- 3. Use light sources that emit minimal ultra-violet light (van Langevelde and Feta, 2001) and avoid the white and blue wavelengths of the light spectrum. I imiting the height of lighting to 8 m and increase
- 5. Avoid using reflective surfaces under lights or light reflecting off windows; 6. Only the minimum amount of light needed for safety and access should be used and or turned off when
- the site is not in use; 7. Artificial lighting proposals should not directly illuminate habitats, which may be of value to foraging or commuting bats and birds (e.g. hedgerows and adjacent gardens);
- 8. Lighting that is required for security reasons should use a lamp of no greater than 2000 lumes (150 Watts) and be PIR sensor activated, to ensure that the lights are not on only when required; 1. Lighting positioned in locations indicated on attached drawing.

Proposed LED lamps (Max 2000 lumes / 150 Watts) with PIR sensor Proposed Location For Air Source Heat Pump

Mulch - apply 50mm mulch around trees immediately after watering in. Mulch to consist of pulverised natural pine bank such as 'Cambank' ornamental grade from Camland Products Ltd, 36 Regent Street, Cambridge or equivalent. Graded particles 8mm-25mm with all fines removed, free from pests, disease, weeds and additives.

Rootballed plants - root balls shall be well filled with fibrous roots and consist of reasonably cohesive natural soil which has been carefully lifted at the nursery so that it remains fully attached to the roots of the tree. Plants which have had bear roots bagged up with soil or containerised are not acceptable.

Transplanted at least twice in the nursery. Single, straight leader. Substantial and evenly developed side shoots to within 0.5m of ground level. Main stem to be substantial enough to be supported by short stake and single tie.

Labelling - when supplied to site trees to be labelled in accordance with the relevant part of the latest BS 3936 in order that they can be readily identified.

Substitutes – if specified trees are unobtainable or known to be likely to be unobtainable at the time of ordering, submit alternatives and obtain approval from LPA before making any substitution.

PREPARATION OF PLANTING

Site clearance - Prior to cultivation all rubbish including stones, bricks, concrete, mortar, building materials, bottles, cans, litter, wood, plastic etc to be removed to tip. Remove all weed from planting areas either by hand pulling or using a herbicide containing gluphosate as the active ingredient which should be applied in accordance with the manufacturer's instructions allowing sufficient time prior to cultivation for the chemical to be effective.

Cultivation – do not dig or cultivate within the root spread of trees and shrubs to be retained. Break up compacted topsoil to its full depth.

Tree pits - shall be of a diameter 600 mm greater that the root ball. The depth of the pit shall be 225mm deeper than the root ball and not less than 600mm deep. The base of the tree pit shall be forked over to a depth of 225mm. MAINTENANCE AND MAKING GOOD DEFECTS

Maintenance prior to practical completion - at all times maintain planted areas in a clean, tidy and largely litter weed free state.

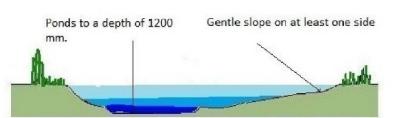
Maintenance and defects liability period — the maintenance and defects liability run concurrently for thirty months (three years) after practical completion.

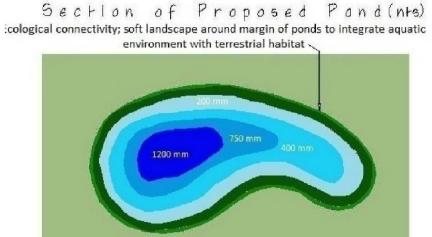
Maintenance – Make visits at approximately monthly intervals during the growing season and as necessary to fulfil the requirements of this specification. After each visit remove soil and other debris from surrounding hard surfaces and leave the site in a clean and tidy condition. Fork over beds as necessary to keep soil loose. Ensure that the trees are not damaged by the use of mowers, hylon filament rotary cutters and similar powered tools. Every two months check condition of stakes and ties and replace if missing or broken. Adjust as necessary to allow for growth and prevent the rubbing of bank.

Prune at appropriate times to remove dead, dying, diseased or damaged wood and suckers, to promote healthy growth and natural shape. Failures of Planting – Excepting theft or malicious damage after practical completion, any of the trees that have failed to thrive, during the defects liability period, will be regarded

as defects due to materials or workmanship not in accordance with this specification. Unless otherwise instructed they must be replaced by approved equivalent trees. Replacements must match the original specification. Replacement planting is to be carried out during the planting season within which the defects are discovered.

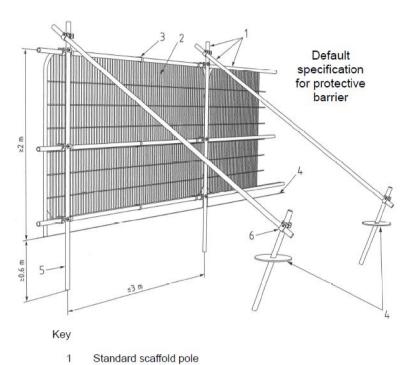






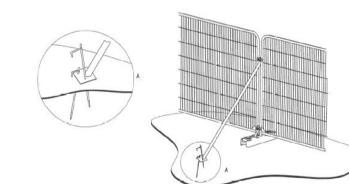
Plan of Proposed Pond (nts)

BS 5837:2012 Figure 2: Default specification for protective barrier

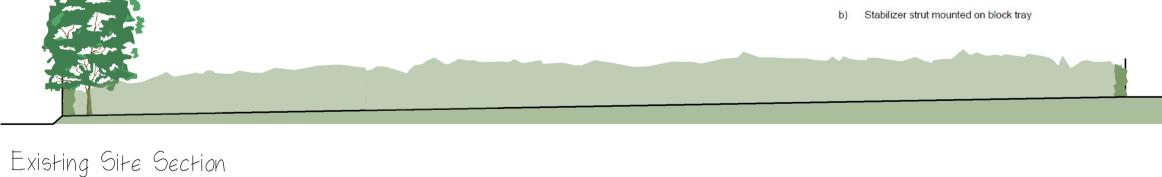


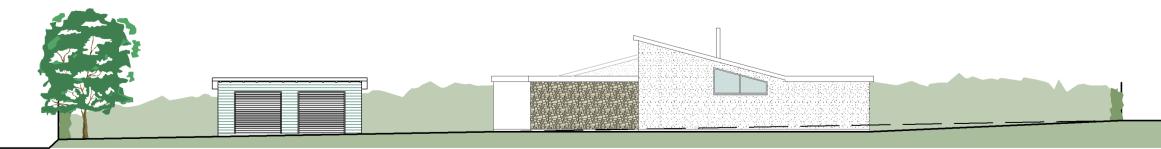
- 2 Heavy gauge 2m tall galvanised tube and welded mesh infill panels 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level 5 Uprights driven into the ground until
- secure (minimum depth 0.6m 6 Standard scaffold clamps

B\$ 5837:2012 Figure 3: Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins





Proposed Site Section

1:200 EXISTING & PROPOSED SITE SECTION

BUMBLEBEE NEST BOX

(boxes sunk into the ground)

Proposed Dwelling The Cottage, Green End, Dane End, Herts