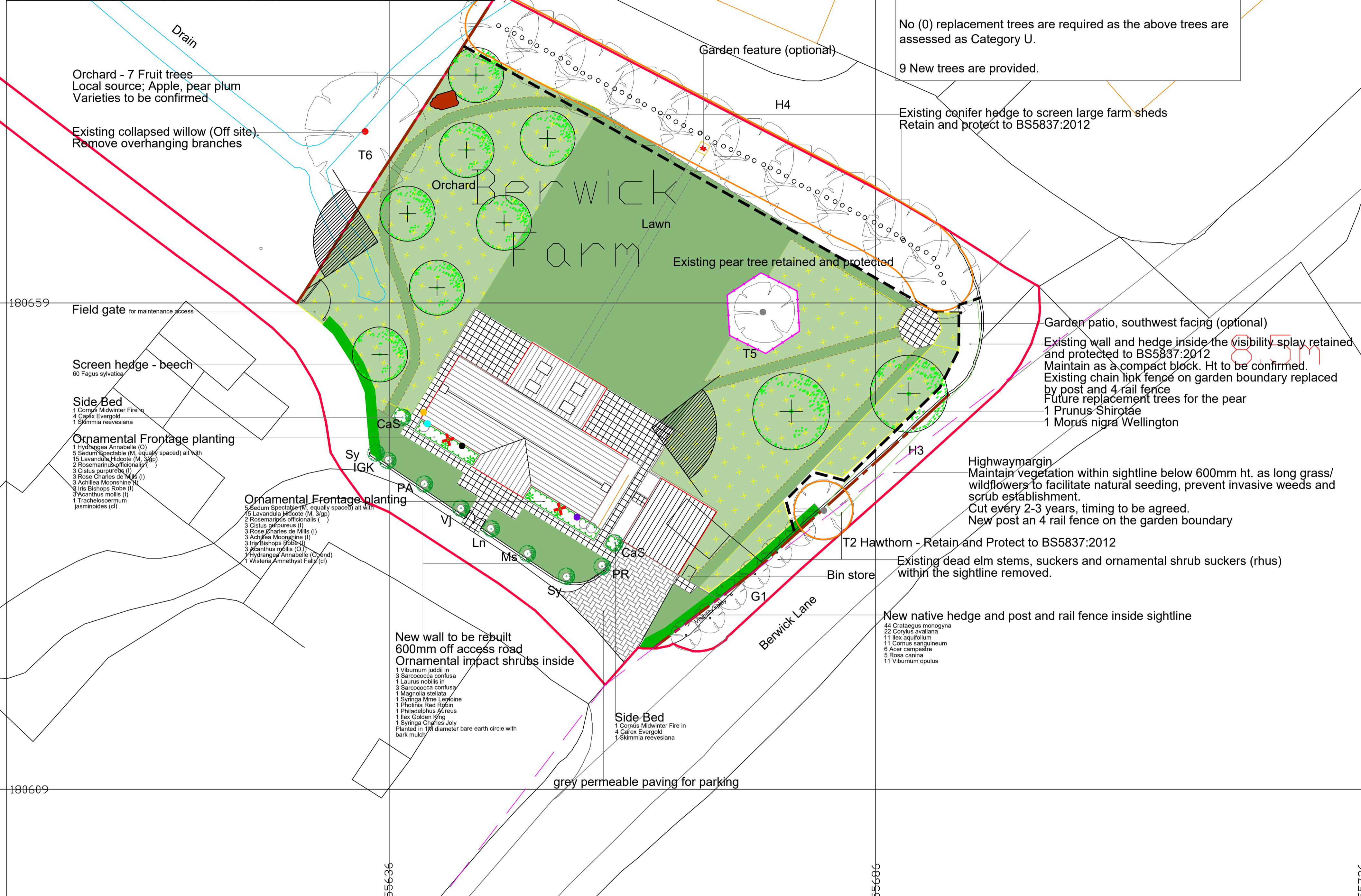


Outline Tree Assessment carried out to BS5837:2012, 3rd November 2023 MDD

Ref	Common name	Age	Gr	Sp	Health	Clearance	Age	Useful	BS	RPA	Observations	Recommendations				
G1	Dead elm	1	0	-	-	0	0	0	0	0	Dead stem, elm & sumach suckers in highway margin/visibility splay. Multi stem from 0.5M. Competed. Low vigour. Located outside the visibility splay.	Remove and protect				
T2	Hawthorn	7	25	3	3	3	0.8	0M	10-20	C2	0	0	2	Maintained as a compact hedge. Located 0.75M inside the of garden fence. Previously topped @ 5M. crown lifted to 3.5M. Mutually suppressing. Minor canopy browsing. Branches overhanging Application site. They provide tall aerial greenery screening the tall farm sheds behind.	Retain and protect	
PH	Elm suckers (dominant) with native shrubs outside the garden boundary on a bank.	5	10	0.16	4	4	4	4	4	VM	10-20	C2	4.2	ma	Planted in a single row 0.75-1.0M apart. Located 0.75M inside the of garden fence. Previously topped @ 5M. crown lifted to 3.5M. Mutually suppressing. Minor canopy browsing. Branches overhanging Application site. They provide tall aerial greenery screening the tall farm sheds behind.	Remove material within the visibility splay
T4	Fruiting pear (trailing)	4	0.48	4.5	3.2	4.5	5	3	0M	<10	U	5.8	-	-	Poor health and condition. Hollow trunk, major deadwood, lost limbs, low vigor and stem headed. High biodiversity value. Collapsed specimen. Regrowth stems from fallen limbs.	Retain and protect for biodiversity. Plan future replacements
T6	Willow (Off site)	8	-	-	-	-	-	0	PM	10-20	U	-	-	-	Collapsed specimen. Regrowth stems from fallen limbs.	Remove suckers and fallen limbs from the Application site



Under the South Gloucestershire Tree Replacement Standard (SGTRS) 0 trees are to be removed for construction.

Dead elm stems, elm suckers and ornamental shrub suckers (Sumach) G1, assessed as Category U are located within the visibility splay and are recommended for removal.

One tree T4 a fruiting pear is in poor condition but has a high biodiversity value. Retention and protection for biodiversity is recommended.

No (0) replacement trees are required as the above trees are assessed as Category U.

9 New trees are provided.

Existing conifer hedge to screen large farm sheds Retain and protect to BS5837:2012

Existing pear tree retained and protected

Garden patio, southwest facing (optional)

Existing wall and hedge inside the visibility splay retained and protected to BS5837:2012

Maintain as a compact block. Ht to be confirmed.

Existing chain link fence on garden boundary replaced by post and 4 rail fence

Future replacement trees for the pear

1 Prunus Shiroteae

1 Morus nigra Wellington

Highway margin

Maintain vegetation within sightline below 600mm ht. as long grass/wildflowers to facilitate natural seeding, prevent invasive weeds and scrub establishment.

Cut every 2-3 years, timing to be agreed.

New post an 4 rail fence on the garden boundary

T2 Hawthorn - Retain and Protect to BS5837:2012

Existing dead elm stems, suckers and ornamental shrub suckers (rhys) within the sightline removed.

New native hedge and post and rail fence inside sightline

44 Crataegus monogyna

22 Corylus avellana

11 Ilex aquifolium

6 Acer campestre

5 Rosa canina

11 Viburnum opulus

OUTLINE SOFT LANDSCAPE SPECIFICATION

GENERAL. All work to be undertaken in accordance with BS4248:1989 and BS7370:1999. EXISTING TREES AND HEDGES. Retain and protect in accordance with BS5837:2012 trees in Relation to Demolition, Design and Construction

It is important to avoid ground compaction and damage to tree and hedge roots. The protective fence to be erected prior to commencement of excavations and construction and located as indicated. No trees to be retained in level, compaction, excavations, materials stored or allowed to run through the protected area. No fires within 10M of the canopy spread. Clearly label the protective fence with a laminated A4 information notice giving procedure required for access by personnel. Any intrusion within to be with written permission from the Site Agent.

Any excavations within the RPA are to be carried out by hand digging or carefully using machinery standing outside the RPA or on new handstanding already constructed with a watching brief. Any roots over 20mm diameter to be retained where possible, wrapped in hessian or covered with sheep sand (not builders, which may contain lime) and watered daily to prevent desiccation. Where root retention is not possible, remove with a clean cut using sharp secateurs. During prolonged periods of dry weather for 7 days or more, vertical faces of soil within the RPA that are exposed during excavations are to be covered with hessian and watered thoroughly at the end of each day to prevent desiccation and rapid fluctuations in temperature around roots which can cause serious damage. Remove the protective fencing at Completion.

Arboricultural supervisor to be present at key stages and make regular progress reports. Timing to be agreed at the pre start meeting.

Timing of Tree Works to comply with the Wildlife and Countryside Act 1981 and undertake outside the bird nesting season March-end August unless otherwise agreed.

SERVICES. No trees to be planted within 3 meters of existing or proposed foul, surface water drain or soakaway. Planting adjacent to other services shall be in accordance with the guidelines laid down by the relevant service authority.

SUBSOIL. Rip to 500mm depth using the teeth of a JCB back bucket or other approved method to break up compaction and allow free drainage.

TOPSOIL. All imported topsoil to comply with BS 3882:2015, pH 6.8, free of stone greater than 50mm in any dimension, perennial weed roots, builders rubble/waste, toxic materials and contamination. Analysis certificate of NPK, Mg, conductivity and contamination to be provided. Sample log corresponding to the respective analysis level to be left on site for comparison with subsequent deliveries. Keep free of perennial weeds by appropriate means. Uncover 3-4 weeks before proposed use to allow weed seeds to germinate. After 10 days exposure and 2 weeks before use, remove all weeds by hand or cultivation without the use of herbicides. Supply and spread by loose topping to the following depths:

Tree pits 1.0 x 1.0M (0.5mm depth below rootball). Base broken up to further 150mm

Ornamental shrubs and hedges - 400mm depth

Wildflower turf and grass/wildflower seeded areas - 100mm Low fertility topsoil or subsoil with N,P,K,Mg and conductivity index of <=2

Lightly firm without compacting. Grade to an even surface and murray in with adjacent soft landscape areas. Cultivate to a fine till, grass areas to 100m depth, planting areas to 250mm depth, removing all stones over 50mm that come to the surface. Allow to settle. Finished levels of shrub beds to be 75mm below kerb level and grass areas to allow for bark/gravel mulch topping. Soil level for grass areas to be flush with hard surfaces unless otherwise instructed. All finished soil levels to be 150mm below DPC level. Make good any deficiencies after settlement.

TURF. Ref Wildflower Turf or similar. Lay turves on 10mm sharp sand to stretcher bond and butt jointed. Scarify cracks between turves with friable topsoil and overseed. Water as necessary to prevent shrinkage and drying

<https://www.wildflower.co.uk/products/wildflower-turf/>

TREE PITS. Depth 500mm below the rootball and 300mm wider all round. Base loosened to a further 150mm depth and shaped to convex profile to facilitate free drainage and root penetration.

Incorporate 10% of approved compost or manure with topsoil backfill. HStG trees to BS5238 planted as BS545 with a double short stake 75mm diameter to BS4072 and cross brace with rubber ties. Feathered st and multi-stem impact material planted with a single angled stake.

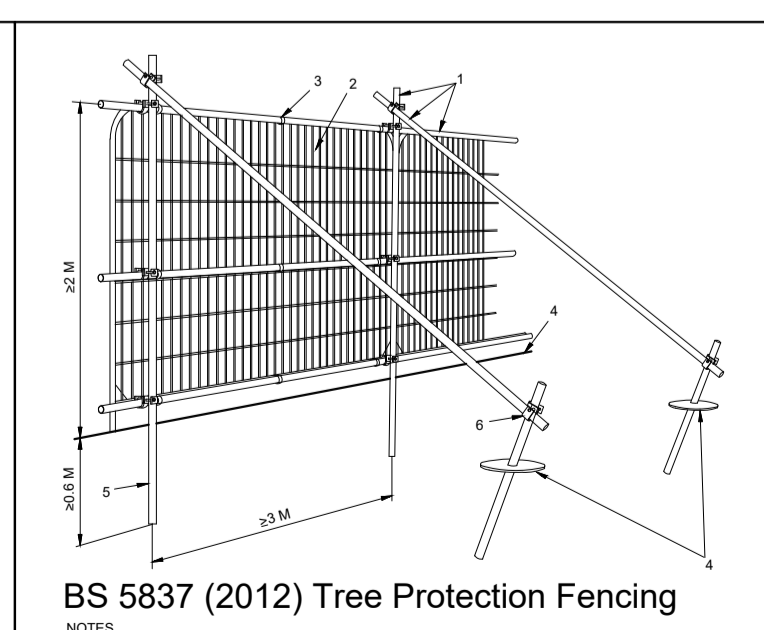
WATER all plants in after planting and before mulching. Watering is essential if planted between April and October/soaking thoroughly after planting and then for dry spells of 7 days-duration for the first growing season. Allow for provision of water from a bowser during periods of hosepipe ban to maintain healthy growth.

BARK MULCH - 75mm depth over shrub and hedge beds Main constituent conifer bark that has been stored for 6 months minimum time, maximum of 15% wood content, particle size 5-65mm and no fines. Free of pests, disease and weed contamination. 2L sample to be submitted for approval with tender documents and approved prior to delivery.

TIMBER. All FSC certified or equivalent and untreated above ground.

MAINTENANCE. until handover or client instruction, include for the removal of weeds and litter and the maintenance of bare ground beneath planted areas by cultivation or use of non residual herbicides, replacement of plant defects, topping up bark and gravel mulch, pruning dead / damaged branches, forking over to relieve compaction and edge trimming as required. Grass areas to be re-levelled, scarified and overseeded to remove hollows, troughs and bare patches which develop. All turf to be watered as necessary to avoid shrinkage cracks over 15mm, kept free of coarse weeds and litter. Mow to keep neat and trim at between 35-75mm ht. Wildflower grass areas established to suppliers recommendations. Cut timing and frequency to encourage natural seeding to be confirmed. Remove invasive noxious weeds and all cuttings to maintain low soil fertility. Paved areas kept free of weeds, litter and leaves. Mulch areas topped up to 50mm depth on completion of the Defects period. All cuttings and mowings either composted on site or removed. Bird, bat and insect boxes cleaned, repaired or reinstated and hedgehog highways cleared of obstructions annually.

All plant defects including replacement trees to be re-instated in the forthcoming planting session (Nov-end March) for 5 years.



BS 5837 (2012) Tree Protection Fencing

Key

Tree Assessment to BS5837:2012

- Category A. High quality. > 40 years life remaining. Desirable to retain
- Category B. Moderate quality. 20-40 years life. Desirable to retain
- Category C. Low quality. > 10 years life or young trees. > 150mm stem diameter. Could be retained
- Category U. Poor quality / less than 10 years useful life. Remove

Protective fencing

Category U. Crown Spread

Root Protection Area

Tree Reference and common name

Tree / SPECIMEN SHRUB Topsoil 900mm x 900 x 150mm depth

SHRUB BED / IMPACT PLANT Topsoil 400mm depth

WILDFLOWER TURF on SHARP SAND Close mown lawn

GRASS/WILDFLOWER SEED EMORGATE ELI FLOWERING LAWN or similar. Close mown

HEDGE Topsoil 400mm depth

CLIMBING PLANT

PC SLAB, MARSHALLS SAXON or similar 600 x 600mm Colour natural

HARD SURFACE To Architects details

VISIBILITY SIGHTLINE (to be confirmed)

TIMBER POST AND RAIL FENCE

TREE PROTECTION FENCE to BS 5837:2012

ATTRACTIVE VIEW

LOG PILE using on site material Constructed to Ecologist recommendations

ARTWORK FEATURE on plinth (GBU solar light?)

WILDLIFE BOXES Locations to be confirmed on site by Ecologist

INVERTEBRATE HOME Schwegler Clay and Reed Insect Nest Box

Schwegler Sparrow Terrace 1SP

Schwegler Nest Box 1B

Schwegler 2F Bat Box

NOTE: Refer to Architect and Engineers drawings for details of Application Site/land ownership boundaries, levels, elevations, services and external works. Building foundations with regard to tree roots to be in accordance with NHBC Guidelines, Chapter 4.2.

Scale: 0 to 20m

OS (RFD)

PLANT SCHEDULE. All to BS9396 Part 1 and Part 4.

STRUCTURE TREES. Of local provenance where possible. All trees planted outside the recognised bare root season (Nov-e. March) to be container grown 80L. April. Base of pits loosened to a further 150mm depth and shaped to convex profile to facilitate free drainage and root penetration. HS trees to BS5238 planted as BS545 with a single tall stake 75mm diameter to BS4072. Trees in grass areas planted in 1.5M diameter circle of bark mulch 50mm depth above permeable substrate. Incorporate 10% of approved compost/manure with topsoil backfill and water to field capacity after planting. Selected from:

Abre Species	Common name	Size	(Eventual size)
IGK	Ilex Golden King	30L half std feather 1.2 x 1.5M S	1.2 x 1.5M S
	Morus nigra Wellington	10L 1.2 x 1.5M S	1.2 x 1.5M S
	Prunus Shiroteae	(Flowering cherry) HS 12-14cm 3.5-4 S	12-14cm 3.5-4 S

NATIVE HEDGE. Plants of local provenance. Supplier details to be provided for approval before ordering. Hedges planted in a double staggered row 400mm between rows. 400mm between plants in row = 50m. M. Species in low numbers in groups of 3-5 with groups spread evenly apart. All with protective biodegradable tube 600mm ht, green and support cane. Cut back by 1/3 after planting to encourage branching.

Acer campestre	(Field maple)	Br. 1+1 transplant	0.6-0.8M
Cornus sanguinea	(Dogwood)	Br. 1+1 transplant	0.6-0.8M
Corylus avellana	(Hazelnut)	Br. 1+1 transplant	0.6-0.8M
Crataegus monogyna	(Hawthorn)	Br. 1+1 transplant	0.6-0.8M
Fagus sylvatica	(Beech)	Br. 1+2 transplant	1.0-1.2M
Ilex aquifolium	(Holly)	3L 500-800mm	
Ligustrum vulgare	(Wild privet)	Br. 1+1 transplant	0.6-0.8M
Rosa canina	(Dog rose)	Br. 1+1 transplant	0.6-0.8M
Taxus baccata	(Yew)	RB 800-800mm @ 500mm c/s	
Viburnum opulus	(Guelder rose)	Br. 1+1 transplant	0.6-0.8M

ORNAMENTAL SHRUBS (eventual growing height over 1.0M. 3 strong breaks from the base. All container grown if planted outside the recognised bare root season)

Common name	Size	No/leg M
Cornus alba Eleganssisa	(Pink dogwood)	5L 450-600mm 2
Cornus alba Eleganssisa	(Variegated dogwood)	5L 450-600mm 2
Cornus Midwinter Fire	(Orange dogwood)	5L 750-900mm 2
Hydrangea Annabelle	(Snowy hydrangea)	5L 450-600mm 1
Laurus nobilis	(Bay)	5L 600-800mm 1
Magnolia stellata	(Star magnolia)	10L Mature 0.8-1.0M 1
Philadelphus Aureus	(Golden/mock orange)	5L 450-600mm 1
Photinia Red Robin	(Red robin)	10L 0.8-1.0M 1
Rose Charles de Mills	(Rose)	5L 450-600mm 1
Viburnum juddii	(Shrub rose, pink)	5L 450-600mm 1
	(Winter flowering viburnum)	5L 450-600mm AS

GROUND COVER 3 strong breaks from the base. Planted in single species groups

Common name	Size	No/leg M
Acanthus mollis	(Bear's breeches)	2L
Achillea Millefolium	(Yarrow, yellow)	2L
Anemone sp. Wild Swan	(Dwarf anemone, white)	2L
Carex Evergold	(Ornamental grass)	2L
Cistus purpureus	(Cistus rose, purple)	3L 300-450mm
Eurymorus Emerald & Gold	(Winter creeper, variegated)	3L 300-450mm S
Its Bishop's Robe	(Scented rose, purple)	3L
Lavandula Hiscote	(Lavender)	3L 250-300mm
Rose Charles de Mills	(Rose)	3L 300-450mm AS
Sarcococca confusa	(Christmas box)	2L
Sedum Spectabile	(Ice plant)	2L
Skimmia Revesiana		3L 300-450mm AS

CLIMBERS Planted 450mm from wall with support cane. Include for provision of support frame of 3 lines of galvanised wire 2M length from 200mm ht @ 450mm intervals secured to vine eyes where the plant is not self supporting.

Common name	Size	No/leg M
Trachelospermum jasminoides	(Star jasmine)	10L 0.8-1.0M AS
Wisteria Amethyst Falls	(Dwarf wisteria)	5L 0.8-1.0M

NOTES: abbreviations: (S) = small tree 10-10M eventual ht, (M) = 15-20M eventual ht, (B) = back, (E) = entrance, (Q) = garden, (H) = hedge, (I) = inside, (M) = margin, (S) = side, (T) = front, (S) = side, (U) = unpermitted.

Plant numbers to be checked prior to ordering and planting. All proposed substitutions to be agreed in writing before ordering and planting. IF IN DOUBT ASK.

Soft Landscape Management Plan. 15 year summary sheet. Review every 5 years.

Operation	Time in years when operation carried out on site by Ecologist				
	1	2	3	4	5 > 15yr
Grass/wildflower lawn - Close mown. Cut 11.75m. Reduce to 35mm ht. (March-Nov.)	*	*	*	*	*
Highway margin 10M wide	*	*	*	*	*
Cut to 100mm reduce to 35mm(March-Nov.)	*	*	*	*	*
Remove coarse and invasive weeds, April-Sept. 20/year avoiding herbicide where possible.	*	*	*	*	*
Edging adjacent to hard surfaces and planting areas (Once a year)	*	*	*	*	*
Grass /Wildflower Areas	*	*	*	*	*
Cut 2-6 times/year to facilitate natural seeding (late August and one other as instructed)	*	*	*	*	*
Timing to be agreed subject to conditions and growth. Remove all cuttings.	*	*	*	*	*
Hedgehog margin. Cut on a 2-3 year cycle to prevent scrub establishment.	*	*	*	*	*
Remove litter and leaves (12 times annually)	*	*	*	*	*
Scarify, re-instate and overseed bare, rutted and compacted areas	*	*	*	*	*
Remove stakes and ties once established	*	*	*	*	*
Replacement of Defects (6 years)	*	*	*	*	*
Pruning (Annually)	*	*	*	*	*
Re-staking and tying (Twice yearly check)	*	*	*	*	*
Fertiliser (annually)	*	*	*	*	*
Reinstating 1M dia bark circle in grass areas	*	*	*	*	*
Watering (during dry spell of 14 days)	*	*	*	*	*
Safety inspection of existing followed by recommended tree works (Annually and after severe storms)	*	*	*	*	*
Remove stakes and ties once established	*	*	*	*	*
Shrub and herbaceous beds	*	*	*	*	*
Replacement of defects	*	*	*	*	*
Pruning (Annually)	*	*	*	*	*
Fertiliser (annually)	*	*	*	*	*
Hoeing (14 occasions annually)	*	*	*	*	*
Weeding/ remove litter (14 occ's annually)	*	*	*	*	*
Pruning to remove obstructions to circulation / damaged/overgrown material, to facilitate flowering and longevity	*	*	*	*	*
Hedges	*	*	*	*	*
New. Formative pruning to shape until the agreed height is reached. Cut at a slight angle wider at the base.	*	*	*	*	*
Cut twice a year when extension growth exceeds 450mm and to remove obstructions	*	*	*	*	*
Remove cuttings, invasive weeds and litter.	*	*	*	*	*
Reinstate guards, canes and support fence when established	*	*	*	*	*
Cut back (by every 3 years)	*	*	*	*	*
Mulching (Bark in communal areas)	*	*	*	*	*
Top up to 75mm in March	*	*	*	*	*
Hard Surfaces	*	*	*	*	*
Remove litter/leaves and pruning cuttings (12 occasions annually)	*	*	*	*	*
Scarify/weedkiller (once a year)	*	*	*	*	*
Carry out annual review with report of works (Once a year, December)	*	*	*	*	*
Agree refinements required to future management and maintenance operations	*	*	*	*	*

All setting out dimensions to be site confirmed prior to works commencing and any discrepancies to be noted on site. To be read in conjunction with all other architectural and structural engineers drawings.

PROPOSED GARDEN LAYOUT
BERWICK FARM, BERWICK LANE, BRISTOL BS10 7RS

TREES CONSTRAINTS, PROTECTION AND PLANTING DETAIL
PLANNING
SCALE 1:250 @ A1

M D LANDSCAPE ARCHITECTS
3 WARRICK TOWER, BATH BA1 6J
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MOB: 07748 893208

Date: 1/11/23
Drawn: MDD
Checked: MDD
Scale: 1:250 @ A1
301/PA/01