542 Cath's Farm Shop

specification notes

• Tree locations are subject to confirmation of engineering and foundation details. Foundations to be piled with ground beams and shall comply with guidelines set by structural engineering consultants, and shall accord with the current NHBC Standards 'Building near Trees' and shall accommodate immediate and future impact of tree or shrubs on buildings and their foundations.

• Any proposed substitutions, whether species, cultivar, pot size or other specification, must be approved by landscape architect prior to planting;

• All native stock to be of local or at least UK provenence;

• Any significant layout changes necessitating revised details (such as new retaining walls casting shade on planting beds) should be reported to the landscape architect;

• All Nursery Stock to comply with BS3936 Part 1:1992 and all subsequent amendments;

• All Landscape operations to comply with BS4428:1989 and all subsequent amendments;

• The landscape contractor to make him/herself aware of any underground services prior to planting.

• Any poor site or soil preparation or conditions, such as excess kerb haunchings, to be reported to site manager for remediation prior to planting.

• No substitutions are to be made without prior approval of the Local Authority

WATERING
During tree, hedge, shrub, perennial and grass establishment and for duration of maintenance period ensure that sufficient water is applied using a hose to maintain healthy growth. During very dry summer spells, trees to be watered at rate of 25L and shrubs at 5L per plant per week during establishment. Draw back mulch and water with hose. Do not use sprays or sprinklers (except for grass and wildflowers) as these just wet the top of the mulch and do not penetrate the root zone.

SOILS
• Topsoil and subsoil to be stored in separate, non-overlapping mounds and topsoil should be stripped from any areas used for subsoil storage. The minimum amount of compaction should be applied when forming soil storage mounds, they should not be driven across. Topsoil mounds should be no greater than 2m in height and subsoil mounds should be no higher than 3m;

• The imported soils for tree and shrub planting will comprise sandy loams as per BS 3882:2015 and BS 8601:2013, of slightly acid pH on placement and with excellent drainage and aeration properties. Details of the soils to be imported (certification in accordance with BS 3882:2015 and BS 8601:2013) and the soil scientist's interpretive report evidencing fitness for purpose, will be made available to the LPA. Soil scientist to advise if ripping is required underneath tree pit.

• Refer to Engineer details for SUDS construction and soil profiles;

• The protection of topsoil and subsoil for planting areas should accord with the Construction Code for the Sustainable Use of Soils on Construction Sites (DEFRA, 2009), BS 3882:2015 and BS 8545:2014;

• Great care must be taken to preserve soil quality and integrity;

• All ground modelling to be to smooth and flowing contours new soil edge to be feathered to marry into adjacent levels;

• All planting and grass areas to be cultivated, with prior ripping where necessary to relieve compaction caused by tracking;

• Planting areas to be spread with imported free draining topsoil to a depth of 300mm for planting beds, above subsoil; soils allowed to settle prior to planting or seeding.

• Soil profiles to be 300mm topsoil over 600mm subsoil for all areas of tree planting/mixed tree and shrub planting, including provision for a minimum 10 cubic metres of root available soil (11m2) for each new tree. Shrubs only and mixed shrub and grass/herbaceous to receive 300mm topsoil over 300mm subsoil and grass only 150mm topsoil over 150mm subsoil.

TREE PITS
• Tree pits to be excavated to minimum 1m x 1m x depth of rootball. In sloping ground, maintain horizontal bases and vertical sides with no less than minimum depth throughout. If compacted, break up bottoms of pits to a depth with a fork and scarify sides;

• All tree pits to be back filled with 600mm subsoil followed by 300mm topsoil;

• Rootballed trees to be anchored underground with Greenleaf Rootball Fixing System and planted with Greenleaf 'Root Rain Urban' watering pipes, fitted according to manufacturer's instructions;

• Tree supply, planting and aftercare must accord with BS 8545:2014.

• No tree will be planted until it has been found to be compliant with Table 1, p.21, BS 8545:2014 – this will be established via inspections on delivery

• All non-biodegradable wrappings, cages etc. to be completely removed on planting. Biodegradable wrappings also to be removed, but may, where root-ball collapse is a concern, be cut and peeled back to no less than one-third root-ball height, and pelled back wrapping removed not folded in;

• All same-species trees to be similar height, form and habit;

• All trees in grass to be planted in mulched edged bed. Tree mulch circles to be a **minimum 1.5m radius** and 50mm depth tapered to 25mm over the root-ball surface; underplanted with bulbs as specified below;

• All planting beds adjacent grass areas and tree pits in grass to be edged with half moon edging tool to separate mulch from grass by forming neat and vertical edges;

• All planting beds but not tree pits to receive peat-free compost during cultivations at a rate of 1m3 to 20m2 and slow release fertiliser (e.g. Ficote 140) at rate of 25g/plant; beds to be thoroughly watered following planting and before mulching;

• Bareroot/containerised trees to be staked with short double stakes a maximum of one quarter the height of the tree above ground, and fixed with Greenleaf biodegradable hessian ties;

• All planting beds to receive Green-tech mycorrhizal Root Grow (granules for general planting and root dip for bare root planting), applied according to manufacturer recommendations;

• Mulch to be dark brown mixed conifer bark of particle size 8-35mm and pH range 5.0-7.0 to BS PAS 100:2005; mulch to be laid to 75mm (settled) depth.

HEDGES
• Hedges to be planted in 800mmm wide bed, 500mm from kerb/fence at 5/linm in double staggered row

WILDFLOWER GRASSLAND
• For remedial areas under trees: Wildflower grass seed is to be Emorsgate EW1 Woodland Mix sown at 4g/m2 for shady areas.
• For flowering lawn, seed mix to be Emorsgate EL1 sown at 4g/m2
All to be sown in suitable conditions onto shallowly cultivated subsoil using shake-aerator; spread with 10-15mm layer of compost, worked into the top layer and watered in (to ensure some nitrogen but low phosphorus)

legend

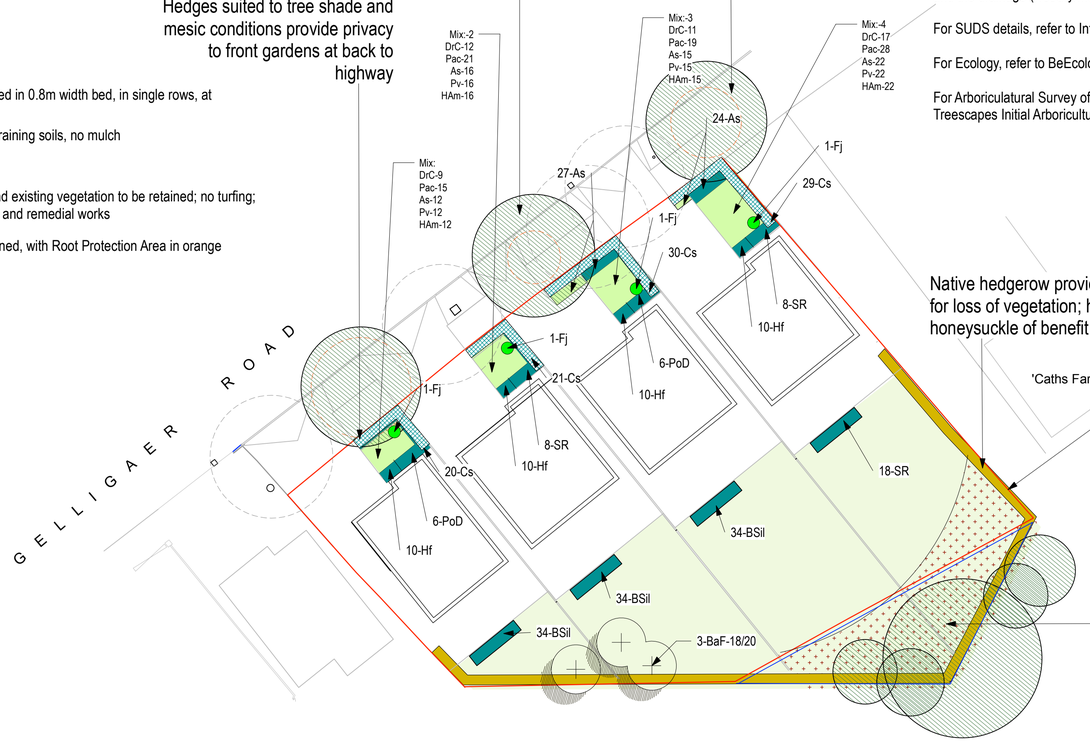
- ornamental shrub beds
- flowering lawn
- proposed rain garden hedge planted in 0.8m width bed, in single rows, at 500mm from kerb
- proposed rain gardens with free draining soils, no mulch
- proposed native hedge
- ground levels underneath trees and existing vegetation to be retained; no turfing; wildflower seed suitable for shade and remedial works
- existing trees and vegetation retained, with Root Protection Area in orange
- existing trees removed

Driveways and drains under existing lime trees constructed utilising no-dig methodology as per arboricultural report recommendations

Elsewhere, ground levels underneath all tree canopies and within the Root Protection Areas are to remain unchanged.

Rain gardens enhance biodiversity, and planting here is specified to tolerate the aspect (sun/shade) and the drainage (wet/dry/mesic). Hedges suited to tree shade and mesic conditions provide privacy to front gardens at back to highway

Retaining existing tree avenue (in part) balances the height of the houses, softening the streetscene and improving microclimate.



Native hedgerow provides ecological connectivity and mitigates for loss of vegetation; hedge to include hazel, hawthorn and honeysuckle of benefit to many native species

'Caths Farm Shop'

Plant in groups (except Lp) of 9-21 no. @ 5/linm-3
64-Ca-1
127-Cm-BR
16-Acam
32-Rca
16-Lp
64-Vo

Ground levels and vegetation underneath all tree canopies and within the Root Protection Areas are to remain unchanged. Remedial seeding with wildflower mix specified; no turfing

Landscape, Biodiversity & Amenity Strategy

The landscape proposals will provide an attractive setting to the proposed housing and integrate the development into the surrounding community.

Planting includes a mix of flowering and evergreen perennial and shrubs as well as wildflower grassland, to improve biodiversity and bring wildlife into back gardens. A native hedge proposed around the site boundary mitigates for loss of existing vegetation and provides a wildlife corridor around the site.

Surface water and roof water will be captured and drained towards the rain gardens Water here will be temporarily stored and then will drain into pipes to be transported further down the drainage chain.

Attenuation area planting will further enhance biodiversity, and planting here will be specified to tolerate the aspect (sun/shade) and the drainage (wet/dry/mesic).

For SUDS details, refer to Intrado Strategy

For Ecology, refer to BeEcological Ltd report

For Arboriculatural Survey of lime trees, refer to Cardiff Treescapes Initial Arboricultural Report

planting management

Management PLan is to be carried out for 5 years with a review at the end of that period.
Maintenance operations shall include:
• Litter clearance;
• Watering;
• Control of insects, fungus and other diseases;
• Control of weeds;
• Pruning, mowing and trimming;
• Refirming and other operations necessary for proper growth; and
• Regular checking and repair / removal of tree guys/stakes and ties as necessary.

Maintenance must be carried out at the appropriate time in order to achieve the standards described. Additional management will be required during drought or after strong winds or other disturbances.

Health & safety legislation
All operations must comply with relevant sections of the following legislation:
• Health and Safety at Work Act 1974;
• Control of Pollution Act 1974;
• Food and Environment Protection Act 1985;
• The Wildlife and Countryside Act 1981; Schedule 9 Section 14 makes it an offence for anyone to knowingly introduce Japanese Knotweed into the wild.
•The Control of Pesticides Regulations 1986; these regulations require all those who handle or use pesticides (including herbicides) to hold approved Certificates of Competence. Only approved pesticides as covered under this Act may be used.
• The Environmental Protection (Duty of Care) Regulations 1991; these regulations require all producers, carriers and disposers of waste to follow a Code of Practice and keep records. Any material contaminated with Japanese Knotweed is a 'waste' unless treated for re-use.
• The Health and Safety (First Aid) Regulations 1981; and
• Guidance notes produced by the Health and Safety Executive with respect to safe working practices.

generally
REINSTATEMENT
Reinstate disturbance to soil structure, mulch or planting to original condition

CONTROL OF PESTS
Combat any attack by mammals/fungus/insect/other pests.
Submit proposals for control method to CA for approval

WATERING
Supply: Potable mains water.
Quantity: Draw back mulch and wet full depth of topsoil.
Application: Do not damage or loosen plants.
Compacted soil: Loosen or scoop out, to direct water to root zone.
Frequency: as often as necessary to maintain healthy plant growth.

DISPOSAL OF ARISINGS
Compostable material to be removed to compost areas/habitat piles at end of gardens. Other material to be removed to Local Authority recycling collection point.

LITTER/TIPPED MATERIALS
Collect and remove from site to Local Authority recycling collection point.

INVASIVE SCRUB
Cut down to ground level and dig out roots.

KNOTWEED
Appearance of knotweed should be reported to CA for instruction.

PROTECTION OF PAVED AREAS
Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on paving.

CLEANLINESS
Soil and arisings: Remove from hard surfaces. Leave the works in a clean, tidy condition at completion and after any maintenance operations.

PEDESTRIAN ACCESS
Wherever works impede pedestrian or vehicular access the Contractor shall provide and maintain safe alternative routes

REFIRMING OF TREES AND SHRUBS
Timing: After strong winds, frost heave and other disturbances.
Refirming: Tread around the base until firmly bedded.
Collars in soil at base of tree stems, created by tree movement: Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

Ensure trees are vertical and adjust tree guys, stakes or ties as necessary.

Ensure that stakes are self supporting and reduce in height by one third each year to complete removal at end of third year. Adjust tie and spacer to top of stake. Ensure stakes do not come into contact with tree directly. If sufficient anchorage has not been established at the end of the third year then tree is to be replaced.

Loosen off tree ties regularly to accommodate new growth.

WATERING
During establishment and for duration of maintenance period ensure that sufficient water is applied using a hose to maintain healthy growth. During very dry summer spells, trees to be watered at rate of 10L per plant per week during establishment. Where watering tube is not fitted, draw back mulch and water with hose. Do not use sprays or sprinklers as these just wet the top of the mulch and do not penetrate the root zone.

PRUNING
In accordance with good horticultural and arboricultural practice and at appropriate season for the type of plant. Prune to remove dead, dying or diseased wood and to promote healthy growth.
Removing branches: Do not damage or tear the stem.
Wounds: Keep as small as possible and cut cleanly back to sound wood.
Cutting: Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance.
Tools: Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
Compostable material to be removed to compost heap on site

FORMATIVE PRUNING OF YOUNG TREES
Formative pruning of young trees will be to BS 3998:2010 and mulch circles to trees will be maintained for a minimum 3 years.

Time of year: Do not prune during the late winter/early spring sap flow period.
Young trees up to 4 m high:
• Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well balanced head and ensure the development of a single strong leader.
• Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.
Whips or feathered trees: Do not prune except to remove damaged wood.

FAILURES OF PLANTING: Plants which have failed to thrive, which are apparent during the maintenance period,may be made good by replanting at discretion of the CA. Review the reason for failure to inform consideration of selecting alternative species, location or replacement soil as directed by CA.

WEED CONTROL GENERALLY
First 3 years: keep planting areas clear of pernicious weeds by hand weeding
Weed tolerance: weed cover 5% and not more than 100mm high. Do not damage adjacent plants, trees.

HAND WEEDING
Remove entire weed, including roots.
Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible. Rake area to a neat, clean condition.

HORTICULTURAL CHEMICALS
Seek approval for use from CA. Not to be used near water.

MAINTENANCE OF MULCH
Top up mulch annually to maintain 50mm settled depth of bark mulch to specification given below.
Weeding: Remove weeds growing on or in mulch by hand.

PARTICULAR REQUIREMENTS
Hydrangea spp:
Prune back by one third on alternate years

FLOWERING LAWN TURF
When grass is between 50 and 75 mm high cut to approximately 35 mm high, using cylinder mower or suitable equivalent. Remove arisings to compost heap.
Initial establishment: Cut every 7-10 days during first growing season to a height of 40-60mm and remove arisings.
Once established, mow regularly as a lawn, but suspend cutting early in year to allow cowslips to flower, and relax cutting for 6-8 weeksafter June to permit other species to flower.

WILDFLOWER AREAS UNDER TREES
Strim annually, at end of August, once seed has set. Allow arisings to lie on ground for 24 hours and then remove to compost heap or Local Authority recycling point.

TREE STEMS
Ensure that a grass-free mulched area of 1m diameter is maintained around planted trees for first five years
Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree.

EDGES TO GRASS AREAS (planting beds and kerbs):
At the time of each cut, trim all grass edges round the base of trees, manholes, etc. and remove arisings.
Sweep all adjoining hard areas clear of cuttings and remove. Form edges to planting beds and around newly planted trees with a suitable edging tool, to clean straight lines or smooth curves. Draw back soil from edges to permit use of edging shears and remove all arisings.

FAILURES OF GRASS: Bare areas and areas of dead grass/wildflowers that have failed to thrive, which are apparent during the maintenance period, must be made good by recultivation and reseeding with seed mix specified as per Planting Plan

WEED CONTROL
Keep the sward substantially free of pernicious broad leaved weeds by hand removal, ensuring that wild flower species thrive. During first year, ensure that sufficient visits are made to keep complete control over weed growth.

FAILURES OF GRASS: Bare areas, areas of dead grass/flowers that have failed to thrive, which are apparent during the maintenance period, must be made good by recultivation and reseeding with appropriate seed with species and at times agreed with the CA.

MATURE TREES
To include trees overhanging the site boundary. An annual inspection is to be made by a qualified arboriculturalist. Tree works to be undertaken only be a qualified tree surgeon who will ensure that the shape and character of each tree is retained.

Prior to tree works being carried out, mature trees should be assessed by an ecologist for potential to support roosting bats. If there is high potential for roosting bats, observations or other assessments may be required. A derogation licence may be required if bats are present.

At each maintenance visit, carry out visual inspection of mature trees and scrub, and notify contract administrator of any emergency arboricultural assessment or incidental works required.

Trees considered dangerous are to be cut back or removed according to arboriculturalist recommendations.

HEDGES
Dogwood hedges to be maintained at 1.2m by a biennial cut in spring and late summer. Manage so that they do not invade adjacent footpaths or compromise boundary treatments.

Native mixed hedges initially allowed to grow up to reach 1.5m and then lightly trimmed to encourage thickening up. Hedge is to provide a thick boundary with an A-shaped profile (i.e. wider at base than top) and subsequently to be maintained annually at 2.0m-2.5m

Tall, thick hedgerows are of more value to wildlife than low overly-managed hedges, and provide better screening and softening of the built landscape.

All equipment used for Hedge Cutting shall be appropriate for the task, and must be kept properly maintained and in a well sharpened condition.

planting specification

Spacing	ID	No.	Latin Name	Scheduled Size	
as shown	Acam	16	Acer campestre	1+1, 60-80cm	BR, 3 breaks
6/m2	As	116	Asplenium scolopendrium	20-30cm, 3L	main leader, well branched
TREE	BaF-18/20	3	Betula albosinensis 'Fascination'	18-20cm	Rootballed
8/m2	BSil	102	Bergenia 'Silberlicht'	30-40, 5L	Full pot
as shown	Ca-1	64	Corylus avellana	1+2, 80–100cm	BR
as shown	Cm-BR	127	Crataegus monogyna	1+2, 80–100cm	BR
as shown	Cs	100	Cornus sanguinea	1+1, 80-100cm	3 breaks BR
5/m2	DrC	49	Dryopteris affinis	30-40cm, 2L	Full pot
SPEC	Fj	4	Fatsia japonica	60-80cm, 10L	5 breaks in lower third
4/m2	HAm	65	Hydrangea 'Ammarin'	60-80cm, 3L	5 breaks in lower third
6/m2	Hf	40	Helleborus foetidus	20-30cm, 3L	Full pot
as shown	Lp	16	Lonicera periclymenum	60-90cm, 3L	min 2 breaks, cane removed on planting
4/m2	Pac	83	Polystichum aculeatum	30-40, 5L	Full pot
4/m2	PoD	12	Physocarpus opulifolius 'Diabolo'	40-60cm, 3L	3 breaks in lower third
10/m2	Pv	65	Primula vulgaris	30-40cm, 1L	Full pot
as shown	Rca	32	Rosa canina	1+2, 80–100cm	BR, 5 breaks in lower third
4/m2	SR	34	Skimmia 'Reevesiana'	30-40cm, 5L	5breaks in lower third
as shown	Vo	64	Viburnum opulus	1+2, 80-100cm	BR

Revision C July 2022: Building footprints reduced in size; deeper rear patios
Revision B April 2022: Plots moved back from road; rear boudnary line amended
Revision A November 2021: Species mix amended to achieve 75% native , flowering lawn added; Management plan added

catherine etchell associates
landscape architecture • recreation planning
t: 01874 636903 • e: landscape@etchell.info
Parc Beddw • Libanus • Brecon • LD3 8NN

job title
Land adjacent Cath's Farm Shop
client
Mr Chris Reilly

drawing title
Landscape Strategy & Planting & Management Plan

scale • 1:250 at A1
date • October 2021
drawn • CE
drawing number • 542.01
revision • C