PROPOSED RESIDENTIAL DEVELOPMENT ON LAND AT CRABTREE WALK, TREFECHAN, MERTHYR TYDFIL

PLANTING NOTES

***Naturalistic Woodland Planting Mix*:**

Canopy Species (30% by number):

Sorbus aucuparia	Mountain Ash	50 %
Betula pubescens	Downy Birch	30 %
Salix caprea	Goat Willow	20 %

Understorey & Edge Species (70% by number):

Salix cinerea	Grey Willow	25 %
Crataegus monogyna	Hawthorn	40 %
Corylus avellana	Hazel	15 %
Rosa canina	Dog Rose	15 %
Ilex aquifolium	Holly	5 %

***Hedgerow Planting*:**

Mixed Species Hedgerow Shrub Species (all planted at 4 plants per linear metre):

Crataegus monogyna	Hawthorn	60 %
Corylus avellana	Hazel	30 %
Ilex aquifolium	Holly	10%

(All to be planted as bare-rooted stock, 450-600mm high; except for holly, as 3-litre container-grown plants 450-600mm high and with a minimum of 3 breaks).

All hedgerow plants to be planted in a prepared trench 500mm wide by 450mm deep, back-filled with (by volume) 50% excavated topsoil and 50% composted green waste to meet PAS 100 - all to be thoroughly mixed before placement in the planting trench.

On completion of planting, all hedgerow plants except holly to be fitted with plastic spiral rabbit guards: attached to a single bamboo cane (shrubs); or to a 75mm diameter short wooden stake (trees). Holly plants to be protected by plastic mesh guards not less than 750mm high, fastened to a 50mm diameter timber stake.

Single Species Hedgerows

Shall be either *Ilex aquifolium* or *Crataegus monogyna* planted as above

Specimen Trees:

Sorbus aucuparia 'Aspleniifolia'

Sorbus 'Joseph Rock'

Sorbus intermedia 'Brouwers'

Betula utilis var. *jacquemontii*

(All planted as selected standard trees 1.8-2m high; root-balled; in prepared pits of not less than 1200mm x 1200mm x 600mm deep; back-filled with (by volume) 50% excavated topsoil and 50% composted green waste to meet PAS 100 - all to be thoroughly mixed before placement in the planting pit).

All specimen trees to be supported with a single short timber stake, 75mm diameter, driven into the base of the tree pit before planting and cut-off at a height of 500mm above finished tree pit soil level following planting. Tree to be secured to the stake using a single plastic tree tie.

Bulbs in Grassed Areas:

All to be *Narcissus pseudonarcissus,* naturalised in informal drifts beneath selected groups of specimen trees and planted following establishment of sward growth following sowing.

Grassland in Landscape Areas - Seeding

Soil specification - including preparation, stripping, handling, storage, and supply of imported topsoil - for all landscape areas beyond rain gardens and linear bioretention features to be in accordance with BS3882:2015 that shall be from an AS DUG source

All cultivated areas prepared for seeding to be sown with '*Germinal A4*' fescue-based grass seed mixture which is tolerant of damp to wet conditions and periodic inundation. Sowing rate to be 35gms/m.sq Pre-seeding fertiliser to be '*Agrosil LR*' (0-20-0 NPK) applied at the rate of 35gms/m.sq.

Rain Garden Planting:

Soil specification to be a manufactured engineering soil to achieve the required porosity, ameliorated with PAS100 compost, to the engineer's specification to ensure compliance with SAB provisions.

Surface of the finished soil profile to be sown with 'Germinal A4' fescue-based grass seed mixture, which is tolerant of damp to wet conditions and periodic inundation. Sowing Rate: 20gms/m^2. No pre-seeding fertiliser to be applied.

Following germination of the seed mix and once the sward has achieved a height of 50mm following the first mowing, plant the following native herbaceous plant species, to address the amenity and biodiversity statutory standards (S4 & S5) required by the SAB approach to drainage design:

Ajuga reptans	Bugle	10%
Dryopteris filix-mas	Male Fern	5%
Filipendula ulmaria	Meadowsweet	30%
Iris pseudacorus	Yellow Iris	10%
Lythrum salicaria	Purple Loosestrife	5%
Phalaris arundinacea	Reed Canary-grass	20%
Silene flos-cuculi	Ragged-robin	20%

Plants to be supplied as either 50mm plug plants or very small container-grown stock (0.5 litre). These would be planted in single-species groups of 5-10 plants and at a density of no more than 10 plants per square metre, giving a maximum of 45 plants for the largest rain garden.

Not all rain gardens would be planted with the full range of species shown, depending upon size and aspect and the degree of over-shading. Not less than 5 species will be planted in each rain garden.

Linear Bioretention Features (Planting)

This planting is in accordance with the guidance provided in Chapter 18 of *The SuDS Manual* prepared by CIRIA (CIRIS 753, London 2015).

Soil specification to be a manufactured engineering soil to achieve the required porosity, ameliorated with PAS100 compost, to the engineer's specification to ensure compliance with SAB provisions.

Surface of the finished soil profile to be sown with '*Germinal A4*' fescue-based grass seed mixture which is tolerant of damp to wet conditions and periodic inundation. Sowing rate to be 35gms/m^2. Pre-seeding fertiliser to be '*Agrosil LR*' (0-20-0 NPK) applied at the rate of 35gms/m^2.

Plant plug plants or very small container-grown stock (0.5 litre) of the following native herbaceous plant species, to address the amenity and biodiversity statutory standards (S4 & S5) required by the SAB approach:

Ajuga reptans	Bugle	Flowering interest and carpeting form
Caltha palustris	Marsh Marigold	Seasonal awareness - early spring flowering; clump-forming growth
Cardamine pratensis	Cuckoo Flower	Seasonal awareness - early spring flowering
Filipendula ulmaria	Meadowsweet	Good summer flowering and strongly scented; spreading habit
Lotus pedunculatus	Greater Bird's-foot Trefoil	Flowering interest and carpeting form
Lycopus europaeus	Gypsywort	Flowering interest and attracts bees
Mentha aquatica	Water Mint	Flowering interest and spreading form
Ranunuculus flammula	Lesser Spearwort	Flowering interest and clump-forming growth
Silene flos-cuculi	Ragged-robin	Good flowering and patch-forming growth

These would be planted in single-species groups of 5-10 plants and at no more than 15 plants per square metre.

All linear bioretention features would be planted with the full range of species shown.

No species will comprise less than 5% by number of the total plants for any individual bioretention area.

PLANT SCHEDULE

Nr	Species	Specification	Centres
	Specimen Trees		
23	Sorbus aucuparia 'Asplenifolia' **SA**	Selected Standards 12-14cm Girth	As shown
10	Sorbus Joseph Rock **SJ**	Selected Standards 12-14cm Girth	As shown
23	Sorbus intermedia 'Brouwers' **SB**	Selected Standards 12-14cm Girth	As shown
21	Betula utilis var Jaquemontii **BJ**	Selected Standards 12-14cm Girth	As shown
	Naturalistic Woodland Planting (c.2010m.sq)		
153	Sorbus aucuparia	45-60cm BR Transplant	Planted at a rate of 1 plant per 2m.sq
92	Betula pubescens	45-60cm BR Transplant	
61	Geranium Biokovo	45-60cm BR Transplant	
97	Salix cinerea	45-60cm BR Transplant	
280	Crataegus monogyna	45-60cm BR Transplant	
223	Corylus avellana	45-60cm BR Transplant	
103	Rosa canina	45-60cm BR Transplant	
36	Ilex aquifolium	3L Pots 45-60cm Bushy	
	Native Hedgerow Planting - Mixed species(c.251 linear metres)		
605	Crataegus monogyna (60%)	45-60cm BR Transplant	Planted at a rate of 4 plants per linear.m
310	Corylus avellana (30%)	45-60cm BR Transplant	
151	Ilex aquifolium (10%)	45-60cm BR Transplant	
	Native Hedgerow Planting - Single species(c.54 linear metres)		
			Planted at a rate of 4 plants per linear.m
216	Ilex aquifolium (100%)	45-60cm BR Transplant	
	Native Hedgerow Planting - Single species(c.25 linear metres)		
			Planted at a rate of 4 plants per linear.m
100	Crataegus monogyna (100%)	45-60cm BR Transplant	
	Rain Garden Planting (c.177m.sq)		
TBC	Ajuga reptans (10%)	50mm Plugs or 0.5L Pots	Planted at a max rate of 10 plants per m.sq
TBC	Dryopterus felix-mas (5%)	50mm Plugs or 0.5L Pots	
TBC	Filipendula ulmaria (30%)	50mm Plugs or 0.5L Pots	
TBC	Iris pseudoacorus (10%	50mm Plugs or 0.5L Pots	
TBC	Lythrum salicaria (5%)	50mm Plugs or 0.5L Pots	
TBC	Phalaris arundinacea (20%)	50mm Plugs or 0.5L Pots	
TBC	Silene flos-cuculi (20%)	50mm Plugs or 0.5L Pots	
	Linear Bioretention Planting (c.266m.sq)		
TBC	Ajuga reptans (10%)	50mm Plugs or 0.5L Pots	Planted at a max rate of 15 plants per m.sq
TBC	Caltha palustris	50mm Plugs or 0.5L Pots	
TBC	Cardamine pratensis	50mm Plugs or 0.5L Pots	
TBC	Filipendula armeria	50mm Plugs or 0.5L Pots	
TBC	Lotus pedunculatus	50mm Plugs or 0.5L Pots	
TBC	Lycopus europaeus	50mm Plugs or 0.5L Pots	
TBC	Mentha aquatica	50mm Plugs or 0.5L Pots	
TBC	Ranunculus flammula	50mm Plugs or 0.5L Pots	
TBC	Silene flos-cuculi	50mm Plugs or 0.5L Pots	
	Bulb Planting (c.461m.sq)		
23050	Narcissus pseudonarcissus	Topsize	Planted at a rate of 50 bulbs per m.sq

Note: All plant numbers shall be confirmed prior to planting

Issue 4 July 2023 FOR PLANNING ONLY
(Landscape Layout updated to accomodate revisions by others)

Issue 3 February 2023 FOR PLANNING ONLY
(Landscape Layout updated to accomodate revisions by others)

Issue 2 February 2021 FOR PLANNING ONLY

Issue 1 June 2020 FOR PLANNING ONLY

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Client	WDL Homes Ltd		
Project	Land at Crabtree Walk, Trefechan		
Drg.Title	Softworks Specification & Schedule		
Date	July 2023	Scale: NTS @ A1	Drg Nr: 1909TMT.03
Drawn	JC/RKR		Issue: 04