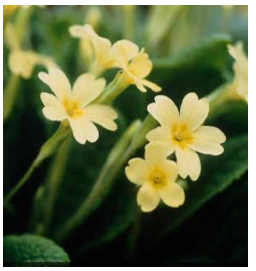
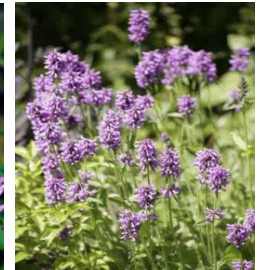


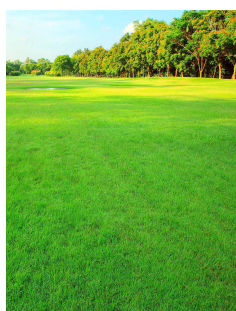
Selected Plant and Shrub Species			Planting Condition	Specification	Density	Description
S1	Ilex Aquifolium Common Holly	 	Moist - Well-drained Clay/ Loam/ Sand/ Chalk Acid, Alkali or Neutral Exposed or Sheltered Full Sun or Partial Shade	10L	2 per m ²	<i>Large evergreen tree, slow growing when young, with dark glossy green, usually strongly spiny leaves. Small white flowers in spring are followed by bright red berries.</i>
S2	Cytisus 'Zeelandia' Cultivated Broom	 	Well-drained Clay/Sand/ Loam Acid, Alkali or Neutral Exposed or Sheltered Full Sun	4L	4 per m ²	<i>A small, bushy deciduous shrub with broom-like green stems and small dark green leaves. Flowers abundant, pink and cream, opening in late spring and early summer</i>
S3	Viburnum Opulus Gelder Rose	 	Moist - Well-drained Clay/ Loam/ Sand Acid, Alkali or Neutral Exposed or Sheltered Full Sun, Shade or Partial Shade	2L 30-50cm	4 per m ²	<i>An upright deciduous shrub with maple-like palmately lobbed leaves with turn red in autumn, and flat clusters of small white flowers surrounded by larger sterile flowers, and followed by translucent red berries.</i>
S4	Rosa Rugosa 'Alba' White Japanese Rose	 	Moist - Well-drained Clay/ Loam/ Sand/ Chalk Acid, Alkali or Neutral Exposed or Sheltered Full Sun or Partial Shade	4L	4 per m ²	<i>A vigorous medium-sized shrub with plentiful glossy, rich green foliage turning yellow in autumn. Fragrant, pure white, single flowers 9cm wide open in summer and autumn, followed by large scarlet hips</i>
S5	Dryopteris Affinis Golden Shield Fern	 	Moist - Well-drained Clay/ Loam/ Sand/ Chalk Acid, Alkali or Neutral Exposed or Sheltered Full Sun, Shade or Partial Shade	5L	2 per m ²	<i>A robust semi-evergreen fern forming a rosette of erect, bipinnatifid fronds to 1.2m in length - bright yellow-green when young, later rich green with dense persistant golden scales on stems.</i>
S6	Calluna Vulgaris Heather	 	Moist - Well-drained Clay/ Loam/ Sand Acid Exposed or Sheltered Full Sun	2L	4 per m ²	<i>An evergreen shrub with small, narrow linear leaves and spikes of urn-shaped pink or pale purple, single or double flowers borne from mid-summer to autumn.</i>
S7	Erica Carnea Alpine Heath	 	Moist - Well-drained Clay/ Loam/ Sand Acid, Alkali or Neutral Exposed or Sheltered Full Sun or Partial Shade	1L	8 per m ²	<i>A dwarf, spreading evergreen shrub with tiny, narrow dark green leaves. One-sided sprays about 8cm long of small, urn shaped pink, purple-pink, magenta or white flowers appear in late winter and early spring.</i>
S8	Primula Vulgaris Primrose	 	Moist - Well-drained Clay/ Loam/ Sand/ Chalk Acid, Alkali or Neutral Sheltered Full Sun or Partial Shade	1L	8 per m ²	<i>A herbaceous perennial, producing clusters of flowers on individual stems from basal rosettes. A few may also have umbel-like flowers.</i>
S9	Betonica Officinalis Betony	 	Well-drained Clay/ Loam/ Sand Acid, Alkali or Neutral Exposed or Sheltered Full Sun or Partial Shade	1L	8 per m ²	<i>An upright perennial with scalloped, oblong leaves and dense terminal spikes of reddish-purple flowers in summer and early autumn.</i>
S10	Persicaria Bistorta Common Bistort	 	Moist - Well-drained Poorly drained Clay/ Loam/ Sand/ Chalk Acid, Alkali or Neutral Exposed or Sheltered Full Sun or Partial Shade	1L	8 per m ²	<i>Vigorous rhizomatous perennial to 1m tall, with prominently veined, ovate leaves to 30cm long, and dense spikes of small pale pink flowers in summer and early-autumn.</i>

Selected Hedge Specification				Specification	Density	Description
H1	Fagus Sylvatica Common Beech	 	Moist - Well-drained Clay/ Loam/ Sand/ Chalk Acid, Alkali or Neutral Exposed or Sheltered Full Sun or Partial Shade	10L 90-120cm	Every 50cm	<i>Large, vigorous deciduous tree reaching 30m in height, with a broad, spreading crown. Leaves broadly elliptic, yellow-green in spring, rich golden copper to russet-brown in autumn. Small, green flowers in early spring, are followed by bristly fruits.</i>
	Mature Height: 12m+ Mature Spread: 8m+ Time to Maturity: 20-50 years					

- 1. SITE CLEARANCE**
Site to be cleared of any debris or rubbish. Weed growth to be removed from existing ground, by mechanical method or by application of translocated herbicide - applied at least three weeks prior to planting. Use of herbicide to be in accordance with manufacturers instructions and be suitable for use near water.
- 2. GROUND PREPARATION**
Topsoil to be fully cultivated to produce an even tilth, free of stones and debris >50mm diameter. Existing soil in all scheduled planting areas, compacted during construction, requires complete replacement with quality topsoil (compliant with British Standard 3882) as specified below. All soil within planting areas to be dug and thoroughly loosened to a minimum depth, 500mm below ground level. Shrub areas to be a minimum 450mm subsoil and 450mm topsoil. Spread 100mm layer of soil improver over all planting areas and cultivate to incorporate thoroughly with topsoil. Soil improver to be well-rotted farmyard manure, spent compost, SHL 'peat free' tree and shrub compost or similar approved.
- 3. PLANTING - GENERALLY**
All works to be carried out in accordance with BS 4428 and good horticultural practice. All plant materials to be a form typical of the species of British provenance, true to size and species, of good health with a good fibrous root system and compatible with British Standard 3936 part 1, 1992 specifications - 'Nursery Stock'. No substitutes are to be made without the written consent of the Local Planning Authority. No soil, spoil, construction materials or rubbish shall be tipped or stored with the spread of vegetation.

- 4. PLANTING - TREES AND SHRUBS**
All bare rooted plants to have their root system immersed in Alginure root dip in accordance with the manufacturer's instructions immediately after lifting.

Shrubs and herbaceous plants to be planted in pits approximately 150mm greater in diameter than the size of the roots when fully spread. Base of pit to be forked over prior to planting. Apply slow release fertilizer (including trace elements of egg/ Vitax Q4) to each planting pit. Fertilizer to be applied at manufacturers recommended rates.
- 5. PLANTING - GRASSES**
Grass seed is best sown in the Autumn or Spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand. For an even distribution, and to avoid running out, divide the seed into two or more parts and sow in overlapping sections at 90 degrees to each other. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/ seed contact.
- 6. PROTECTION AFTER PLANTING**
All planting material to be well watered prior to planting and again immediately after planting to ensure the soil is saturated to full planting depth. All planting areas to be lightly raked to an even profile prior to mulching. Spread pine mulch over planted areas to a minimum depth of 50mm, ensuring that the mulch does not bury ground cover plants. Mulch to be a good quality pine, no greater than 65mm in any direction, composted for a minimum of 6 months and containing no rubble or other foreign matter. Mulch level to sit at least 30mm below adjoining paved areas.

Selected Grasses and Wildflower Specification		Specification	Spread	Description
G1	Barenbrug E2 Tough Turf Grass Seed Grass Species: 80% Perennial Ryegrass and 20% Strong Creeping Red Fescue	 100% grasses	25-35g per m ²	<i>For areas that are subjected to year-round use. The robust perennial ryegrass varieties provide wear tolerance whilst the creeping fescue helps to create an exceptionally tight-knit turf. The inclusion of fescue species also aids performance during spells of dry weather.</i>
G2	Barenbrug Wildflower Classic Hay Meadow Mix Wildflower Species include: buttercup, knapweed, daisy, burnet, campion, bedstraw, selfheal, sorrell, ribwort, yarrow and yellow rattle. Grass Species include: hard fescue, crested dogstail, red fescue.	 20% native wild flowers 80% grasses	5g per m ²	<i>A mixture of some of the most commonly found wildflower species in the UK. Can be used on a broad range of soil types. Contains 13 wildflower species</i>
G3	Carex Pendula Pendulous Sedge Mature Height: 1-1.5m Mature Spread: 0.5-1m Time to Maturity: 2-5 years	 5L	N/A	<i>A vigorous grass-like hardy perennial forming large clumps up to 1.5m tall, of dark green, narrow, pleated leaves, with tall stems bearing slender, drooping flower spikes.</i>
G4	Centaurea Cyanus Cornflower Mature Height: 0.5-1m Mature Spread: 0.1-0.5m Time to Maturity: 1-2 years	 plug	N/A	<i>An upright annual to 75cm, with simple or slightly lobed leaves and solitary deep blue flower-heads 3-4cm across in late spring and summer.</i>
G5	Leucanthemum Vulgare Ox-eye Daisy Mature Height: 0.5-1m Mature Spread: 0.1-0.5m Time to Maturity: 2-5 years	 plug	N/A	<i>A rhizomatous perennial with dark green spoon-shaped leaves and solitary white, daisy-like flowerheads with yellow disk florets, in late spring and early summer.</i>

Bio-Retention Planting Specification			Planting Condition	Specification	Density	Description
B1	Juncus Effusus Common Rush		Poorly-drained Clay/ Loam pH - Acid	5L	4 per m²	Clump-forming evergreen, grass-like perennial. Bright green to yellowish rounded stems. Flowers from late-spring to summer, with small green/ brown flowers just below stem tips.
	Mature Height: 1-1.5m Mature Spread: 0.5-1m Time to Maturity: 2-5 years					
B2	Eupatorium Cannabinum Hemp Agrimony		Moist but well drained - poorly drained Clay/ Loam ph - Any	5L	4 per m²	Upright perennial with reddish stems, leaves palmately-divided into narrow leaflets, and a dense domed clusters of purple-pink flowers in late-summer and early-autumn.
	Mature Height: 1-1.5m Mature Spread: 1-1.5m Time to Maturity: 2-5 years					
B3	Filipendula Ulmaria Meadow Sweet		Moist but well drained - poorly drained Clay/ Loam ph - Any	1L	8 per m²	A vigorous perennial with pinnately divided leaves, the leaflets strongly toothedand whitish beneath. Creamy-white flowers in dense irregular terminal clusters on leafy stems in summer.
	Mature Height: 0.5-1m Mature Spread: 0.5-1m Time to Maturity: 2-5 years					
B4	Lythrum Salicaria Purple Loosestrife		Poorly-drained Clay/ Loam ph - Any	1L	8 per m²	Robust herbaceous perennial with upright stems to 1.2m tall, clad in narrow, willowy leaves and small vivid purplish-pink flowers. 2cm wide, in dense terminal spikes over a long period in the summer.
	Mature Height: 1-1.5m Mature Spread: 1-1.5m Time to Maturity: 2-5 years					
B5	Rudbeckia Fulgida Little Goldstar		Moist but well drained Clay/ Loam or Sand ph - Any	1L	8 per m²	A herbaceous perennial forming a clump to 60cm in height, with erect stems bearing narrowly ovate leaves and dark-eyed, deep yellow flowers to 12cm width.
	Mature Height: 0.5-1m Mature Spread: 0.5-1m Time to Maturity: 2-5 years					
B6	Deschampsia Cespitosa Goldtau		Moist but well drained Clay/ Loam or Sand ph - Acid/ Neutral	3L	4 per m²	An evergreen grass forming a neat tussock of narrow, leathery, dark green leaves to 60cm long, with feathery panicles of silvery-purple flowers on arching stems in summer.
	Mature Height: 1-1.5m Mature Spread: 0.5-1m Time to Maturity: 2-5 years					

- 7. ESTABLISHMENT MAINTENANCE AND REPLACEMENT OF DEFECTS**
Establishment period and defects period to be 1 year following practical completion. The following maintenance operations to be undertaken during the establishment period: i) Remove and replaced all dead, dying or diseased plants during the nearest planting season. ii) Keep area 1m in diameter around each plant free from weeds. iii) Prune plants to remove dead, dying or diseased wood and to promote healthy growth and natural shape. iv) Regularly check the condition of stakes, ties and guards - replacing as necessary, with removal by others after the 12 months defects and maintenance period. v) Top up mulch annually. vi) Re-firm loose trees and shrubs as necessary. vii) Watering frequency as necessary to maintain continued thriving of all planting.

GENERAL NOTES

a. This drawing is confidential and copyright and owned by WSP (Real Estate & Infrastructure) Ltd. and is for use on this site only unless contractually stated otherwise.

b. Dimensions are not to be scaled from this drawing. Discrepancies and / or ambiguities within this drawing, between I and information given elsewhere, must be reported immediately to the architect for clarification before proceeding.

c. Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the Specifications and / or Details for actual sizes, or specific contractor construction information where only design intent is provided.

d. This drawing is to be read in conjunction with all other relevant architectural drawings and specifications as well as the drawings and specifications of other design disciplines, including structural engineers and building services engineers.

e. It is assumed that all works on this drawing will be carried out by a competent contractor, aware of their duties under CDM regulations 2015 and working to a construction phase plan developed by the Principle Contractor.

HEALTH & SAFETY SYMBOL KEY

WARNING RISK
Indicates a Residual Risk as a warning

COMPULSORY RISK
Indicates a Residual Risk requiring a compulsory action

PROHIBITIVE RISK
Indicates a Residual Risk requiring a prohibitive action

INFORMATION RISK
Indicates a Residual Risk for information

P01	Issued for Stage 3	05/12/24
Rev	Description	(Chk'd / App'd) Date

Status
S2 - For information and reference
Classification

Client

Merthyr Tydfil County Borough Council

Project

Merthyr Interchange Link

Drawing

Planting Specification & Guidance

Planting Specification & Guidance

Project No.	Date
70121420	19/08/2024

Drawing Identifier	project	origin	zone	level	form	discip.	number	revision
MIL	-ESA	-XX	-XX	-DR	-A	-	940002	_ P01

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