SUDS & RAIN GARDEN

PLANTING SCHEME GUIDE

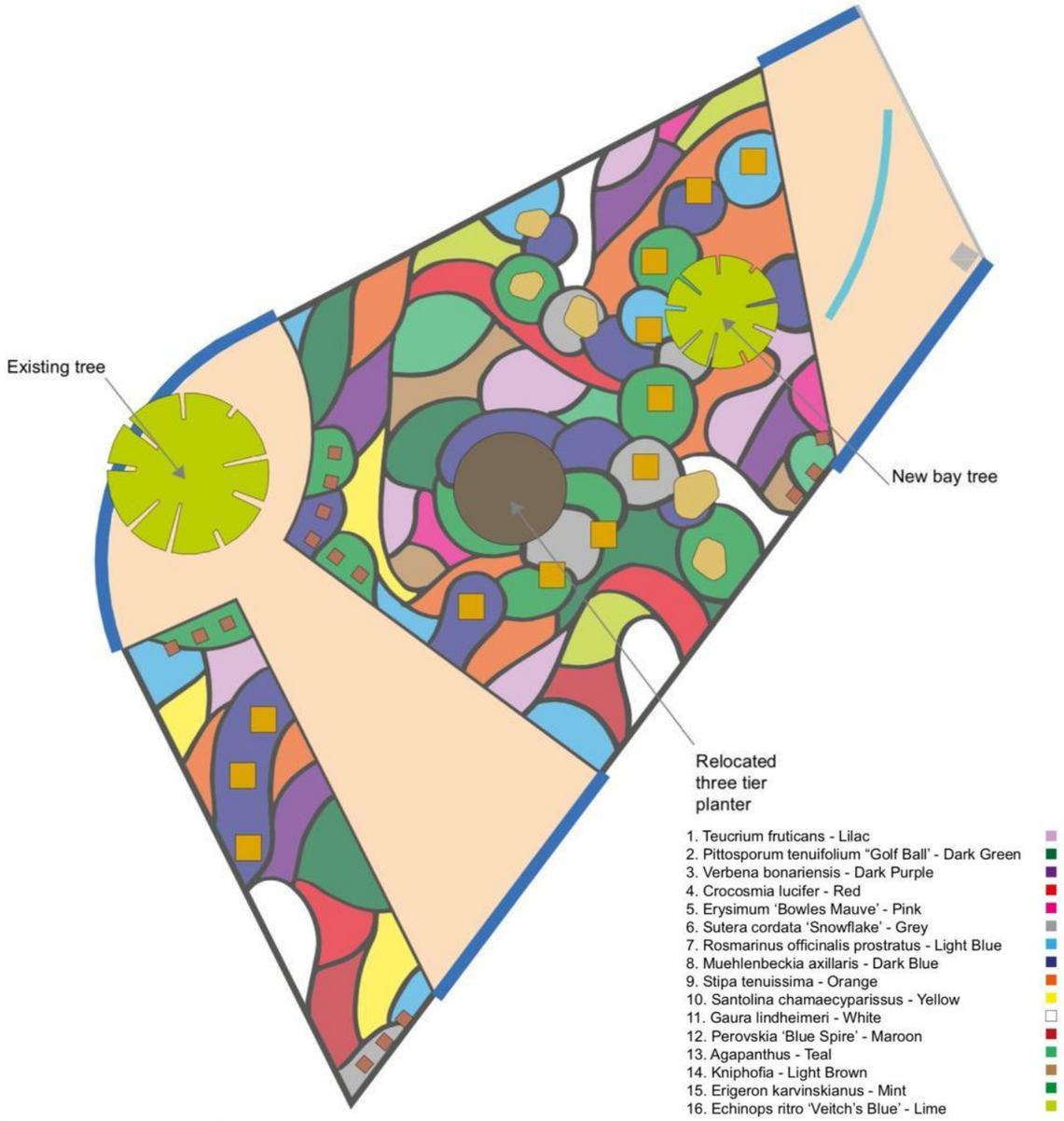
MERISTEM DESIGN

All the designs contained in this document remain the property of Meristem Design and are not to be used by any third party for manufacturing purposes

PLANT GUIDE

CHOOSING PLANTS FOR THE RAIN GARDEN

Creating a successful Sustainable Drainage System (SuDS) Rain Garden involves thoughtful selection of plants that not only enhance the aesthetic appeal but also contribute to the functionality and ecological balance of the system. The right combination of flowering plants, grasses, ground cover, shrubs, and trees plays a crucial role in achieving the goals of stormwater management, biodiversity promotion, and overall environmental sustainability.



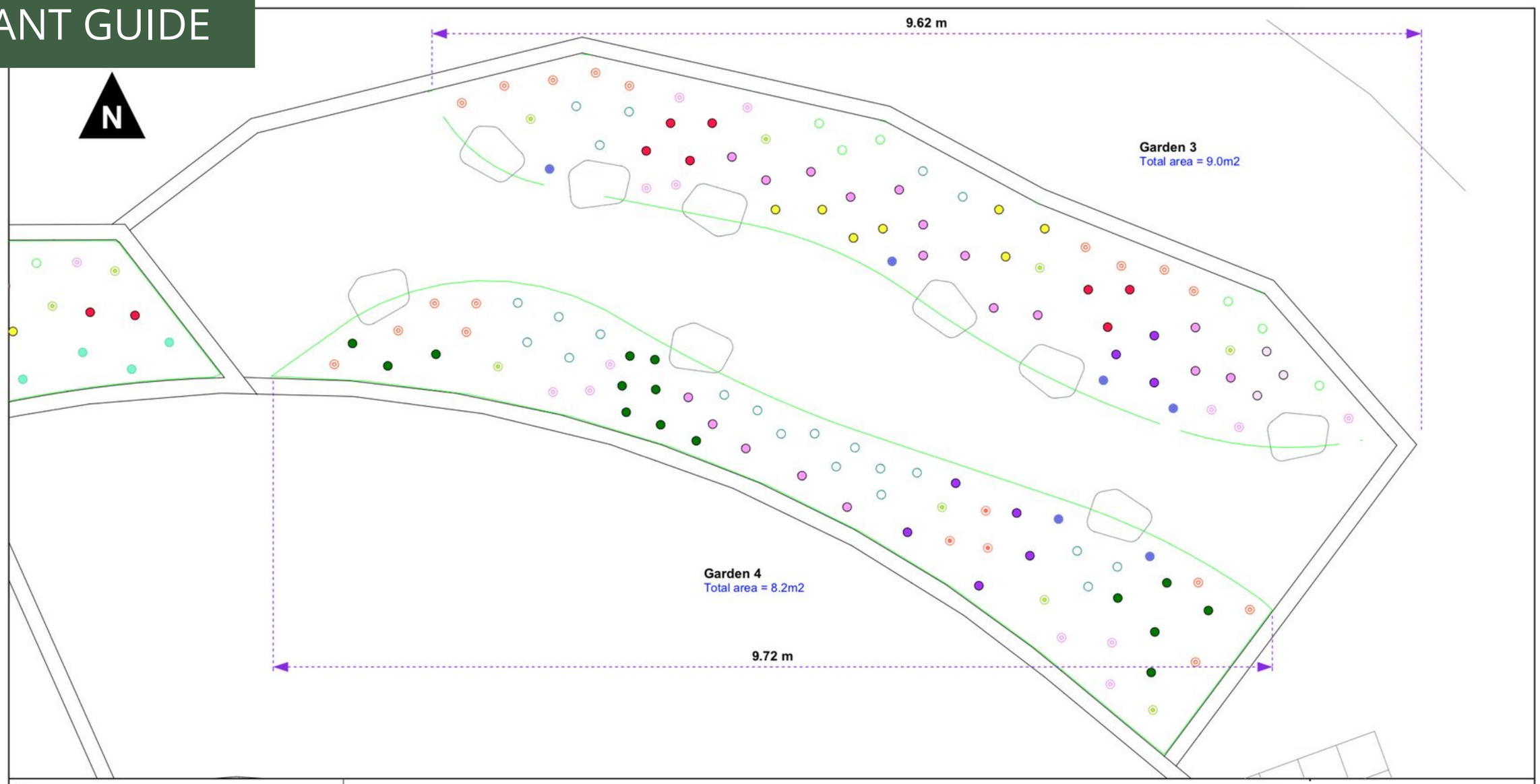
CONSIDERATIONS FOR PLANT SELECTION:

Ideally, the Rain Garden is designed as an integral part of the landscape design, choosing not only its location but also its shape and the plant species you use.

We recommend planting a variety of different species, known for their hardiness to both drought conditions and flash flooding. Species found in wetland conditions, as well as marginal species, can really benefit the space, coping well with large amounts of water in a short period of time. We also try to plant native species, which are well adapted to the climate, coping well with our seasons, as well as supporting local wildlife including birds, pollinating insects and other invertebrates.

- **Adaptability to Moisture Levels:** Plants need to tolerate both wet and dry conditions so choosing plants that can survive a variety of moisture conditions is essential.
- **Root System Characteristics:** Water absorption and erosion prevention are facilitated by deep-rooted plants, contributing to the overall health of the rain garden.
- **Biodiversity and Ecological Functionality:** A rich ecosystem is encouraged by aiming for a diverse plant palette.
- **Seasonal Interest:** Consideration of the colour, texture, and form of plants contributes to a visually pleasing and dynamic landscape.
- **Maintenance Requirements:** Plants with low maintenance needs should be chosen to ensure the longevity and efficiency of the rain garden.
- **Pollution Tolerance:** Plants with a tolerance for potential contaminants should be selected, given the rain garden's role in treating stormwater runoff. Some species, particularly effective at filtering pollutants, contribute to the water purification process.
- **Local Regulations and Guidelines:** Familiarity with local regulations and guidelines for planting in SuDS is essential.

PLANT GUIDE



Key:
Perennials:

- Rudbeckia
- Perovskia
- Sage
- Teucrium
- Verbena
- Salvia Nemorosa
- Camas
- Pittosporum
- Salvia 'Hot Lips'
- Crocosmia
- Vinca minor
- Miscanthus
- Geranium
- Geum
- Carex

Schedule: Garden 3 and 4
Perennials:
Notes: Garden 3 -Total planting area = 9.0m2 / 1-3 Litre pots minimum / 5-7 plants per m2. 66 Plants.
Garden 4 -Total planting area = 8.2m2 / 1-3 Litre pots minimum / 5-7 plants per m2. 64 Plants.

1. Rudbeckia fulgida var. deamii / Height: 60cm Spread: 45cm / Foliage: Deciduous
2. Perovskia 'Blue Spire' / Height: 1.2m Spread: 1m / Foliage: Deciduous
3. Salvia officinalis, sage / Height: 75cm Spread: 1m / Foliage: Deciduous
4. Teucrium fruticans / Height: 1.2m Spread: 1.2m / Foliage: Evergreen
5. Verbena bonariensis / Height: 60cm Spread: 60cm / Foliage: Deciduous
6. Salvia nemorosa 'Amethyst' / Height: 50cm Spread: 30cm / Foliage: Deciduous
7. Camassia quamash, Camas/ Height: 60cm Spread: 30cm / Foliage: Deciduous
8. Pittosporum tenuifolium Bannow Bay / Height: 1m Spread: 80cm / Foliage: Evergreen
9. Salvia x jamensis 'Hot Lips' / Height: 90cm Spread: 60cm / Foliage: Deciduous
10. Crocosmia 'Lucifer' - montbretia / Height: 1.5m Spread: 50cm / Foliage: Deciduous
11. Vinca minor 'Azurea Flore Pleno' / Height: 10cm Spread: 1.5m / Foliage: Evergreen
12. Miscanthus sinensis 'Morning Light' (Chinese Silver Grass) / Height: 1.2m Spread:1.2m / Foliage: Deciduous
13. Geranium pratense (Meadow Cranesbill) / Height: 90cm Spread: 60cm / Foliage: Deciduous
14. Geum chiloense 'Red Dragon' / Height: 40cm Spread: 30cm / Foliage: Evergreen
15. Pendulous Sedge (Carex pendula) / Height: 1.5m Spread: 1m / Foliage: Evergreen

Copyright © 2023 Meristem Design

Typology 1: Grasses, flowering herbs and ferns.

A broad range of flowering plants, grasses and ground cover that area suitable for SUDs planting.

ALCHEMILLA MOLLIS - GARDEN LADY'S-MANTLE

An herbaceous perennial forming a clump of softly hairy, light green leaves with scalloped and toothed edges. Small, bright yellow flowers.

Height: 60 cm

AGAPANTHUS AFRICAN LILY

Agapanthus have mounds of strappy, bright green leaves. Sturdy stems shoot up in summer carrying loosely spherical heads of trumpet-shaped flowers.

Height: 1 m

ASTER × FRIKARTII 'MÖNCH'

'Mönch' is a vigorous, clump-forming perennial, with strong, well-branched stems. Bears loose clusters of long-lasting flowers, in late summer and early autumn.

Height: 70 cm

CALAMAGROSTIS - FEATHER REED GRASS

'Karl Foerster' is a clump-forming deciduous perennial grass with flat, arching leaves, and bronze flowering panicles that fade to pale brown.

Height: 90 cm

CAREX PRAIRIE FIRE - ORANGE NEW ZEALAND SEDGE

A dense, tufted, evergreen perennial grass with narrow bright green strap-like leaves tipped with bright orange. The foliage turns a darker orange in the autumn.

Height: 50 cm

Carex remota - REMOTE SEDGE

Forms dense semi-evergreen tussocks of very thin, long, arching pale to bright green leaves. Drooping flower stems carry yellow-green flowers during early summer.

Height: 50 cm

CAREX RIPARIA - Greater pond sedge

A vigorously spreading rhizomatous perennial with linear, glaucous green leaves and tall stems bearing stout, erect, dark brown flowering spikes in early summer

Height: 125 cm

CENTAUREA NIGRA - Black knapweed

An upright, branching perennial, with simple or pinnately lobed leaves and thistle-like purple flowerheads to 4 cm across.

Height: 75 cm

CROCOSMIA 'LUCIFER'

A cormous, herbaceous perennial with a robust and very upright growing habit. It has mid-green, pleated blade-like leaves and arching deep red flower stems.

Height: 160 cm

CYNARA CARDUNCULUS - CARDOON

Huge, purple, thistle-like flowers from June to September held above enormous clumps of deeply-cut, silvery-green leaves.

Height: 1.5 m

ECHIUM VULGARE - VIPER'S BUGLOSS

An erect, bristly biennial to 75cm, with lance-shaped, hairy leaves and dense cylindrical spikes of bell-shaped violet-blue flowers in early summer.

Height: 100 cm

EURYBIA × HERVEYI - ASTER TWILIGHT

Self-supporting, branching stems, carrying a profusion of light-blue daisy flowers, 5 cm across. Flowering late summer and autumn.

Height: 100 cm

MERISTEM DESIGN
Turning the grey green®

www.meristemdesign.co.uk

Typology 1: Grasses, flowering herbs and ferns.

A broad range of flowering plants, grasses and ground cover that area suitable for SUDs planting.

ERYNGIUM - SEA HOLLY

A herbaceous perennial with strongly toothed eaves and branching violet-blue stems bearing cone-like flowerheads surrounded by narrow, spiny, metallic-blue bracts

Height: 90 cm

GERANIUM PHAEUM - MOURNING WIDOW

An erect, clump-forming perennial with lobed leaves often with brownish markings, and flat, outward-facing dusky purple, lilac or white flowers 2cm wide in late spring.

Height: 50 cm

GERANIUM ROZANNE

A vigorous spreading perennial with neat, dense, lobed leaves and saucer-shaped violet-blue flowers 5cm wide, opening from early summer to early autumn.

Height: 60 cm

GEUM 'MRS J.BRADSHAW'

'Mrs J. Bradshaw' is a clump-forming herbaceous perennial, with hairy, dark green, basal leaves and purple stems bearing semi-double, rich scarlet flowers.

Height: 60 cm

HAKONECHLOA MACRA - JAPANESE FOREST GRASS

Perennial grass producing mounds of bright green leaves topped by airy sprays of green flowers in mid- to late summer. Leaves develop red-brown tints in autumn.

Height: 50 cm

Helenium loysder wieck - Sneezeweed

Sun-loving perennials are tough, hardy and easy to grow. They combine particularly well with grasses and other late-flowering perennials plantings.

Height: 100 cm

HEMP AGRIMONY

A vigorous upright perennial with reddish stems, leaves palmately-divided into narrow leaflets, and clusters of tiny pink or purple flowers in late summer and early autumn.

Height: 100 cm

HYSSOPUS OFFICINALIS

A compact, spreading, semi-evergreen sub-shrub with erect shoots bearing aromatic, linear leaves and terminal spikes of tubular blue flowers in summer and early autumn.

Height: 50 cm

KNAUTIA MACEDONICA - MACEDONIAN SCABIOUS

A clump-forming perennial with simple or lobed stem leaves, with a succession of deep crimson pincushion-like flowerhead 3-4cm across, from mid to late summer.

Height: 80 cm

LAVANDULA ANGUSTIFOLIA - ENGLISH LAVENDER

'Hidcote' is a bushy dwarf evergreen shrub with narrow, silvery-grey leaves and small deep violet-purple flowers in dense, aromatic spikes 3-4cm in length.

Height: 50 cm

MISCANTHUS SINENSIS - EULALIA MORNING LIGHT

'Morning Light' is a compact deciduous perennial with narrow leaves finely edged with white, and pink-tinged panicles of flowers in autumn.

Height: 150 cm

MUEHLENBECKIA - MAIDENHAIR VINE

Forming lots of thin, wiry stems, which are clothed in small dark green leaves, this fast-growing deciduous plant can be grown as either groundcover or a climber.

Height: 2 m

MERISTEM DESIGN
Turning the grey green®

www.meristemdesign.co.uk

Typology 1: Grasses, flowering herbs and ferns.

A broad range of flowering plants, grasses and ground cover that area suitable for SUDs planting.

OSMUNDA REGALIS - ROYAL FERN

A robust deciduous fern forming a large clump of fronds, bearing rusty-brown spore-bearing pinnae at the tips; foliage turns attractive red-brown in autumn.

Height: 150 cm

PEROVSKIA ATRIPLICIFOLIA 'BLUE SPIRE' - RUSSIAN SAGE

A small deciduous sub-shrub, with white stems. Small violet-blue flowers in large plumy panicles in late summer and autumn.

Height: 120 cm

PHORMIUM - NEW ZEALAND FLAX

Phormiums are exotic-looking evergreen perennials. They offer striking, often highly coloured sword-like leaves and slender flower spikes.

Height: 2 m

SALVIA OFFICINALIS

S. officinalis is a bushy, spreading evergreen shrub, with very aromatic, finely veined, grey-green leaves and short spikes of pale blue flowers in early summer.

Height: 75 cm

SALVIA ROSMARINUS - ROSEMARY

A bushy shrub with a dense, leafy habit. Flowers usually pale violet-blue and white. Flowering starts in spring but is often repeated at different times of year.

Height: 150 cm

Salvia verbenaca - Eye-seed

A mound forming perennial with mid-green coarse textured foliage and slender spikes with whorls of violet-blue lipped flowers in summer found in wild meadows.

Height: 50 cm

SANGUISORBA MINOR - SALAD BURNET

A herbaceous perennial with pairs of toothed leaflets which form a rosette. Knobbly clusters of crimson flowers, blooming from early summer through to autumn.

Height: 50 cm

SANTOLINA CHAMAECYPARISSUS - LAVENDER-COTTON

S. chamaecyparissus is a dwarf evergreen shrub with narrow, silvery-woolly, much dissected leaves and long-stalked, button-like bright yellow flowerheads.

Height: 50 cm

STIPA GIGANTEA - GOLDEN OATS

S. gigantea is a robust tufted evergreen grass to 2m, with arching linear green leaves and large panicles of oat-like, long-awned purplish flowers which ripen to gold.

Height: 200 cm

STIPA TENUISSIMA - MEXICAN FEATHER GRASS

S. tenuissima is a deciduous grass, forming a compact upright tuft of thread-like leaves, with narrow, arching, feathery flowering panicles in summer.

Height: 60 cm

VERBENA BONARIENSIS LOLLIPOP - PURPLE TOP 'LOLLIPOP'

'Lollipop' is a dwarf cultivar. It is a short-lived perennial with rough stems and leaves, and dense clusters of small, purple flowers in summer and autumn.

Height: 60 cm

MERISTEM DESIGN
Turning the grey green®

www.meristemdesign.co.uk

Typology 2: Shrubs

Shrubs are of greatest value to wildlife and have other positive impacts on filtering dust and pollution from streets.

BRACHYGLOTTIS COMPACTA ‘SUNSHINE’

'Sunshine' is a small, spreading evergreen shrub with greyish, white-felted beneath like the flowers stalks. Bright yellow flowers 2.5cm in width, in loose clusters.

Height: 150 cm

CONVOLVULUS CNEORUM

Silverbush -
A small spreading evergreen shrub,, with narrowly oblong, very silvery leaves and funnel-shaped white flowers tinged pink in bud, up to 4cm in width

Height: 60 cm

HEBE 'MRS WINDER'

A spreading evergreen small shrub with narrow, dark green leaves, the youngest tinged with reddish-brown. Flowers small, violet-blue, in racemes to 7cm in length

Height: 75 cm

PITTOSPORUM TENUIFOLIUM BANOWAY BAY

Compact well branched mound forming Pittosporum with colour changing foliage starting off light green with a cream edge and changing through late summer.

Height: 1 m

Teucrium fruticans

Tree germander -
T. fruticans is an evergreen shrub with white hairy stems bearing small, dark green leaves, white beneath, and light blue flowers 2.5cm long in summer.

Height: 150 cm

Typology 3: Trees

Robust trees that are easy to maintain, providing shade and a variety of habitats. These will absorb a large amount of water and pollutants.

ALNUS GLUTINOSA

Common alder -
A deciduous tree, broadly conical in habit when young, with grey-purple buds and young catkins conspicuous in winter, and rounded bright green leaves.

Height: 12 m+

AMELANCHIER CANADENSIS

Serviceberry -
A dense, erect shrub producing upright sprays of small, white flowers in late spring, followed by blue-black berries. The foliage may turn yellow, orange or red in autumn.

Height: 6 m

BETULA UTILIS

Himalayan birch -
A variable species with peeling, usually copper-brown or pinkish bark and dark green leaves up to 12cm long. In early spring it produces long, yellow-brown male catkins.

Height: 12 m+

CARPINUS FRANS FONTAINE

Hornbeam 'Frans Fontaine' -
A narrow, columnar deciduous tree, with smooth, grey bark which darkens with age. It bears fresh green leaves in spring and summer, which turn golden-yellow in autumn.

Height: 10 m

Ginkgo biloba

Maidenhair tree -
G. biloba is a deciduous, conical when young, becoming more irregular with age. Leaves are fan-shaped, turning clear yellow in autumn. Yellow fruits in autumn also.

Height: 12 m+

SUDS & RAIN GARDEN

PLANTING SCHEME GUIDE

MERISTEM DESIGN

All the designs contained in this document remain the property of Meristem Design and are not to be used by any third party for manufacturing purposes