

PLANTING SPECIFICATION

SITE PREPARATION

Topsoil

Existing topsoil shall be stripped before building works begin. Imported topsoil shall be BS3882:2015 Specification for Topsoil and Requirements for Use. Topsoil shall be multi-purpose grade, of medium texture, with a high proportion of fertile loamy material. It shall be free from subsoil, rubbish, rubble, stones or other material injurious to plant growth. The maximum stone content of the soil shall be 20%, with the maximum size of stone 25mm in any one dimension. All topsoil shall be stacked in heaps, not exceeding 2m high. During storage, topsoil heaps shall be kept free from compaction, contamination and weeds.

Excavation

Excavation shall NOT be undertaken within the root protection area of any existing trees or shrubs to be retained. Unless otherwise indicated, areas to be planted/seeded shall be cleared of all surface rubbish and excavated to the dimensions below finished level as follows, when the soil is not waterlogged or frozen. Ensure the location of all services is known before any excavation operations.

Tree pits: 1000x1000x800mm deep unless otherwise shown
Shrub and hedge pit/trench: 450mm deep
Grass areas: 300mm deep
Wildflower grassland areas: Excavate to finished levels

The base of excavated areas shall be forked or otherwise cultivated to a depth of 150mm to facilitate drainage and all bricks, stones and other debris, etc. over 75mm in any one dimension shall be removed. Similarly, areas trafficked by construction vehicles shall be ripped to a depth of 150-300mm to relieve compaction.

Backfilling with Subsoil

Where excavated areas are lower than the required depth, excavations shall be backfilled with selected subsoil and lightly consolidated to make up levels. Selected subsoil shall be friable, second quality topsoil or similar and be free of rubbish, roots, stones over 75mm in any one dimension, perennial weeds or other materials injurious to plant growth.

Backfilling with Topsoil

Tree, shrub and hedge pit/trench excavations shall be backfilled, in layers, with clean topsoil (as specified above) thoroughly mixed with planting compost e.g. 'Greentree' compost at a rate of 20 litres/m². An approved tree and shrub fertiliser shall be added to topsoil, prior to backfilling tree-pits. Grass areas (excluding wildflower grassland areas) shall be backfilled with topsoil in layers of 150mm depth.

Cultivation

Cultivation shall not be undertaken within the root protection area of any tree/shrubs to be retained, without prior agreement from the Local Planning Authority. Topsoil shall be cultivated by hand or machine prior to planting, with minimal compaction by machine. Cultivate to the following depths and till, removing all rubbish, vegetation, perennial weeds, roots, stones over 25mm in any one dimension and rake to even levels.

Planting areas: 300mm deep cultivation to medium till
Grass seeding areas: 150mm deep cultivation to fine till raked to a smooth, evenly firmed bed
Turf areas: 150mm deep cultivation to medium till raked to a smooth, evenly firmed bed
Wildflower grassland areas: 150mm deep cultivation to medium till raked to a smooth, evenly firmed bed

Wildflower grassland areas: Where un-excavated areas are to be seeded with wildflower grassland mix the topsoil shall be cultivated to turn the soil over to a depth of 300mm to bring subsoil to the surface. Elsewhere, excavated areas to be seeded with wildflower grassland mix to be backfilled to finished levels with subsoil (as above).

PLANTING

Plant Stock and Operations shall conform to BS 3938 Nursery Stock (Parts 1-10), BS 4428: 1989, BS 4043: 1989 and BS 5537: 2012. The planting season shall be from the 1st October to the 31st March. Container grown stock may be planted outside this season if accompanied by daily watering, or as necessary to ensure healthy establishment. Planting shall not be carried out during periods of frost, drought, cold drying winds or when the soil is waterlogged or frozen.

Planting

All planting that is within the root protection area of existing trees/shrubs to be retained, shall be undertaken by hand and positions altered should tree roots be encountered, in order to avoid damage to the root systems.

All plants shall be set out evenly over the areas as indicated, to the density and quantities shown. All plants shall be planted upright at the same depth as the nursery soil level and evenly spaced, leaving room for growth. All restrictive containers shall be removed with roots not twisted. Immediately following planting, all plants shall be watered-in to field capacity.

Container grown and root balled plants shall be planted in a planting pit sufficient to accommodate the plant without causing root damage, with a minimum of 50mm backfill beyond the root ball extender. Plants to be firmed, watered-in and dead, damaged or topside branches shall be removed after planting. Bare-root plants shall be silt planted, incorporating an approved high phosphate, slow-release fertiliser.

Tree Planting and Support

Trees planted in landscape areas shall be underground guyed, using seven strand galvanised wire, with adjustable grippers, secured to 2 no. sleeper deadmen at the base of the tree pit unless otherwise specified. All trees to be firmed in after planting. All trees shall have irrigation/aeration system units fitted to fully surround the root ball.

Hedge Planting

Dead, damaged or straggly branches shall be removed after planting. All transplants in hedge and native mixes shall be fitted with individual protection i.e. shrub shelters, spiral guards as specified, or alternatively the planting areas shall be protected with rabbit-proof fencing. All shrub shelters/spiral guards shall be black or green, adequately supported and installed to allow for expansion.

Mulching

Prior to the application of mulch the planting areas shall be completely weed free and watered sufficiently to achieve field capacity. The surface of the planting areas shall be mulched with a minimum 75mm depth layer of 15-65mm nominal particle size, dark, matured woodchip mulch, ensuring that the low branches of trees, shrubs and/or herbaceous plants are NOT smothered.

Mulch shall be an approved product and completely weed and weed seed free. The mulch shall be topped-up to maintain, after settlement, a depth of not less than 50mm. Trees in grass areas shall be planted centrally within a 1m diameter mulch bed, to be mulched to 75mm deep. The surface of mulch to be 10mm below the surface of adjacent lawn.

GRASS AREAS

Turf shall accord with BS 3969: 1998, it shall be good quality meadow/cultivated, amenity turf free from weeds and be laid on even, prepared ground (as detailed above), during periods of suitable warm and moist weather conditions. Pre-turfing fertiliser shall be applied to manufacturer's specifications and turf shall be laid in accordance with BS 4428: 1989.

Turf shall be laid with broken joints well-butted up, working from timber planks to avoid damaging turf when laying. Water as necessary to avoid shrinkage and achieve satisfactory establishment. Undertake good horticultural practice to ensure establishment of a healthy grass sward.

Grass seeding

Areas of amenity grass shall be seeded with a general amenity grass mix as specified during the period March to May or September to October, during periods of suitable warm and moist weather conditions. Pre-seeding fertiliser shall be applied to manufacturer's recommendations (as detailed above), at a rate of 35g/m² in two transverse operations. Lightly roll seed bed after sowing. Water as necessary to avoid shrinkage and achieve satisfactory establishment. Undertake good horticultural practice to ensure establishment of a healthy grass sward.

Wildflower Grassland Seeding
Areas of wildflower grassland shall be seeded with a wildflower grassland mix suitable for the soil type as specified, during the period March to May or September to October, during periods of suitable warm and moist weather conditions. Seed shall be sown on prepared ground (as detailed above), at a rate of 5g/m² or as specified. Lightly roll seed bed after sowing. Water as necessary to avoid shrinkage and achieve satisfactory establishment. Undertake good horticultural practice to ensure establishment of a healthy wildflower grass sward.

AFTERCARE PERIOD

Regular Visits

During the specified Aftercare Period, maintenance visits shall be carried out, at least monthly from April to September and twice during the dormant season to carry out the following operations to establish healthy growing plants/grass in weed free areas: watering, firming up, removal of litter, pest and disease control, general pruning, checking guards, ties and stakes, weed control, grass cutting and autumn tidying. All arisings shall be carted away and the site shall be left clean and tidy at all times.

Watering

All planting and grass areas shall not be allowed to dry out and shall be kept well watered during the growing season, ensuring the soil is kept moist at all times but avoiding waterlogging.

Replacement Planting

During each August within the Aftercare Period an inspection shall be made and all plants that have died, are missing, damaged or have failed to thrive shall be noted and replaced in the following planting season.

Grass Cutting

During the first and subsequent growing seasons amenity grass shall be kept at a height of 25mm to 50mm. Selective weed control shall be undertaken as necessary once the sward is sufficiently established.

Wildflower Grassland Cutting

During the first growing season cut wildflower grassland every 2 months to a height of 50mm and in subsequent growing seasons cut to 50mm height during late March and late August/early September or as specified. All arisings shall be collected and removed from the site to avoid smothering the sward and to reduce nutrient levels. Spot treat perennial weeds with Glyphosate at the manufacturer's recommended dose rate or hand pull.

PLANTING SCHEDULE

Herbaceous							
Qty	Abb	Plant Name	Ht/Sprd/Gr	Form	Root	Cntr	Spacing(m)
13	Aj rep	Ajuga reptans			C	1L	0.300
21	Aj SQ	Ajuga reptans 'Silver Queen'			C	1L	0.300
30	Aich mol	Alchemilla mollis			C	2-SL	0.400
20	Berg BR	Bergenia 'Bressingham Ruby'			C	2L	0.400
32	Berg BW	Bergenia 'Bressingham White'			C	2L	0.400
43	Ger Alb	Geranium macrorrhizum 'Album'			C	2-SL	0.400
15	Ger BV	Geranium macrorrhizum 'Bevan's Variety'			C	2-SL	0.400
3	Heuch CP	Heuchera 'Canyon Pink'			C	2-SL	0.400
6	Lin BB	Liriope muscari 'Big Blue'			PT		0.450
13	Per LS	Perovskia atriplicifolia 'Little Spire'			C	4L	0.500
3	Poly pbb	Polystichum polydephnum			C	5L	0.550
36	Sisay AM	Sisyrinchium striatum 'Aunt May'			C	2-SL	0.400
235							
Shrub							
Qty	Abb	Plant Name	Ht/Sprd/Gr	Form	Root	Cntr	Spacing(m)
10	Buxus spiral	Buxus sempervirens topiary spiral	80-100cm	Specimen	C	10-15L	
423	Carp bet hedge (5m)	Carpinus betulus as hedge (5m staggered row)	80-100cm	Transplant	B		0.200
4	Cean Con	Ceanothus 'Concha'	60-80cm		C	10L	0.800
6	Cean Rep	Ceanothus thyrsiflorus 'Repens'	40-60cm(D)		C	5-7.5L	0.650
77	Choi lem	Choisya ternata	30-40cm		C	3L	0.650
12	Cis corb	Cistus corbariensis	40-60cm		C	3-5L	0.500
24	Corn Spae	Cornus alba 'Spaethii'	40-60cm		C	3L	0.700
36	Euon EG	Euonymus fortunei 'Emerald Gaiety'	30-40cm(D)		C	5L	0.500
16	Euon SQ	Euonymus fortunei 'Silver Queen'	30-40cm(D)		C	5L	0.500
6	Heb rak	Hebe rakatensis	30-40cm		C	5L	0.550
6	Heb RE	Hebe abietans 'Red Edge'	20-25cm		C	3-5L	0.450
13	Hebe AG	Hebe 'Autumn Glory'	30-40cm		C	3L	0.500
1	Hyd pet	Hydrangea anomala petiolaris	80-100cm		C	10-15L	
182	Hyp caly	Hypericum calycinum	20-30cm		C	2L	0.500
145	Hyp Hid	Hypericum 'Hidcote'	40-60cm		C	5L	0.600
33	Lav Hid	Lavandula angustifolia 'Hidcote'	30-40cm		C	5L	0.450
12	Lav stoe P	Lavandula stoechas 'Papillon'	30-40cm		C	3L	0.450
78	Lig ova as hedge (3m)	Ligustrum ovalifolium as hedge (3m)	80-100cm		C	5L	0.330
58	Lon MG	Lonicera nitida 'Maigrain'	30-40cm		C	3L	0.600
1	Lon peri	Lonicera periclymenum	50-60cm		C	3L	
6	Nand HD	Nandina 'Harbor Dwarf'	40-60cm		C	3L	0.600
28	Phom fru	Philomelis fruticosa	30-40cm		C	5L	0.500
130	Prun OL	Prunus laurocerasus 'Otto Luyken'	30-40cm		C	3L	0.500
59	Sarc dig	Sarcococca hookeriana digyna	25-30cm		C	3L	0.700
3	Sarc hum	Sarcococca humilis	15-20cm		C	3L	0.700
16	Spir GF	Spiraea japonica 'Goldflame'	30-40cm		C	3L	0.500
31	Vib dav	Viburnum davidii	30-40cm		C	5L	0.550
47	Vib tin (as hedge)	Viburnum tinus as hedge (3m)	40-60cm		C	5L	0.330
11	Weig R	Weigela florida 'Rosae'	40-60cm		C	3-5L	0.700
1484							
1719							

MAINTENANCE SCHEDULE

	January	February	March	April	May	June	July	August	September	October	November	December
Herbaceous plants												
Grasses			Cut down withered stems to the ground in early spring									
All other herbaceous sp.					Remove dead leaves, deadhead flowers and trim back as necessary.							
Shrub planting												
Buxus topiary					Trim to shape end of May		Trim if necessary		Trim to shape beginning of September			
Carpinus betulus as hedge					Trim to form neat hedge at least once a month during the summer and early autumn							
Ceanothus spp.					Prune back to form a neat shrub after the flowers fade.							
Choisya ternata					Cut out frost-damaged shoots and tidy shape to form a neat shrub							
Cornus spp.					Cut stems down to 10cm of their base in spring to encourage new stem growth from the base.							
Euonymus spp.					Trim to shape in spring.							
Hebe spp.					No regular pruning required; any plants that become leggy can be pruned hard in spring to encourage new shoots from base.							
Hydrangea anomala petiolaris					No regular pruning required; cut out dead shoots in spring and thin out any densely overlapping and wayward shoots.							
Hypericum 'Hidcote'			Shorten shoots from the previous season by a quarter. Trim straggly shoots where necessary.									
Lavandula spp.					If plants become large and straggly prune back in mid-late spring to encourage new growth from the base.			In late summer cut off old flowerheads and trim foliage lightly.				
Ligustrum as hedge					Prune to form neat hedgerow at least three times during the summer months. Check for nesting birds and if found delay any cutting until after the third nesting season is over.							
Lonicera shrub spp.			No regular pruning is required but wayward or dead shoots should be cut out in late winter / early spring.									
Philomelis fruticosa					No regular pruning is required but wayward or dead shoots should be cut out in spring.							
Phomium spp.					No pruning required; remove dead leaves from base							
Prunus laurocerasus spp.					Trim as necessary to maintain a neat, low shrub. Can be pruned back into old wood in early spring to rejuvenate straggly specimens.							
Sarcococca spp.					After flowering remove dead and damaged growth and trim lightly to maintain shape.							
Spiraea 'Goldflame'					Cut back to a low framework, healthy stems to 3 buds from the base and removing weak or dead stems to ground.							
Viburnum sp.					No regular pruning is required but wayward or dead shoots should be cut out in spring after flowering.							
Viburnum sp. as hedge					Trim to form neat hedge at least once a month during the summer and early autumn							
Weigela spp.					After flowering trim back to older wood that produced flowers to encourage new growth, or to ground level if hard pruning is required.							
Grass areas												
Amenity grass					Cut at least twice a month March to October to maintain a sward height of 35-50mm							
Wildflower grass					Cut to 50mm in spring if necessary, and remove arisings from site.			Cut in late summer / early autumn once annual flowers have seeded and leave arisings in situ to shed seed for 1-7 days then remove arisings from site.				Cut to 50mm and remove arisings from site.

PLANT IMAGES



EM2 - STANDARD GENERAL PURPOSE MEADOW MIXTURE

From Emorgate seeds www.wildseed.co.uk or similar approved

Wild Flowers	Latin name	Common name
5%	Achillea millefolium	Yarrow
0.5%	Centaurea nigra	Common Knapweed
1.6%	Daucus carota	Wild Carrot
3%	Galium verum	Lady's Bedstraw
0.3%	Knautia arvensis	Field Scabious
0.3%	Leonodon hispidus	Rough Hawkbit
2.5%	Leucanthemum vulgare	Oxeye Daisy
3%	Malva moschata	Musk Mallow
0.8%	Plantago lanceolata	Ribwort Plantain
1%	Potentilla anagallis	Sailed Burnet
0.6%	Primula veris	Cowslip
0.3%	Prunella vulgaris	Selfheal
0.8%	Ranunculus acris	Meadow Buttercup
1.2%	Rhinanthus minor	Yellow Rattle
1.1%	Rumex acetosa	Common Sorrel
20%		

Grasses	Latin name	Common name
4%	Agrostis capillaris	Common Bent
8%	Cynosurus cristatus	Crested Dogstail
26%	Festuca rubra	Slender-creeping Red-fescue
4%	Pheum bertolonii	Smaller Cat's-tail
80%		
Sowing Rates	kg/ha	kg/acre
	40	16
	g/m2	
	4	

N14 FLOWERING LAWN MIXTURE

From Naturescape Ltd (www.naturescape.co.uk) or similar approved
A mix of 12 native wildflower species (N14F) and 6 species of grass (N14G). The species in this mixture will all tolerate close mowing to a height of about 5cm for the majority of the year, permitting individual choice regarding when mowing is ceased to allow flowering.

Mix is 80% Grasses to 20% Wildflowers by weight.
Sowing Rate: 5g per square metre, 20kg per acre, 50kg per hectare

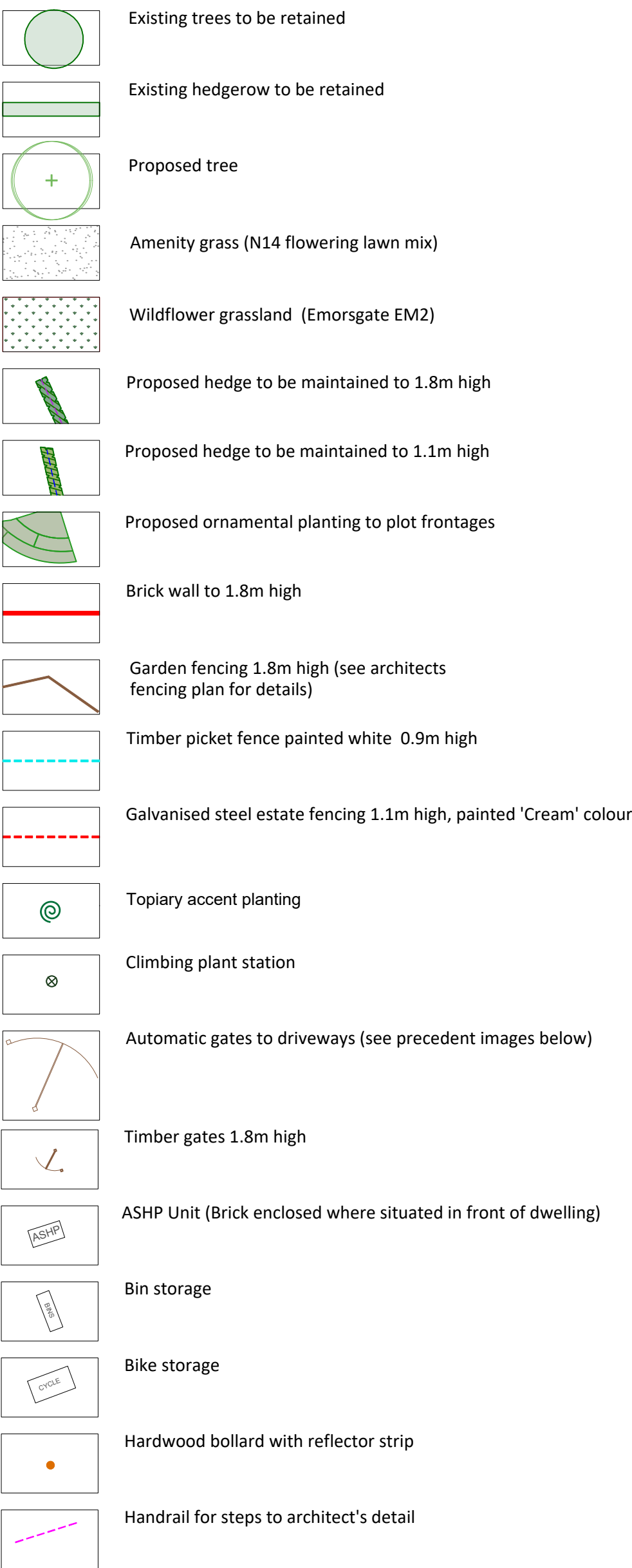
N14 Flower species	Latin Name	English Name	%
4%	Achillea millefolium	Yarrow	4%
4%	Antithyllis vulneraria	Kidney Vetch	4%
12%	Galium verum	Lady's Bedstraw	12%
3%	Hypochaeris radicata	Common Catsear	3%
4%	Leonodon hispidus	Rough Hawkbit	4%
8%	Leucanthemum vulgare	Oxeye Daisy	8%
10%	Lotus corniculatus	Birdsfoot Trefoil	10%
16%	Plantago lanceolata	Ribwort Plantain	16%
7%	Primula veris	Cowslip	7%
12%	Prunella vulgaris	Self Heal	12%
12%	Rumex acetosa	Meadow Buttercup	12%

NV Grass species	Latin Name	English Name	%
5%	Agrostis capillaris	Common Bent	5%
15%	Cynosurus cristatus	Crested Dogstail	15%
20%	Festuca rubra ssp. litoralis	Hard Fescue	20%
20%	Festuca rubra ssp. rubra	Slender Creeping Red Fescue	20%
20%	Poa pratensis	Smooth Stalked Meadow Grass	20%

Native Hedge Mix (Non-thorny) Planted in groups of 5-10 of the same species

Qty	Abb	Name	Age	Height	Form	Root	%
52	Carp bet	Carpinus betulus	1/1	60-80cm	Transplant	B	30.00%
35	Cory ave	Corylus avellana	1/2	60-80cm	Transplant	B	20.00%
52	Lig vul	Ligustrum vulgare	1/1	60-80cm	Transplant	B	30.00%
35	Vib op	Viburnum opulus	1/2	60-80cm	Transplant	B	20.00%
174							

LEGEND



PROPOSED TREE PLANTING:

Ac Acer campestre

Bp Betula pendula

Sa Sorbus aucuparia