

Plant specification and schedule

Project: Residential development, land at Kirkland Road, Ennerdale Bridge

Client: Genesis Homes

Document no: 12

Eden Environment Ltd

Revisions	Date	Notes
0	25th Aug 2020	original document

Schedules and specification

Individual Trees								Totals for each species
see planting plan for locations								
Latin and common name	Form	Age	Girth (cm)	Height (cm)	Root or pot size	% of mix	Planting density / m ²	
<i>Alnus glutinosa</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	2
<i>Amelanchier lamarckii</i>						n/a	n/a	5
<i>Amelanchier Obelisk Alnifolia</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	3
<i>Betula pendula</i>	Feathered Tree	2x	n/a	150-175	BR	n/a	n/a	1
<i>Carpinus betulus Frans Fontaine</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	1
<i>Corylus avellana</i>	Feathered Tree	2x	n/a	150-175	BR	n/a	n/a	2
<i>Crataegus monogyna</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	4
<i>Crataegus Paul's Scarlet</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	3
<i>Ilex aquifolium</i>	-	-	-	40-60	3L	n/a	n/a	4
<i>Ilex aquifolium Arentea Marginata</i>	-	-	-	40-60	3L	n/a	n/a	2
<i>Malus Evereste</i>	Select Standard	2x	10 to 12	300 - 350	BR	n/a	n/a	1
<i>Malus James Grieve</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	2
<i>Malus John Downie</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	3
<i>Malus sylvestris</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	2
<i>Prunus avium</i>	Standard	2x	8 to 10	250-300	BR			4
<i>Prunus padus</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	4
<i>Quercus petraea</i>	Select Standard	2x	10 to 12	300 - 350	BR	n/a	n/a	1
<i>Sorbus aria</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	1
<i>Sorbus aria Lutescens</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	1
<i>Sorbus aucuparia</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	5
<i>Sorbus aucuparia Streetwise</i>	Select Standard	2x	10 to 12	300 - 350	BR	n/a	n/a	1
<i>Sorbus torminalis</i>	Standard	2x	8 to 10	250-300	BR	n/a	n/a	1
<i>Sorbus vilmorinii</i>	Select Standard	2x	10 to 12	300 - 350	BR	n/a	n/a	2
<i>Tilia cordata Greenspire</i>	Select Standard	2x	10 to 12	300 - 350	BR	n/a	n/a	2
<i>Viburnum lantana</i>	Feathered Tree	2x	n/a	150-175	BR	n/a	n/a	3
<i>Viburnum tinus</i>	-	-	-	40-60	3L	n/a	n/a	3
Total								63

Orchard Trees								Totals for each species
see planting plan for locations								
Latin and common name	Form	Age	Pollination group	Height (m)	Rootstock	% of mix	Planting density / m ²	
APPLES								
<i>Malus domestica "Braeburn"</i>	Unfeathered maiden	1 year	4	approx 1m	MM106 or M26	n/a	n/a	2
<i>Malus domestica "Bramely"</i>	Unfeathered maiden	1 year	3	approx 1m	MM 106	n/a	n/a	1
PEARS								
<i>Pyrus communis "Conference"</i>	Unfeathered maiden	1 year	B (also self-fertile)	approx 1m	Quince A	n/a	n/a	1
PLUMS								
<i>Prunus domestica "Victoria"</i>	Unfeathered maiden	1 year	B (also self-fertile)	approx 1m	VVA 1 or St Julien	n/a	n/a	1
Total								5

Shrubs and groundcover								Totals for each species
see planting plan for locations								
Latin and common name	Form	Age	Girth (cm)	Height (cm)	Root or pot size	% of mix	Planting density / m ²	
Aucuba japonica "Crotonifolia" (Japanese Laurel "Crotonifolia")	-	n/a	-	40 - 45	3L	n/a	as shown	10
Cotinus Grace (Smoke Tree)	-	n/a	-	40 - 45	3L	n/a	as shown	11
Eleagnus ebbingei 'Gilt Edge' (Eleagnus)	-	n/a	-	40 - 45	3L	n/a	as shown	12
Eleagnus ebbingei "Limelight"	-	n/a	-	40 - 45	3L	n/a	as shown	15
Euonymus fortunei 'Emerald n Gold'	-	n/a	-	30 - 40	2L	n/a	as shown	20
Euonymus fortunei 'Silver Queen'	-	n/a	-	30 - 40	2L	n/a	as shown	45
Griselinia littoralis (New Zealand Broadleaf)	-	n/a	-	40 - 45	3L	n/a	as shown	10
Juniperus "Grey Owl" Juniper shrub	-	n/a	-	30 - 40	2L	n/a	as shown	45
Laurus nobilis (Sweet Bay)	-	n/a	-	40 - 45	3L	n/a	as shown	1
Lonicera nitida (Maigrun)	-	n/a	-	30 - 40	2L	n/a	as shown	15
Nandina domestica (Heavenly bamboo)	-	n/a	-	30 - 40	2L	n/a	as shown	43
Prunus laurocerasus Zabelliana	-	n/a	-	40 - 45	3L	n/a	as shown	25
Rosa "Snow Carpet" (White ground cover rose)	-	n/a	-	30 - 40	2L	n/a	as shown	20
Rosa "Scented Carpet" (pink ground cover rose)	-	n/a	-	30 - 40	2L	n/a	as shown	10
Rosa rubiginosa (sweet briar)	-	n/a	-	30 - 40	2L	n/a	as shown	60
Rubus fruticosus "Loch Ness" AGM (Blackberry)	-	1 to 2 yrs	-		2L	n/a	as shown	27
Viburnum davidii (ground cover viburnum)	-	n/a	-	30 - 40	2L	n/a	as shown	35
Viburnum opulus (guelder rose)	-	n/a	-	40 - 45	3L	n/a	as shown	60
Viburnum tinus (Laurustinus)	-	n/a	-	40 - 45	3L	n/a	as shown	1
Vinca minor (Periwinkle)	-	n/a	-	30 - 40	2L	n/a	as shown	25
Weigela florida "Variegata"	-	n/a	-	40 - 45	3L	n/a	as shown	3
Total								493

Bulbs								Totals for each species
Plant bulbs in natural drifts at entrances, along Kirkland Road verges and along wetland strip (swale) and wildflower strip								
Latin and common name	Form	Age	Girth (cm)	Bulb size	Root or pot size	% of mix	Planting density / m ²	
Galanthus nivalis (Snowdrop)				4 - 5 cm		n/a	n/a	200
Narcissus pseudonarcissus (native daffodil)				10 - 12 cm		n/a	n/a	200
Total								400

Wetland and pond plants								Totals for each species
Plant in drifts in SuDS area and in wetland strip (swale)								
Latin and common name	Form	Age	Girth (cm)	Height (cm)	Root or pot size	% of mix	Planting density / m ²	
SHALLOW EDGE PLANTS								
Acorus calamus (Sweet Flag)						n/a	n/a	200
Aruncus diocus (Goat's Beard)						n/a	n/a	200
Hemerocallis fulva "Flore Pleno" (Double yellow day lily)						n/a	n/a	200
DEEPER EDGE PLANTS								
Iris versicolor (Blue Flag)						n/a	n/a	200
Total								800

Wildflower Grass
Wildflower grass species to be selected following detailed soil sampling. Seed to be of local provenance, e.g. from Cumbrian Wildflowers Ltd

Establishment regime

Year 1 establishment (seeding and planting year)

Carry out planting between November and March

Plant trees in prepared pits backfilled with topsoil, fertiliser and soil conditioner, in accordance with manufacturer’s recommendations. Do not use peat-based products.

Protect shrubs with shelters and stakes

Support and protect trees with double stakes and ties

Protect hedgerows from cattle with stock proof fence

Provide shelter and prevent short-cuts for road-side hedges with geotextile fence line to a height of 750mm to windward side or side which is more vulnerable to traffic

Sow grass seed or lay turf on prepared bed during correct climatic conditions, and mow as necessary to achieve thick sward no higher 75mm

Sow seed in Spring or early Autumn when the soil is warm, in correct climatic and weather conditions, and mow as necessary to achieve thick sward no higher 75mm

Lay turf on prepared bed during correct climatic conditions, and mow as necessary to achieve thick sward no higher 75mm

Sow wildflower seed on prepared bed from which any topsoil has been removed and allow to grow, flower and shed seed before any cut, in accordance with supplier’s instructions.

Years 1 – 5, each year (maintenance)

Keep grass short around bases of trees with mowing and / or mulch mats, as appropriate

Inspect tree ties, stakes and shelters / guards; loosen and remove as necessary with all being removed by year 5.

Trim ornamental and semi-ornamental hedges annually during correct season to obtain a dense, formal shaped hedge of 1.2m ultimate height.

Prune and lay hedgerows as necessary once a year to develop dense, evenly shaped hedgerow

Replace any trees or shrubs which are dead or failing to thrive in the winter of each year.

Mow amenity grass areas as required to ensure sward does not exceed 50mm.

Exact wildflower maintenance regime for wildflower areas to be determined in consultation with seed supplier.

Cut wildflower area only once a year, at end of summer / early autumn when flowering is over.

Leave wildflower grass and stems on ground for two weeks afterwards, to allow seed to fall, then remove the grass and stem, to prevent them from enriching the soil (which would allow common grasses to out-compete the wildflowers).

Water trees, hedgerows, hedges and shrubs if drought conditions occur.

Inspect and maintain all fencing, paying attention to stock proof fencing

Suggested ongoing maintenance operations

Amenity grass: continue to keep grass short around bases of trees with regular mowing

Wildflower grass: continue to prevent common grass from out-competing wildflowers, following above techniques.

Hedgerows: regular trimming to ensure dense, neat shape, laying as required

Hedges: regular trimming to ensure dense, neat shape

Shrubs: regular trimming to remove damaged or diseased branches, maintain desired shape and size / height, and to avoid over-crowding

Trees: prune as necessary to maintain good shape and to avoid disease, overcrowding, or low canopies

ORCHARD SPECIMENS

Year 1 establishment (planting year)

Purchase unfeathered maidens (maiden whips) with good root system and sturdy stems.

Carry out planting between November and March.

Plant trees in prepared pits backfilled with topsoil, fertiliser and soil conditioner, in accordance with manufacturer’s recommendations.

Protect feathered maidens with shelters and stakes.

Winter Year 1 formative pruning

Undertake pruning when tree is dormant (usually between November and early March).

Always use sharp secateurs to make pruning cuts, above, and sloping away from nearest bud.

In order to stimulate production of strong vigorous shoots (from which primary branches can be selected), prune branches to a bud which is approximately 75cm above ground level, leaving three or four healthy buds below the cut.

Should any fruit develop in this year, remove it as soon as it becomes visible, so that the tree’s energy is directed towards healthy tree growth.

Winter Year 2 formative pruning

If a strong, central topmost shoot has developed, and is too vertical and dominant, prune to just above the next lowest wider-angled side branch.

Select the best three to five shoots to begin to form the main framework of branches.

The aim is to create a “goblet” shaped structure. Shorten these selected branches by half, with the cut being just above an outward facing bud – this will help encourage the goblet shape. If any branches are growing horizontally, prune to an upward-facing bud to further encourage a goblet shape.

Remove all remaining lower branches, with a cut close to the main stem.

If the tree is growing well, allow one or two fruit to develop. If growth is slow, remove the fruit as soon as it becomes visible.

Winter Year 3 formative pruning

Shorten the previous year’s growth on main stems (primary branches) by approximately 1/3, with the cut being above a healthy outward-facing bud.

Leave a framework of 8 to 10 side branches which will form the permanent framework of the fruit tree.

Only remove side branches arising from the main stem if they are misplaced, or crossing each-other (risking rubbing and disease), or if they are growing inwards towards the centre of the tree.

Thin any crowded branches.

Should any strongly upright shoots be developing at the top of the tree, also remove these.

For fruit-forming in this and subsequent years, ensure the fruits are not crowded or rubbing against each-other, by removing as necessary to allow air, light and sunlight in to them, and to avoid rubbing.

Guidance for winter pruning in subsequent years

Firstly, remove any branches that are crossing, rubbing, damaged, dead or diseased.

Then, in order to encourage the development of new branches and maintain a good shape, shorten previous year’s growth on each main (primary) branch by approximately one third, with the cut being just above a bud which faces in the desired direction (usually outward-facing).

Only remove young lateral branches if they are becoming crowded.

Remove any strong shoots which are growing towards the centre of the tree.

Years 1 – 5, general maintenance of the orchard area, each year

Keep grass short around bases of trees with mowing, herbicides and / or mulch mats, as appropriate

Inspect tree ties, stakes and shelters / guards; loosen and remove as necessary with all being removed by year 5. .

Water trees if drought conditions occur.

Inspect and maintain stock proof fencing.

Replace any trees and shrubs which are dead or failing to thrive in the winter of each year.

Guidance for ongoing maintenance operations in subsequent years

grass: keep grass short around bases of trees with regular mowing

Continue to water trees in times of drought.

TRANSLOCATION OF EXISTING HEDGEROW

Year 0 (pre-planting year) Preparatory work

Undertake this work outside the bird nesting season.

Mark length of hedgerow to be translocated (the part of the existing hedgerow which would be affected by developing the access road and creating sight lines).

Clearly mark any individual specimens within this length which have potential to form good hedgerow trees in the future.

Coppice length of hedgerow to a height of approximately 1.2m ensuring that any trees to be grown on into hedgrow trees are left intact.

Trim roots to a depth of approx. 1m deep and approx 0.5m out from edges of hedgerow on each side, with a straight cut, avoiding excavation.

(this is to encourage a neat, fibrous root zone wich will be easy to lift with a toothed excavator bucket.)

Mark trimmed hedgerow into approximately 1m lengths, trimming tangled branches and roots as necessary to allow easy lifting of 1m lengths the following year.

Year 1 Translocation

In advance of translocation, excavate and prepare (backfill with topsoil, fertiliser and soil conditioner) a trench long and wide enough to accommodate the hedgerow and its rootzone.

Lift and immediately replant 1m long sections of hedgrow into prepared trench, using a large toothed excavator bucket, to ensure the receiving trench does not become compacted

Adapt trench by further digging to widen it as necessary to accommodate rootzone

Straighten hedgerow and ensure each 1m length neatly abuts the next.

Backfill around roots with soil and use back of bucket to gently firm in, ensuring forks do not damage roots or branches, nor ground is over-compacted.

