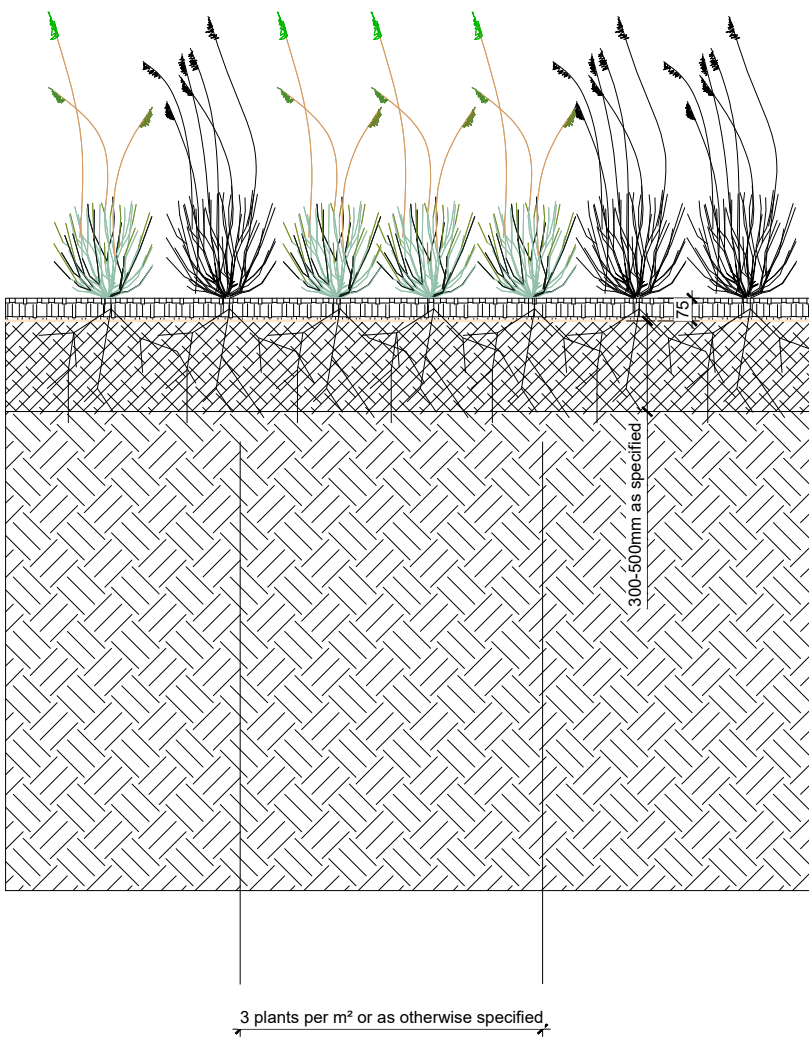


TREE PLANTING DETAIL A (clear or multi-stemmed trees)

- Q31/505 The tree pit should be excavated to allow adequate clearance between the root ends (when fully spread) and the side of the pit.
- Excavate the tree pit to 1200x1200x1000mm depth. Care is to be taken that soil removed from the pit does not damage existing landscape finishes (topsoil, mulch, plants, grass lawns etc); protection from foot damage is to be provided by the use of boards.
- Fork the bottom and sides of the pit to break up the sub-soil. Q31/586 Back-fill with 1200mm³ multi-purpose grade topsoil to BS:3882 as shown to the level of the roots. Scarify pit sides, and ensure pit bottom is slightly raised.
- Q31/515 On heavy wet soils, provide a min 150mm depth of clean gravel or broken stone, with no fines, graded 40 to 20 mm with a geotextile filter membrane on top to aid drainage.
- Mix the dug soil with a slow-release fertiliser and an approved soil ameliorant.
- Stakes and rail to be half-round 150mm diameter planed finish. Drive in the stakes so that they are a minimum of 300mm below the bottom of the pit, and 650mm above the ground level. The stakes and rail are to be sweet chestnut or peeled larch poles, pointed at one end, preserved to resist rot for their intended lifespan, and strong enough to take galvanised screws without splitting.
- Plant the tree, ensuring that the original depth is maintained and the soil is carefully firmed back up to the existing ground level.
- Secure the rail to the stakes with 2 no. galvanised screws per stake.
- Secure the tree to the rail with 2 no. rainbow type rubber tree ties, screw-fixed to rails. Secure ties to allow for movement but to prevent damage to trunk.
- Q31/512 Install irrigation/ventilation pipe, woven coil pipe wrapped 1.5 times to encircle rootball with plastic cover cap. Watering filler cap to finish slightly above mulch level.
- Spread Q37/430 90gs/m² black non-woven geotextile landscape fabric over the back-filled topsoil (1200mmØ where tree is in lawn surfacing).
- Spread Q37/430 75mm depth medium-grade bark mulch over around the tree, and maintain it until the spring following the first growing season (1200mmØ where tree is in lawn surfacing).
- Protect the tree base and stem from damage by using a bamboo or hessian wrap tree guard to 2m height.
- The stakes and rail are to be removed as soon as the tree is anchored securely by its own roots (generally at the start of the third growing season after planting).
- Q31/510 wherever the installed rootball will be within 3.0 m of an existing underground service route and 2.0m of a building or paving foundation, install a tree pit root barrier, geotextile or cylinder type as appropriate. Top of root barrier to finish 75mm below finished soil level, installation with sides vertical.

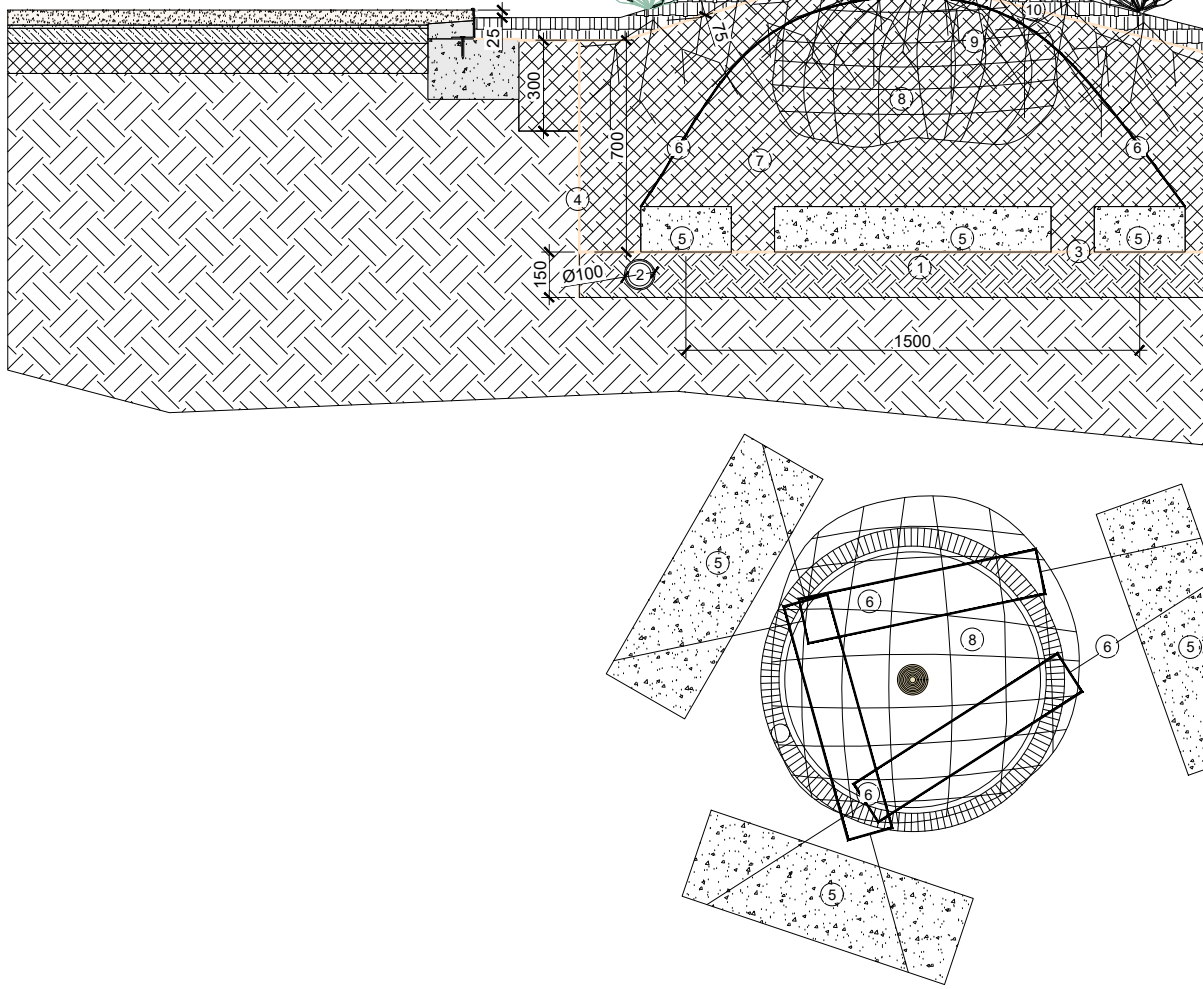
SHRUB/TRANSPLANT PLANTING DETAIL

- All shrub/transplant planting beds to Q31/315 300/450mm depth of quality approved multi-purpose grade topsoil to BS: 3882 or as otherwise specified.
- Break up the soil in the base of each pit.
- Mix the dug soil with a slow release fertiliser and a specified soil ameliorant.
- Spread 90gs/m² black porous non-woven geotextile landscape fabric over the back-filled topsoil and secure with pins.
- Planting is to be carried out to the densities specified, through cuts in landscape fabric. Provide one single cut 300mm per length per plant. All 300mm cuts to follow in one direction along length of landscape fabric (cross-cutting not accepted).
- Once planted, back-fill with the remaining soil and firm as before.
- Top-dress the planting area with a Q37/430 75mm depth of medium-grade bark mulch, and maintain it until the spring following the first growing season. Mulch to finish 25mm below adjacent surfacing.



UNDER-GROUND GUYED TREE DETAIL B

- Q31/515 150mm depth clean gravel or broken stone, with no fines, graded 40 to 20 mm
- 100mmØ perforated plastics drainage pipe laid around perimeter of pit within aggregate layer, connected to soakaway or drainage system to engineer's design detail & specification
- Q31/515 Non-woven UV stable polypropylene fibre geotextile to be laid over aggregate before installing tree or backfill.
- Q31/510 wherever the installed rootball will be within 3.0 m of an existing underground service route and 2.0m of a building or paving foundation, install a tree pit root barrier, geotextile or cylinder type as appropriate. Top of root barrier to finish 75mm below finished soil level, installation with sides vertical.
- 3 no. pre-cast concrete 'dead-man' type kerbstones in base of planting pit to secure guying wires to.
- Underground guying with min. 3 no. mat straps, 6mmØ galvanised multi-strand guying wires and dead-man kerbs to BS 4043. Use galvanised ratchet winder to tension guying wires.
- Multi-purpose grade topsoil to BS:3882 with ameliorants and compost.
- Tree planting: prepare roots and transplant to BS 4043; wrap trunks and lower branches with hessian strips and leave on for at least two summers.
- Q31/512 Min. 50mmØ perforated plastics inlet/ventilation pipe with plastic cover cap in circle above and around rootball of tree.
- Q31/385 Lay 90gs/m² UV-resistant black permeable weed-guard type geotextile over topsoil layer and plant shrubs through it.
- Q31/385 75mm depth medium grade bark mulch or mulch cover as specified



UNDER-GROUND GUYED TREE DETAIL - PLAN

PLANTING SCHEDULE & SOFT LANDSCAPE MAINTENANCE - GROUND FLOOR

SOFT LANDSCAPE WORKS MAINTENANCE PROGRAMME

- Bare root transplants, hedging and rootballed trees
- Containerised shrubs, perennials
- 12 months maintenance & defects liability period, to commence on practical completion of soft landscape works. Planted beds, trees, hedges and transplant planting 16 no. maintenance visits required per annum (April- October) carried out on a fortnightly basis and 2 additional visits over winter period. 16 no. maintenance visits required per annum.
- 12 months maintenance & defects liability period to planted beds, trees, hedges and transplant planting to be carried out at the same time as grass cutting, 16 no. maintenance visits required.

Qty.	Species	Height (cm)	Pot Size	Density	Container-grown (cg) / Bare Root (br)	Quality Specification
Trees						
All trees to be provided with 1.2m ³ multi-purpose grade topsoil to BS3882 and planted as per planting details drawings, with root restrictor membrane where appropriate to ensure adjacent pavingservices are not disturbed by root growth, and provided with irrigation where appropriate.						
NOTE: Trees above podium and at roof garden levels to be planted using dead man anchor system Ref 'Tree Planting Detail A' (both multi-stemmed and clear stemmed).Trees along site perimeter to be double staked - Ref 'Tree Planting Detail B'.						
1	<i>Pinus sylvestris</i> (Scots Pine)	30-35 cmg clear stemmed to 2m height planted to Planting Detail A				
9	<i>Pinus sylvestris</i> (Scots Pine)	20-25 cmg clear stemmed to 2m height planted to Planting Detail A				
6	<i>Pinus sylvestris</i> (Scots Pine)	18-20 cmg clear stemmed to 2m height planted to Planting Detail A				
2	<i>Pinus sylvestris</i> (Scots Pine)	16-18 cmg clear stemmed to 2m height planted to Planting Detail A				
2	<i>Populus tremula</i> (Aspen)	30-35 cmg clear stemmed to 2m height planted to Planting Detail A				
1	<i>Populus tremula</i> (Aspen)	20-25 cmg clear stemmed to 2m height planted to Planting Detail A				
3	<i>Populus tremula</i> (Aspen)	18-20 cmg clear stemmed to 2m height planted to Planting Detail A				
3	<i>Alnus glutinosa</i> (Alder)	20-25 cmg clear stemmed to 2m height planted to Planting Detail A				
5	<i>Alnus glutinosa</i> (Alder)	18-20 cmg clear stemmed to 2m height planted to Planting Detail A				
13	<i>Betula pubescens</i> (Downy Birch)	20-25 cmg clear stemmed to 2m height planted to Planting Detail A				
27	<i>Betula pubescens</i> (Downy Birch)	18-20 cmg clear stemmed to 2m height planted to Planting Detail A				
4	<i>Betula pubescens</i> (Downy Birch)	16-18 cmg clear stemmed to 2m height planted to Planting Detail A				
2	<i>Sorbus aucuparia</i> (Rowan)	20-25 cmg clear stemmed to 2m height planted to Planting Detail A				
3	<i>Sorbus aucuparia</i> (Rowan)	18-20 cmg clear stemmed to 2m height planted to Planting Detail A				
2	<i>Sorbus aucuparia</i> (Rowan)	16-18 cmg clear stemmed to 2m height planted to Planting Detail A				
4	<i>Prunus padus</i> (Bird Cherry)	20-25 cmg clear stemmed to 2m height planted to Planting Detail A				
3	<i>Prunus padus</i> (Bird Cherry)	18-20 cmg clear stemmed to 2m height planted to Planting Detail A				
5	<i>Betula pubescens</i> (Downy Birch)	2.50m height multi-stemmed planted to Planting Detail A				
11	<i>Salix caprea</i> (Goat Willow)	2.50m height multi-stemmed planted to Planting Detail A				
8	<i>Salix aurita</i> (Eared Willow)	2.00m height multi-stemmed planted to Planting Detail A				
47	<i>Crataegus monogyna</i> (Hawthorn)	2.50m height multi-stemmed planted to Planting Detail A				
21	<i>Prunus spinosa</i> (Blackthorn)	2.50m height multi-stemmed planted to Planting Detail A				
17	<i>Corylus avellana</i> (Hazel)	2.50m height multi-stemmed planted to Planting Detail A				
11	<i>Viburnum opulus</i> (Guelder Rose)	2.00m height multi-stemmed planted to Planting Detail A				
5	<i>Ligustrum vulgare</i> (Wild Privet)	2.00m height multi-stemmed planted to Planting Detail A				
225	<i>Euonymus europaeus</i> (European spindle)	2.50m height multi-stemmed planted to Planting Detail A				

Shrubs & Perennials

Lightweight topsoil mix by Enrich to various depths as shown finished with 75mm depth medium grade bark mulch .

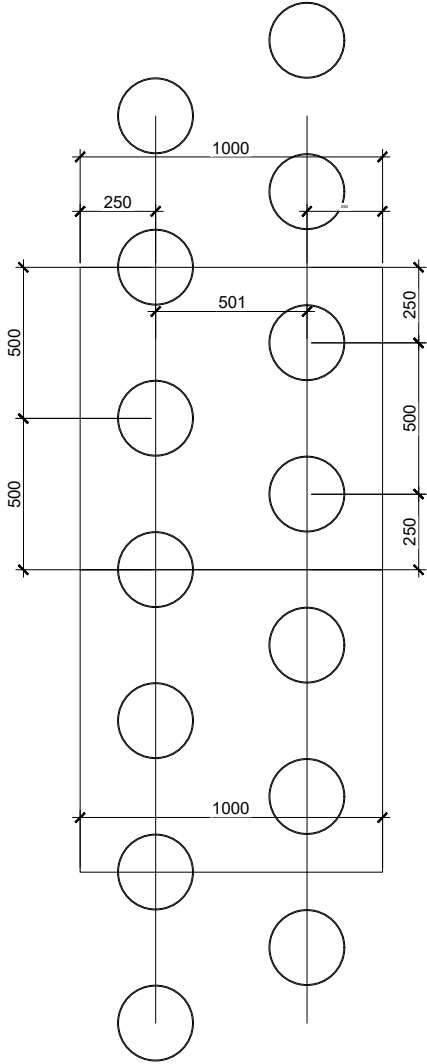
Qty.	Species	Height (cm)	Pot Size	Density	Container-grown (cg) / Bare Root (br)	Quality Specification
P1 Perennial Mix						
			4 plants per m ²			
	<i>Iris foetidissima</i>	40-60cm	2lt		cg	
	<i>Libertia grandiflora</i>	40-60cm	2lt		cg	
	<i>Kniphofia caulescens</i>	40-60cm	2lt		cg	
	<i>Euphorbia amygdaloides</i> var. <i>robbiae</i>	40-60cm	2lt		cg	
	<i>Echinacea purpurea</i> 'Kim's Knee High'	40-60cm	2lt		cg	
	<i>Rudbeckia fulgida</i> 'Goldsturm'	40-60cm	2lt		cg	
	<i>Agapanthus</i> 'Storm Cloud'	40-60cm	2lt		cg	
	<i>Salvia nemorosa</i> 'Caradonna'	40-60cm	2lt		cg	
	<i>Ligularia</i> 'The Rocket'	40-60cm	2lt		cg	
	<i>Berberia cordifolia</i> 'Purpurea'	40-60cm	2lt		cg	
P2 Shade Tolerant Perennial Mix						
			3 plants per m ²			
	<i>Digitalis purpurea</i>	40-60cm	2lt		cg	
	<i>Blechnum spicant</i>	40-60cm	2lt		cg	
	<i>Digitalis grandiflora</i>	40-60cm	2lt		cg	
	<i>Echinacea pallida</i>	40-60cm	2lt		cg	
	<i>Iris foetidissima</i>	40-60cm	2lt		cg	
	<i>Euphorbia amygdaloides</i> var. <i>robbiae</i>	40-60cm	2lt		cg	
	<i>Polystichum aculeatum</i>	40-60cm	2lt		cg	
	<i>Phyllitis (Asplenium) scolopendrium</i>	40-60cm	2lt		cg	
P3 Riparian Understory Mix						
			3 plants per m ²			
	<i>Digitalis purpurea</i>	40-60cm	2lt		cg	
	<i>Blechnum spicant</i>	40-60cm	2lt		cg	
	<i>Digitalis grandiflora</i>	40-60cm	2lt		cg	
	<i>Iris pseudacorus</i>	40-60cm	2lt		cg	
	<i>Polystichum aculeatum</i>	40-60cm	2lt		cg	
	<i>Phyllitis (Asplenium) scolopendrium</i>	40-60cm	2lt		cg	

Lightweight topsoil mix by Enrich to various depths as shown finished with 75mm depth medium grade bark mulch .

H1	Hedgerow Mix					
	<i>Ilex Aquifolium</i> (Holly)	40-60cm	1lt	4 per m ²	cg	5 breaks in lower 1/3
	<i>Ligustrum vulgare</i> (Privet)	40-60cm	Transplant 1+1	4 per m ²	br	
W1	Live Willow Cuttings for Bioengineering River Embankments					
	<i>Salix caprea</i> (Goat Willow)	40-60cm	Transplant 1+1	4per lin m	br	
	<i>Salix aurita</i> (Eared Willow)	40-60cm	Transplant 1+1	4per lin m	br	

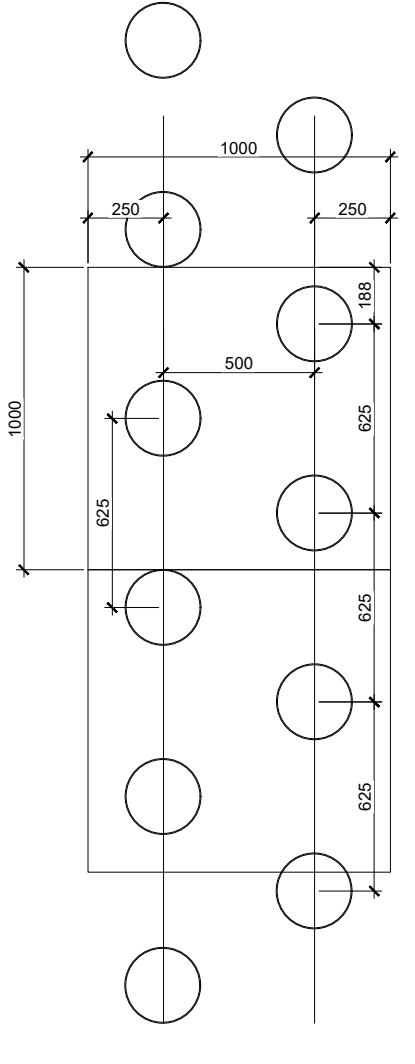
Planting Density: 4 per m²

All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



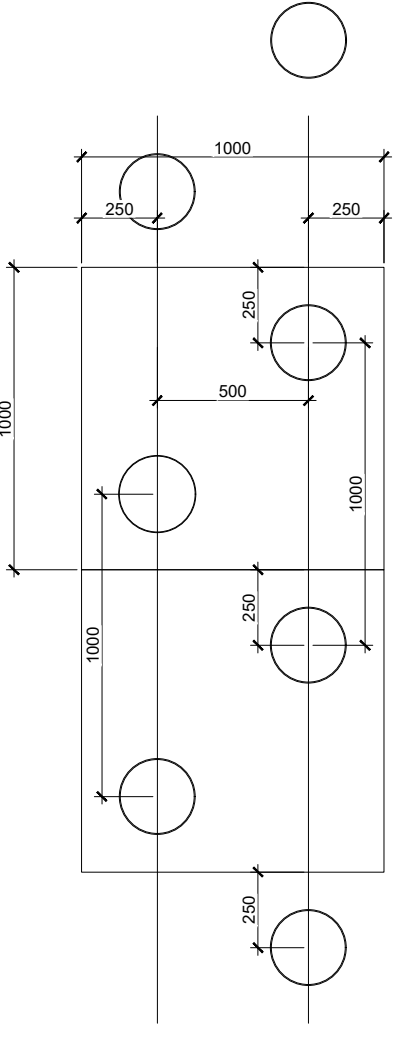
Planting Density: 3 per m²

All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



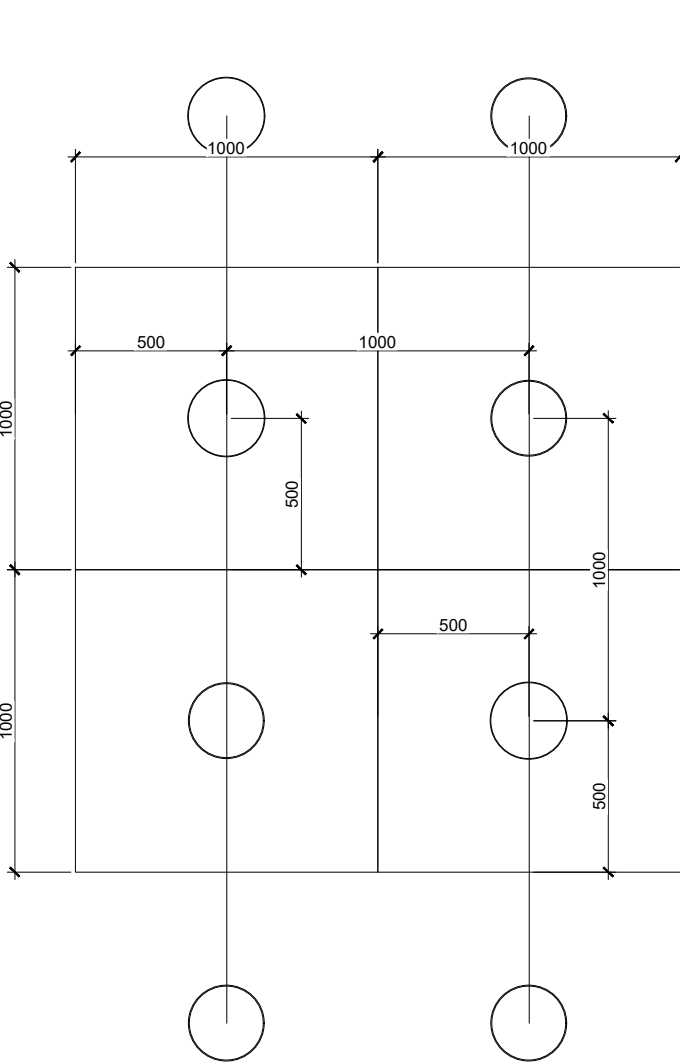
Planting Density: 2 per m²

All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



Planting Density: 1 per m²

All shrub planting to follow 1m grid in straight parallel staggered rows to specified centres as shown.



TREE NOTES:

Psy	<i>Pinus sylvestris</i> (scot's pine)
Bp	<i>Betula pubescens</i> (downey birch)
Pp	<i>Prunus padus</i> (bird cherry)
Cm	<i>Crataegus monogyna</i> (hawthorn) multi-stemmed
Pt	<i>Populus tremula</i> (aspen)
Ag	<i>Alnus glutinosa</i> (alder)
Sa	<i>Sorbus aucuparia</i> (rowan)

Sc	<i>Salix caprea</i> (goat willow) multi-stemmed
Sau	<i>Salix aurita</i> (eared willow) multi-stemmed
Ca	<i>Corylus avellana</i> (hazel) multi-stemmed
Ps	<i>Prunus spinosa</i> (sloe) multi-steamed
Lv	<i>Ligustrum vulgare</i> (wild privet) multi-stemmed
Vo	<i>Viburnum opulus</i> (guelder rose) multi-stemmed
Ee	<i>Euonymus europaeus</i> (spindletree)

Level Notes:

EX+	Existing Level
TL+	Top of Landscape Finish
TP+	Top of Paving
TK+	Top of Kerb
TW+	Top of Walls
TE+	Top of Edging
TR+	Top of Railing
TB+	Top of Bench
TS+	Top of Slab

Rev/Date	Description	By

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Client Malclose Limited Project No: 22-579

Project Gowan House Scale 1:25 @ A1

Title Planting Schedule and Details Date Issued 2023-10-09

Drwg No 22-579-SDA-PD-DR-XX-301

Drawn BS Purpose Planning Checked SD