

## LANDSCAPE SPECIFICATION IMPLEMENTATION GUIDELINES

### General

All soft landscape proposals will be fully implemented in the first planting season following reasonable completion of the development.

Existing levels to be preserved around retained existing trees and vegetation. Existing trees and vegetation to be retained are to be protected in accordance with BS5837 during construction. All landscape works to be undertaken by competent persons, with appropriate training and equipment.

### Services

The contractor must ascertain for themselves the exact location of underground services before commencing work.

### Topsoil

Topsoil to be handled (i.e. excavated and/or imported, stored, spread, cultivated) in accordance with BS3882. Amelioration to be as determined by analysis. If poor drainage is suspected in existing soil surfaces, these should be broken up prior to planting, turfing and seeding to a depth of 350mm to remove likelihood of compaction and damage to new planting and turf.

Where at all possible clean site won topsoil should be used. Where Imported topsoil required, such soils to be a good quality loam to BS 3882: multipurpose grade or manufactured topsoil. All topsoil areas shall be thoroughly cultivated by hand or suitable machinery to the full depth of the topsoil layer, incorporating ameliorants as specified and/or as indicated by analysis and in accordance with BS 3882. Hand cultivations shall be carried out to achieve the required finish on areas where machine cultivation is impossible ie adjacent to kerbs, manholes and footpath junctions etc. Surplus plant matter, rubbish and surface stones having any dimension greater than 25mm shall be collected and removed from the site. Existing topsoil to be stripped and re-used if suitable as per specification.

Topsoil is to be stored in heaps, maximum of 2m in height, providing soil is reasonably dry and friable during stripping and handling - using a tracked excavator. To protect from wet weather once final height is achieved, an excavator should regrade the sides and top of stockpile to firm surface by tracking across it to form a smooth gradient.

Topsoiling depth as follows:

- Amenity Grass areas min 150mm depth
- Shrub areas min 450mm depth
- Tree Planting min 450mm depth or to match existing topsoil depth, whichever is the greater

in addition to the above suitable loosened multi purpose subsoil to BS8601:2013 should provide the remainder of the minimum rooting depth:

- Amenity Grass areas min 400mm depth
- Shrub areas min 600mm depth
- Tree Planting min 400mm depth

Soiling for all meadow grass areas spread 75mm of topsoil and cultivate to depth of 200mm to allow for a nutrient low soil suitable for species.

Before applying topsoil, remove all debris and contaminants, cultivate the surface depth of approx. 300mm to loosen subsoil soil and create a 'key' for the new topsoil, or to break up compacted topsoil.

### Fertilizer/Compost

Approved (peat free) composts to PAS100 and fertilizers to be added during cultivation as required to full depth of growing medium.

Ensure that plant beds are neatly defined, and rise from adjacent paved areas. All ornamental planting areas to be mulched with 75mm (settled depth) bark mulch. Sample of mulch to be approved by Landscape Architect.

### Plant Handling

Plant handling at the nursery, and during transit up to delivery, shall be in accordance with 'Plant Handling', the booklet published by the Committee for Plant Supply and Establishment (CPSE). The contractor shall comply with clauses 3 & 4 of the above booklet (obtained from the Horticulture Trades Association) which refers to the receipt, unloading and temporary storage of plants. General plant stock to conform to BS 3936, advanced nursery stock to BS 5236, and planting to BS 4428. Plants shall be first class examples of their species or variety, free from all pests and diseases, with good fibrous root systems and materially undamaged (refer to relevant sections of BS3936 Parts 1-4 'Specification of Nursery Stock'). All planting operations to be in general compliance with BS4428: 1989 'Code of Practice for general landscape operations (including hard surfaces)'. Carry out all planting while soil and weather conditions are suitable:

- Do not plant during periods of frost or strong winds. Plant only during the following periods
- Deciduous and conifer trees: Late October to late March
- Container grown plants: At any time if ground and weather conditions are favourable. Ensure that adequate watering and weed control is provided
- Bulbs : September/October

### Trees

All tree planting works & tree husbandry should be carried out in accordance with BS8545 2014: *Trees from nursery to independence in the landscape*.

The species of tree, stock size and stock type shall be as labeled on the planting drawing and as identified on the schedule opposite. Any deviation on species, stock type or stock size shall be agreed with the Local planning authority prior to planting.

All trees to be planted in pits depth no deeper than the depth of the root ball, dependant on planting stock root ball depth with the bottom 150mm forked over to relieve compaction. The root stock/ball to rest directly on underlying soil. Backfill should comprise excavated soils replaced to match adjacent soil horizons with mycorrhizal additive as per manufacturer specification. Water-in heavily after planting.

Unless noted above as requiring underground guying, all trees to be short double staked and tied and multi stems diagonal single stake - Refer to detail opposite. Any necessary tree works are to be carried out by an approved tree surgeon to BS 3998. Trees planted in grass areas to be set in bare earth circles, 1m diameter around tree trunk, with turf trimmed neatly to form circle, and earth mulched with approved bark mulch to 75mm depth after planting.

### Clipped Hedges

Carpinus Betulus - Plants to be as feathered to ground. Plant spacing as shown on schedule. Planting trench to be minimum 600 width x 500mm depth so as to accommodate full root spread, backfilled with 80% topsoil and 20% approved green compost to PAS100 and 20gms granular fertilizer over 200mm depth washed medium coarse grade sand. All hedges to be mulched with 75mm depth approved bark mulch after planting.

### Mixed Native Hedgerows

Plants to be feathered. Plant to be double staggered rows, with plant spacing as shown on schedule. Plants to be notched into the ground. All free standing hedges, i.e those not on hedgebanks to be mulched with 75mm depth bark mulch after planting.

**Native Shrub Mix** Generally clear any surface vegetation in proposed woodland and thicket areas, utilising proprietary herbicide where appropriate and instal plants into isolated pre-prepared planting pits, generally 300 x 300 x 450mm deep or 200mm greater than the rootstock, whichever is greater, backfilling with either existing retained site sourced topsoil (free from weeds) or imported topsoil (General Purpose grade to BS3882:2007) or a combination of the two as necessary. Incorporate a soil conditioner/ameliorant in the form of peat free tree and shrub compost or well rotted spent mushroom compost into backfill material at the rate of 5L per pit. Ensure planting conforms to planting matrix where appropriate and in all other areas appears random / natural and not formal in accordance with the planting proposal layouts.

### Species Groups :

All hedge whip planting to be planted with species in groups of 3-5.

Native Shrub Mix is to be planted in species groups of 3-5.

### Plant Protection

All bushy thicket shrubs to be protected by min. 600mm high x 170-200mm diameter, proprietary plastic mesh shrub shelters / guards and secured in place with treated softwood timber stake and plastic cable ties. All single stem thicket transplants to be protected by min. 450mm high x 50mm proprietary plastic spiral guards secured with min. 12-14lb x 900mm long bamboo cane.

### Specimen Shrubs

All shrubs to be planted in pit of min, size 0.4m x 0.4m x 0.4m deep so as to accommodate full root spread, backfilled with 80% clean topsoil and 20% approved green compost to PAS100 and 20gms granular fertilizer. All shrub beds to be mulched with 75mm depth approved bark mulch after planting.

### Shrub Herbaceous & Ground Cover Planting

All plants to be planted in cultivated planting beds at densities shown in plant schedule, in pits of min. size 0.3m x 0.3m x 0.3m deep so as to accommodate full root spread, backfilled with 80% clean topsoil and 20% approved green compost to PAS100 and 20gms granular fertilizer. All shrub beds to be in min. 300mm good quality, well prepared topsoil and to be mulched with 75mm depth approved bark mulch after planting.

### Grass/Turf

Turfing and seeding shall be carried out only during appropriate seasons and while soil and weather conditions are suitable for the relevant operations. Only machinery and tools suitable for the site conditions and the work to be carried out shall be used. Hand tools shall be used around trees, plants and in confined spaces where it is impractical to use machinery. The soil shall be weed free prior to turfing and seeding. Contact herbicide as specified should be applied to all areas of weed growth 4-6 weeks before grassing and repeated if necessary to maintain a weed free bed. Where deep rooted weeds are present (dock, thistles etc.) approved Glyphosate-based herbicide should be applied as a spot treatment. Turf shall be laid on prepared, leveled soil (minimum 150mm depth) in the areas indicated on the drawings in accordance with BS 4428:1989. All grass areas to be approved landscape quality turf.

### Wildflower Meadow Seeding

Kill off any existing vegetation by spraying off with proprietary herbicide and allow time to elapse as recommended by the manufacturer before commencing any cultivation works. If time permits, a 'stale seed bed' is to be established, by allowing the graded meadow area to colonise with weeds from the existing soil seed bank following initial cultivation / rotation and an additional application of proprietary herbicide applied to remove any weed growth. Areas to be seeded are to be finely graded to bring to a uniform and even grade at the correct finished level and to remove all minor hollows and ridges. All stones and debris greater than 50mm in size to be removed and disposed of off-site. Wildflower seeded areas are to consist of min. 300mm deep existing retained topsoil (free from weeds):subsoil mix (50:50) over existing site subsoil layer. No imported topsoil should be used in the formation of wildflower meadows. Final preparation of the seeded areas shall be carried out so as to create a fine tilth surface suitable for seeding. No pre-seeding fertiliser shall be applied. Wildflower seeding is to be undertaken preferably in Spring (Early March to late June) or if not feasible in Autumn (Mid August to October). Where sowing rates are low and sowing is to be undertaken by hand broad-casting, the contractor should mix the seed evenly with a fine, dry sand to bulk up the sowing mixture. Seeding by this method should only be undertaken on calm days with no wind. After seeding, areas are to be hand raked and lightly rolled. The contractor shall take the necessary precautions to ensure all grass areas are protected throughout the establishment period, with the use of chestnut pale fencing where appropriate. The contractor shall ensure that all seeded areas are watered fully at the time of installation to the full cultivated depth, and that sufficient subsequent watering is carried out to ensure healthy establishment of the grass sward.

## ESTABLISHMENT MAINTENANCE GUIDELINES

### General

Establishment maintenance for all planting for 5 years from Practical Completion (first year to be carried out by installing contractor) to include weed control, watering and replacement of failures to original specification in the planting season following failure. All plant material to receive annual pruning and groundcover to be trained and edged with minimum 2 trims per year. Mowing of amenity grass is to be carried out using approved machinery to maintain the vegetation length within the limits of 30 mm and 50 mm during April to August inclusive and between 50 mm and 70 mm during the rest of the year.

During the 5 yr establishment period visit at eight weekly intervals from April - December to carry out the following to planting areas:

- Control weed growth. Maintaining a weed free area around each plant during the first few years will allow quick establishment of the plants and reduce the likelihood of dieback.
- Prune dead and broken branches/shoots
- Check stakes and ties. Adjust or replace as necessary
- Litter picking of beds

### Irrigation

*Shrubs and Herbaceous Plants:* During the first full growing season after planting it may be necessary to water all plants in prolonged periods of dry weather. This usually occurs during May - September. All planting areas should be watered to field saturation using clean fresh water on a weekly basis.

*Trees:* During the initial three full growing seasons year after planting it may be necessary to water all specimen trees. Watering will need to be accessed on the prevailing soil and weather conditions. The following is a guide only and should be taken as a minimum standard. During the months of May to September watering will be required twice weekly when there has not be significant rainfall within 15 consecutive days. As a guide for Light Standards to Heavy Standards, including Multi-Stem stock up to 1.8m height, water volumes shall be 20L per m<sup>2</sup>. For planting stock of Extra Heavy Standards and above the volumes shall be 40L per m<sup>2</sup>. During the first year after planting an area of 500mm dia from the tree stem shall be covered with water. i.e 1m<sup>2</sup>. This should be increased to 1m dia. (2m<sup>2</sup> around the tree stem) for year 2, to ensure the rooting zone is covered.

### Removal of Stakes and Ties

All spiral guards, canes and tree stakes should be removed at the end of years 3-5 following planting, once planting has established.

### Formative Pruning of Trees

Trees should require very little pruning and should be allowed to grow to their naturally occurring shape. some occasional intervention may be necessary in relation to removing the following growth: crossing branches and branches that grow back towards the center of the tree. Remove tightly included branching or one half codominant stems.Remove multiple leaders on evergreens and other trees where a single leader is desirable. As young trees grow, remove lower branches gradually to raise the crown, and remove branches that are too closely spaced on the trunk.

### Hedge Maintenance

New hedges are to be allowed to grow to an approximate height of 1.8m Native Hedge , 1.5m Carpinus Hedge and to be trimmed every year to ensure dense vegetation. Hedge cutting to take place during November - February (outside bird nesting periods).

### Wildflower and Meadow Areas

- First year management: Most of the sown meadow species are perennial and will be slow to germinate and grow and will not usually flower in the first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This weed growth should be controlled by topping or mowing. This should be done up to four times in the first year (if sown in the previous autumn) or three times if sown in the spring.
- Management once established: In the second and subsequent years meadow areas are to be managed by topping in the spring followed by a main cut in late July August once seed has set. Leave the 'hay' to dry and shed seed for 1-7 days then remove from site. Mow or graze the re-growth through to late autumn/winter to c 50mm and again in early April.

## WILDFLOWER SEED MIX (EMORSGATE EM2)

### Wild Flowers (20%)

%	Latin name	Common name
0.5	Achillea millefolium	Yarrow
3	Centaurea nigra	Common Knapweed
0.5	Daucus carota	Wild Carrot
1.5	Galium verum	Lady's Bedstraw
2	Knautia arvensis	Field Scabious
1.5	Leucanthemum vulgare	Oxeye Daisy
1.4	Lotus corniculatus	Birdsfoot Trefoil
3	Plantago lanceolata	Ribwort Plantain
0.4	Plantago media	Hoary Plantain
0.5	Primula veris	Cowslip
3	Ranunculus acris	Meadow Buttercup
1.5	Rhinanthus minor	Yellow Rattle
1	Rumex acetosa	Common Sorrel
0.2	Trifolium pratense	Wild Red Clover

### Grasses (80%)

%	Latin name	Common name
8	Agrostis capillaris	Common Bent
40	Cynosurus cristatus	Crested Dogstail
28	Festuca rubra	Slender-creeping Red-fescue
4	Phleum bertolonii	Smaller Cat's-tail

Meadow seed to be sown onto prepared seed bed at a rate of 4g/m<sup>2</sup>

Planting Schedule					
Number	Species	Specification	Height	Girth	Pot Size
1 -	Acer campestre	Standard :C	200-250cm	8-10cm	25L
3 -	Betula pendula	Standard :C	200-250cm	8-10cm	25L
4 -	Quercus robur	Standard :C	200-250cm	8-10cm	25L
Total :8 -					

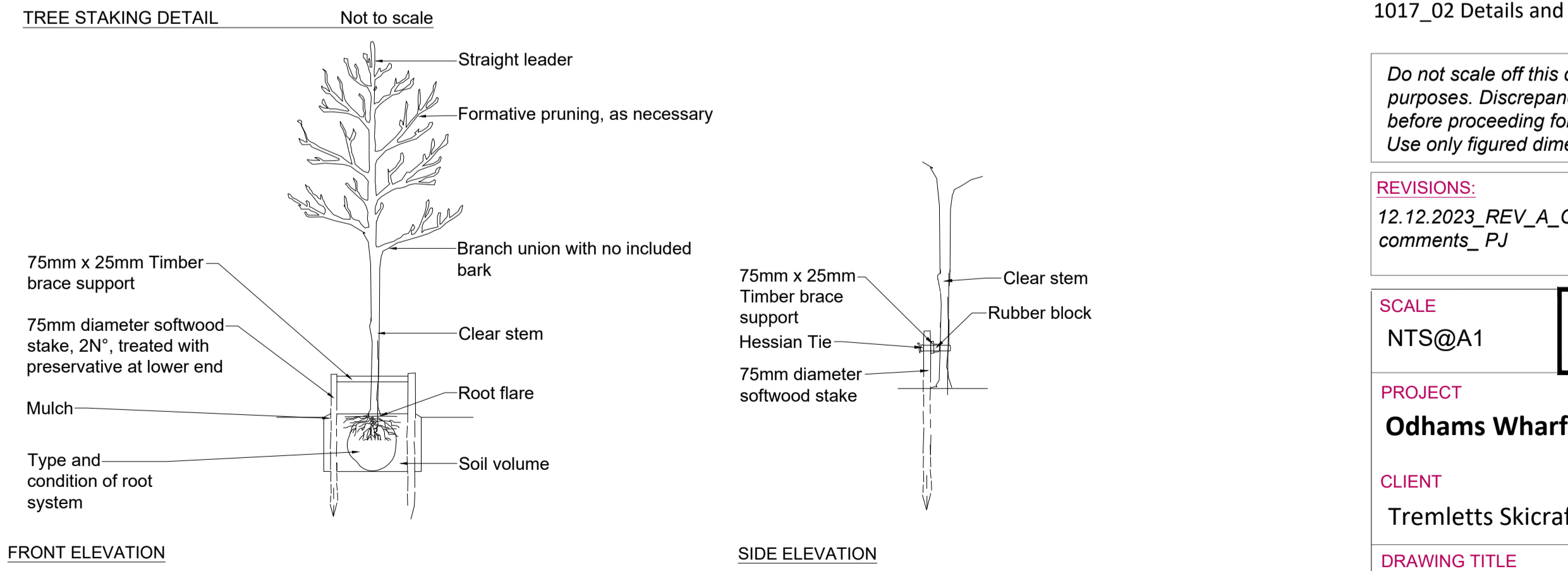
Shrubs					
Number	Species	Specification	Height	Pot Size	Density
2 -	Cordylne australis	C	60-80cm	10L	Counted
14 -	Corylus avellana multistem	C	60-80cm	10L	Counted
3 -	salix cinerea subsp. oleifolia	C	60-80cm	10L	Counted
3 -	Sambucus nigra	C	60-80cm	10L	Counted
1 -	Sambucus nigra 'Black Lace'	C	60-80cm	10L	Counted
27 -	Viburnum davidii	C	20-30cm	3L	2/m <sup>2</sup>
5 -	Viburnum opulus 'Roseum'	C	60-80cm	10L	Counted

Herbaceous				
Number	Species	Specification	Pot Size	Density
41 -	Deschampsia cespitosa 'goldtau'	C	5L	2/m <sup>2</sup>
37 -	Liriope muscari 'big blue'	C	3L	2/m <sup>2</sup>

Native Hedge						
Number	Species	Specification	Height	Pot Size	Density	%
79 -	Corylus avellana	BR :Transplant	60-80cm		0.35Ctr Double Staggered at 0.35m offset	20%
99 -	Crataegus monogyna	BR :Transplant	60-80cm		0.35Ctr Double Staggered at 0.35m offset	25%
20 -	Ilex aquifolium	C : 3L	45-60cm	3L	0.35Ctr Double Staggered at 0.35m offset	5%
40 -	Prunus spinosa	BR: Transpalnt	60-80cm		0.35Ctr Double Staggered at 0.35m offset	10%
20 -	Quercus robur	BR : Transplant	60-80cm		0.35Ctr Double Staggered at 0.35m offset	5%
20 -	Rosa arvensis	BR : Transplant			0.35Ctr Double Staggered at 0.35m offset	5%
60 -	Sambucus nigra	BR :Transplant	60-80cm		0.35Ctr Double Staggered at 0.35m offset	15%
60 -	Viburnum opulus	BR :Transplant	20-30cm		0.35Ctr Double Staggered at 0.35m offset	15%
Total :398 -						

Hornbeam Hedge						
Number	Species	Specification	Height	Pot Size	Density	%
76 -	Carpinus betulus	RB	60-80cm		0.35Ctr Double Staggered at 0.35m offset	100%
Total :76 -						

Native Shrub Mix						
Number	Species	Specification	Height	Pot Size	Density	%
9 -	Cornus sanguinea	BR	60-80cm		1/m <sup>2</sup>	15%
11 -	Corylus avellana	BR	60-80cm		1/m <sup>2</sup>	20%
11 -	Crataegus monogyna	BR	60-80cm		1/m <sup>2</sup>	20%
4 -	Ilex aquifolium	C	60-80cm	3L	1/m <sup>2</sup>	5%
6 -	Rosa rubiginosa	BR	60-80cm		1/m <sup>2</sup>	10%
9 -	Sambucus nigra	BR	60-80cm		1/m <sup>2</sup>	15%
9 -	Viburnum opulus	BR	60-80cm		1/m <sup>2</sup>	15%
Total :59 -						



REFER TO

1017\_01 Planting Plan 01

1017\_02 Details and Notes

*Do not scale off this drawing for construction purposes. Discrepancies to be reported to RBD before proceeding for construction purposes. Use only figured dimensions.*

**REVISIONS:**  
12.12.2023\_REV\_A\_Changes as per client comments\_PJ

**SCALE**  
NTS@A1

**DRAWING NO.**  
1017/02

**Rev.**  
A

### PROJECT

**Odhams Wharf**

### CLIENT

Tremletts Skicraft Ltd

### DRAWING TITLE

**Details and Notes**

**DATE**  
01/12/2023

**DRAWN BY**  
MG

**CHECKED BY**  
PJ

**redbaydesign**  
LANDSCAPE CONSULTANTS

T: 01803 605735 E: landscape@redbaydesign.com