

OUTLINE SPECIFICATION (FOR PLANNING)

STANDARD OF OPERATIONS

All works shall be carried out in accordance with good professional horticultural practice by qualified and experienced staff. Works shall comply with all relevant and current British Standards and codes of practices including:

Topsoil: BS 3882: 2015 Multipurpose Grade

Nursery Stock: BS 3936 1-9

Turf, BS 3969: 1998 +A1: 2013

Tree work, BS 3998: 2010

Trees from nursery to independence, BS8545: 2014

Code of Practice for general landscape operations, BS 4428: 1989

Trees in relation to design, demolition and construction – Recommendations BS 5837: 2012

Grounds maintenance, BS 7370: 1998

Joint Council for Landscape Industries (JCLI) Committee for Plant Supply and Establishment 'Guidance on Handling and Establishing Landscape Plants' see Appendix 1, HTA National Plant Specification.

SITE PREPARATION

General Requirements for Site Clearance , Preparation and Cultivation

Old foundations, slabs and the like in areas to be planted/ seeded: break out in locations and to the extents stated by engineer.

Foreign matter: On visual inspection, areas to be planted or seeded to be free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like.

Contamination: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:

- Corrosive, explosive or flammable.
- Hazardous to human or animal life.
- Detrimental to healthy plant growth.

Purity: Free of pests and disease.

Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.

Objectionable odour: None.

Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

Grading Subsoil for Soft Landscaped Areas

Standard: In accordance with BS 8601.

General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.

Areas of thicker topsoil: Excavate locally.

Avoid compaction.

Excess subsoil: Remove.

Subsoil Surface Preparation

Standard: In accordance with BS 3882.

General: Excavate and/ or place fill to required profiles and levels.

Loosening:

- When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth:
- Light and non-cohesive subsoils: 150mm
- Stiff clay and cohesive subsoils: 300mm
- Rock and chalk subgrades: Lightly scarify to promote free drainage.
- Wet conditions: Do not loosen subsoils.

Stones: Immediately before spreading topsoil, remove stones larger than 75mm.

Remove from site: all coarse rubble or artefacts greater than 75mm in diameter, remove to a licenced facility.

TOPSOIL

Preparation of Undisturbed Topsoil:

Standard: In accordance with BS 4428.

- Grading and cultivation: to suit cultivation operations suited to specified seeding/ planting.

Hard ground: Break up thoroughly.

Clearing: Clear of rubbish, debris, remove visible roots and large stones with a diameter greater than 75mm.

Do not compact topsoil.

Areas covered with turf or thick sward: Plough or dig over to full depth of topsoil.

Fallow period (minimum): One month.

- Weed control: At appropriate times treat with a suitable translocated non-residual herbicide.

Grading of Topsoil:

Topsoil condition: Reasonably dry and workable.

Contours: Smooth and flowing, with falls for adequate drainage.

- Hollows and ridges: Not permitted.

Give notice: If required levels cannot be achieved by movement of existing soil.

Handling Topsoil:

Standard: In accordance with BS 3882.

Aggressive weeds: Give notice and obtain instructions before moving topsoil.

Plant: Select and use plant to minimize disturbance, trafficking and compaction.

Contamination: Do not mix topsoil with:

- Subsoil, stone, hardcore, rubbish or material from demolition work.
- Other grades of topsoil.

Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.

Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall.

Imported Topsoil to BS3882: Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.

Standard: To BS 3882.

Classification: Multipurpose Grade

- Soil textural class to BS 3882, Figure 1: Any Class.

Spreading Topsoil

Standard: In accordance with BS 3882.

Temporary roads/ surfacing: Remove before spreading topsoil.

Layers:

- Depth (maximum): 150 mm.
- Gently firm each layer before spreading the next.

Depth after firming and seedbed: Grass – 150mm, Planting/ shrubs – 450mm. Trees 750mm (or to dimensions shown on any tree pit detail).

Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

Loose Tipping Of Topsoil:

Standard: In accordance with BS 3882.

General: Do not firm, consolidate or compact topsoil when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

Final Cultivation of Areas to be Planted/ Seeded

Compacted topsoil: Break up to full depth.

Tilth: Loosen, aerate and break up topsoil to a fine tilth depth of 150mm suitable for blade grading.

Particle size (maximum): 10mm.

Timing: Prior to seeding and planting. Weather and ground conditions: Suitably dry.

Surface: Leave regular and even.

Undesirable material brought to the surface:

- Remove visible weeds.
- Remove roots and large stones with any dimension exceeding 25mm in turfled areas, 50mm planted areas.

Finished Levels of Topsoil after Settlement

In relation to adjoining paving, kerbs or hard surfaces: 25mm above (including bark mulch).

In relation to dpc of adjoining buildings: minimum 150mm below.

In relation to adjacent grass areas: 25mm above.

Seeded areas: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marring in of levels.

Within root spread of existing trees and shrubs to be retained: Do not dig or cultivate.

Adjoining soil areas: Marry in.

Thickness of turf or mulch: Included.

Weed Treatment

All areas to be planted are to be treated with Roundup a minimum of 10 days prior to planting. Planted areas are to be kept weed free with the use of herbicides. Following the use of herbicides remove dead vegetation.

PLANTING

Planting General

All plant material to be supplied in accordance with HTA National Plant Specification.

All planting to be local provenance wherever possible and from local supplier.

General Planting Notes

All plants to be healthy, hardened-off and with good fibrous root systems and to comply with the requirements of BS3936 Specification for Nursery Stock. All planting to be undertaken in accordance with BS4428 Code of Practice for General Landscape Operations.

All plants to be protected from wind exposure at all times. All plants to be soaked in water for several hours prior to planting and to be well watered in.

No planting to be carried out during poor weather conditions, i.e. when ground is frozen, waterlogged, or during droughts, hot sunshine or persistent dry or cold winds. All plant material to receive enough water to ensure healthy establishment.

Labelling and Information:

General: Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:

- Full botanical name.
- Total number.
- Number of bundles.
- Part bundles.
- Supplier's name.
- Employer's name and project reference.
- Plant specification, in accordance with scheduled National Plant Specification categories.

Additional information: Submit on request: Country of Origin.

Times of year for planting/ seeding:

Deciduous trees and shrubs: Late November to late March.

Container grown stock - Any time of year as providing adequately watered, autumn planting desirable.

Conifers and evergreens: September/ October or April/ May.

Herbaceous plants: September/ October or March/ April.

Container grown plants: At any time if ground and weather conditions are favourable.

- Watering and weed control: Provide as necessary.

Dried bulbs, corms and tubers: September/ October.

Turfing: All year round providing adequately watered, avoid hot sunny conditions.

Grass seeding: March - September (best in Spring or Autumn)

Wildflower seeding: Spring or autumn

Soil Conditioner/ Ameliorant

As part of good horticultural practice, use peat-free composts, mulches and soil conditioners.

Soil analysis shall be completed by a reputable laboratory to determine any nutritional requirements, and any pH and organic matter adjustments necessary. Once determined, the soil shall be appropriately amended to a range suitable for the species to be established.

Locations: All new trees, plant beds and new turf and seeded areas.

- Type: Peat free sanitized and stabilized compost or spent mushroom compost and to conform to the Numerical Product Specification for Landscape Compost.
- Reference/Description/Grading: Compost shall be produced from biodegradable materials and shall fall within the recommended ranges for the horticultural parameters outlined in the specification table, as well as fall within the limits for contaminant parameters in PAS 100.
- Coverage: Plant beds -Uniformly apply a (25mm-50mm) layer over the area to be treated, trees - incorporate into backfill 1:3 mixture of compost and topsoil, grass seeding / turf cover the entire treatment area at an average depth of 25 to 50 mm, then incorporate it to a minimum depth of 150 mm using a rotavator or other appropriate equipment
- Timing: Apply prior to cultivation.

Compost: typical specification.

Horticultural Parameters Reported as (units of measure) Recommended Range

pH pH units (1.5 water extract) 7.0 – 8.7

Electrical Conductivity µS/cm or mS/m (1.5 water extract) 2000 µS/cm or 200 mS/m max

Moisture Content % m/m of fresh weight 35 – 55

Organic Matter Content % dry weight basis >25

Particle Sizing % m/m of air-dried sample passing 99% pass through 25mm screen

the selected mesh aperture size 90% pass through 10mm screen

C:N Ratio 20:1 maximum

Contaminant Parameters Various Meet BSI PAS 100* Criteria

Cultivation

Cultivate the soil of all areas prior to seeding and planting. This should include loosening, aerating and breaking up soil into particles 2-8mm to depth of 150mm.

Remove any undesirable material brought to surface to a depth of 100mm including visible weeds, roots and large stones or clay balls with any dimension exceeding 30mm.

Final Cultivation prior to seeding topsoil shall be brought to a fine tilth by approved mechanical means or by hand raking, and if necessary regrading of the surface will be carried out to conform to the prescribed finished levels.

TREES

Tree Planting

Trees to be pit planted with root access to a minimum 7m3 volume of topsoil. Minimum pit size to be 300mm greater than rootball in all directions. Excavate tree pits with slightly raised centre. Retain topsoil for reuse. Dig a hole which is substantially bigger than the volume of roots to be accommodated. Break up and loosen the base and sides of the pit and shape base to falls towards the edge of pit to aid drainage. All tree pits should be constructed to be free of impeded - in areas of impeded drainage, additional measures may be required such as adding 150mm depth clean pea gravel to base of pit. The trees will be planted to the same depth as they were in the nursery. Back fill the pit in stages, whilst firming up the soil around the roots until the original ground level is restored.

Tree pits to be filled with 1:3 mixture of compost and topsoil. Topsoil to contain peat free organic matter and Growtab fertiliser to be incorporated into each pit.

Tree Support

Semi mature trees: secured with underground guy to BS4043.

Short double stakes as BS8545:2014 with an adjustable rubber tie from each stake, and no spacer pad. Stake to be driven into the ground either side of the tree pit. Height of stakes: cut to no higher than approximately one third of the tree height above ground level, and at least 300mm into the ground.

Stakes to be first grade pressure impregnated round timber with chamfered tops.

Backfilling: consolidate material around stake. Tying: secure tree firmly but not rigidly to stake with ties within 25mm of top of stake.

Tree Accessories

Rootbarrier: The need for root barriers to be confirmed by engineer. Trees adjacent to hard surfacing and/or services to have growing area defined by GreenBlue Urban 'Reroot 2000' high density root barrier, or similar approved, in accordance with manufacturer's and Engineer's guidance.

Irrigation:

Trees in soft landscape (EHS and Standard trees) - All trees to receive a GreenBlue Urban Rootrain Metro irrigation pipe, or similar and approved.

SHRUBS

Semi-native mixes

To be pit planted in staggered rows, 1000mm between rows and 1000mm between plants, with rabbit protection to aid establishment. Planted in single species groups, as indicated in the Plant Schedule.

Native Hedgerow Planting

All transplants to be planted with rabbit protection (tree/ shrub shelters) and stake support. Trench to be excavated 800mm wide x 450mm deep then backfilled with topsoil mixed with compost in a 3:1 ratio.

Hedge plants to be planted in a double staggered row 450mm apart at 450mm centres (5 per linear metre). All hedgerow planting to be covered with bark mulch to 50mm depth.

Ornamental Shrub Planting

Soil analysis shall be completed by a reputable laboratory to determine any nutritional requirements necessary. Once determined, the soil shall be appropriately amended to a range suitable for the species to be established. If required, apply an organic based fertiliser to manufacturer's recommended rates.

To be pit-planted, with sufficiently large pit to accommodate root system without bending roots (minimum size of 150mm wider than roots when fully spread and 200mm deep).

GRASS SEEDING/TURF

Turfed Areas

Turf must meet the Turfgrass Grower's Association (TGA) Quality Standards for Cultivated Turf for the supply and laying of turf.

The turf soil should be of a sandy loam nature with no stones. The grass will be dense, of uniform green colour, free of broadleaved weeds and not visibly affected by pest or disease. Existing vegetation and stones should be removed and a light

tilth prepared. Turf to be laid within 24 hours of receipt. Turfing shall comply with BS 3969 and be carried out during poor weather conditions, i.e. when ground is frozen, waterlogged, or during droughts, hot sunshine or persistent dry or cold winds. All plant material to receive enough water to ensure healthy establishment.

Grass Seeding

After cultivation operations have been carried out, use a pre-seed herbicide on areas to be seeded. Existing vegetation and stones should be removed and a light tilth prepared. Sow areas to be seeded with grass seed which has been stored off the ground in a clean, dry place free from vermin. Following an even distribution of seed, the contractor shall carry out a light raking or light harrowing of the area and ensure consolidation of the seed with the soil by the use of a light roller.

All reasonable precautions shall be taken to ensure that pedestrian and other traffic does not cross areas during cultivation and until the grass has established.

The grass will be dense, of uniform green colour, free of broadleaved weeds and not visibly affected by pest or disease.

Allowance should be made to keep the grass watered during dry periods encountered throughout the establishment period.

300mm mowing strips to perimeter of all grassed and planted areas abutting building.

MULCH

Bark Mulch Materials

General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life, all to be Forestry Stewardship Council (FSC) Certified and have fire resistant characteristics, being certified in accordance with BS4790: 1987.

Submit certification of source, analysis, suitability for purpose and absence of harmful substances.

Certified materials: Composted bark mulch, 2 years minimum service life.

Purity: Free of pests, disease, fungus and weeds. Preparation: Clear all weeds. Water soil thoroughly.

Mulch: ornamental fine grade mulch (5-35mm nominal particle size) to all shrub/ herbaceous beds and ornamental trees in grass (Melcourt Ornamental Bark Mulch or similar), coarse grade bark mulch (15-65mm nominal grade) to structure planting/ woodland mix / hedgerow (Melcourt Bark Nuggets or similar approved).

Coverage: planted areas and ornamental trees to 75 mm settled depth.

Trees in grass: 500mm radius from trunk.

Finished level of mulch: 30 mm below adjacent grassed or paved area.

Mulch under existing tree (Root Protection Area)

In accordance with the principles of BS 5387:2012.

To compensate for root damage and stress caused by construction activities, mulch within retained tree Root Protection Area.

Materials: The materials that may be used for mulching include coarsely divided plant matter, such as wood chip, pulverized bark, or leaf mould, any of which may be combined with well-rotted animal manure.

Area: The mulched area should extend over as much of the root system as can be allowed by other site-usage requirements.

Depth: The depth of an organic mulch should not be so much as to inhibit aeration of the root system or to cause overheating of uncomposted material (normally no more than 80 mm to 100 mm).

Replacement: The mulch should be periodically replenished as it decomposes, so that it does not become depleted.

PLANT SCHEDULE

For further details refer to Planting Plan 25051-LD-01

TREES							
QTY	CODE	PLANT NAME	STOCK	FORM	GIRTH/HEIGHT	SPECIFICATION	
4No.	ACE STR ss10	Acer campestre 'Streetwise'	RB	STD	10-12cm	2x; Selected standard; clear stem minimum 200cm; 4 breaks; 300-350cm ht	
6No.	BET PEN s	Betula pendula	RB	STD	8-10cm	2x; standard; clear stem minimum 175-200, 250-300cm ht	
1No.	SOR ARI ss	Sorbus aria	8	STD	10-12cm	2x; selected standard; clear stem 175-200cm; 4 breaks	
6No.	SOR SHE s	Sorbus aucuparia "Sheerwater Seedling"	8	STD	10-12cm		
3No.	SOR AUC s	Sorbus aucuparia	8	STD	8-10cm	2x; standard standard; clear stem minimum 175-200, 250-300cm ht	

HEDGES						
QTY	CODE	PLANT NAME	STOCK	SIZE	SPECIFICATION	
11m	Holly Hedge @5L	Ilex aquifolium C 5L		60-80cm	Leader with laterals	
55No.	Plants spaced @ 5/m in a Single Row					

SHRUBS							
QTY	CODE	PLANT NAME	STOCK	SIZE	SPACING	SPECIFICATION	
5No.	Bux sem 5L	Buxus sempervirens	C 5L	30-40cm	3/m2	Bushy; 8 breaks	
74No.	Heb pin SU 5L	Hebe pinguifolia "Sutherlandii"	C 5L	20-300	5/m2	Bushy; 7 breaks	
3No.	Vib Ros	Viburnum opulus "Roseum"	C 3L	40-60cm	3/m2		
16No.	Win Ger 5L	Vinca minor "Gertrude Jekyll"	C 5L	30-400	2/m2	Several shoots; 5 breaks	

HERBACEOUS PLANTS						
QTY	CODE	PLANT NAME	STOCK	SPACING	SPECIFICATION	
17No.	Sed alb	Sedum album	C 2 L	6/m2	Full pot; Sept to April planting; British native-origin	

BULBS/WILDFLOWERS							
QTY	CODE	PLANT NAME	GRADE	SPACING			
817No.	Hya non	Hyacinthoides non-scripta	5-6cm	20/m2			

HEDGE MIXES						
PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION	
15m NATIVE HEDGE MIX 43	planted @ 6/m	in a double staggered row				
34%	31No.	Acer campestre	B Trans	60-80cm	1+1;	Transplant - seed raised
33%	30No.	Ilex aquifolium	RC5 150ccmin.20-40cm	60-80cm	1+0;	Seedling; cell grown
33%	30No.	Prunus spinosa	B Trans	60-80cm	1+1;	Transplant - seed raised; branched; 2 breaks
To be planted in species groups of approximately 5, 7, 9. Notch plant in a double staggered row, 450mm between rows, 450mm centres (6no. Per 1in.m), notched planted with rabbit protection (mesh guard for holly) and staked.						

PLANT MIXES						
PERCENT	QTY	PLANT NAME	STOCK	SIZE	SPECIFICATION	
22m2 GROUNDCOVER MIX 8c planted @ 3/m2						
25%	17No.	Hypericum x moserianum	C 2L	20-30cm	Bushy; 5 breaks	
25%	17No.	Hedera helix	C 2L	40-60cm	several shoots; 3 breaks	
25%	17No.	Rubus "Betty Ashburner"	C 2L	20-30cm	Branched; 5 breaks	
25%	17No.	vinca minor "Gertrude Jekyll"	C 3L	20-30cm	several shoots; 3 breaks	
Individual varieties to be planted in groups of between 5 and 11.						
7m2 GROUNDCOVER MIX 51a planted @ 3/m2						
15%	3No.	Sedum album	C 1L	-	Full Pot	
50%	11No.	Hedera helix	C 2L	40-60cm	several shoots; 3 breaks	
35%	7No.	Polypodium vulgare	C 3L	-	Full Pot	
Individual varieties to be planted in groups of between 3, 5 and 7. Sedum to front of beds.						

16m2 NATIVE SHRUB MIX 30 planted @ 0.5m centres						
30%	19No.	Crataegus monogyna	B Trans	80-100cm	1+2	Individual varieties to be planted in groups of between 7 and 11. Notch planted with rabbit protection (minimum 600mm height) and staked. Ilex to have mesh rabbit protection.
10%	6No.	Ilex aquifolium	C 3L	30-40cm	Leader with laterals	
8%	5No.	Prunus spinosa	B Trans	60-80cm	1+1; branched; 2 breaks	
127m2 NATIVE SHRUB MIX 33 planted @ 1/m2						
35%	44No.	Cornus sanguinea	B Trans	60-80cm	1+1; branched; 3 breaks	Individual varieties to be planted in groups of between 5 and 9. Notch planted with rabbit protection (minimum 600mm high) and staked. Ilex to have mesh rabbit protection.
20%	25No.	Crataegus monogyna	B Trans	80-100cm	1+2	
20%	25No.	Ilex aquifolium	C 3L	30-40cm	Leader with laterals	
15%	19No.	Sambucus nigra	B Trans	60-80cm	1+1; Transplant - seed raised	
10%	13No.	Viburnum lanata	B Trans	60-80cm	1+2; branched; 3 breaks	

NOTES AND ABBREVIATIONS:

B = Bare root (bagged).

C = Container (or pot) grown, followed by size of the container (or pot).

Cell = cell grown.

FORM = Shape of tree as supplied by the nursery.

QTY = Quantity

RB = rootballed (balled and wrapped).

SIZE = Height or Spread of juvenile plant.

Std = (Clear stem) Standard.

STOCK = Root condition/protection method eg Bare root.

Trans = Transplant (or undercut seedling).

- Refer to specification for further information.

- All plants to be completely hardened off

- Substitutions to be agreed with Landscape Architect.

Plant Schedule generated by "qscscape" software 09/04/2025

GENERAL NOTES

- Drawing for Planning purposes only
- Cura Terrae drawing references:
- 25051-LD-01 Soft Landscape Proposals - Planting Plan**
- 25051-LD-02 Outline Specification and Planting Schedule**
- 25051-LD-03 Maintenance Schedule**
- Refer to Arboricultural report for details of existing vegetation to be retained and protection measures. Report produced by JCA ltd titled "Arboricultural Method Statement to BS5837:2012".
- Proposed Site Layout provided by Orange Design Studio, Drawing number "ODS_20/284-(20/001"
- Building foundations to be confirmed by Engineer with reference to planting proposals and NHBC guidance (or alternative where applicable). Tree locations to be fully co-ordinated once building foundation depth are confirmed. Requirements for root barriers to be confirmed by an engineer.
- Refer to Engineer's details for level, drainage and utilities information
- Levels to be confirmed following coordination with the design team.
- Levels to be verified by the contractor with any variations
- Setting out on site to be agreed with Landscape Architect
- Check all dimensions on site.
- Do not stake from this drawing
- Report any discrepancies and omissions to Cura Terrae
- This drawing is Copyright
- All levels indicative only. Extrapolated from site levels. All require to be checked.
- All details subject to approval by the local authority for the discharge of relevant planning conditions.

3RD-PARTY INFORMATION

NB This drawing includes information provided by independent surveyors and / or consultants, to whom all queries shall be made. Cura Terrae can accept no liability for its context or accuracy.

DESIGN

Unless stated otherwise, the designs shown are subject to detailed site survey, investigations, and legal definition, the CDM regulations and the comments and / or approval of the various relevant Local Authority Officers, Statutory Undertakers, Fire Officers, Engineers and the like. They are copyright, project specific and confidential. No part is to be used or copied in anyway without the express prior consent of Cura Terrae.

TREE NOTES:

Note that all tree and shrub locations are subject to coordination with services, to be undertaken by others. **The requirement for root barriers is to be confirmed by an engineer.**

Note that it is best practice that root barriers are required to extend 2m beyond the mature canopy spread of new trees to protect all structures and hard landscape elements, such as highways, services and buildings. In addition, root barriers are required for all new trees within 5m of highways - e.g. GreenBlue Urban 'Reroot 2000' or similar. Depth of tree root barrier to be confirmed by an engineer once services design has been produced at construction detail. Install to manufacturer's and engineer's guidance.

CDM - Risks / Hazards

- Proposed locations of landscape elements shown are subject to the presence of below ground services. A detailed survey is to be undertaken and necessary method statements prepared and approved prior to undertaking any excavations / work within this area.
- Care to be taken when working in proximity to the surrounding existing roads.
- Care to be taken when clearing the existing site due to the potential presence of needles, litter etc.

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