

# HIGH STREET, YIEWSLEY

## SOFT LANDSCAPE SPECIFICATION

prepared for  
HESTER ARCHITECTS

by  
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| NB       | All landscape specification and design proposals for High Street Yiewsley are to be read in conjunction with broader architectural and development proposals, project preliminaries and specifications prepared by Hester Architects and other project team consultants. If any overlap or conflict is noted this should be addressed to Hester Architects and Adams Habermehl Landscape Architects for clarification. |      |

## Q Paving/Planting/Fencing/Site furniture

### Q28 Topsoil and growing media

To be read with Preliminaries/ General conditions.

#### 120 SITE INVESTIGATION

- Report: See section - Contractor to thoroughly familiarize themselves with site conditions.

#### 200 GRADING SUBSOIL

- General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
- Areas of thicker topsoil: Excavate locally.

#### 250 SUBSOIL SURFACE PREPARATION

- General: Excavate and/ or place fill to required profiles and levels, as section D20.
- Loosening:
  - Light and noncohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm.
  - Stiff clay and cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm.
  - Rock and chalk subgrades: Lightly scarify to promote free drainage.
- Stones: Immediately before spreading topsoil, remove stones larger than 50mm.
- Remove debris.

#### 260 INSPECTING FORMATIONS

- Give notice: Before spreading topsoil for inspection
- Notice period: 48 hours

#### 335 SURPLUS TOPSOIL TO BE REMOVED

- Generally: Remove from site.

#### 340 IMPORTED TOPSOIL TO BS 3882

- Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
- Standard: To BS 3882.
- Submit: Declaration of analysis including information detailing each of the relevant parameters given in BS 3882, clause 6 and table 2.

#### 350 SPECIAL IMPORTED SOIL FOR ROOF GARDEN PLANTERS AND ROOF GARDEN TURF

Product Bauder Intensive Substrate

Manufacturer/ Supplier: Bauder Ltd, 70 Landseer Road, Ipswich, IP3 0dh Tel 01473 257671

See appendix

#### 355 COMPOST

- Standard: In accordance with PAS 100.
- Type: Sanitized and stabilized compost.
- Horticultural parameters:
  - pH (1:5 water extract): 7.0-8.7.
  - Electrical conductivity (maximum, 1:5 water extract): 200 mS/m.
  - Moisture content (m/m of fresh weight): 35-55%.
  - Organic matter (minimum): 25%.
  - Grading (air dried samples): 99% passing 25 mm screen, and 90% a 10 mm screen mesh aperture.
  - Carbon:Nitrogen ratio (maximum): 20:1.
- Texture: Friable.
- Objectionable odour: None.
- Composting Association certification:

- Submit: Declaration of analysis.
- Samples: for approval, minimum of 48 hours before delivery to site.
- Application rate: 50mm deep to ground floor and roof garden planters
- Timing: Apply prior to cultivation.

395 PEAT

- Peat or products containing peat: Do not use.

520 IMPORTED MANUFACTURED PLANTING AMELIORANT FOR ROOF GARDEN SHRUB & GROUND COVER AREAS

- Source: Carbon Gold, the Maples, Bristol BS49 4FS  
Product reference: Carbon Gold 'Biochar Biology Blend'
- Application to roof garden planting areas as an admix to Bauder Intensive Soils: 300 gms per m2 to supplier's specification.
- This application is additional to PAS 100 compost described elsewhere

Carbon Gold, the Maples, Bristol BS49 4FS      Tel 0117 244 0032  
<https://www.carbongold.com/trade/>

SOIL AMELIORANTS FOR ROOF GARDEN TURF AREAS

Soil ameliorants will also assist with grass establishment and long term resilience in droughty conditions. Add soil ameliorants to the Bauder soils prior to turfing as per suppliers recommendations:

TerraCottem Turf soil conditioner

A specific conditioner for sandy and light soils that require turf or seed. The product contains these materials and components.

Fertilisers, carefully selected hydro-gels, growth stimulators, humic acids and zeolite.

Apply at 120 grams per square metre evenly cultivated into soil layer 200MM deep.

NB: Must be stored and applied in the dry

<https://www.inturf.com/terracottem/terracottem-turf/>

Terracottem is available from 'Inturf', Wilberforce, York Tel 01759 321000 - sales@inturf.co.uk

650 NOTICE OF IMPORTING TOPSOIL

- Give notice: Before stripping topsoil for transfer to site.
  - Notice period: 48 hours

660 SAMPLE LOAD OF IMPORTED TOPSOIL

- General: Deliver to site a sample load of not less than 5 m³.
- Give notice: Allow inspection before making further deliveries to site. Retain for comparison with subsequent loads.
  - Notice period: 48 hours

670 CONTAMINATION

- General: 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.
- Subsoil: In areas to receive topsoil, do not use subsoil contaminated with the above materials.
- Give notice: If any evidence or symptoms of soil contamination are discovered on the site, or in topsoil to be imported.

680 TOPSOIL STORAGE HEAPS - NONE ALLOWED

690 HANDLING TOPSOIL

- 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 or when it is waterlogged

#### 700 SPREADING TOPSOIL

- Temporary roads/surfacing: Remove before spreading topsoil.
- Layers:
  - Depth (maximum): 150 mm.
  - Gently firm each layer before spreading the next.
- Depths after firming and settlement (minimum): 100mm grass areas over 150mm subsoil  
400mm shrubs planting over 150mm subsoil
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

#### 910 FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT

- Above adjoining paving or kerbs: Flush for grass, 100mm below for planting beds
- Below dpc of adjoining buildings: Not less than 150mm
- Shrub areas: Higher than adjoining grass areas by 50mm, in centre of bed, not at edge.
- Within root spread of existing trees: Unchanged.
- Adjoining soil areas: Marry in.
- Thickness of turf or mulch: Included.
- Roof garden raised planters, 50mm below planter edge.
- Roof garden edge beds, flush with edge trim.

## **Q30 Seeding/turfing**

To be read with Preliminaries/General conditions.

### **GENERAL INFORMATION/REQUIREMENTS**

#### **115 SEEDED AND TURFED AREAS**

- Growth and development: Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.
- Appearance: A closely knit, continuous ground cover of even density, height and colour.

#### **120 CLIMATIC CONDITIONS**

- General: Carry out the work while soil and weather conditions are suitable.

#### **145 WATERING**

- Quantity: Wet full depth of topsoil.
- Application: Even and without displacing seed, seedlings or soil.
- Frequency: As necessary to ensure the establishment and continued thriving of all seeding/turfing.

#### **150 WATER RESTRICTIONS**

- Timing: If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

#### **160 NOTICE**

- Give notice before:
  - Setting out.
  - Applying herbicide.
  - Applying fertilizer.
  - Preparing seed bed.
  - Seeding or turfing.
  - Visiting site during maintenance period.
- Period of notice: 48 hours.

#### **170 SETTING OUT**

- Boundaries: Mark clearly.
- Delineation: In straight lines or smoothly flowing curves as shown on drawings.

### **PREPARATION**

#### **205 PREPARATION MATERIALS**

- General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- Certification of source, analysis, suitability for purpose and absence of harmful substances: Submit.
  - Certified materials: see method statement
- Give notice: before ordering or using.

#### **212 SEED BED CLEANING BEFORE SOWING - SMALL AREAS**

- Operations: hand weed if necessary.

#### **231 PEAT**

- Peat or products containing peat: Do not use.

#### **250 CULTIVATION**

- Compacted topsoil: Rotovate to 300mm deep to relieve compaction.
- Fertilizer: Fully incorporate into topsoil to a depth of 100mm.

- Tilth: Reduce topsoil to a tilth suitable for blade grading.
  - Depth: 50-100mm, minimal cultivation where tree roots reach the surface.
  - Particle size (maximum): 10mm down
- Material brought to the surface: Remove stones and clay balls larger than 50 mm in any dimension, roots, tufts of grass, rubbish and debris.

## 260 GRADING

- Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage.
  - Hollows and ridges: Not permitted.
- Finished levels after settlement: flush with adjoining paving, kerbs, including depth of turf.
- Blade grading: May be used to adjust topsoil levels provided depth of topsoil is nowhere less than 100mm.
- Give notice: If required levels cannot be achieved by movement of existing soil.
- Levels prior to seeding in Bodpave 85 to be as recommended by the manufacturer.

## 280 FINAL CULTIVATION

- Timing: After grading and fertilizing.
- Seed bed: Reduce to fine, firm tilth with good crumb structure.
  - Depth: 25 mm.
  - Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted.
  - Remove surface stones/earth clods exceeding:
    - General areas: 25mm
    - Fine lawn areas: 10 mm.
- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

## SEEDING

### 310 GRASS SEED -

- Source: Emorsgate seeds
- Mixture: Emorsgate EG1 General Purpose Meadow Mix seed mix
- Application rate: as recommended by the supplier.

### 319 QUALITY OF SEED

- Freshness: Produced for the current growing season.
- Certification: Blue label certified varieties.
  - Standard: EC purity and germination regulations.
  - Official Seed Testing Station certificate of germination, purity and composition: Submit when requested.
- Samples of mixtures: Submit when requested.

### 330 SOWING

- General: Establish good seed contact with the root zone.
- Method: all to suppliers recommendations

### 335 GRASS SOWING SEASON

- Grass seed generally: autumn/spring in accordance with good practice.

### 340 PRE-EMERGENT HERBICIDE

- Standard: Pesticide Safety Directorate approved.
- Application rate: In accordance with manufacturer's written recommendation.
  - Timing: Immediately after sowing.

## TURFING FOR ROOF GARDEN AND IF REQUIRED BY SEASON FOR GROUND LEVEL;

**CULTIVATED TURF****Inturf Classic Turf**

A fine leaved but durable turfgrass blend made up of the following species.

- 25% dwarf perennial ryegrass ,
- 40% strong creeping red fescue and
- 35% slender creeping red fescue.

<https://www.inturf.com/turf/classic-turf/>

From Inturf, Wilberforce, York Tel 01759 321000 - sales@inturf.co.uk

**420 DELIVERY AND STORAGE**

- Timing: Lay turf with minimum possible delay after lifting. If delay occurs, lay turf out on topsoil and keep moist.
- Frosty weather or waterlogged ground: Do not lift turf.
- Delivery: Arrange to avoid need for excessive stacking.
- Stacking height (maximum): 1 m.
- Dried out or deteriorated turf: Do not use.

**423 INSPECTION OF TURF**

- Give notice: Before lifting turf 48 hours

**430 TURFING GENERALLY**

- Time of year: autumn/spring.
- Timing of laying:
  - Spring and summer: Within 18 hours of delivery.
  - Autumn and winter: Within 24 hours of delivery.
- Weather conditions: Do not lay turf when persistent cold or drying winds are likely to occur or soil is frost bound, waterlogged or excessively dry.
- Working access: Planks laid on previously laid turf. Do not walk on prepared bed or newly laid turf.
- Jointing: Laid with broken joints, well butted up. Do not stretch turf.
- Edges: Whole turfs, trimmed to a true line.
- Adjusting levels: Remove high spots and fill hollows with fine soil.
- Consolidating: Lightly and evenly firm as laying proceeds to ensure full contact with substrate. Do not use rollers.
- Dressing, brushed well in to completely fill all joints: fine topsoil
- Watering: Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

**430 A PLANT PLUGS**

Play area grass is to be sown with Emorsgate EG1 General Purpose Meadow Mix seed mix, or equivalent turf according to client preference. Where rubber grass reinforcement matting is not utilised, grass areas are to be interplanted with plant plugs at 2 per sq.m (x 120m2) as 40 CC plant plugs as set out in the planting plan schedule.

**PROTECTING/CUTTING****510 PROTECTIVE FENCING TO GRASS OR TURF AREAS**

- Fencing type: to client's approval if required.
  - Height: 900mm.
- Erection: On completion of seeding/ turfing.
- Removal: on establishment of sward.

**530 FIRST CUT OF GRASSED AREAS**

- Timing: When grass is reasonably dry.
  - Height of initial growth: 40mm
- Preparation:

- Debris and litter: Remove.
- Stones and earth clods larger than 25 mm in any dimension: Remove
- Height of first cut: 20mm
- Mower type: cylinder
- Arisings: remove and dispose of offsite for composting

#### 590 CLEANLINESS

- Soil and arisings: Remove from hard surfaces.
- General: Leave the works in a clean, tidy condition at Completion and after any maintenance operations.

### **MAINTENANCE**

#### 605 MAINTENANCE

- Duration: Carry out the following operations from completion of seeding/ turfing until practical completion

#### 610 FAILURES OF SEEDING/TURFING / PLANT PLUGS

- Defective materials or workmanship: Areas that have failed to thrive.
  - Exclusions: Theft or malicious damage.
- Method of making good: Recultivation and reseeding/ returfing.
- Timing of making good: autumn/spring.

#### 620 MAINTAINING LAWNS

- Maximum height of growth at any time: 40mm.
- Preparation: Before each cut remove all litter and debris.
- Cutting: As and when necessary to a height of 20mm.
  - Arisings: remove to compost facility.
- Maintain 'plant plugs' and associated floral diversity.
- Trimming: All edges.
  - Arisings: Remove.
- Stones brought to the surface: Remove regularly.
  - Size: Exceeding 25 mm in any dimension.
- Areas of settlement: Make good.
- Watering: as required.

## Q31 External planting

To be read with Preliminaries/General conditions.

### GENERAL INFORMATION/ REQUIREMENTS

- 112 SITE CLEARANCE GENERALLY
- General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
  - Stones: Remove those with any dimension exceeding 25mm
  - Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
  - Vegetation: remove only if instructed to.
  - Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.
  - Additional requirements: none
- 118 SOIL CONDITIONS
- Soil for cultivating and planting: Moist, friable and (excepting aquatic/ marginal planting) not waterlogged.
  - Frozen or snow covered soil: Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing.
- 120 CLIMATIC CONDITIONS
- General: Carry out the work while soil and weather conditions are suitable.
    - Strong winds: Do not plant.
- 125 TIMES OF YEAR FOR PLANTING
- Deciduous trees and shrubs: Late October to late March.
  - Conifers and evergreens: September/ October or April/ May.
  - Herbaceous plants (including marginal): 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.
  - Colchicum (crocus): July/ August.
  - Green bulbs: After flowering in spring.
- 130 MECHANICAL TOOLS
- Restrictions: Do not use within 100 mm of tree and plant stems.
- 145 WATERING
- Quantity: Wet full depth of topsoil.
  - Application: Even and without damaging or displacing plants or soil.
  - Frequency: As necessary to ensure establishment and continued thriving of planting.
- 150 WATER RESTRICTIONS
- General: If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering.
- 160 NOTICE
- Give notice before:
    - Setting out.
    - Applying herbicide.
    - Applying fertilizer.
    - Delivery of plants/ trees.
    - Planting shrubs.
    - Planting trees into previously dug pits.

- Watering.
- Visiting site during maintenance period.
- Period of notice: 48 hours.

#### 165 PREPARATION, PLANTING AND MULCHING MATERIALS

- General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- Certification of source, analysis, suitability for purpose and absence of harmful substances: Submit.

#### 200 PLANTS/ TREES - GENERAL

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in a suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants: Bottom worked.
- Root system and condition: Balanced with branch system.
- Species: True to name.
- Origin/ Provenance: UK.  
Definition: Origin and Provenance have the meaning given in the National Plant Specification.

#### 216 PLANTS/ TREES - SPECIFICATION CRITERIA

- Name, forms, dimensions and other criteria: To the relevant part of BS 3936.

#### 235 CONTAINER GROWN PLANTS/ TREES

- Growing medium: With adequate nutrients for plants to thrive until permanently planted.
- Plants: Centred in containers, firmed and well watered.
- Root growth: Substantially filling containers, but not root bound, and in a condition conducive to successful transplanting.
- Hardiness: Grown in the open for at least two months before being supplied.
- Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

#### 246 LABELLING AND INFORMATION

- Standard: To BS 3936.

#### 260 PLANT/ TREE SUBSTITUTION

- Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering: Submit alternatives, stating:
  - Price.
  - Difference from specified plants/ trees.
- Approval: Obtain before making any substitution.

#### 265 PLANT HANDLING, STORAGE TRANSPORT AND PLANTING

- Standard: To HTA 'Handling and establishing landscape plants'.
- Frost: Protect plants from frost.
- Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- Plant packaging: Black polythene bags for bare root.
- Packaging of bulk quantities: Pallets or bins sealed with polythene.
- Planting: Upright or well balanced with best side to front.

#### 280 TREATMENT OF TREE WOUNDS

- Cutting: Keep wounds as small as possible.
  - Cut cleanly back to sound wood using sharp, clean tools.
  - Leave branch collars. Do not cut flush with stem or trunk.
  - Set cuts so that water will not collect on cut area.
- Fungicide/ Sealant: Do not apply unless instructed.

#### 285 PROTECTION OF EXISTING GRASS

- General: Protect areas affected by planting operations using boards/ tarpaulins.

- Excavated or imported material: Do not place directly on grass.  
Duration: Minimum period.

#### 290 SURPLUS MATERIAL

- Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings: Remove.

### **PREPARATION OF PLANTING BEDS/ PLANTING MATERIALS**

#### 305 WEED CONTROL BY HAND WEEDING

- Locations: Planting beds.
- General: Prevent weeds from seeding and perennial weeds from becoming established, clear all weeds by hand weeding.

#### 341 PEAT

- Do not use peat or products containing peat.

#### 375 CULTIVATION

- Compacted topsoil: Break up to full depth.
- Cultivation: Loosen, aerate and break up soil into particles of 2-8 mm.
  - Depth: 100mm, no mechanical cultivation
  - Timing: Within a few days before planting.
  - Weather and ground conditions: Suitably dry.
- Surface: Leave regular and even.
- Levels: as specified.
- Undesirable material brought to the surface: Remove visible weeds, roots and large stones with any dimension exceeding 25mm.
- Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate.

### **PLANTING SHRUBS/ HERBACEOUS PLANTS/ BULBS**

#### 401 REGULAR PLANT LAYOUT

- Spacing: as specified.
- Density: as specified.

#### 405 SHRUB PLANTING PITS

- Timing: Excavate while planting.
  - Sizes: 300 x 300 x 300mm pits or 100mm wider than pot or rootball if greater
- Pit bottom improvement loosen if necessary
- Backfilling material: 3L compost and 3 fertiliser tablets/ 5L plant, 2 tabs/3L plant, 1 tab/2L plant

#### 420 CLIMBING PLANTS

- Planting: 150 mm clear of supporting structure (e.g. wall/ fence) with roots spread outward.
    - Branches: Lightly secured to supports.
  - Climber supports: canes, fix wires to walls and tie climbers to wires with wire twists.
    - Base height: 500mm
    - Extent: 2m wide
    - Centres: 450mm
    - Fixings: eye screws.
- Centres:1m

#### 470 FORMAL HEDGES

- Shrubs for hedges: Consistent in species, cultivar and clone to ensure a uniform hedge.
- Planting: In trenches large enough to take full spread of roots. Set out plants evenly.

#### 480 AFTER PLANTING

- Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
- Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.

#### 485 MULCHING PLANTING BEDS

- Material: premium grade ornamental bark mulch as supplied by Melcourt or equal
  - Purity: Free of pests, disease, fungus and weeds.
- Preparation: Clear all weeds. Water soil thoroughly.
- Coverage: All planting beds.
- Finished level of mulch: 50mm settled depth.

## **PLANTING TREES**

### **505 TREE PITS IN SOFT AREAS**

- Sizes: 1.5m x 1.5m x 0.9m
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- Pit bottoms: With slightly raised centre. Break up to a depth of 200mm
- Pit sides: Scarify.
- Backfilling material: 5 parts topsoil 1 part compost
- Accessories: Greenblue Urban Ltd. RRPC2A rootrain metro irrigation system nailed to stake, with cap clear of mulch level.

### **506 TREES IN RAISED ROOF GARDEN PLANTERS**

- Ground Anchor: Greenblue Urban Ltd. Arborguy SASMCB strapped anchor system installed with secure connection to planter foundations as shown on landscape details plan.

### **510 TREE PIT ROOT BARRIERS**

- Locations: where trees are less than specified distance from services/ or if identified during works
- Manufacturer: GreenBlue Urban (Tel 01580 830800)
  - Product reference: ReRoot 1000. Green Blue Urban ref: RER1000A
- Depth and installation: as manufacturer's specification, With sides vertical.

### **535 STAKING GENERALLY – GROUND FLOOR**

- Stakes: Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots and with pointed lower end.
  - Preservative treatment: tanalised
- Nails: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
- Stake size (minimum): 75-100mm x 2400mm

### **545 LONG SINGLE STAKING FOR TREES IN SOFT AREAS**

- Staking: Position stake close to tree on windward side and drive vertically at least 300 mm into bottom of pit before planting.
  - Backfilling: Consolidate material around stake.
- Height of stakes: Cut off just below lowest branch of tree.
- Ties: 2 adjustable rubber ties and spacer sleeve at 600 and 1500mm above ground level.
- Tying: Secure tree firmly but not rigidly to stake with at least two ties. Use three ties if necessary to prevent tree touching stake.

### **586 TREE BACKFILLING MATERIAL**

- Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil and subsoil as required.
- Ameliorant/ Conditioner: tree and shrub planting compost within topsoil layer only
  - Application rate: 5 parts topsoil 1 part compost

## **PROTECTING/ MAINTAINING/ MAKING GOOD DEFECTS**

### **710 MAINTENANCE**

- Duration: Carry out the operations in the following clauses from completion of planting until the end of the 12 months defects liability period
- Frequency of maintenance visits: to be programmed as necessary

ALSO SEE BAUDER MAINTENANCE SPECIFICATION AT APPENDICES

#### 720 FAILURES OF PLANTING

- Defects due to materials or workmanship not in accordance with the Contract: Plants/ trees/ shrubs that have failed to thrive.
  - Exclusions: Theft or malicious damage after completion.
  - Rectification: Replace with equivalent plants/ trees/ shrubs.
- Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
- Timing of making good: winter following planting.

#### 740 CLEANLINESS

- Soil and arisings: Remove from hard surfaces and grassed areas.
- General: Leave the works in a clean tidy condition at completion and after any maintenance operations.

#### 750 PLANTING MAINTENANCE GENERALLY

- Weed control: Maintain weed free area around each tree and shrub.
  - Diameter (minimum): The larger of 1 m or the surface of original planting pit.
  - Keep planting beds clear of weeds: by hand weeding
  - Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
- Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
- Staking: Check condition of stakes, ties, guys and guards.
  - Broken or missing items: Replace.
  - Rubbing: Prevent.
  - Ties: Adjust to accommodate growth.
  - Damage to bark: Cut back neatly with sharp knife. Prevent further damage.
  - Frequency of checks: each maintenance visit
- Firming up: Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
- Trees: Spray crown when in leaf during warm weather.
  - Timing: After dusk.
- Watering: as necessary to ensure establishment and continued thriving of planting.

#### 760 PLANTING MAINTENANCE - PRUNING

- General: Prune to promote healthy growth and natural shape.
  - Dead, dying, diseased wood and suckers: Remove.
  - Timing: winter.
  - Trees: Favour a single central leading shoot.
- Arisings: Remove.

#### 790 FINAL MULCHING

- Timing: At end of the maintenance period.
- Watering: Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
- Planting beds: top-up to settled depth of 50mm

## Q35 Landscape maintenance

To be read with Preliminaries/ General conditions.

### GENERALLY

#### 105 MAINTENANCE OBJECTIVES

Duration: Carry out the operations in the following clauses from completion of planting for 12 months.

- Aims: to create good growing conditions and successful plant establishment.

ALSO SEE BAUDER MAINTENANCE SPECIFICATION AT APPENDICES

#### 110 NOTICE

- Give notice before:
  - Application of herbicide.
  - Application of fertilizer.
  - Watering.
  - Each site maintenance visit.
- Period of notice: 48 hours.

#### 130 REINSTATEMENT

- Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: Reinstate to original condition.

#### 155 WATERING ALSO SEE IRRIGATION PROPOSALS IN HARD LANDSCAPE SPEC.

- Supply: on site
- Quantity: as required to reach field capacity.
- Application: Do not damage or loosen plants.
- Compacted soil: Loosen or scoop out, to direct water to rootzone.
- Frequency: As necessary for the continued thriving of all planting.

#### 160 WATER RESTRICTIONS

- General: If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

#### 170 DISPOSAL OF ARISING

- General: Unless specified otherwise, dispose of arisings as follows:
  - Biodegradable arisings: recycle off site
  - Grass cuttings: recycle off site
  - Tree roots and stumps: recycle off site
  - Shrub and tree prunings: recycle off site
  - Litter and nonbiodegradable arisings: to suitable tip.

#### 180 CHIPPING OR SHREDDING

- General: Not permitted on site.

#### 181 MECHANICAL EQUIPMENT

- General: Minimize.

#### 190 LITTER

- Extraneous rubbish not arising from the contract work: Collect and remove from site.

#### 195 PROTECTION OF EXISTING / ESTABLISHING GRASS

- General: Protect areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly on grass.

#### 197 CLEANLINESS

- Soil and arisings: Remove from hard surfaces.

- General: Leave the works in a clean, tidy condition at completion and after any maintenance operations.

## **GRASSED AREAS**

### **210 MAINTENANCE OF GRASSED AREAS**

- General: Maintain turf in a manner appropriate to the intended use.
- Soil and grass:
  - Condition: Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
  - Waterlogging and compaction: Prevent.
  - Damage: Repair trampling, abrasion or scalping.
- Ornamental lawns: Maintain reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills.
  - Edges: Neat and well defined, in clean straight lines or smooth flowing curves.
- Litter and fallen leaves: Remove regularly to maintain a neat appearance.

### **211 MAINTENANCE OF GRASSED AREAS**

- Standard: To BS 7370-3. Carry out maintenance appropriate to each category of turf, as follows:
  - Objectives: To BS 7370-3, table 6.
  - Programme: To BS 7370-3, clause 11.
- Mowing methods: To BS 7370-3, table 3.

### **220 GRASS CUTTING GENERALLY**

- Before mowing: Remove litter, rubbish and debris.
- Finish: Neat and even, without surface rutting, compaction or damage to grass.
- Edges: Leave neat and well defined. Neatly trim around obstructions.
- Adjoining hard areas: Sweep clear and remove arisings.
- Drought or wet conditions: Obtain instructions.

### **226 TREE STEMS**

- Precautions: Do not allow nylon filament rotary cutters and other mechanical tools closer than 100 mm to the stem of any tree.
- Operations close to stems: Complete using hand tools.

### **250 LEAF REMOVAL**

- Operations: Collect fallen leaves.
- Special requirements: \_\_\_\_\_.
- Disposal: recycle off site.

### **260 MOWING LAWNS**

- Grass height: 25mm.
- Arisings: recycle off site.
- Arisings: recycle offsite

### **309 EDGES TO SEEDED AREAS**

- Location: Planting beds and around newly planted trees.
- Timing: After seeded areas are well established.
- Edges: Cut to clean straight lines or smooth curves. Draw back soil to permit edging.
- Arisings: recycle offsite

### **310 RE-FORMING GRASS EDGES**

- Location: adjacent to shrub beds and hedges
- Edges: Draw back soil and re-form edges to clean straight lines or smooth flowing curves, sloping slightly back from vertical.

### **320 LEVELLING HOLLOWES AND BUMPS IN TURF**

- Standard: To BS 7370-3, clauses 12.4 and 12.5.

### **380 REINSTATEMENT OF DAMAGED LAWNS**

- Damaged turf: Remove to a depth of 25mm.
- Preparation: Cultivate substrate to a fine tilth.
- Reinstatement: Contractor's choice of returfing or topsoiling and reseedling:
  - Returfing: Quality and appearance to match existing.
  - Reseeding: Fill with fine topsoil to BS 3882 general purpose grade, free from stones, debris and weeds. Reseed with a seed mix to match existing grass in quality and appearance.
- Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

#### 381 REINSTATEMENT OF WORN OR DAMAGED LAWNS

- Worn or damaged areas: Make good by returfing or reseedling:
  - Returfing standard: To BS 7370-3, Clause 12.2.
  - Reseeding standard: To BS 7370-3, Clause 12.6.
- Turf or seed: To match existing in appearance and quality.
- Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

### SHRUBS/TREES/HEDGES

#### 500 ESTABLISHMENT OF NEW PLANTING

- Duration: 12 months defects liability period
- Weed control:
  - Method: Keep planting beds clear of weeds by hand weeding.
  - Area: Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
- Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
- Trees: When in leaf, spray crowns during warm weather.
  - Timing: After dusk.
- Watering: as required

#### 510 TREE STAKES AND TIES

- Inspection/ Maintenance times: at every maintenance visit.
- Stakes:
  - Replace loose, broken or decayed stakes to original specification.
  - If longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
- Ties: Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
  - Where chafing has occurred, reposition or replace ties to prevent further chafing.

#### 515 TREE GUY WIRES ROOF GARDEN

- Inspection/ Maintenance times: at every maintenance visit.
- Operations:
  - Replace or resecure loose or missing guy wires.
  - Adjust to suit stem growth and to provide correct and uniform tension.

#### 520 REFIRMING OF TREES AND SHRUBS

- Timing: After strong winds, frost heave and other disturbances.
- Refirming: Tread around the base until firmly bedded.
- Collars in soil at base of tree stems, created by tree movement: Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

#### 540 PRUNING GENERALLY

- Pruning: In accordance with good horticultural and arboricultural practice.
  - Removing branches: Do not damage or tear the stem or bark.
  - Wounds: Keep as small as possible and cut cleanly back to sound wood.
  - Cutting: Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
  - Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.

- Appearance: Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance.
- Tools: Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
- Disease or infection: Give notice if detected.
- Growth retardants, fungicide or pruning sealant: Do not use unless instructed.
- Standard: To BS 7370-4.
- Special requirements: \_\_\_\_\_.

#### 570 FORMATIVE PRUNING OF YOUNG TREES

- Standard: Type and timing of pruning operations to suit the plant species.
- Time of year: Do not prune during the late winter/ early spring sap flow period.
- Young trees up to 4 m high:
  - Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well balanced head and ensure the development of a single strong leader.
  - Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.

#### 575 PRUNING ORNAMENTAL SHRUBS

- General: Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
- Suckers: Remove by cutting back level with the source stem or root.

#### 580 PRUNING FLOWERING SPECIES OF SHRUBS AND ROSES

- Time of year:
  - Winter flowering shrubs: Spring.
  - Shrubs flowering between March and July: Immediately after the flowering period.
  - Shrubs flowering between July and October: Back to old wood in winter.
- Rose bushes: Early spring to encourage basal growths and a balanced, compact habit.

#### 600 TRIMMING RAPIDLY ESTABLISHING HEDGES

- General: Allow to reach planned height as rapidly as possible.
- Form: Trim back lateral branches moderately.

#### 605 TRIMMING SLOWLY ESTABLISHING HEDGES

- Operations:
  - Timing: Cut back hard in June and September to encourage bushy growth down to ground level.
  - Form: Allow to reach planned dimensions only by gradual degrees, depending on growth rate and habit.

#### 620 REMOVAL OF DEAD PLANT MATERIAL

- Operations: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

#### 625 CLIMBING PLANTS

- Pruning: Remove excess growth, to ensure that signs, light fittings, doors and windows are kept clear at all times.
- Insecure growth: Attach to supporting wires or structures using wire ties.
- Supporting structures: Check and repair as necessary.

#### 630 DEAD AND DISEASED PLANTS

- Removal: inform client.
- Replacement: with other stock during defects, winter following 12 months maintenance and defects liability period.

#### 650 HAND WEEDING

- General: Remove weeds entirely, including roots.
- Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
- Completion: Rake area to a neat, clean condition.

- Mulch: Reinstate to original depth.

#### 690 MAINTENANCE OF LOOSE MULCH

- Thickness (minimum): 50mm
  - Top up: at end of defects period.
- Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.
- Weeding: Remove weeds growing on or in mulch by hand weeding

### **TREE WORK**

#### 810 TREE WORK GENERALLY

All tree protection of existing trees is to follow arboricultural method statement and any required tree works are also to accord with an agreed arboricultural method statement and specification.

### **HARD LANDSCAPE AREAS/FENCING**

#### 910 HARD SURFACES AND GRAVEL AREAS

- Hard surfaces: Remove litter, leaves, weeds and other debris by manual means.
- Surface gutters and channels: Remove mud, silt and debris.
- Drainage gullies: Empty traps and flush clean.
- Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
- Repairs to all pavings: In accordance with the original paving specification
- Stain removal: In accordance with BS 7370-2, table 4.

#### 930 GRAFFITI REMOVAL

- Method: notify and agree method with client.

### **Q37 Green roofs**

#### **To be read with Preliminaries/General conditions GENERAL**

See proposals by Hester Architects for Green Roof build up and performance requirements. Specific landscape related elements for Extensive Growing Medium, Irrigation, Soil ameliorants etc are covered elsewhere in this Soft Works Specification, in the Hard Works Specification and in the tender drawings.

**APPENDIX**     Bauder intensive substrate soils sheet  
                      Bauder intensive roof garden maintenance guide