PRP

AA1692C
82-84 Otterfield Road
Landscape Speci ication

Issued for Approval
Rev A

09 Jan 2019

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# AA1692 Landscape Specification

**09 Jan 2019**

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# Q28 Topsoil and soil ameliorants

To be read with Preliminaries/ General conditions.

**PRODUCTS**

300 PREPARATION MATERIALS GENERALLY
- Purity: Free of pests and disease.
- Foreign matter: On visual inspection, 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.
- 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.

315 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.
- Classification: Multipurpose.
  - Grade: Within the parameters of 'sandy loam' textural class.
- Source: Local, to approval of landscape architect or equivalent.
  - Product reference: Submit proposals.

340A SPECIAL IMPORTED TOPSOIL AND/ OR GROWING MEDIUM TO TREE PIT IN HARD PAVED AREA
- Type: Urban tree sand.
- Source: Heicom UK, Michael Queree, 4 Frog Lane, Tunbridge Wells, Kent, TN1 1YT.
  - Product reference: Heicom tree sand.

**EXECUTION**

605 SITE INVESTIGATION
- Report: See section A12.

610 TOPSOIL ANALYSIS
- Soil to be analysed: Imported topsoil.
- Soil analyst: NAMAS accredited.
- Samples: Collect in accordance with BS 3882.
- Submit:
  - Declaration of analysis: Chemical analysis and contaminants.
  - Report detailing soil analyst's recommendations.

620 IMPORTING TOPSOIL
- Give notice: Before stripping topsoil for transfer to site.
  - Notice period: 7 days.

625 SAMPLE LOADS FOR IMPORTED TOPSOIL
- Deliver to site a sample load: of not less than 5 $m^3$.
- Give notice: Allow inspection before making further deliveries to site. Retain for comparison with subsequent loads.
  - Notice period: 7 days.

650 NOTICE
- Give notice before:
  - Setting out.
  - Spreading topsoil.
  - Applying herbicide.
  - Applying fertilizer.
  - Visiting site during maintenance period.
- Period of notice: One week.

655 MECHANICAL TOOLS
- Restrictions: Do not use within 100 mm of tree and plant stems.

660 GRADING SUBSOIL
- General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
- Loosening:
  - Light and non-cohesive 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.
- Areas of thicker topsoil: Excavate locally.
- Avoid over compaction.

665 SUBSOIL SURFACE PREPARATION
- General: Excavate and/ or place fill to required profiles and levels, as section D20.
- Loosening:
  - Light and non-cohesive 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 75 mm.
- Remove from site: Arisings, contaminants and debris and Builders rubble.

670 INSPECTING FORMATIONS
- Give notice: Before spreading topsoil for lawn areas and planting beds.
- Notice period: 7 days.

700 GRADING OF TOPSOIL
- Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage.
  - Hollows and ridges: Not permitted.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.
- Give notice: If required levels cannot be achieved by movement of existing soil.

705 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 wetter than the plastic limit less 3%, to BS 1377-2.

710 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): 450 mm.
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 LOOSE TIPPING OF TOPSOIL

- 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.

720 FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT

- Above adjoining paving or kerbs: 20 mm.
- Below dpc of adjoining buildings: Not less than 150 mm.
- Shrub areas: Higher than adjoining grass areas by 25 mm.
- Within root spread of existing trees: Unchanged.
- Adjoining soil areas: Marry in.
- Thickness of turf or mulch: Included.

# 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: 1 week.

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

**PREPARATION**

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: 10 -15 mm.
    Fine lawn areas: 10 mm.
- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

430 TURFING GENERALLY

- Time of year: Autumn or early winter.
- 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: 35% Finely sifted topsoil, 35% Compost, 30% Sand.
- Watering: Thoroughly water completed turf immediately after laying. Check that water has penetrated into the soil below.

440 TURFING ON BANKS EXCEEDING 30° SLOPE

- Turf configuration: Diagonal or horizontal.
- Securing turfs:
  - Fixings: Submit proposals.
  - Frequency of fixings: Each turf.
- Removal of fixings: At completion.

450 TRIMMING TURF

- Newly planted tree pits: Neatly cut away around individual trees.
  - Diameter: 800 mm.
  - Tree pit surface: Respread existing mulch.

565 TIMBER/ PLASTICS EDGINGS

- Material: Softwood board.
  - Size: 150 mm x 38 mm.
- Fixings: Nailed.
  - Pegs: 50 mm x 50 mm x 450 mm long.
  - Centres: 1200 mm.
  - Installation height: Flush.
- Curved boards: Closely spaced vertical grooves cut in the back to achieve smooth flowing lines.
- Preservative treatment: As section Z12 and Wood Protection Association commodity specification C3.
  - Type: To provide a 15 year service life.

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**

610 FAILURES OF SEEDING/TURFING

- Duration: Carry out the following operations from completion of seeding/ turfing until: practi cal completion.
- 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: The next suitable planting season.

# 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 75 mm.
- Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- Vegetation: Clear scrub to ground level by flail mowing and remove arisings; retain and protect trees indicated on drawings.
- 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 (except in 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.
- Wildflower plugs: Late August to mid November or March/ April.
- Aquatic plants: May/ June or September/ October.

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.

160A NOTICE
CONTRACTOR TO GIVE NOTICE TO PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANT SELECTION

- 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: One week.

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.
  - Certified materials: Mulches.
  - Give notice before ordering or using.

200A 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.
  - Standard: The National Plant Specification.
- Species: True to name.
- Origin/ Provenance: Preferably British; depending on current availability.
  Definition: Origin and Provenance have the meaning given in the National Plant Specification. Tree supplier for external planting to be confirmed by Landscape Architect.

- Specimen Tree supplier: or similar approved
  1. Deepdale Nurseries (tel: 01767 262636)
  2. Lorenz Von Ehren (tel: 0049 40 761 080)
  3. Lappen (tel: 0049 2157 8180)
  4. Van Den Berk Nurseries (tel: 0181 788 3924)
  5. Hillier Nurseries (Tel: 01794 368855)
  6. Whiting Landscapes (Tel: 01527 836 292)

- Shrub/Hedging supplier: or similar approved
  1. Robin tacchi (tel: 01953 681312)
  2. Hilliers (Tel: 01794 368855)
  3. Wyevale Nurseries (tel: 01432 352255)
  4. Johnsons of Whixley (tel: 01423 330234)

- Orchard Trees supplier: or similar approved
  1. Majestic Trees (Tel: 01582 843 881)
  2. Joseph Rochford Gardens Ltd. (Tel: 01707 261370)

215 PLANTS/ TREES - SPECIFICATION CRITERIA

- Name, forms, dimensions, provenance and other criteria: As scheduled and defined in the National Plant Specification.

216 PLANTS/ TREES - SPECIFICATION CRITERIA

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

225 BULBS/ CORMS/ TUBERS

- Condition: Firm, entire, not dried out or shrivelled.
- Health: Free from pests, diseases and fungus.
- Handling: Remove from packaging immediately.
- Storage: Permitted only when necessary.
  - Location: Well ventilated, dark, covered, rodent proof container, away from exhausts and fruit.
  - Duration: Minimum period.
  - Temperature: 18-21°C.

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.

245 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: None.

255 PLANTS/ TREES RESERVED AT SUPPLIER'S PREMISES

- Types/ Species: As plant schedule.
- Predelivery inspection: Give notice.
- Labelling: Identify inspected plants/ trees as reserved for use on this project.

260A 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.
  - Source nursery
- Such substituions shall be kept a minimum, if not acceptable, submission of further alternative may be required.
- Approval: Obtain written approval from LA and CA 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 polyethylene bags.
- Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped.
- Planting: Upright or well balanced with best side to front.

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

**PREPARATION OF PLANTING BEDS/ PLANTING MATERIALS**

300A HERBICIDE TO CLEAR OVERGROWN BEDS
- Herbicides, pesticides and other chemicals may only be used with the approval of the contract administrator. Use of chemicals shall be in accordance with all relevant guidelines and the manufacturer's recommendations.

305 WEED CONTROL
- Locations: Planting beds.
- General: Prevent weeds from seeding and perennial weeds from becoming established, by hand weeding.

375 CULTIVATION
- Compacted topsoil: Break up to full depth.
- Cultivation: Loosen, aerate and break up soil into particles of 2-8 mm.
  - Depth: 450 mm.
  - Timing: Within a few days before planting.
  - Weather and ground conditions: Suitably dry.
- Surface: Leave regular and even.
- Levels:
  - 25 mm above adjoining paving or kerbs;
  - 50 mm above adjoining lawns; and
  - Minimum 150 mm below dpc of adjoining buildings.
- Undesirable material brought to the surface: Remove visible weeds, roots and large stones with any dimension exceeding 50 mm.
- 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 TO SHRUB PLANTING
- Spacing: In regular, staggered rows.
- Density: As plant schedule.

405A SHRUB PLANTING PITS
- Timing: Excavate 1-2 days (maximum) before planting.
- Sizes: 150 mm wider than roots when fully spread and 300 mm deep.
- Pit bottom improvement Break up to a depth of 150 mm, incorporating 25 g of slow release fertilizer per planting pit.
- Backfilling material: Mix of topsoil excavated from pit, fresh topsoil and compost at manufacturers recommended rates.

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.

471 NATURALIZED HEDGES
- Planting: In trenches large enough to take full spread of roots. Set out plants evenly.

472 FENCING SUPPORT FOR NEW HEDGES
- Type: Timber post and general pattern wire mesh.
- Standard: To BS 1722-2.
- Height: 600 mm.
- Timing: Before planting hedge.
- Support: Lightly secure hedge plants to fence wires at appropriate intervals.

476A SHRUB, HERBACEOUS AND BULB BACKFILLING MATERIAL FOR PLANTING BEDS
- Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required:
- Ameliorant/ Conditioner: Well rotted compost.
  - Application rate: 3 $m^3$ per 10 $m^3$ of topsoil.

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.
- Top dressing: Not required.
  - Depth: N/A.

485A MULCHING PLANTING BEDS

- Material: Ornamental bark mulch.
  - Purity: Free of pests, disease, fungus and weeds.
- Preparation: Clear all weeds. Water soil thoroughly.
- Coverage: 75 mm depth.
- Finished level of mulch: 50 mm above adjacent grassed or paved areas.
- Supplier:  Melcourts or similar approved.
  - Product reference: Ornamental bark.
  - Size: 3-35mm.

487A SHRUB PROTECTION

- General: Ensure that protection methods do not impede natural movement of shrubs or restrict growth.
- All planted areas to be protected from pedestrian and vehicular traffic, inlcluding work by other trades from time of planting to practical completion.

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## PLANTING TREES

512A TREE PIT ACCESSORIES IN SOFT LANDSCAPE

- Locations: tree pits in soft landscape.
- Manufacturer: TBC by client
  - Product reference: Refer to schedule.
- Type: Perforated plastics irrigation pipe, 60 mm diameter, in circle above and around sides of rootball, with plastics cap. Pipe to touch root ball.

512B TREE PIT ACCESSORIES FOR TREE PIT IN HARD LANDSCAPE

- Locations: tree pits in hard landscape.
- Manufacturer: TBC
  - Product reference: Refer to Drawing
- Type: Perforated plastics irrigation pipe, 60 mm diameter, in circle above and around sides of rootball. 100x100mm aluminium inlet and stainless steel vent lid flush to tree grill. Pipe to touch root ball.

515 TREE PIT DRAINAGE

- Depth of excavation: Increase from specified size to allow for aggregate layer, with base slightly falling to outlet.
- Aggregate layer: Clean gravel or broken stone, with no fines, graded 40 to 20 mm.
  - Depth: 200 mm.
- Drainage pipes:
  - Type: Perforated plastics.
  - Diameter: 100 mm.
  - Position: Lay around perimeter of pit within aggregate layer.
  - Discharge: Connect to land drain as drawing ???.
- Geotextile filter:
  - Manufacturer: Terram.
  - Product reference: Standard Geotextile.
  - Position: Lay over aggregate before installing tree or backfill.
- Completed pits: Test for free drainage before planting.

525A SEMIMATURE TREES

- Standard: Prepare roots and transplant to BS 4043.
- Backfilling material: As clause 585.
- Support: Underground guying to BS 4043.
- Protection: Not required.
- Species and specification shown on planting plan.
- Contractor to check availablility of stock for each species.

586A TREE BACKFILLING MATERIAL IN SOFT LANDSCAPE

- Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required.
- Ameliorant/ Conditioner: Composted bark.
  - Application rate: 3 m³ per 10 m³ of topsoil.
- Fertilizer: Slow release.
  - Application rate: To manufacturer's/ supplier's recommendations.
- Laying: Place backfilling material around rootball in 150mm layers. Firm the soil as backfilling proceeds taking care not damage roots. Backfill at 1-2m rootable depth (300 mm topsoil/ 900 mm rootable subsoil) .

586B TREE BACKFILLING MATERIAL IN HARD LANDSCAPE

- Material: Greenleaf Arborsoil.
- Ameliorant/ Conditioner: Composted bark.
  - Application rate: 3 m³ per 10 m³ of topsoil.
- Fertilizer: Slow release.
  - Application rate: To manufacturer's/ supplier's recommendations.
- Laying: backfilled in layers. To manufacturer's/ supplier's instruction.

590A MULCHING TREES IN SOFT LANDSDCAPE

- Material: Ornamental bark mulch.
  - Purity: Free of pests, disease, fungus and weeds.
- Preparation: Clear all weeds. Water soil thoroughly.
- Coverage: In a circular area of 500 mm radius measured from the tree stem, 75mm depth.
- Finished level of mulch: 30 mm below adjacent grassed or paved areas.

590B MULCHING TREES IN TREE GRILL

- Material: selfbonding gravel.
  - Manufacturer: CED Ltd or equivalent.
  - Product: Super CEDEC
  - Size: 75mm
- Coverage: 1.2x1.2m pit area.
- Finished level of mulch: 100 mm below surrounding pavement surface level.
- Geotextile filter:
  - Manufacturer: [Terram].
  - Product reference: [Standard Geotextile].
  - Position: Lay over tree pit before installing selfbonding gravel.

**PROTECTING/ MAINTAINING/ MAKING GOOD DEFECTS**

710 MAINTENANCE

- Duration: Carry out the operations in the following clauses from completion of planting until t he end of the rectification period.
- Frequency of maintenance visits: Monthly during growing season.

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: During the next suitable planting season.

730 PROTECTIVE FENCING

- Fencing type: Cleft chestnut pale fencing to BS 1722-4.
  - Height: 1200 mm.
- Erection: On completion of planting.
- Removal: After planting is well established.

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.

750A 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 use of approved non-residual herbicides.
- 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.
- Firming up: Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.

755A PLANTING MAINTENANCE - FERTILIZER

- Time of year: March or April.
- Fertilizer: An approved organic fertilizer.
- Application: Evenly spread, carefully incorporating below mulch materials.
- Application rate: To manufacturer's recommendations.

760 PLANTING MAINTENANCE - PRUNING

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

780 MAINTENANCE INSTRUCTIONS

- General: Before end of the maintenance period, submit printed instructions recommending procedures to be established by the Employer for maintenance of the planting work for one full year: Provide a schedule of any ongoing maintenance problems experienced during the rectification period.

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: Refer to schedule.
  Depth (minimum): 50 mm.
- Trees: Remulch.
  Depth (minimum): 75 mm.

# Q35 Landscape maintenance

To be read with Preliminaries/ General conditions.

**GENERALLY**

105 MAINTENANCE OBJECTIVES
- Location: 82-84 Otter field Road
  - Duration: Five years.
- Aims:
  - Enhanced landscape quality;
  - Improved landscape visual amenity; and
  - Provide wildlife habitat and increase biodiversity.
- Restrictions: N/A.
- Results: Adequate establishment and continued thriving of all plants.

110 NOTICE
- Give notice before:
  - Application of herbicide.
  - Application of fertilizer.
  - Watering.
  - Each site maintenance visit.
- Period of notice: 7 days.

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

155 WATERING
- Supply: Potable mains water.
- Quantity: Wet full depth of topsoil .
- 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 ARISINGS
- General: Unless specified otherwise, dispose of arisings as follows:
  - Biodegradable arisings: Remove to recycling facility.
  - Grass cuttings: Remove to recycling facility.
  - Tree roots and stumps: Remove from site.
  - Shrub and tree prunings: Remove to recycling facility.
  - Litter and nonbiodegradable arisings: Remove from site.

180 CHIPPING OR SHREDDING
- General: Not permitted on site.

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

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.

235 BULBS AND CORMS IN GRASSED AREAS
- Before flowering: Do not cut.
- Interval between end of flowering and start of grass cutting (minimum): Six weeks.

237A Ornamental grasses
Ornamental grasses are to be puned once a year only, in Febuary, just before the emergence or new
growth. Their straw coloured folliage and dried flowers are to be retained throughout the winter season.
Only flower stalks collaping are to be removed.

250 LEAF REMOVAL
- Operations: Collect fallen leaves.
- Special requirements: Remove by hand raking.
- Disposal: Remove from site for recycling.

255 FIRST CUT OF ALL GRASSED AREAS
- Height of initial growth: 75 mm.
- Preparation:
  - Debris and litter: Remove.
  - Stones and earth clods larger than 25 mm in any dimension: Remove
- Height of first cut: 50 mm.
- Mower type: Contractor's choice.
- Arisings: Remove.

260 MOWING LAWNS
- Grass height: Maintain between 35 and 40 mm.
- Arisings: Remove.

265 MOWING GENERAL AREAS
- Grass height: Maintain between 35 and 40 mm.
- Arisings: Remove.

272 MAINTAINING GRASSED AREAS WITH PERENNIAL WILD FLOWERS
- Preparation: Before each cut remove litter and debris.
- Height and frequency of cut in first growing season:
  - Time of first cut: June/ July.
  - Height of first cut: 50 mm .
  - Frequency of subsequent cutting (minimum): Every six to eight weeks until autumn.
  - Height of growth permitted (maximum): 100 mm.
- Height and frequency of cut in second growing season:
  - Time of cut: Single cut in October.
  - Height of cut: 75 mm.
- Trimming: All edges.
  - Arisings: Remove.
- Watering: When instructed.

275 CUTTING SUMMER FLOWERING WILD FLOWER MEADOWS
- Times of year/ Frequency of cutting: July and September.
- Height of cut: 75 mm.
- Arisings: Remove.

285 TOP DRESSING
- Location: All lawns.
- Timing: November.
- Material: Compost/ sand/ loam mix.
- Supplier: Contractor's choice.
  - Product reference: Contractor's choice.
- Declaration of analysis: Submit.
- Additional analyses: Not required.
- Samples: Not required.
- Application rate: 1.5 kg/m².

290 ROLLING
- Location: All lawns.
- Timing: February or March, after first mowing.
- Roller: 100 kg (2 cwt).
- Operations: Consolidate turf and reduce frost heave.

295 SPIKING
- Location: All lawns.
- Timing: February or March, after first mowing.
- Operations: Aerate the soil and improve surface water penetration.
- Depth (minimum): 75 mm into soil.

300 SCARIFYING
- Location: All lawns.
- Timing: February or March, before first cut.
- Operations: Relieve thatch conditions and remove dead grass.
- Depth (maximum): 25 mm into soil.
- Arisings: Remove.

350 FERTILIZER - SPRING APPLICATION
- Type: Organic.
- Application rate: 60 g/m².

360 FERTILIZER - AUTUMN APPLICATION
- Type: Organic.
- Application rate: 60 g/m².

380 REINSTATEMENT OF DAMAGED LAWNS
- Damaged turf: Remove to a depth of 40 mm.
- Preparation: Cultivate substrate to a fine tilth.
- Reinstatement: Contractor's choice of returfing or topsoiling and reseeding:
  - Returfing: Quality and appearance to match existing.
  - Reseeding: Fill with fine topsoil to BS 3882 multi purpose class, 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 reseeding:
  - 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: One year.
- Weed control:
  - Method: Keep planting beds clear of weeds by maintaining full thickness of mulch.
  - 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.
- Watering: When instructed.

502 ESTABLISHMENT OF NEW PLANTING - FERTILIZER

- Time of year: March or April.
- Type: Organic.
- Spreading: Spread evenly. Carefully lift and replace any mulch materials.
  - Application rate: As manufacturer's recommendations.

510 TREE STAKES AND TIES

- Inspection/ Maintenance times: As scheduled and immediately after strong winds.
- 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.
- Removal of stakes and ties: During spring when no longer required to support the tree.
  - Fill stake holes with lightly compacted soil.

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.

535 TREE GRILLES

- Operations: Lift grilles, remove weeds, adjust levels as necessary and lightly compact. Refit grilles, refill interstices and lightly compact to correct level.
- - Material for making up levels and refilling: Horticultural grit.

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.

555 PRUNING TREES AND SHRUBS

- Standard: To BS 7370-4.
- Special requirements: None.

930 GRAFFITI REMOVAL

- Method: Air abrasion.
- Subsequent treatment: Transparent, two part, anti-graffiti coating.
  - Finish: Matt.

931A STEEL GATES

- Check all steel gates for functioning and replace or repair broken gates immediately.
- Check fixings, latches and lock mechanisms all work correctly.
- Timing: Check all gates on a quarterly basis.

932A STEEL BOLLARDS/ CYCLE STANDS/ BINS

- Cleaning: Inspect and maintain cleanness.
  - Frequency: minimum every 3 months.
  - Method: using warm soapy water applied with a lint free cloth. Avoid the use of abrasive cleaners as they may damage the surface finish.
- Repair: to repair chipping and scratch as necessary.
  - Method: As per manufacture's recommendations.

933A PRE-CAST STONE CUBE BOLLARD/ SEATING/ PLAY ITEMS

- Cleaning: Inspect and maintain cleanness.
  - Frequency: minimum every 3 months.
  - Method: As per manufacture's recommendations. Avoid the use of abrasive cleaners as they may damage the surface finish.
- Repair: to repair or reseal chipping and scratch as necessary.
  - Method: As per manufacture's recommendations.

943A REPAIRS

- Paving - All damaged paving surfaces (granite, concrete,resin bound, metal gratings) are required to have
  an emergency repair within 24 hours, followed by a full repair within 4 weeks.
- Pedestrian Railings/Glass Panels - Emergency repairs to be undertaken within 24 hours, followed by full
  repair within 2 weeks.
- Precast Concrete - Emergency repairs to be undertaken within 24 hours, followed by full repair within 4
  weeks.

# Q40 Fencing

To be read with Preliminaries/ General conditions.

**FENCING SYSTEMS**

310A CLOSE BOARDED FENCING

- Manufacturer: Contractor's choice.
  - Product reference: Contractor's choice.
- Standard: To BS 1722-5, type PW 180A.
- Height: 1800 mm.
- Wood: Softwood.
  - Treatment: To provide a 30 year service life·.
  - Finish: Painted, RAL 8019 Grey Brown (low gloss).
- Boards/ rails: As PRP drawing
- Posts: Wood.
- Centres of posts (maximum): 1500mm.
- Method of setting posts: 500 mm square or round holes, 600 mm deep filled to not less than half the depth with concrete .
- Accessories: Wood gravel board.
- Conformity: Submit manufacturer's and installer's certificates, to BS 1722-5.
- Drawing reference: PRP drawing 5015-YEW 01

310B CLOSE BOARDED FENCING WITH TRELLIS

- Manufacturer: Contractor's choice.
  - Product reference: Contractor's choice.
- Standard: To BS 1722-5, type PW 180B.
- Height: 1200 mm.
- Wood: Softwood.
  - Treatment: To provide a 30 year service life·.
  - Finish: Painted, RAL 8019 Grey Brown (low gloss).
- Boards/ rails: As PRP drawing .
- Posts: Wood.
- Centres of posts (maximum): 1500mm.
- Method of setting posts: 500 mm square or round holes, 600 mm deep filled to not less than half the depth with concrete .
- Accessories: Wood gravel board and trellis as shown on detail.
- Conformity: Submit manufacturer's and installer's certificates, to BS 1722-5.
- Drawing reference: PRP drawing