



Green Park Highways Improvement

Landscape specification

September 2022

91100-PLA-PUB-XX-SP-LS-00001
Rev. P03

NOTE:

Wherever manufacturer or products are specified by proprietary name, the phrase 'or equivalent approved' is deemed included.

Rev.	Date	Description	Author	Checked
P00	Apr-22	First issue.	KG	GH
P01	05/05/22	Material amendments.	KG	GH
P02	15/09/22	Revision	CC	GH
P03	29/09/22	Revision	CC	GH

PLACE Design & Planning Ltd

Mapletree

Green Park Highways Improvements

911_SP_001 Landscape specification

29-09-2022

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D20

Excavating and filling

Generally/the site

155A No Dig Construction

1. Landscape works to be in line with 'No Dig Construction' methods within the Root Protection Areas (RPAs).
2. Existing surfaces to be re-profiled and prepared for new surfaces (e.g. resin bound).
3. Proposed landscape areas to be built-up to accommodate new surfaces (e.g. resin bound).

Clearance/excavating

164 Tree roots

1. Protected area: Do not cut roots within precautionary protection area.
 - 1.1. Size of area: Branch spread of the tree.
2. Excavation in protected area
 - 2.1. Method: By hand
 - 2.2. Backfill as soon as possible or temporarily line with polyethylene sheet to reduce evaporation.
3. Outside protected area: Give notice of roots exceeding 25 mm and do not cut without approval.
4. Cutting
 - 4.1. Make clean smooth cuts with no ragged edges.
 - 4.2. Pare cut surfaces smooth with a sharp knife.
 - 4.3. Treatment of cut roots: Not required
5. Backfill: As dug material, enriched with amelioration as section Q31

Disposal of materials - Not Used

Filling

530 Placing fill

1. Surfaces of excavations and areas to be filled: Free from loose soil, topsoil, organic material, rubbish and standing water.
2. Freezing conditions: Do not place fill on frozen surfaces. Remove material affected by frost. Replace and recompact if not damaged after thawing.
3. Adjacent structures, membranes and buried services
 - 3.1. Do not overload, destabilise or damage.
 - 3.2. Submit proposals for temporary support necessary to ensure stability during filling.
 - 3.3. Allow 14 days (minimum) before backfilling against in situ concrete structures.
4. Layers: Place so that only one type of material occurs in each layer.
5. Earthmoving equipment: Vary route to avoid rutting.

Bioremediation - Not Used

'specification for highway works: earthworks specification' appendices - Not Used

Ω End of Section

Q23

Gravel/ hoggin/ woodchip/ resin bound roads/ pavings/ overlays

Types of surfacing

190A Porous bonded chippings for pedestrian areas

1. Description: S2
2. Prepare existing surface: Remove 120mm of existing surface
3. Granular sub-base: MOT Type 3
 - 3.1. Compacted thickness: 80 mm
4. Geofabric: 2.4 mm
5. Addagrid: 7.1 mm
6. Surface course
 - 6.1. Slip/ skid resistance: Submit proposals
 - 6.2. Chippings: Terrabase Classic, nominal size 10mm.
 - 6.2.1.Colour: Golden Beach
 - 6.2.2.Compacted thickness:: 30 mm
 - 6.2.3.Manufacturer:: Addagrip Terraco Ltd, Addagrip House, Bell Lane Industrial Estate, Uckfield, East Sussex, TN22 1QL.
T: 01825 761333
W: www.addagrip.co.uk
 - 6.3. Application: Porous, and suitable for 'No Dig Construction'
7. Completion: Before trafficking, remove excess chippings.

191A Porous bonded chippings for pedestrian areas

1. Description: S3
2. Prepare existing surface: Regulate existing surface as required (in preparation for No Dig build-up above)
3. Granular sub-base: MOT Type 3
 - 3.1. Compacted thickness: 80 mm
4. Geofabric: 2.4 mm
5. Addagrid: 7.1 mm
6. Surface course
 - 6.1. Slip/ skid resistance: Submit proposals
 - 6.2. Chippings: Terrabase Classic, nominal size 10mm.
 - 6.2.1.Colour: Golden Beach
 - 6.2.2.Compacted thickness:: 30 mm
 - 6.2.3.Manufacturer:: Addagrip Terraco Ltd, Addagrip House, Bell Lane Industrial Estate, Uckfield, East Sussex, TN22 1QL.
T: 01825 761333
W: www.addagrip.co.uk
 - 6.3. Application: Porous, and suitable for 'No Dig Construction'
7. Completion: Before trafficking, remove excess chippings.

Laying

315 Materials

1. **Compatibility:** Chippings suitable for use with respective binders/ emulsions/ resin/ epoxy.

320 Samples

1. **Submit:** Representative samples of all aggregates.

340 Laying generally

1. **Channels, gullies, etc:** Keep clear.
2. **Finished surfaces**
 - 2.1. **Lines and levels:** To prevent ponding.
 - 2.2. **Overall texture:** Even.
 - 2.3. **State at completion:** Clean.

350 Cold weather working

1. **Frozen materials:** Do not use.
2. **Freezing conditions:** Do not lay pavings.
3. **Cold bituminous surface dressings:** Do not apply when ambient temperature is below 10°C.
4. **Other dressings or overlays:** As manufacturers' recommendations.

380 Laying granular surfaces in pedestrian areas and cycle tracks

1. **Permissible deviation from required levels, falls and cambers (maximum):** ±12 mm.
2. **General:** Spread and level in 100 mm maximum layers. As soon as possible, compact each layer.
3. **Dry weather:** Lightly water layers during compaction.

390 Protection from traffic and plant

1. **Paved areas:** Restrict access to prevent damage.

Completion - Not Used

Ω End of Section

Q28 Topsoil and soil ameliorants

System outline

135 Planting bed topsoil system

1. Description: to planting bed
2. Composition
 - 2.1. Mulch:: 75mm layer of ornamental grade bark mulch
 - 2.2. Topsoil: 350-750mm min layer of imported as clause 315 across site. Imported sub-soil BS8601:2013 back filled in max 200mm horizons and compacted by treading
 - 2.3. Subsoil:: 400-500mm min layer of Imported subsoil layer as per Q28.320
 - 2.4. Ameliorants: Organic materials and BSI PAS 100 composted material.
 - 2.5. Accessories: None

155 Mulching and top dressing system

1. Description: to planting bed
2. Composition
 - 2.1. Material: Aggregates, Organic materials and Sanitized and stabilized composted materials certified to PAS 100

Products

300 Preparation materials generally

1. Purity: Free of pests and disease.
2. 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.
3. Contamination: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - 3.1. Corrosive, explosive or flammable.
 - 3.2. Hazardous to human or animal life.
 - 3.3. Detrimental to healthy plant growth.
4. Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
5. Objectionable odour: None.
6. Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

305 Permitted materials

1. Materials: Composted bark and BSI PAS 100 composted material
2. Give notice: before ordering or using.
3. Declaration of compliance in accordance with BS EN 13650: Required

310 Materials not permitted

1. Materials: Peat; product containing peat and River and canal dredgings

315 Imported topsoil to BS 3882

1. **Description:** to planting bed
2. **Quantity:** Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
3. **Standard:** To BS 3882.
4. **Classification:** Premium grade
 - 4.1. **Soil textural class** to BS 3882, Figure 1: Sandy loam
5. **Source:** Submit proposals
 - 5.1. **Product reference:** Submit proposals

355 Organic materials

1. **Description:** To planting beds for top dressing/ mulching
2. **Type:** Melcourt Industries Limited, Boldridge Brake, Long Newton, Tetbury, Gloucestershire, GL8 8RT. Tel: +44(0)1666 502711
Fax: +44(0)1666 504398, Email: mail@melcourt.co.uk
3. **Source:** Processed from natural, sustainably produced British pine, Douglas Fir and larch bark
 - 3.1. **Product reference:** Ornamental Bark Mulch
 - 3.2. **Size:** Nominal particle size range 5 to 35mm
4. **General:** Ensure that protection methods do not impede natural movement of shrubs or restrict growth

360 Sanitized and stabilized composted materials certified to PAS 100

1. **Description:** For top dressing/mulch
2. **Standard:** In accordance with PAS 100
3. **Source:** Submit proposals
 - 3.1. **Product reference:** Submit proposals
4. **Texture:** Friable.
5. **Objectionable odour:** Not permitted.
6. **Compost Certification Scheme certification:** Not required
7. **Declaration of analysis:** Submit.
8. **Additional analyses:** Not required
9. **Samples:** Submit details of recent chemical and physical analysis before ordering

Execution

610 Topsoil analysis

1. **Soil to be analysed:** Stockpile of topsoil material before it is brought to site
2. **Soil analyst:** To be agreed
3. **Samples:** Collect in accordance with BS 3882.
4. **Submit**
 - 4.1. **Declaration of analysis:** In accordance with BS 3882, clause 6 and Table 1.
 - 4.2. **Additional analysis:** Not required
 - 4.3. **Report detailing soil analyst's recommendations.**

620 Importing topsoil

1. **Give notice:** Before stripping topsoil for transfer to site.

- 1.1. Notice period: 14 days

625 Sample loads

1. Description: For imported subsoil
2. Deliver to site a sample load: of 5 kg
3. Give notice: Allow inspection before making further deliveries to site. Retain for comparison with subsequent loads.
 - 3.1. Notice period: 7 days

630 Documentation for imported topsoil

1. Description: to planting bed
2. Timing: Submit at handover.
3. Contents
 - 3.1. Full description of all soil components.
 - 3.2. Record of source for all soil components.
 - 3.3. Record drawings showing the location and depth of all soils by type and grade.
 - 3.4. Declaration of analysis: in accordance with BS 3882, clause 6 and Table 1.
4. Number of copies: Two

635 Documentation for compost and composted materials

1. Description: to planting beds
2. Timing: Submit at handover.
3. Contents
 - 3.1. Full description of all compost components.
 - 3.2. Record of source for all compost components.
 - 3.3. Analyst's report for each test carried out.
 - 3.4. Declaration of compliance: in accordance with PAS 100 and BSI PD CR 13456.
4. Number of copies: Two

650 Notice

1. Give notice before
 - 1.1. Setting out.
 - 1.2. Spreading topsoil.
 - 1.3. Applying herbicide.
 - 1.4. Applying fertilizer.
 - 1.5. Visiting site during maintenance period.
2. Period of notice: 2 weeks

655 Mechanical tools

1. Restrictions: Do not use within 100 mm of tree and plant stems. Do not damage adjacent planting.

Works within canopy spread and existing trees should adhere to 'No Dig Construction' methods, careful hand digging is required.

675 Preparation of undisturbed topsoil

1. Standard: In accordance with BS 4428.
 - 1.1. Grading and cultivation: Category C

2. **Hard ground:** Break up thoroughly.
3. **Clearing:** Remove visible roots and large stones with a diameter greater than 50 mm.
4. **Areas covered with turf or thick sward:** Plough or dig over to full depth of topsoil.
5. **Fallow period (minimum):** Two months
 - 5.1. **Weed control:** At appropriate times re-cultivate at fortnightly intervals to suppress weed growth.

700 Grading of topsoil

1. **Topsoil condition:** Reasonably dry and workable.
2. **Contours:** Smooth and flowing, with falls for adequate drainage.
 - 2.1. **Hollows and ridges:** Not permitted.
3. **Give notice:** If required levels cannot be achieved by movement of existing soil.

705 Handling topsoil

1. **Standard:** In accordance with BS 3882.
2. **Aggressive weeds:** Give notice and obtain instructions before moving topsoil.
3. **Plant:** Select and use plant to minimize disturbance, trafficking and compaction.
4. **Contamination:** Do not mix topsoil with:
 - 4.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 4.2. Other grades of topsoil.
5. **Multiple handling:** Keep to a minimum. Use or stockpile topsoil immediately after stripping.
6. **Wet conditions:** Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall, or when the moisture content is greater than the plastic limit.

710 Spreading topsoil on:

1. **Description:** to planting bed
2. **Standard:** In accordance with BS 3882.
3. **Temporary roads/ surfacing:** Remove before spreading topsoil.
4. **Layers**
 - 4.1. **Depth (maximum):** 150 mm.
 - 4.2. Gently firm each layer before spreading the next.
5. **Depth after firming and settlement:** 450 mm
6. **Crumb structure:** Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 Loose tipping of topsoil

1. **Standard:** In accordance with BS 3882.
2. **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.

718 Final cultivation

1. **Description:** to planting bed
2. **Compacted topsoil:** Break up to full depth.
3. **Tilth:** Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
4. **Depth:** 100 mm
5. **Particle size (maximum):** 2-8 mm

6. **Timing:** Within a few days before planting
7. **Weather and ground conditions:** Suitably dry.
8. **Surface:** Leave regular and even.
9. **Levels:** 25 mm above adjoining paving or kerbs
10. **Undesirable material brought to the surface**
 - 10.1. Remove visible weeds.
 - 10.2. Remove roots and large stones with any dimension exceeding 30 mm.

720 Finished levels of topsoil after settlement

1. **In relation to adjoining paving, kerbs or hard surfaces:** 25 mm above
2. **In relation to dpc of adjoining buildings:** Not less than 150 mm below.
3. **In relation to adjacent grass areas:** 25 mm above
4. **Seeded areas:** Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
5. **Sportsfields:** To even levels and within the following permitted deviations:
 - 5.1. From levels or gradients shown on drawings: ± 75 mm.
 - 5.2. From line between boning rods 30 m apart: ± 25 mm.
6. **Within root spread of existing trees and shrubs to be retained:** Do not dig or cultivate.
7. **Adjoining soil areas:** Marry in.
8. **Thickness of turf or mulch:** Included.

805 Applying soil ameliorant

1. **Description:** to planting bed
2. **Type:** Organic materials and BSI PAS 100 composted material.
3. **Fully incorporate into topsoil to a depth of 150 mm.**
4. **Application:** Spread evenly.
 - 4.1. **Timing:** Apply prior to cultivation.
 - 4.2. **Rate:** 5 m³/100 m²
5. **Timing:** Prior to cultivation.
6. **Other requirements:** None

Completion

920 Applying mulch

1. **Timing:** At end of the rectification period
2. **Watering:** Ensure that soil is thoroughly moistened prior to mulching, applying water where necessary.
3. **Planting beds:** Re-mulch.
 - 3.1. **Depth (minimum):** 75 mm
4. **Trees:** Remulch.
 - 4.1. **Depth (minimum):** 75 mm
5. **Container planting:** Remulch.
 - 5.1. **Depth (minimum):** 50 mm

Ω End of Section

Q31 External planting

General information/ requirements

112 Site clearance generally

1. **General:** Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
2. **Stones:** Remove those with any dimension exceeding 50 mm.
3. **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
4. **Vegetation:** Remove existing trees and clear scrub to ground level by flail mowing and remove arisings
5. **Large roots:** Works within Root Protection Areas should adhere to 'No Dig Construction' methods
6. **Additional requirements:** Remove paving, sub base and any hard surface materials

118 Soil conditions

1. **Soil for cultivating and planting:** Moist, friable and (except in aquatic/ marginal planting) not waterlogged.
2. **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

1. **General:** Carry out the work while soil and weather conditions are suitable.
 - 1.1. **Strong winds:** Do not plant.

125 Times of year for planting

1. **Deciduous trees and shrubs:** Late October to late March.
2. **Conifers and evergreens:** September/ October or April/ May.
3. **Herbaceous plants (including marginal):** September/ October or March/ April.
4. **Container grown plants:** At any time if ground and weather conditions are favourable.
 - 4.1. **Watering and weed control:** Provide as necessary.
5. **Dried bulbs, corms and tubers:** September/ October.
6. **Green bulbs:** After flowering in spring.

130 Mechanical tools

1. **Restrictions:** Do not use within 100 mm of tree and plant stems.

Works within canopy spread and existing trees should adhere to 'No Dig Construction' methods, careful hand digging is required.

145 Watering

1. **Quantity:** Wet full depth of topsoil. 35L weekly applied, increasing or decreasing to account for weather conditions.
2. **Application:** Even and without damaging or displacing plants or soil.
3. **Frequency:** As necessary to ensure establishment and continued thriving of planting.

150 Water restrictions

1. **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

1. Give notice before
 - 1.1. Setting out.
 - 1.2. Applying herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Delivery of plants/ trees.
 - 1.5. Planting shrubs.
 - 1.6. Planting trees into previously dug pits.
 - 1.7. Watering.
 - 1.8. Visiting site during maintenance period.
2. Period of notice: Two weeks

170 Soil requirements

1. Type
 - 1.1. Planted beds: Planting bed soil system, as section Q28
 - 1.2. Tree pits, shrub pits and other backfilling: Plant pit backfilling soil system, as section Q28
 - 1.3. Mulch applied after planting: Mulching and top dressing system, as section Q28

200 Plants/ Trees – general

1. **Condition:** Materially undamaged, sturdy, healthy and vigorous.
2. **Appearance:** Of good shape and without elongated shoots.
3. **Hardiness:** Grown in a suitable environment and hardened off.
4. **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
5. **Budded or grafted plants:** Bottom worked.
6. **Root system and condition:** Balanced with branch system.
 - 6.1. Standard: The National Plant Specification
7. **Species:** True to name.
8. **Origin/ Provenance:** British grown
9. **Definition:** Origin and Provenance have the meaning given in the National Plant Specification.

215 Plants/ Trees – specification criteria

1. **Name, forms, dimensions, provenance and other criteria:** As scheduled and defined in the National Plant Specification (available on CS Design Software Limited's website).

235 Container grown plants/ Trees

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

245 Labelling and information

1. **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:
 - 1.1. Full botanical name.
 - 1.2. Total number.
 - 1.3. Number of bundles.
 - 1.4. Part bundles.
 - 1.5. Supplier's name.
 - 1.6. Employer's name and project reference.
 - 1.7. Plant specification, in accordance with scheduled National Plant Specification categories.
2. **Additional information:** Submit on request: Country of origin, Date supplied and consignment details or reference.

255 Plants/ Trees reserved at supplier's premises

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

260 Plant/ Tree substitution

1. **Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering:** Submit alternatives, stating:
 - 1.1. Price.
 - 1.2. Difference from specified plants/ trees.
2. **Approval:** Obtain before making any substitution. Approval from the LPA is required.

265 Plant handling, storage transport and planting

1. **Standard:** To CPSE 'Handling and establishing landscape plants'.
2. **Frost:** Protect plants from frost.
3. **Handling:** Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
4. **Plant packaging:** Coextruded polyethylene bags with black interior and white exterior
5. **Packaging of bulk quantities:** Pallets or bins sealed with polyethylene and shrink wrapped
6. **Planting:** Upright or well balanced with best side to front.

290 Surplus material

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

Plant containers - Not Used

Preparation of planting beds/ planting materials

305 Weed control

1. **Description:** For invasive non-native weeds
2. **Locations:** Planting bed
3. **General:** Prevent weeds from seeding and perennial weeds from becoming established, by hoeing.

Planting shrubs/ herbaceous plants/ bulbs

401 Regular plant layout

1. **Description:** to planting beds
2. **Spacing:** Equal spacing as planting schedule. drawings no:
3. **Density:** As plant schedule

405 Shrub planting pits

1. **Timing:** Excavate 1-2 days (maximum) before planting.
2. **Sizes:** Wide enough to accommodate roots when fully spread and 75 mm deeper than root system
3. **Pit bottom improvement** Break up to a depth of 150 mm, incorporating soil ameliorant/ conditioner at 50 g/m².

480 After planting

1. **Watering:** Immediately after planting, thoroughly and without damaging or displacing plants or soil.
2. **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.
3. **Top dressing:** Mulching and top dressing system, as section Q28
 - 3.1. **Depth:** 75 mm

Planting trees

500 Tree planting

1. **Standard:** Prepare trees and transplant in accordance with BS 4428

505 Tree pits

1. **Sizes:** Wide enough to accommodate roots when fully spread, or 1000mm diameter (whichever is greater), and 750mm (min) deep
2. **Sloping ground:** Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
3. **Excavated material:** Remove arisings
4. **Pit bottoms:** Excavate with slightly raised centre: Shape up using compacted subsoil to ensure.
 - 4.1. **Treatment:** Soil ameliorant worked into pit bottoms
5. **Pit sides:** Scarify.
6. **Backfilling material:** Topsoil and subsoil as section Q28

512 Tree pit irrigation and ventilation accessories

1. **Locations:** to tree pit
2. **Manufacturer:** GreenBlue Urban Ltd
Northpoint
Compass Park
Junction Road
Bodiam
East Sussex
TN32 5BS
[+44 \(0\)1580 830800](tel:+441580830800)
enquiries@greenblueurban.com
www.greenblue.com

- 2.1. Product reference: Rootrain Urban Irrigation System
3. Type: Perforated plastics irrigation pipe with inlet
4. Pipe diameter: 60 mm
5. Ring diameter: 3000 - 5000mm
6. Inlet: Black plastics
7. Installation
 - 7.1. Pipe: Lay in loop above root ball with slight fall away from inlet pipe. Trim length to ensure a close fit in the tree pit. Connect both ends of pipe securely into plastics tee junction on inlet.
 - 7.2. Top cap of inlet: Protruding slightly above finished surround level.
 - 7.3. Backfill material: Carefully compact in layers.

550 Double staking for

1. Description: ALL TREES
2. Staking
 - 2.1. Position: Either side of tree position and perpendicular to wind direction.
 - 2.2. Driving: Vertically at least 300 mm into bottom of pit before planting.
 - 2.3. Backfilling: Consolidate material around stake.
 - 2.4. Firming: Sufficiently firm to prevent movement of the rootball/ rootstock.
3. Height of stakes: Cut off at approximately one third of the height of the clear stem of tree
4. Horizontal bracing: Rubber belting with spacers
 - 4.1. Fixing: Firmly fix using nails on windward side of tree and as close as possible to the stem without making contact with the bark. Position cross bar horizontally and 25 mm from top of stakes
5. Ties: Adjustable
6. Tying: Secure rubber belting around tree stem firmly without causing constriction or chafing
7. Nails for fixing ties, belts and webbing: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
8. Nails for fixing cross bars: Contractor's choice

Woodland/ matrix/ buffer zone planting

680 Setting out

1. Planting density: As drawing 91100-PLA-PUB-XX-DR-LS-00200
2. Layout: Random groups of no less than 5 or more than 7 of the same species, ensuring that no three plants are aligned in any one direction.

Protecting/ maintaining/ making good defects

710 Maintenance

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

720 Failures of planting

1. Defects due to materials or workmanship not in accordance with the Contract: Plants/ trees/ shrubs that have failed to thrive.
 - 1.1. Rectification: Replace with equivalent plants/ trees/ shrubs.

2. **Replacements:** To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
3. **Timing of making good:** Appropriate to growing seasons for replacement plants.

740 Cleanliness

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

750 Planting maintenance generally

1. **Weed control:** Maintain weed free area around each tree and shrub.
 - 1.1. **Diameter (minimum):** The larger of 1 m or the surface of original planting pit.
 - 1.2. **Keep planting beds clear of weeds:** By maintaining full thickness of mulch
2. **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.
3. **Precautions:** Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
4. **Firming up:** Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
5. **Trees:** Spray crown when in leaf during warm weather.
 - 5.1. **Timing:** After dusk.
6. **Tree accessories:** Check condition of stakes, ties, guys, guards and irrigation and ventilation systems. Remove tree ties/ stake after 3 years if the tree is established.
 - 6.1. **Broken or missing items:** Replace.
 - 6.2. **Loose guys:** Re-firm anchor points and adjust as necessary to provide support to the tree.
 - 6.3. **Damage to bark:** Cut back neatly with sharp knife. Prevent further damage.
 - 6.4. **Frequency of checks:** At each scheduled maintenance visit
7. **Watering:** Quantity: Wet full depth of topsoil as required for healthy establishment and continued thriving of planting. For tree planting, 35L weekly applied, increasing or decreasing to account for weather conditions.

760 Planting maintenance – pruning

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

780 Maintenance instructions

1. **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

1. **Timing:** At end of the maintenance period.
2. **Watering:** Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
3. **Planting beds:** Remulch.

4. Depth (minimum): 75 mm
5. Trees: Remulch.
6. Depth (minimum): n/a

Ω End of Section

Q35 Landscape maintenance

Generally

105 Maintenance objectives

1. Location: All external landscape areas
 - 1.1. Duration: 5 years
2. Aims: Improved landscape visual amenity, Enhanced landscape quality
3. Restrictions: None
4. Results: Improved landscape visual amenity, Enhanced landscape quality

110 Notice

1. Give notice before
 - 1.1. Application of herbicide.
 - 1.2. Application of fertilizer.
 - 1.3. Watering.
 - 1.4. Each site maintenance visit.
2. Period of notice: 2 weeks

140 Control of mammalian pests

1. Specialist firms: Submit proposals
 - 1.1. Method: Submit proposals

155 Watering

1. Supply: Potable mains water
2. Quantity: Quantity: Wet full depth of topsoil as required for healthy establishment and continued thriving of planting. For tree planting, 35L weekly applied, increasing or decreasing to account for weather conditions.
3. Application: Do not damage or loosen plants.
4. Compacted soil: Loosen or scoop out, to direct water to rootzone.
5. Frequency: As necessary for the continued thriving of all planting.

160 Water restrictions

1. 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

1. General: Unless specified otherwise, dispose of arisings as follows:
 - 1.1. Biodegradable arisings: Remove to recycling facility
 - 1.2. Grass cuttings: Remove to recycling facility
 - 1.3. Tree roots and stumps: Remove from site
 - 1.4. Shrub and tree prunings: Remove to recycling facility
 - 1.5. Litter and nonbiodegradable arisings: Remove from site

180 Chipping or shredding

1. General: Not permitted on site.

190 Litter

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

197 Cleanliness

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

Grassed areas - Not Used

Flower beds/ seasonal beddings - Not Used

Shrubs/trees/hedges

500 Establishment of new planting

1. Duration: 5 years
2. Weed control
 - 2.1. Method: Keep planting beds clear of weeds by hoeing and screefing, and maintaining full thickness of mulch.
 - 2.2. 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.
3. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
4. Watering: As schedule and when instructed

510 Tree stakes and ties

1. Inspection/ Maintenance times: As scheduled and immediately after strong winds
2. Stakes
 - 2.1. Replace loose, broken or decayed stakes to original specification.
 - 2.2. 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.
3. Ties: Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing.
 - 3.1. Where chafing has occurred, reposition or replace ties to prevent further chafing.
4. Removal of stakes and ties: When instructed, and during spring when no longer required to support the tree. Remove tree ties/ stake after 3 years if the tree is established.
 - 4.1. Fill stake holes with lightly compacted soil.

520 Refirming of trees and shrubs

1. Timing: After strong winds, frost heave and other disturbances.
2. Refirming: Tread around the base until firmly bedded.
3. 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.

537 Nesting wild birds

1. Survey: Before starting hedge or tree work during the period of February to August (inclusive), carry out a survey by a qualified ecologist and submit report

2. **Accidental disturbance:** Report immediately.

540 Pruning generally

1. **Pruning:** In accordance with good horticultural and arboricultural practice.
 - 1.1. **Removing branches:** Do not damage or tear the stem or bark.
 - 1.2. **Wounds:** Keep as small as possible and cut cleanly back to sound wood.
 - 1.3. **Cutting:** Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.
 - 1.4. **Larger branches:** Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
2. **Appearance:** Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well-balanced natural appearance.
3. **Tools:** Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
4. **Disease or infection:** Give notice if detected.
5. **Growth retardants, fungicide or pruning sealant:** Do not use unless instructed.

545 Pruning of excessive overhang

1. **Timing:** As instructed
2. **Operations:** Branches will be pruned/ removed to ensure clearance of 2.75m above paths and 5.5m above the road statutory clearance heights.
3. **Special requirements:** Allow ground cover plants to partially overlap paths and lawns

555 Pruning trees and shrubs

1. **Standard:** To BS 3998: 2010
2. **Special requirements:** None

620 Removal of dead plant material

1. **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.

630 Dead and diseased plants

1. **Removal:** As soon as possible
2. **Replacement:** In the next scheduled round of replacement planting, In the next suitable planting season

645 Weed control generally

1. **Weed tolerance:** At all times, weed cover less than 5% and no weed to exceed 100 mm high
2. **Adjacent plants, trees and grass:** Do not damage.

650 Hand weeding

1. **General:** Remove weeds entirely, including roots.
2. **Disturbance:** Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
3. **Completion:** Rake area to a neat, clean condition.
4. **Mulch:** Reinstate to original depth.

685 Soil level adjustment

1. **Level of soil/mulch at edges of beds:** Reduce to 50 mm below adjacent grass or hard surface.
 - 1.1. **Arisings (if any):** Spread evenly over the bed.

690 Maintenance of loose mulch

1. **Thickness (minimum):** 75 mm
 - 1.1. **Top up:** Twice per year
2. **Mulch spill on adjacent areas:** Remove weeds and rubbish and return to planted area.
3. **Weeding:** Remove weeds growing on or in mulch by hand weeding.

695 Fertilizing established trees and shrubs

1. **Time of year:** During February or March
2. **Type of fertilizer:** Organic slow release
3. **Application:** Spread evenly.
 - 3.1. **Rate:** As manufacturer's recommendations

Tree work

815 Additional work

1. **Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention:** Give notice if detected.

825 Prevention of disease transmission

1. **Standard:** To BS 3998.

830 Cleaning out and deadwooding

1. **Remove**
 - 1.1. **Dead, dying, or diseased wood, broken branches and stubs.**
 - 1.2. **Rubbish, windblown or accumulated in branch forks.**
 - 1.3. **Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.**

835 Cutting and pruning generally

1. **Tools:** Appropriate, well maintained and sharp.
2. **Final pruning cuts**
 - 2.1. **Chainsaws:** Do not use on branches of less than 50 mm diameter.
 - 2.2. **Hand saws:** Form a smooth cut surface.
 - 2.3. **Anvil type secateurs:** Do not use.
3. **Removing branches:** Do not damage or tear the stem.
4. **Wounds:** Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
5. **Cutting:** Cut at a fork or at the main stem to avoid stumps wherever possible.
6. **Large branches:** Remove only with prior approval
 - 6.1. **Remove in small sections and lower to ground with ropes and slings.**
7. **Dead branches and stubs:** When removing, do not cut into live wood.
8. **Unsafe branches:** Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.

9. Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

860 Removing trees, shrubs and hedges

1. Standard: To BS 3998.
2. Existing services: Check for below and above ground services. Give notice if they may be affected.
3. Shrubs and smaller trees: Cut down and grub up roots.
4. Tree stumps
 - 4.1. Treatment: Cut as close to ground as possible and kill by applying a suitable herbicide into drilled holes immediately after felling
 - 4.2. Removal by winching: Give notice. Do not use other trees as supports or anchors.
5. Protection: Avoid damage to neighbouring trees, plants and property
6. Work near retained trees: Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.
7. Filling holes
 - 7.1. Material: Use as-dug material and/ or imported soil as required.
 - 7.2. Finishing: Consolidate and grade to marry in with surrounding ground level.

865 Bark damage

1. Wounds
 - 1.1. Do not attempt to stop sap bleeding.
 - 1.2. Bark: Remove ragged edges using a sharp knife.
 - 1.3. Wood: Remove splintered wood from deep wounds.
 - 1.4. Size: Keep wounds as small as possible.
2. Liquid or flux oozing from apparently healthy bark: Give notice.

Water areas - Not Used

Hard landscape areas/fencing

900 Snow clearance

1. Clearance: When instructed
2. De-icing: To roads and footpaths
 - 2.1. Material: Grit/ Rock salt to BS 3247
 - 2.2. Timing: When the road surface temperature falls to +1°C with forecast of freezing conditions and ice forming
 - 2.3. Application rate: Spread evenly at a rate of As manufacturer's recommendations.

910 Hard surfaces and gravel areas

1. Herbicide: Apply a suitable foliar acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings.
2. Hard surfaces: Remove litter, leaves and other debris.
3. Surface gutters and channels: Remove mud, silt and debris.
4. Drainage gullies: Empty traps and flush clean.
5. Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
6. Repairs to flexible bituminous pavings: In accordance with the original paving specification or BS 7370-2, clause 4.12.
7. Stain removal: In accordance with BS 7370-2, table 4.

930 Graffiti removal

1. Method: Submit proposals
2. Subsequent treatment: As required

Ω End of Section



Specification created using NBS Chorus