



Landscape Specification

Ashley Road East NBS Specification

Prepared on behalf of

Galliford Try

Ref: TH-ARE-01-001-L-002882-90-0850

Date: May 2022

Allen Pyke Associates Limited

Galliford Try Construction

Ashley Road East

Ashley Road East Landscape
Specification 2882-SP-01

12-05-2022

Revision _C1__ Hard and soft landscape at
ground, podium and upper roof level.

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F10 Brick/ block walling

Clauses

2 To be read with preliminaries/ general conditions.

Types of walling

355A Concrete common blockwork

1. Description: sub walls clad in porcelain at level 5 - engineer to confirm requirements (W1)
2. Blocks: To BS EN 771-3.
 - 2.1. Manufacturer: Refer to Structural Engineer.
3. Product reference: Refer to Structural Engineer.
 - 3.1. Freeze/ Thaw resistance: Frost resistant.
 - 3.2. Work sizes (length x width x height): Refer to Structural Engineer.
4. Mortar: As section Z21.
 - 4.1. Standard: Refer to Structural Engineer.
 - 4.2. Mix: Site batched and mixed mortar.
 - 4.3. Additional requirements: None.
5. Bond: Half lap stretcher.
6. Locations - refer to TH-ARE-01-001-L-002882-90-1052 and TH-ARE-01-001-L-002882-90-007

Testing - Not Used

Workmanship generally

440 Conditioning of concrete bricks/ blocks

1. Autoclaved concrete bricks/ blocks delivered warm from manufacturing process: Do not use.
2. Age of nonautoclaved concrete bricks/ blocks: Do not use until at least four weeks old.
3. Avoidance of suction in concrete bricks/ blocks: Do not wet.
 - 3.1. Use of water retaining mortar admixture: Submit details.

500 Laying generally

1. Mortar joints: Fill vertical joints. Lay bricks, solid and cellular blocks on a full bed.
2. AAC block thin mortar adhesive and gypsum block adhesive joints: Fill vertical joints. Lay blocks on a full bed.
3. Clay block joints
 - 3.1. Thin layer mortar: Lay blocks on a full bed.
 - 3.2. Interlocking perpend: Butted.
4. Bond where not specified: Half lap stretcher.
5. Vertical joints in brick and concrete block facework: Even widths. Plumb at every fifth cross joint.

635 Jointing

1. Profile: Consistent in appearance.

690 Adverse weather

1. **General:** Do not use frozen materials or lay on frozen surfaces.
2. **Air temperature requirements:** Do not lay bricks/ blocks:
 - 2.1. In cement gauged mortars when at or below 3°C and falling or unless it is at least 1°C and rising.
 - 2.2. In hydraulic lime:sand mortars when at or below 5°C and falling or below 3°C and rising, or as manufacturer's/ supplier's recommendations.
 - 2.3. In thin joint mortar glue when outside the limits set by the mortar manufacturer.
3. **Temperature of walling during curing:** Above freezing until hardened.
4. **Newly erected walling:** Protect at all times from:
 - 4.1. Rain and snow.
 - 4.2. Drying out too rapidly in hot conditions and in drying winds.

Additional requirements for facework

760 Appearance

1. **Brick/ block selection:** Do not use units with damaged faces or arrises.
2. **Cut masonry units:** Where cut faces or edges are exposed cut with table masonry saw.
3. **Quality control:** Lay masonry units to match relevant reference panels.
 - 3.1. **Setting out:** To produce satisfactory junctions and joints with built-in elements and components.
 - 3.2. **Coursing:** Evenly spaced using gauge rods.
4. **Lifts:** Complete in one operation.
5. **Methods of protecting facework:** Submit proposals.

Ω End of Section

M40

Stone/concrete/quarry/ceramic tiling/mosaic

Clauses

5A Tiling to

1. LOW concrete blockwork walls at 5th floor (W1)
2. Tiles: Porcelain
 - 2.1. Manufacturer/ Supplier: TBC: Kinorigo T: +44 (0) 24 7642 2580 E: info@kinorigo.com
204 Duggins Lane
Tile Hill
Coventry
West Midlands
CV4 9GP UK
 - 2.1.1. Product reference: Aurora Sand
 - 2.2. Colour: Sand
 - 2.3. Size: 900 x 450 x 20
3. Base: Slurry Primer
4. Joint width: 4mm (to be free draining)
5. Grout: to engineers specification colour - to match tiles
6. Accessories: None
7. Refer to drawing TH-ARE-01-001-L-002882-90-0551

15 New backgrounds/bases

1. Background drying times (minimum):
 - 1.1. Brick/block walls: 6 weeks.
 - 1.2. Rendering: 2 weeks.
 - 1.3. Gypsum plaster: 4 weeks.
2. Base drying times (minimum):
 - 2.1. Concrete slabs: 6 weeks.
 - 2.2. Cement:sand screeds: 3 weeks.

30 Fixing generally

1. Colour/ shade: Avoid unintended variations within tiles for use in each area/ room.
 - 1.1. Variegated tiles: Mix thoroughly.
2. Adhesive: Compatible with background/ base.
3. Cut tiles: Neat and accurate.
4. Fixing: Provide adhesion over entire background/ base and tile backs.
5. Final appearance: Before bedding material sets, make adjustments necessary to give true, regular appearance to tiles and joints.
6. Deviation of surface: Measure from underside of a 2 m straightedge with 3 mm thick feet placed anywhere on surface. The straightedge should not be obstructed by the tiles/ mosaics and no gap should be greater than 6 mm, i.e. a tolerance of: ± 3 mm.
7. Surplus bedding material: Clean from joints and face of tiles/ mosaics.

32 Mortar bedding

1. Bedding mix:

- 1.1. Cement: Portland to BS EN 197-1, type CEM I/42.5.
- 1.2. Sand for walls: Fine aggregate to BS EN 13139.
 - 1.2.1. Grading designation: 0/2 (CP or MP) category 2 fines.
- 1.3. Sand for floors: Fine aggregate to BS EN 13139.
2. Grading designation: 0/4 (MP) category 1 fines and between 20-66% passing a 0.5 sieve.
3. Batching: Select from:
 - 3.1. Batch by weight.
 - 3.2. Batch by volume: Permitted on the basis of previously established weight:volume relationships of the particular materials. Use accurate gauge boxes. Allow for bulking of damp sand.
4. Mixing: Mix materials thoroughly to uniform consistence. Use a suitable forced action mechanical mixer. Do not use a free fall type mixer.
5. Application: At normal temperatures use within two hours. Do not use after initial set. Do not retemper.

35 Setting out

1. Joints: True to line, continuous and without steps.
 - 1.1. Joints on walls: Horizontal, vertical and aligned round corners.
 - 1.2. Joints in floors: Parallel to main axis of space or specified features.
2. Cut tiles: Minimise number, maximise size and locate unobtrusively.
3. Joints in adjoining floors and walls: Align.
4. Joints in adjoining floors and skirtings: Align.

50 Adhesive bed - notched trowel method to walls

1. Application: By 3 mm floated coat of adhesive to dry background. Comb surface.
2. Tiling: Press tiles firmly onto float coat.

70 Grouting

1. Sequence: Grout when bed/adhesive has set sufficient to prevent disturbance of tiles.
2. Joints: 6 mm deep (or depth of tile if less). Free from dust and debris.
3. Grouting: Fill joints completely, tool to profile, clean off surface. Leave free from blemishes.
4. Polishing: When grout is hard, polish tiling with dry cloth.

Types of tiling/ mosaic - Not Used

General - Not Used

Preparation - Not Used

Fixing - Not Used

Movement joints/ grouting/ completion - Not Used

Performance - Not Used

Ω End of Section

Q10

Kerbs/ edgings/ channels/ paving accessories

To be read with preliminaries/ general conditions.

2A The following clauses refer to landscape elements only

Types of kerbs/edgings and channels

110B Steel

1. Description: Edging to play area and porcelan paving (e4)
2. Manufacturer: Kinley Systems Ltd
3. Haywood Way
4. Hastings
5. East Sussex
6. TN35 4PL
7. Tel: +44 (0) 1424 201111
8. Email: sales@kinleysystems.com .
9. - Product reference: ExcelEdge AluExcel aluminium edging
10. Recycled content: 75% (minimum) to BS EN ISO 14021
11. Size (width x height x length): 6 x 150 x 2500 mm
12. Finish: Mill
13. Accessories: Steel pins in haunched concrete to secure

120A Stone

1. Description: Granite kerb (e1)
2. Standard: To BS EN 1343.
3. Supplier: Submit proposals
4. Types: To match existing
5. Stone type: Granite
6. Size (width x height): 300 x 200 mm
7. Freeze/ Thaw resistance: Resistant
8. Finish: To match existing
9. Bedding: Concrete
10. Joints generally: Dry, 2-3 mm gap
11. Sealant movement joints: Not required

120B Stone

1. Description: Granite kerb chamfered (e2)
 2. Standard: To BS EN 1343.
 3. Supplier: Submit proposals
 4. Types: To match existing
 5. Stone type: Granite
 6. Size: 300mm wide
 7. Freeze/ Thaw resistance: Resistant
 8. Special shapes: Chamfered
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9. Finish: To match existing
10. Bedding: Concrete
11. Joints generally: Dry, 2-3 mm gap
12. Sealant movement joints: Not required

120C Stone

1. Description: Granite kerb flush (e3)
2. Standard: To BS EN 1343.
3. Supplier: Submit proposals
4. Types: To match existing
5. Stone type: Granite
6. Size (width x height): 300 x 200 mm
7. Freeze/ Thaw resistance: Resistant
8. Finish: To match existing
9. Bedding: Concrete
10. Joints generally: Dry, 2-3 mm gap
11. Sealant movement joints: Not required

170A Linear slot drainage channel systems

1. D3
2. Manufacturer: ACO Technologies plc., Web: www.aco.co.uk. Tel: +44 (0)1462 816666.
 - 2.1. Product reference: Multidrain MD Brickslot
3. Bore: To engineer's details
4. Finish: Stainless steel, twinslot offset
5. Colour: Stainless steel
6. Accessories: To engineer's detail
7. Bedding: To engineer's detail
8. Joints generally: To engineer's and supplier's detail

180A Drainage channel systems with gratings

1. (D1)
2. Manufacturer: ACO Technologies plc., Web: www.aco.co.uk. Tel: +44 (0)1462 816666.
 - 2.1. Product reference: ACO FreeDeck Fixed Height Channel System, various height
3. Size: To engineer's details
4. Type of fall: To engineer's detail
5. Accessories: Heel safe gratings
6. Bedding: To supplier's details
7. Joints generally: To supplier's details
8. Cover gratings: Stainless steel, Heel safe gratings

180B Drainage channel systems with gratings

1. (Threshold drain, D2)
2. Manufacturer: ACO Technologies plc., Web: www.aco.co.uk. Tel: +44 (0)1462 816666.
 - 2.1. Product reference: FreeDeck
3. Size: To engineer's details

4. Type of fall: To engineer's details
5. Finish: Standard
6. Accessories: To engineer's details
7. Bedding: To engineer's details
8. Joints generally: To engineer's details
9. Cover gratings: Stainless steel, heel safe

Roads/paving accessories/ marking/ demarcation

305A Tree grilles and surrounds

1. (F4(
2. **Manufacturer:** Green Blue Urban Limited, Northpoint, Compass Park, Junction Road, Bodiam TN32 5BS, Tel: 0800 018 7797
 - 2.1. **Product reference:** Galvanised Steel 'Castle' Tree Grille with inset stone
3. **Size:** 1800 x 1800mm
4. **Material:** Galvanized mild steel, stainless steel to all visible faces
5. **Finish:** Hot Dip Galvanised to BS 729 Tree Grilles
6. **Colour:** As manufactured
7. **Bedding/ fixing:** As manufacturer's specification
8. **Accessories:** Irrigation ports and covers

Laying

520 Adverse weather

1. **Conditions:** Do not construct if the temperature is below 3°C on a falling thermometer or 1°C on a rising thermometer. Adequately protect foundations, bedding and haunching against frost and rapid drying by sun and wind.

540 Cement mortar bedding

1. **General:** To section Z21.
2. **Mix (Portland cement:sand):** 1:3.
 - 2.1. **Portland cement:** Class CEM I 42.5 to BS EN 197-1.
 - 2.2. **Sand:** to BS EN 12620, grade 0/4 or 0/2 (MP).
3. **Bed thickness:** 12-40 mm.

620 Accuracy

1. **Deviations (maximum)**
 - 1.1. **Level:** ± 6 mm.
 - 1.2. **Horizontal and vertical alignment:** 3 mm in 3 m.

625 Regularity of paved surfaces

1. **Maximum undulation of (non-tactile) paving surface:** 3 mm.
 - 1.1. **Method of measurement:** Under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface).
2. **Difference in level between adjacent units (maximum)**
 - 2.1. **Joints flush with the surface:** Twice the joint width (with 5 mm max difference in level).
 - 2.2. **Recessed, filled joints:** 2 mm.

2.2.1. Recess depth (maximum): 5 mm.

2.3. Unfilled joints: 2 mm.

3. Sudden irregularities: Not permitted.

Ω End of Section

Q25

Slab/brick/sett/cobble pavings

To be read with preliminaries/ general conditions.

2A The following clauses refer to landscape elements only

General

99A Samples

127A Porcelain paving

1. Description: (p1) paving to podium terraces
2. Manufacturer: Kinorigo T: +44 (0) 24 7642 2580 E: info@kinorigo.com
204 Duggins Lane
Tile Hill
Coventry
West Midlands
CV4 9GP UK
3. Tel:
4. Email: info@kinorigo.com
5. Colour/finish: Aurora
6. Dimensions: 900 x 450 x 20
7. Paving support: Laid on slurry primer on top of permeable concrete mix; joints to be free - draining
8. Paving units: Kinorigo Aurora
9. Accessories: Dry slip resistance value (PTV) 34-51 DIN standard R11
10. Laying: Staggered bond with 2mm free draining joint

127B Porcelain paving

1. Description: (p2) to podium terraces
2. Manufacturer: Kinorigo T: +44 (0) 24 7642 2580 E: info@kinorigo.com
[204 Duggins Lane](#)
[Tile Hill](#)
[Coventry](#)
[West Midlands](#)
[CV4 9GP UK](#)
3. Tel: +44 (0) 24 7642 2580
4. Email: info@kinorigo.com
5. Colour/finish: Wildwood Ash
6. Dimensions: 1200 x 400 x 20
7. Paving support: Laid on 40-50mm deep grit bed above drainage board
8. Paving units: Kinorigo Wildwood Ash
9. Accessories: Blister profile to manufacturers specification. Dry slip resistance value (PTV) 34-51 DIN standard R11
10. Laying: Staggered bond with 2mm free draining joint

System performance - Not Used

Products

310A Natural stone slabs

1. Description: (g1)
2. Standard: To BS EN 1341.
3. Supplier: BBS Natural Stone, Kimcote House, Kimcote Court, Walton Road, Kimcote, Leicestershire, LE17 5RU, 01455 559474 or similar
 - 3.1. Product reference: Moohrenjo Stone pavers 70%buff, 30% grey
 - 3.2. Quarry: TBC
4. Petrographical description/ stone type: Granite
5. Finish: Bush hammered
6. Sizes: 600 x 200mm, 400 x 200mm, 300mm x 200mm (TBC in line with Grants proposals for Ferry Square)
 - 6.1. Plan dimension deviation class: P2
 - 6.2. Diagonal deviation class: D2
 - 6.3. Thickness deviation class: T2
7. Arrises: Square
8. Breaking strength: Class 2
9. Slip resistance: PTV to BS 7976-2 of 40
10. Skid resistance: PSV to HA DMRB 7.5.1 of 50
11. Surface treatment: None
12. Refer to detail XX TBC.

310B Natural stone slabs

1. Description: (g2)
2. Standard: To BS EN 1341.
3. Supplier: BBS Natural Stone, Kimcote House, Kimcote Court, Walton Road, Kimcote, Leicestershire, LE17 5RU, 01455 559474 or similar
 - 3.1. Product reference: Moohrenjo Stone pavers 70%buff, 30% grey
 - 3.2. Quarry: TBC
4. Petrographical description/ stone type: Granite
5. Finish: cropped and heavily flamed top, sawn sides
6. Sizes: Large setts, 400 x 200mm, 300 x 200mm (TBC in line with Grants proposals for Ferry Square)
 - 6.1. Plan dimension deviation class: P2
 - 6.2. Diagonal deviation class: D2
 - 6.3. Thickness deviation class: T2
7. Arrises: Square
8. Breaking strength: Class 2
9. Slip resistance: PTV to BS 7976-2 of 40
10. Skid resistance: PSV to HA DMRB 7.5.1 of 50
11. Surface treatment: None
12. Refer to detail XX TBC.

310C Natural stone slabs

1. Description: (g4) granite paving to building edge
2. Standard: To BS EN 1341.
3. Supplier: BBS Natural Stone, Kimcote House, Kimcote Court, Walton Road, Kimcote, Leicestershire, LE17 5RU, 01455 559474 or similar
 - 3.1. Product reference: Moohrenjo Stone pavers
 - 3.2. Quarry: TBC
4. Petrographical description/ stone type: Granite
5. Finish: Bush hammered
6. Sizes: 600mm x random width
 - 6.1. Plan dimension deviation class: P2
 - 6.2. Diagonal deviation class: D2
 - 6.3. Thickness deviation class: T2
7. Arrises: Square
8. Breaking strength: Class 2
9. Slip resistance: PTV to BS 7976-2 of 40
10. Skid resistance: PSV to HA DMRB 7.5.1 of 50
11. Surface treatment: None
12. Refer to detail XX TBC. Note: to create 300mm boarder set out from pallisters.

320 Tactile flags and slabs

1. Description: (G5)
2. Standard: To DD CEN/TS 15209.
3. Material: TBC
 - 3.1. Manufacturer: TBC
 - 3.1.1.Product reference: Submit proposals
4. Recycled content: Not applicable
5. Nominal sizes: 400 x 400 mm
6. Colour: TBC
7. Type of surface: Blister

330A Natural stone setts

1. Description: To loading bay(g6)
 2. Standard: To BS EN 1342.
 3. Supplier: Hardscape or similar
 - 3.1. Product reference: TBC Mid grey
 - 3.2. Quarry: TBC
 - 3.2.1.Petrographical description/ stone type: Granite
 4. Petrographical description/ stone type:
 5. Finish: Flamed or picked
 6. Sizes: 150mm x 250mm (TBC)
 - 6.1. Plan dimension and thickness deviation: Class 2
 7. Slip resistance: PTV to BS 7976-2 of 40
 8. Skid resistance: PSV to HA DMRB 7.5.1 of 50
 9. Surface treatment: None
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330B Natural stone setts

1. Description: To tree pits (g7)
2. Standard: To BS EN 1342.
3. Supplier: BBS Natural Stone, Kimcote House, Kimcote Court, Walton Road, Kimcote, Leicestershire, LE17 5RU, 01455 559474 or similar
 - 3.1. Product reference: Moohrenjo Stone pavers 70%buff, 30% grey
 - 3.2. Quarry: TBC
 - 3.2.1. Petrographical description/ stone type: Granite
4. Petrographical description/ stone type:
5. Finish: Cropped top and sawn sides
6. Sizes: 125 x 140mm
7. Slip resistance: [PTV to BS 7976-2 of 40].
8. Skid resistance: [PSV to HA DMRB 7.5.1 of 50].
9. Surface treatment: None

330C Natural stone setts

1. Description: Between colonaded column (g3)
2. Standard: To BS EN 1342.
3. Supplier: BBS Natural Stone, Kimcote House, Kimcote Court, Walton Road, Kimcote, Leicestershire, LE17 5RU, 01455 559474 or similar
 - 3.1. Product reference: Moohrenjo Stone pavers 70%buff, 30% grey
 - 3.2. Quarry: TBC
 - 3.2.1. Petrographical description/ stone type: Granite
4. Petrographical description/ stone type:
5. Finish: Bush hammered
6. Sizes: 150mm x 250mm (TBC in line with Grants proposals for Ferry Square)
7. Slip resistance: [PTV to BS 7976-2 of 40].
8. Skid resistance: [PSV to HA DMRB 7.5.1 of 50].
9. Surface treatment: None

440 Ready-mixed mortar

1. Description: For laying course of paving
2. Type: High performance bonding mortar
3. Standard/ Performance requirements: In accordance with BS 7533-7
4. Manufacturer: Steintec
 - 4.1. Product reference: tuffbed 2-pack
5. Consistency: To manufacturer's recommendations

455 Joint filler for movement joints

1. Description: As per engineer's specification
2. Type: Compressible rubber or plastics compatible with specified sealant
3. Manufacturer: To engineer's specification
 - 3.1. Product reference: To engineer's specification

Execution

610 Material samples

1. Samples representative of colour and appearance of designated materials: Submit before placing orders.
 - 1.1. Designated materials: ALL PAVINGS AND KERBS

615 Control samples

1. Sample areas: Complete as part of the finished work.
 - 1.1. Types of paving: Q25/ All pavings and kerbs and installation of sundry items associated with paving
 - 1.2. Location: to be agreed and to form part of the completed works when conditions allow.
 - 1.3. Size (minimum): 3.0 x 3.0m, as part of the finished work
 - 1.4. Included features: Edging, kerbing, channels, paving, recessed manhole covers, cutting around base of lighting columns and junctions with building facade
2. Approval of appearance and surface: Obtain before proceeding.

620 Adverse weather

1. General
 - 1.1. Temperature: Do not lay or joint paving if the temperature is below 3°C on a falling thermometer or below 1°C on a rising thermometer.
 - 1.2. Frozen materials: Do not use. Do not lay bedding on frozen or frost covered bases.
2. Paving with mortar joints and/ or bedding
 - 2.1. Protect from frost damage, rapid drying out and saturation until mortar has hardened.
3. Paving laid and jointed in sand:
 - 3.1. Stockpiled bedding sand: Protect from saturation.
 - 3.2. Exposed areas of sand bedding and uncompacted areas of sand bedded paving: Protect from heavy rainfall.
 - 3.3. Saturated sand bedding: Remove and replace, or allow to dry before proceeding.
 - 3.4. Laying dry-sand jointed paving in damp conditions: Brush in as much jointing sand as possible. Minimize site traffic over paving. As soon as paving is dry, top up joints and complete compaction.

625 Laying pavings – general

1. Appearance: Smooth and even with regular joints and accurate to line, level and profile.
2. Falls: To prevent ponding.
3. Bedding of paving units: Firm so that rocking or subsidence does not occur or develop.
 - 3.1. Bedding/ Laying course: Consistently and accurately graded, spread and compacted to produce uniform thickness and support for paving units.
4. Slopes: Lay paving units upwards from the bottom of slopes.
5. Paving units: Free of mortar and sand stains.
6. Cutting: Cut units cleanly and accurately, without spalling, to give neat junctions with edgings and adjoining finishes.

630 Levels of paving

1. Permissible deviation from specified levels
 - 1.1. Generally: ± 6 mm.
2. Height of finished paving above features

- 2.1. At gullies: +6 to +10 mm.
- 2.2. At drainage channels and kerbs: +3 to +6 mm.

635 Regularity of paved surfaces

- 1. Maximum variation in gap under a 3 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface)
 - 1.1. Precast concrete paving blocks and clay pavers for flexible pavements: 10 mm.
 - 1.2. Precast concrete flags or natural stone slabs: 3 mm.
- 2. Difference in level between adjacent paving units (maximum): 2 mm.
- 3. Sudden irregularities: Not permitted.

637 Regularity of paved surfaces

- 1. Maximum undulations in the surface of pavings (except tactile paving surfaces) under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface): 3 mm.
- 2. Joints between paving units or utility access covers
 - 2.1. Joints flush with the surface: difference in level between adjacent units to be no more than twice the joint width (with a 5 mm max difference in level).
 - 2.2. Recessed, filled joints: difference in level between adjacent units to be no greater than 2 mm; the recess to be no deeper than 5 mm.
 - 2.3. Unfilled joints: difference in level between adjacent units to be no greater than 2 mm.
- 3. Sudden irregularities: Not permitted.

640 Colour banding

- 1. General: Unless premixed by manufacturer, select from at least 3 separate packs in rotation to avoid colour banding.

645 Protection

- 1. Cleanliness: Keep paving clean and free from mortar droppings, oil and other materials likely to cause staining.
- 2. Materials storage: Do not overload pavings with stacks of materials.
- 3. Handling: Do not damage paving unit corners, arrises, or previously laid paving.
- 4. Mortar bedded pavings: Keep free from traffic after laying:
 - 4.1. Pedestrian traffic (minimum): 24 hours
 - 4.2. Vehicular traffic (minimum): 28 days
- 5. Access: Restrict access to paved areas to prevent damage from site traffic and plant.

650 Cementitious bases and sub-bases

- 1. General: Protect from moisture loss, if not covered by another pavement course within 2 hours of completion.

655 Condition of sub-bases/ bases before spreading laying course

- 1. Trenches and excavation of soft or loose spots in subgrade: Fill and thoroughly compact.
- 2. Granular surfaces: Lay and compact so as to be sound, clean, smooth and close-textured enough to prevent migration of bedding/ laying course materials into the sub-base during compaction and use, free from movement under compaction plant and free from compaction ridges, cracks and loose material.
- 3. Prepared existing and new bound bases (roadbases): Sound, clean, free from rutting or major cracking. Remove sharp stones, projections and debris.

4. Sub-base/ Roadbase level tolerances: To BS 7533-7, Annex A.
5. Levels and falls: Accurate and within the specified tolerances.
6. Drainage outlets: Within 0-10 mm of the required finished level.
7. Features in sand bedded paving (including mortar bedded restraints and drainage ironwork): Complete to required levels; adequately bed and haunch in mortar.
8. Sub-bases containing cement/ hydraulic binder: Cure for minimum times specified in BS 7533-4.

Completion

930 Slip resistance testing

1. Surfaces to be tested: All paving
 - 1.1. Surface condition: Dry and wet
2. Timing: As agreed with contract administrator
3. Period of notice (minimum): 3 working days.
4. Test standard: To BS 7976
 - 4.1. Testing authority: A UKAS accredited laboratory
 - 4.2. Witnessing/ Certification: Arrange for tests to be witnessed/ certified by: Contract administrator.
 - 4.3. Report: Submit.
 - 4.3.1.Format: As required under BS 7976

Ω End of Section

Q26

Special surfacings/ pavings for sport/ general amenity

To be read with preliminaries/ general conditions.

2A The following clauses refer to landscape elements only

Sports surfacing

110 Information to be provided by the contractor

1. Submit
 - 1.1. Reference samples: Materials, seams and line markings.
 - 1.2. Additional information: None

140 Surface gradients, evenness and flatness

1. Surface regularity: As specified by BS 7044-4.
2. Deviation from the finished plane: When checked on a 10 m grid the difference in level between adjacent grid points, after taking design gradients into account, must not exceed ± 10 mm.
3. Profile: To engineer's specification
4. Gradients: To engineer's specification

150 Suitability of base/ sub-base

1. Preparation: Before starting work ensure the following:
 - 1.1. Accuracy: Base/ sub-base will permit specified flatness/ regularity of finished surfacing.
 - 1.2. Falls/ camber: Accurately incorporated in the base/ sub-base.

260A Resin bound stone aggregate surfacing

1. FOr play area (p3F)
2. Subgrade improvement layer: Not required
 - 2.1. Compacted thickness: Not applicable
3. Sub-base: Permeable concrete mix - Maxrete or similar
 - 3.1. Compacted thickness: 150mm
4. Base: Porous concrete to engineer's details
5. Wearing surface: Resin bound mixed stone aggregate of 6 mm nominal size. Finished with two layers of acrylic coloured resin.
 - 5.1. Thickness: 18mm
 - 5.2. Manufacturer: Addagrip Terraco Ltd., Web: www.addagrip.co.uk, Tel: +44 (0)1825 761333.
 - 5.2.1. Product reference: Addabound Resin Bound Decorative Porous Surfacing
 - 5.3. Colour: Golden Field, 6 mm

Impact attenuating surfacings for play areas

350 Synthetic grass surfacing (P4)

1. Surface course: Synthetic grass surface.
 - 1.1. Manufacturer: EverRoof, EverGreens UK Group

+44 (0) 1572 768208
 - 1.2. Product reference: Astro turf, EVR-3 Two Part Paving System (BROOF t4 certified)

Associated accessories - Not Used

Execution - Not Used

Completion

930 Documentation

1. General: For all types of surfacing, provide the following:
 - 1.1. Name and contact details of installer.
 - 1.2. Date of installation.
 - 1.3. Name and contact details of manufacturer.
 - 1.4. Type/ description/ reference of products used.
 - 1.5. Manufacturer's recommended inspection and maintenance procedures to maintain safety and impact absorbing performance.
 - 1.6. Manufacturer's recommended cleaning and maintenance methods, where relevant.
 2. Manufacturer's recommended cleaning and maintenance methods, where relevant.
- Ω End of Section

Q28

Topsoil and soil ameliorants

To be read with preliminaries/ general conditions.

2A Refer to planting plans th-are-01-001-I-002882-91-1gf1, th-are-01-001-I-002882-91-1011, th-are-01-001-I-002882-91-1051 for soft landscape details

1. NOTE: TO ALL CONTAINER PLANTING, TOP 300MM PROFILE IS TO CONSIST OF TOPSOIL,
2. WITH A SUBSOIL SPECIFICATION TO ALL LAYERS BELOW 300MM

System outline

120 Manufactured topsoil/ growing media system

1. Description: For container planting
2. Topsoil/ growing media type: Imported manufactured topsoil
3. Ameliorants: Organic materials
4. Accessories: None

120A Manufactured subsoil/ growing media system

1. Description: For container planting
2. Topsoil/ growing media type: Imported manufactured topsoil
3. Ameliorants: Organic materials
4. Accessories: None

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: Well-rotted organic matter - SAMPLES TO BE APPROVED PRIOR TO ORDERING.
2. Give notice: before ordering or using.
3. Declaration of compliance: Required

310 Materials not permitted

1. Materials: Products containing peat
- Allen Pyke Associates Limited
12-05-2022

315A Imported topsoil to BS 3882

1. (For ground level tree pits)
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:** Multipurpose
 - 4.1. **Grade:** Within the parameters of 'sandy loam' textural class
5. **Source:** Boughton, Telford Way Industrial Estate, Telford Way, Kettering, Northamptonshire NN168UN T 01536 510515 E enquiries@boughton.co.uk or similar.
 - 5.1. **Product reference:** Screened Topsoil or equivalent

330A Imported manufactured topsoil/ growing medium

1. **Description:** For all amenity roof terrace planters
2. [Boughton,
3. Telford Way Industrial Estate,
4. Telford Way,
5. Kettering,
6. Northamptonshire
7. NN16 8UN
8. T: 01536 510515
9. E: enquiries@boughton.co.uk.
10. **Type:** Lightweight Sandy Loam, suitable for intensive horticultural practices on a roof garden /podum deck, very low silt & clay content.
 - 10.1. **Grade:** Within the parameters of 'sandy loam' textural class.

331 Imported manufactured subsoil/growing medium

1. **Description:** For all planters
2. **Quantity:** Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
3. **Source:** Bourne AmenityThe Wharf Rye Road Newenden Kent TN18 5QGE: info@bourneamenity.co.uk T: 01797 252 299
4. **Type:** Blend of lightweight topsoil with expanded clay particles, saturated weight of 1 tonne/m³
5. **Texture:** light
6. **Particel size:** medium size (0.25mm-0.5mm) and coarse sand (0.5mm-1.0mm)
7. **Reaction,** to BS 1377-3: pH 7.5.
8. **Organic matter:** <2%

355 Organic materials

1. **Description:** For all planters
2. **Type:** Well rotted organic matter
3. **Source:** Local, cotractors choice
 - 3.1. **Product reference:** Contractor's choice. Sumbit proposals and sample for apporval byDesigner and Landscape Project Manager prior to ordering.

355A Organic materials

1. **Description:** For all planters

2. • **Type:** Blood, fish and bone.
3. • **Source:** Local, contractor's choice.
 - 3.1. **Product reference:** Contractor's choice. Submit proposals and sample for approval by Designer and Landscape Project Manager prior to ordering.

390A Fertilizers to be incorporated into manufactured topsoil

1. **Description:** For all planters
2. **Type:** Slow release fertilizer
3. **Source:** Submit proposals
 - 3.1. **Product reference:** Contractor's choice. Submit proposals and sample for approval by Designer prior to ordering.

Execution

605 Site investigation

1. **Report:** See section D20.

610A Soil analysis

1. **Soil to be analysed:** Imported topsoil and subsoil
 - 1.1. The sample(s) should be truly representative of the topsoil being offered.
 - 1.2. One Composite Sample should be taken for every 500m³ of topsoil being offered / harvested. Each composite sample should be made up of 10 No. sub-samples taken from evenly spaced locations across the field / stockpile. The sub-samples should be mixed together and quartered down to form a 1kg composite sample.
 - 1.3. The composite sample(s) should be placed in a clean plastic bag(s) and labelled with the supplier's name, date of sampling and sample location. .
2. **Soil analyst:** Tim O'Hare Associates, Howbery Park, Wallingford, Oxfordshire OX10 8BA Tel: 01491
3. **822653 Email:** info@toha.co.uk.
4. **Samples:** Collect in accordance with BS 3882.
5. **Submit**
 - 5.1. **Declaration of analysis:** Nutrient content, pH value, textural classification, contaminants and report detailing soil analyst's recommendations
 - 5.2. 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 topsoil
2. **Deliver to site a sample load:** of not less than 5kg
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:** All topsoil

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, Annex E.
4. **Number of copies:** 2

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:** Three working days

655 Mechanical tools

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

660 Grading subsoil for:

1. **General:** Grade to smooth flowing contours to achieve specified finished levels of topsoil.
2. **Loosening:**
 - 2.1. **Light and non-cohesive subsoils:** When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm.
 - 2.2. **Stiff clay and cohesive subsoils:** When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm.
 - 2.3. **Rock and chalk subgrades:** Lightly scarify to promote free drainage.
3. **Areas of thicker topsoil:** Excavate locally.
4. Avoid over compaction.

665 Subsoil surface preparation for:

1. **General:** Excavate and/ or place fill to required profiles and levels, as section D20.
2. **Loosening**
 - 2.1. **Light and non-cohesive subsoils:** When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm.
 - 2.2. **Stiff clay and cohesive subsoils:** When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm.
3. **Stones:** Immediately before spreading topsoil, remove stones larger than: 50 mm
4. **Remove from site:** Arisings, contaminants and debris and Builders rubble

670 Inspecting formations

1. **Give notice:** Before spreading topsoil for all areas to receive topsoil.
2. **Notice period:** 7 days

680 Surplus topsoil to be retained

1. **Generally:** Spread and level on site:

- 1.1. **Locations:** Any areas where topsoil is required for new planting.
- 1.2. **Protected areas:** Do not raise soil level within root spread of trees that are to be retained.

685 Surplus materials to be removed

1. **Topsoil: Remove from site:** Remove from site topsoil remaining after completion of all landscaping work unless agreed with Landscape project Manager / Estate that topsoil can be utilised elsewhere on site
2. **Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings:** Remove.

690 Topsoil storage heaps

1. **Location:** to be agreed on site with Landscape Project Manager.
2. **Height (maximum):** 1.0m
3. **Width (maximum):** 4.0 m
 - 3.1. **Formation:** Loose tip and shape from the side only, without running machinery on the heap at any time.
4. **Protection**
 - 4.1. Do not place any other material on top of storage heaps.
 - 4.2. Do not allow construction plant to pass over storage heaps.
 - 4.3. Prevent compaction and contamination, by fencing and covering as appropriate.

695 Cultivation

1. **Compacted topsoil:** Break up to full depth.
2. **Tilth:** Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
 - 2.1. **Depth:** 350 mm
 - 2.2. **Particle size (maximum):** 15 mm
 - 2.3. **Timing:** Within a few days before planting.
 - 2.4. **Weather and ground conditions:** Suitably dry.
3. **Surface:** Leave regular and even.
4. **Levels:** 50 mm above adjoining lawns or paving and Minimum 150 mm below dpc of adjoining buildings
5. **Undesirable material brought to the surface:** Remove visible weeds, roots and large stones with any dimension exceeding: 50 mm
6. **Soil within root spread of trees and shrubs to be retained:** Do not dig or cultivate.

700A 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. **Finished levels after settlement:** 30 mm above adjoining paving, kerbs, manholes etc.
4. **Give notice:** If required levels cannot be achieved by movement of existing soil.

705 Handling topsoil

1. **Aggressive weeds:** Give notice and obtain instructions before moving topsoil.
2. **Plant:** Select and use plant to minimize disturbance, trafficking and compaction.
3. **Contamination:** Do not mix topsoil with:
 - 3.1. Subsoil, stone, hardcore, rubbish or material from demolition work.

- 3.2. Other grades of topsoil.
4. Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.
5. 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

710A Spreading topsoil

1. Layers
 - 1.1. Gently firm each layer before spreading the next.
2. • Depths after firming and settlement (minimum):
 - 2.1. Shrub and planting areas areas 300mm (assuming an existing free draining substrate to a total
3. depth of 600mm)
 - 3.1. Tree areas 400mm for light standards
 - 3.2. Graded slopes to be of even gradient without puddles and kept 50mm above bordering
4. hard surfaces to allow for settlement.
5. • Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs
6. wherever possible..

715 Loose tipping of topsoil

1. 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

1. Above adjoining paving or kerbs: 30 mm
2. Below dpc of adjoining buildings: Not less than: 150 mm
3. Shrub areas: Higher than adjoining grass areas by: 75 mm
4. Within root spread of existing trees: Unchanged.
5. Adjoining soil areas: Marry in.
6. Thickness of turf or mulch: Included.

805 Applying soil ameliorant

1. Description: For all palnters
2. Type: SANITIZED AND STABILIZED COMPOSTED MATERIALS CERTIFIED TO PAS 100 as clause 360
3. Locations: All planting areas as noted on GA plans unless specified.
4. Fully incorporate into topsoil to a depth of 300mm.
5. Application: Spread evenly.
 - 5.1. Timing: Apply prior to cultivation.
 - 5.2. Rate: 0.6 m³/100 m²
6. Timing: Prior to cultivation.
7. Other requirements: Submit 5 kg sample before ordering.

Completion

905 Applying maintenance fertilizer to soil

1. Time of year: March or April.
2. Application: Evenly spread, carefully incorporating below mulch materials.

3. **Rate:** To manufacturer's recommendations

915 Applying maintenance fertilizer as a foliar feed

1. **Locations:** all containers
2. **Application:** Evenly spread.
 - 2.1. **Rate:** to manufacturer's guidelines
3. **Foliar feeding:** Do not damage or contaminate adjacent surfaces or equipment.

Ω End of Section

Q31

External planting

To be read with preliminaries/general conditions. - Not Used

General information/ requirements

120 Climatic conditions

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

125A Times of year for planting

1. Deciduous trees and shrubs: Late October to late March.
2. Conifers and evergreens: September/ October to 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. Colchicum (crocus): July/ August.
7. Green bulbs: After flowering in spring.
8. Wildflower plugs: Late August to mid November or March/ April.
9. Aquatic plants: May/ June or September/ October.

130 Mechanical tools

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

145 Watering

1. Quantity: Wet full depth of topsoil.
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

165 Preparation, planting and mulching materials

1. **General:** Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
2. **Certification of source, analysis, suitability for purpose and absence of harmful substances:** Submit.
 - 2.1. **Certified materials:** Composted bark
 - 2.2. Give notice before ordering or using.

200A Plants/ trees - general

1. **Condition:** Materially undamaged, sturdy, healthy, vigorous, with dense fibrous root system,
2. well formed and balanced branch system to suit species.
3. **Appearance:** Of good shape and without elongated shoots.
 - 3.1. No trees to have been heavily top pruned within the previous 12 months unless specified.
4. **Hardiness:** Grown in a suitable environment and hardened off.
 - 4.1. Do not use plants that have been winter protected by polythene, net tunnels or cold glass. Plants to be wind hardy.
6. **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
7. **Budded or grafted plants:** Bottom worked.
8. **Root system and condition:** Balanced with branch system.
 - 8.1. **Standard:** The relevant parts of BS 3936
9. **Species:** True to name.
10. **Origin/ Provenance:** As plant schedule
11. **Definition:** Origin and Provenance have the meaning given in the National Plant Specification.
12. **Preparation of trees for transport:** the crown must be loosely tied in with ribbon and not string.
 - 12.1. Extent of tying in should suit the brittleness of the species in order to prevent damage in transit.
 - 12.2. Adequately and carefully pack and protect against mechanical damage, extremes of temperature and drying out.
 - 12.3. Pack so that shoots face the same direction and that roots do not come into contact with shoots.
13. Handle plants in accordance with Code of Practice for Plant Handling published by the Committee for Plant Supply and Establishment (CPSE), unless a higher standard is specified.
14. Remove suppliers tags, labels, win, canes and other packaging prior to planting

215A Plants/ trees - specification criteria

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

216A Plants/ trees-specification criteria

1. To BS 4043.
2. **At least seven times transplanted, sizes as scheduled Select trees for the following:**
 - 2.1. Straight and even stem with no snags
 - 2.2. Uniform and bushy canopy, well formed (not pruned as continental pruning regime)
 - 2.3. Single straight leader
 - 2.4. Shape pleasing to the eye with no feature which detracts from their overall appearance

3. **Root condition:** Spring ring as by clause 128.
4. Prepare, lift, handle and transplant to BS 4043 unless otherwise specified
5. **Disease:** Trees must be pest free with the bark free from coral spot.
6. **Preparation for transport:** The crown must be loosely tied in with Hessian webbing / ribbon and not string. Tension and extent of tying in to suit the brittleness of the species in order to prevent damage in transit.
7. All Semi-mature trees to be selected with Landscape Architect.

216B Nursery stock

1. To BS 3936, size categories as scheduled
2. **All Extra Heavy, Selected and Standard trees to be selected for the following:**
 - 2.1. Straight and even stem with no snags
 - 2.2. Uniform and bushy canopy, well formed (not pruned as continental pruning regime)
 - 2.3. Single straight leader
 - 2.4. Shape pleasing to the eye with no feature which detracts from their overall appearance.
 - 2.5. Where required to form an avenue or for street trees, all trees to be of uniform height and shape
3. Prepare, lift, handle and transplant to BS 4043 unless otherwise specified
4. **Root condition:** Springring as by clause 128.
5. **Disease:** Trees must be pest free with the bark free from coral spot.
6. **Preparation for transport:** Stem must be wrapped with hessian binding prior to leaving the nursery. The crown must be loosely tied in with ribbon and not string. Tension and extent of tying-in to suit the brittleness of the species in order to prevent damage in transit.
7. Multi-stemmed trees to be on a single root stock with at least three stems originating from near ground level.
8. Feathered trees to be feathered to near ground level with single straight leader and well balanced lateral shoots.
9. Conifers to be well formed with a straight single leader. They must be pleasing to the eye with nothing which detracts from their overall appearance.
10. **Root preparation:** All trees to be selected as SpringRing stock. Where more than 1 growing season selected from installation, rootballed trees can be preselected and containerised for the tender.

225 Bulbs/ Corms/ Tubers

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

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;- Impact of pest/ disease;- Name or designation of rootstock of budded or grafted plants;- Potting dates;- Propagation method and dates;- Pruning dates; and- Type of container..

250A Supply of plants / trees

1. **Suppliers:** Submit proposals to Landscape Architect prior to any orders being placed.
2. All Extra Heavy Standard and Semi Mature trees will be selected in person by the Landscape Architect. Travel and accommodation as necessary will be provided by the Contractor.

252A Pre-delivery inspection

1. The following are to be inspected by CA/Landscape Architect before supplying to site, then clearly identified as being reserved for use on this project:
 - 1.1. All trees, shrubs and groundcover material.
2. The contractor is responsible for monitoring the quality and health of plant material prior to delivery on site.

255A Approved source nurseries

1. **Trees to be sourced from the following:**
2. Deepdale Trees, Deepdale Trees Ltd.,
3. Tithe Farm,
4. Hatley Road,
5. Potton,
6. Sandy
7. Beds.
8. SG19 2DX.
9. Tel 01767 26 26 36
10. **E-mail:** mail@deepdale-trees.co.uk
11. Hillier Nurseries Limited
12. Ampfield House
13. Ampfield
14. Romsey
15. Hampshire

16. SO51 9PA
17. Tel: 01794 368733
18. E-mail: trees@hilliertrees.co.uk
19. Barcham Trees Plc,
20. Eye Hill Drove, Ely,
21. Cambridgeshire,
22. CB7 5XF
23. Tel: 01353 720 748
24. Email: sales@barchamtrees.co.uk
25. Plants / Shrubs to be sourced from the following:
26. Palmstead Nurseries Limited Harville Road
27. Wye
28. Ashford
29. Kent
30. TN25 5EU
31. Tel: (01233) 813340
32. Fax: (01233) 813071
33. Email: sales@palmstead.co.uk
34. Hortus Loci
35. Hound Green
36. Hook
37. Hampshire
38. RG27 8LQ
39. Tel: 0118 9326495
40. Email: ms@hortusloci.co.uk
41. Crocus.co.uk Ltd
42. Wholesale Team
43. Nursery Court
44. London Road
45. Windlesham
46. Surrey GU20 6LQ
47. Tel: 01344 629614
48. Email: edward.durbin@crocus.co.uk

256A Pre-selected specimen trees, shrubs and hedges

1. All stock shall be tagged in the pre-approved source nurseries. It shall be supplied in accordance with the following:
 - 1.1. Each Specimen Tree carries an individually numbered non-removable plastic tag.
 - 1.2. The contractor is required to place an order for the plant material and be responsible for it in every respect from the point it leaves the supply nursery.
 - 1.3. Given the length of the contract period, Semi-Mature trees may be selected at smaller girths than the scheduled sizes.
2. In particular the contractor must:
 - 2.1. Satisfy himself that the plant material leaves the supply nursery in prime condition and that no deterioration has resulted from the point of selection, or from the lifting operation.

- 2.2. Obtain a valid PHYTO SANITARY certificate for all plant material outside of the UK to ensure plant health and to certify free from pests and diseases that may not be present in the UK.
3. Take a receipt of the stock on arrival in the UK and transport to a suitable holding nursery.
4. Co ordinate all deliveries of plant material from the supply/holding nurseries:
 - 4.1. Give 3 days notice to the CA/Landscape Architect of all deliveries to site.
5. The CA/Landscape Architect reserves the right to reject plant material at any time in the collection and delivery process.

257A Growing of preselected specimen trees, shrubs and

1. The Contractor is responsible for monitoring the health, quality and achievement of the ultimate plant specification prior to delivery to site.
2. The Trade Contractor is required to provide a Method Statement with his priced tender giving full details of his intended sources for all the material and where it is to be held between tagging and delivery to site.
3. Stock selected as Clause 256A are to be scheduled out to include the following information:
 - 3.1. Species
 - 3.2. Source Nursery
 - 3.3. Selection pot size, height & habit
 - 3.4. Expected 'grown on' girth, potsize height & habit
 - 3.5. Quantity, including spare / contingency stock
4. Provide an update of the schedule annually at the end of each growing season to track the progress of all stock.
5. All contract grown material will be required to comply with the following:
6. All plants shall be healthy, vigorous and of normal habit for the species/cultivar and clone specified, and accord fully with the relevant clauses of BS 3936.
7. Shrubs shall have a minimum of 4/5 strong, healthy shoots and shall have been pruned back (depending on the species) to produce a sturdy, well balanced & bushy plant. Shrubs shall be lined out with sufficient space to encourage unrestricted, sturdy growth and shall not be cramped or overshadowed.
8. Sizes indicated by the schedules are the minimum acceptable, measured from soil level in the container to the outer extent of the general crown.
9. Shrubs shall be fully hardened and shall have spent at least one growing season and winter period lined out in the external environment. Soft plant material from polytunnels or forced under glass will not be acceptable.
10. Container sizes listed in the schedule shall be the minimum size acceptable and shall be of rigid plastic or similar. Plants grown in plastic grow bags or similar are not acceptable.
11. Plants shall be maintained in prime condition for the duration of the contract growing period and shall be available for inspection by the landscape architect at all times and on a regular basis to be agreed allow for one visit per year.
12. Plants shall be of the highest quality and free of dead material, fungus, pest & disease. At the time of delivery, plants shall be fully established in the containers, so that on removal the entire root ball remains fully intact. However, plants must not, under any circumstances be supplied in a cramped or pot-bound condition.
13. Hedging plants shall be carefully set out at spacings to be agreed with the Landscape Architect and clearly individually numbered and labelled with approved plastic or metal tags. Hedge plants will be grown together & clipped at least once in order that on delivery to site the general form & shape of the hedge will be well established. All labels & tags shall be left in place at the time of delivery to site.
14. Allow for delivery of all plants to site & provide all necessary protection & shelter during transit/loading in full accordance with the latest relevant British Standard.

15. Treat conifers with appropriate anti desiccant immediately before delivery to site. The Contractor will visit the supply nursery every three months making provision for the Landscape Architect to accompany him. The Landscape Architect will check the quality and health of the plant material at the time.
16. Stock is to be clearly identified on the holding supply as advanced stock being held for the Replacement Acute Mental Health In-patient Facility (RAMHIF) Project.
17. Approval of the signage content and location to be agreed in advance by CA/Landscape Architect
18. The contractor will make provision for the CA/Landscape Architect to visit the holding Nursery no less than annually during the contract period and at that time check the health and quality of the plant material.
19. Give notice to CA/Landscape Architect as soon as any damage / disease / or other factors affect the health / vigour / appearance of the preselected trees.
20. Make allowance to re-visit the supply nurseries should any subsequent rejections affect the ability to fulfil the contract numbers.

260A 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. **Further alternatives:** Proposed substitutions may not be acceptable and submission of further alternatives may be required.
3. **Approval:** Obtain before making any substitution.

265A Plant handling, storage transport and planting

1. **Standard:** To HTA 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0 and 4.0. Extracts from Part III paragraphs 3.0 and 4.0.
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.

266A Planting generally

1. **Standard:** To HTA 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part III, paragraphs 6.2 to 6.6.
 - 1.1. **Appearance:** Plant upright or well balanced with best side to front.

280 Treatment of tree wounds

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

285 Protection of existing grass

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

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

290 Surplus material

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

Plant containers

292A Prefabricated plant containers

1. (W2(
2. Manufacturer: EverEdge
01630 417120
enquiries@everedge.co.uk
 - 2.1. Product reference: Bespoke planters
3. Material: mild steel, zintec primed and powdercoated
4. Dimensions/ Shape: Varies - refer to General Arrangements and Technical
5. Lining: Not required
6. Accessories: refer to details - Adjustable feet required beneath all planter sections. Sufficient drainage holes required in bases of all planters

292B Prefabricated plant containers

1. (F7(
2. Manufacturer: Urbis DesignThe AirfieldFull SuttonYorkYO41 1HS, Tel: 01759 373839<https://urbisdesign.co.uk/product/globe/>
 - 2.1. Product reference: Large Globe, Limestone colour
3. Material: Glass reinforced concrete
4. Dimensions/ Shape: D 115cm, H83cm
5. Lining: Not required
6. Accessories: refer to details - Adjustable feet required beneath all planter sections. Sufficient drainage holes required in bases of all planters

Preparation of planting beds/ planting materials

302A Chemicals generally

1. The Contractor must use a certified operator, take appropriate safety precautions and comply with the Control of Pesticides Regulations 1986, the conditions of approval for the chemical and any relevant Code of Practice issued by Department for Environment, Food & Rural Affairs (DEFRA).
2. The Contractor must dispose of empty or unwanted containers and chemicals, including unused diluted tank mixture, in a safe way in accordance with the methods approved by the Control of Pesticides Regulations and relevant Codes of Practice. Disposal will be off site unless prior arrangements have been made.
3. The contractor must notify the CA / Landscape Architect of his intention to apply chemicals, the product to be used and the dose rates.
4. Use only where specified or approved, and then only products on the current list of the Agricultural Chemicals Approval Scheme.
5. Where work is near water, drainage ditches or land drains comply with the Department for Environment, Food & Rural Affairs (DEFRA) 'Code of Practice for the use of herbicides on weeds in watercourses and lakes'.

305 Weed control

1. **Description:** Generally
2. **Locations:** All planting areas
3. **General:** Prevent weeds from seeding and perennial weeds from becoming established, by application of appropriate non-residual herbicide.

305A Weed control

1. **Description:** For invasive non-native weeds
2. **Locations:** All planting areas
3. **General:** Prevent weeds from seeding and perennial weeds from becoming established, in accordance with the Environment Agency 'Managing Japanese knotweed on development sites. The knotweed code of practice'.

335A General fertilizer

1. **Locations:** All areas to be planted.
2. **Manufacturer:** Green-tech Ltd
3. Sweethills Park
4. Nun Monkton
5. York
6. YO26 8ET
7. Tel: 01423 332 100
8. Email: sales@green-tech.co.uk
 - 8.1. **Product reference:** Scotts EN-Mag Controlled Release Fertiliser.
9. **Application:** Spread evenly.
 - 9.1. **Timing:** Immediately before cultivation.
10. **Coverage:** To manufacturer's guidelines.

340A Topsoil

1. Imported as required.
 - 1.1. Quantify amounts required and submit to Landscape Architect for approval as Q28.

341A Peat

1. Imported as required.
 - 1.1. **Peat or products containing peat:** Do not use.

342A Compost

1. As Clause Q31 .

344A Mulch

1. **Type:** Composted bark mulch.
2. **Locations:** Refer to Landscape Architect's Softworks GA and details.
3. **Manufacturer:** Melcourt, tel: 0166502711, www.melcourt.co.uk.
 - 3.1. Well composted ornamental grade bark mulch
 - 3.2. **Particle size:** 5-35mm,
 - 3.3. Free from foreign material and weed seeds
 - 3.4. Less than 5% wood chippings.

- 3.5. Ph to be between 4.5 and 5.5.
- 3.6. comply with BS 4790: 1987 fire rating
4. Thickness: 50mm minimum.

Planting shrubs/ herbaceous plants/ bulbs

400 Random plant layout

1. Description: To all beds
2. Spacing: Evenly, avoiding straight lines
3. Density: As plant schedule

400A Plant layout hedges

1. rEgular/ formal pre-clipped hedginr
2. All planting will be set out on site by Landscape Architect. Contractor to notify ASD with 4 working days notice for this work to take place.
3. No planting should be commenced until ASD has set out the plants by hand.
4. Spacing: As drawing ASD drawings.
5. Density: As plant schedule.

415 Antidesiccant for conifers/ Evergreens

1. Manufacturer: Wilt Pruf Products
2. www.wiltpruf.com .
 - 2.1. Product reference: Wilt Pruf
3. Application: Dip before delivering to site. Spray soon after planting.
 - 3.1. Do not apply in wet or frosty weather.
 - 3.2. Ensure full coverage of underside of foliage.

445 Planting bulbs/ Corms/ Tubers

1. Depth: Top of bulb/ corm/ tuber at a depth of approximately twice its height, base in contact with bottom of hole.
2. Backfilling: Finely broken soil. Lightly firm to existing ground level.
3. Naturalized planting in existing grassed areas
 - 3.1. Scattering: Random. Plant bulbs/ corms/ tubers where they fall.
 - 3.2. Planting: Neatly remove a plug of turf and replace after planting.

470A All hedges

1. All hedging to be instant hedge species (pre-grown to dimensions specified in
2. plant schedule). Non-instant hedging will be rejected
3. Shrubs for hedges: Consistent in species, cultivar and clone to ensure a uniform
4. hedge.

476A Shrub, herbaceous and bulb backfilling material

1. Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required:
2. Ameliorant/ Conditioner: Sanitized and stabilized compost as clause 358A
 - 2.1. Application rate: a 3:1 Soil:Compost proportion
3. Fertilizer: Slow release as clause 335A

3.1. **Application rate:** To manufacturer's/ supplier's recommendations

480A 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. - Depth: 50 mm.

485A Mulching planting beds

1. **Material:** As clause 344A
 - 1.1. **Purity:** Free of pests, disease, fungus and weeds.
2. **Preparation:** Clear all weeds. Water soil thoroughly.
3. **Coverage:** 50 mm depth

485B Mulching hedges

1. **Material:** As clause 344A
 - 1.1. **Purity:** Free of pests, disease, fungus and weeds.
2. **Preparation:** Clear all weeds. Water soil thoroughly.
3. **Coverage:** 50 mm depth

Planting trees

502 Antidesiccant for conifers/ Evergreens

1. **Manufacturer:** Wilt Pruf - www.wiltpruf.com
 - 1.1. **Product reference:** Wilt Pruf
2. **Application:** Dip in or thoroughly spray before delivering to site. Spray again soon after planting.
 - 2.1. Do not apply in wet or frosty weather.
 - 2.2. Ensure full coverage of underside of foliage.

525A Semimature trees

1. **Standard:** Prepare roots and transplant to BS 4043.
2. **Backfilling material:** As clause 586 / 586A.
 - 2.1. Backfill in layers of no greater than 200mm
 - 2.2. Consolidate each layer to ensure air pockets are removed
 - 2.3. Heal in and firm soil under any taper beneath the rootball to ensure a stable base is established.
3. **Support:** Underground guying as clause 530 - 534
4. **Protection:** Protect from ongoing constructions works and wrap trunks and lower branches with hessian strips and leave on for at least two summers

530A Guying generally

1. All Semi-mature Trees and Specimen Multistem Shrubs are to be secured with underground guying.

532A Underground guying - platipus tree anchor system

1. **Tree Anchor System and Rootball fixing system:**

- 1.1. Manufacturer: Platipus Anchors Limited, Kingsfield Business Centre, Philanthropic Road, REDHILL, Surrey, RH1 4DP. Tel: +44 (0) 1737 762300. www.platipus-anchors.com.
- 1.2. Product reference: [RF1, RF2, RF3, RF4 - size as per Manufacturer's recommendation].
2. Install in strict accordance with Manufacturer's recommendations.
3. Selection of the correct size of system and overall design liability will remain with the trade contractor.

590A Mulching trees

1. Material: Sanitized and stabilized compost as clause 358A
 - 1.1. Purity: Free of pests, disease, fungus and weeds.
2. Preparation: Clear all weeds. Water soil thoroughly.
3. Coverage: In a circular area, 900 mm diameter to semi-mature trees and 800mm diameter to multi stem trees, measured from the outside of the tree stem, 50mm thick.

Woodland/ matrix/ buffer zone planting - Not Used

Protecting/ maintaining/ making good defects

710A Maintenance

1. Duration: Carry out the operations in the following clauses from completion of planting until the end of the defects liability period.
2. Defects liability period:
 - 2.1. Trees: 12 months
 - 2.2. All Other Grass & Shrubs: 12 months
3. Frequency of maintenance visits: Monthly during growing season or more frequently as scheduled in Q35 Clause 102.
4. Submit monthly summary sheets of all operations carried out, broken down in the pre- agreed areas / zones. Details to include:
 - 4.1. Personnel employed
 - 4.2. Equipment used for each operation
 - 4.3. Comment on effectiveness of past months operations
 - 4.4. Recommendations for any alteration to specified procedures / operations
 - 4.5. Problems, incidents occurring (damage, disease, pests, infestation, water logging etc.)

720A Failures of planting

1. General: Plants/ trees/ shrubs that have failed to thrive (unless due to theft or malicious damage after completion) during period stated in clause 710A, will be regarded as defects due to materials or workmanship not in accordance with the Contract. Replace with plants/ trees/ shrubs equivalent in height and spread of those currently thriving on site.
2. Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
 - 2.1. If full crop has failed, replacements shall be of a size equal to one nursery size up for each season since original planting was programmed & implemented.
3. Timing of making good: In accordance with an agreed defects rectification programme, but no later than the next available planting season

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 hoeing, maintaining full thickness of mulch, and the use of approved non-residual herbicides if required
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. **Staking:** Check condition of stakes, ties, guys and guards.
 - 4.1. **Broken or missing items:** Replace.
 - 4.2. **Rubbing:** Prevent.
 - 4.3. **Ties:** Adjust to accommodate growth.
 - 4.4. **Damage to bark:** Cut back neatly with sharp knife. Prevent further damage.
 - 4.5. **Frequency of checks:** At each scheduled maintenance visit
5. **Firming up:** Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
6. **Trees:** Spray crown when in leaf during warm weather.
 - 6.1. **Timing:** After dusk.
7. **Watering:** As scheduled and when instructed

755 Planting maintenance - fertilizer

1. **Time of year:** March or April.
2. **Fertilizer:** Slow release as clause 335A
 - 2.1. **Manufacturer:** As clause 335A
 - 2.2. **Product reference:** As clause 335A
3. **Application:** Evenly spread, carefully incorporating below mulch materials.
4. **Application rate:** To manufacturer's recommendations / to suit soil report recommendations

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.

Ω End of Section

Q35

Landscape maintenance

To be read with preliminaries/ general conditions.

2A Contacts

1. **FACILITIES MANAGEMENT (FM)**
2. TBC
3. **CONTRACTOR**
4. TBC
5. **LANDSCAPE ARCHITECT (LA)**
6. Vincent Friedlander / Lori Micu
7. Allen Pyke Associates
8. 69A Lensfield Road
9. Cambridge
10. CB2 1EN
11. Email: v.friedlander@allenpyke.co.uk / l.micu@allenpyke.co.uk
12. Tel: 01223 358 055
13. **PLANNING SERVICE ARBORICULTURAL OFFICER**
14. TBC

Generally

101A Maintenance plant / equipment

1. The Contractor is to provide all equipment necessary for the complete maintenance of the works.
2. **Training:** Where required by law all operatives using such equipment will be trained to statutory requirements. Where the equipment is not covered by law; all operatives will be trained to appropriate industry standard best practice use of machinery (NPTC or equivalent).

102A Maintenance programme - schedule of operations

1. In addition to the electronic submission provide a bound maintenance programme with the Tender Return to cover the specification here-in and all appendices to this document.
2. **Schedule of operations, broken down into areas as illustrated in Appendix A, and by month and shall identify:**
 - 2.1. Approximate dates
 - 2.2. Operations to be undertaken
 - 2.3. Chemicals used, location and quantities
 - 2.4. Machinery and labour to be employed
3. A revised bound maintenance manual is to be prepared by the Contractor at the end of the defects liability period, as clause 104A for the use of the FM.

103A Record of maintenance operations

1. **Submit monthly summary sheets of all operations carried out, broken down in the pre-agreed areas / zones. Details to include:**
 - 1.1. Personnel employed
 - 1.2. Equipment used for each operation
 - 1.3. Comment on effectiveness of past months operations

- 1.4. Recommendations for any alteration to specified procedures / operations
- 1.5. Problems, incidents occurring (damage, disease, pests, infestation, water logging etc)

104A Re-submission of the schedule of operations

1. **General:** Before end of the annual review, submit a printed report recommending procedures to be established by the Employer for maintenance of the estate for the coming year.
2. Document to be based on the document produced for clause 102A, and include all submitted reports as Clause 103A.
3. Provide a summary of any ongoing maintenance problems experienced during the previous period, and recorded as clause 103A.

110A Notice

1. **Give notice to FM before:**
 - 1.1. Application of herbicide.
 - 1.2. Application of fertilizer.
 - 1.3. Major pruning / shaping operations.
 - 1.4. Major re-instatement works, as clause 130A.
 - 1.5. Each site maintenance visit.
2. **Period of notice:** 7 days

130A Reinstatement

1. **Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings during tertiary operations:** Reinstatement to original condition.

140 Control of mammalian pests

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

155A Watering

1. **Quantity:** As required to promote best plant establishment and ongoing health and vigour.
2. **Frequency:** As required to promote best plant establishment and ongoing health and vigour.
3. **Application:** Do not damage or loosen plants, and use fine rose head unless specifically specified differently.
4. **Compacted soil:** Loosen or scoop out, to direct water to root zone.
5. **Special requirements:** Planters to car park entrances – top-up water reservoirs to ensure constant supply is available to wick up into planting medium.

160A 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.
2. **Deficiencies in Aquifer:** If water supply is, or is likely to be, reduced due to a lowering of the water table and thus supply of the borehole, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

180A Chipping or shredding

1. **General:** quiet machine to be used and arisings spread under existing shrubs. Diseased plant material or other plant material unsuitable for chipping is to be removed offsite.
2. **Leaf collection:** shredded leaves collected by vacuums to be emptied in sheltered conditions to avoid unnecessary debris blowing around.

190A Litter

1. **Extraneous rubbish / non-biodegradable litter not arising from the contract work:** Collect and remove from site in accordance with clause 170.
2. **Operations:** All roads, pavements, car parks, hard standings, lawns, shrub beds, tree canopies, hedgerows water courses / features and the like are to remain free from litter at all times.
3. **Woodland areas:** review woodlands in the course of general operations and collect litter as it occurs. Provide for one entire sweep of all woodland areas to collect litter that may have blown onto the site and accumulated throughout the year.

191A Leaf removal

1. **Operations:** All hard standings are to remain free from leaves and autumn debris. Removal of fallen leaves on lawns, shrub beds and the like is to take place as required to avoid excessive build up.
2. **Frequency hard paving:** As required to achieve objectives
3. **Frequency soft landscape areas:** Not less than weekly during peak autumn defoliation Transport leaves in closed / netted vehicle to prevent re-dispersal during transport. Disposal as Clause 170.

192A Litter bin & ash bin emptying

1. **Location:** as per contract drawings (TBC)
2. **Frequency:** Do not allow to become more than 2/3 full. **Operations:**
 - 2.1. Remove partially filled bags, and replace with new bag.
 - 2.2. Do not decant bags from one to another
 - 2.3. Do not empty bags into common container
3. Transport in sealed vehicle or netted trailer to avoid dispersal.
4. Co-ordinate disposal of litter bags with the FM's cleaning/waste Contractor:

195 Protection of existing grass

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

197A Cleanliness

1. **During Operations:** Minimise disruption to the smallest effective working area to avoid disruption to the operation of the estate. Plant and tools will be maintained in close proximity of the operations at all times.
2. **Breaks in Operations:** during breaks all work areas are to be left in a clean and tidy manner. All tools and plant to be removed and/or secured from public areas. Any path closures are to be re-opened where possible and where not, adequate provision / diversions are to be provided to minimise disruption to the operation of the estate.
3. **Soil and arisings:** Remove from hard surfaces.
4. **General:** Leave the works in a clean, tidy condition after any maintenance operations

Grassed areas

226 Tree stems

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

235 Bulbs and corms in grassed areas

1. Before flowering: Do not cut.
2. Interval between end of flowering and start of grass cutting (minimum): 4 weeks

250A Leaf removal

1. As clause 191A.
2. Frequency: as required to ensure berries are not laying on the paving.

285A Top dressing

1. Location: As Clause 260 & 265
2. Type: Blend of fine grade green waste compost and sand. Composition TBC based on soil / sward conditions
3. Coverage/ Depth: 6 – 12mm TBC depending on site conditions
4. Timing: Autumn
5. Decompaction / aeration operations to be concluded before topdressing operations. Co-ordination: with clause 350 to prevent over fertilisation

345A Control of japanese knotweed

1. Notify FM / LA of any occurrence outside the recorded positions on site.
2. Access Control: erect a cordon 2m beyond the visible extend of any growth and exclude all pedestrian and vehicular movement from entering / traversing the area. Seek prior approval from LA before commencing the cordon.
3. Operations: Spot treat in June and September during suitable weather conditions and when plants are growing vigorously.
4. Herbicide: In accordance with the Environment Agency 'Code of Practice for the management, destruction and disposal of Japanese knotweed'
5. Application: In accordance with the Environment Agency 'Code of Practice for the management, destruction and disposal of Japanese knotweed'
6. Arisings: In accordance with the Environment Agency 'Code of Practice for the management, destruction and disposal of Japanese knotweed'

Flower beds/ seasonal beddings

460A Beds of perennials or perennials and annuals

1. Plant supports: Stake and tie plants using pea sticks.
 - 1.1. Length: To suit plant height
 - 1.2. Maintain throughout the growing season.
2. Gaps in planting: Refill by replanting.
3. Watering
 - 3.1. New plants: Before and after planting out.
 - 3.2. Ongoing: As necessary for the continued thriving of all planting.
4. Operations at end of growing season
 - 4.1. Trim: Older flowering stems of herbaceous perennials.
 - 4.2. Remove: Redundant plant supports, litter, debris and arisings.
 - 4.3. Cultivate: Fork over the soil, taking care not to cause undue disturbance to plants.
 - 4.4. Top dress: Apply green waste compost mulch.
 - 4.5. Cut Back: in consultation with LA cut back at the end of the first flowering to promote a second flowering.

470A Flower beds generally

1. Operations
 - 1.1. Remove: Dead flower heads, fallen leaves, litter and debris.
 - 1.2. Weeds: Thoroughly hand weed.
 - 1.3. Cultivate: Lightly hoe.
 - 1.4. Trim: Clip grass edges.

490A Thinning by removal of surplus plants

1. Plants to be thinned: All Shrub and Flower beds, in agreement with LA.
2. Standard: BS 7370-4, clause 3.5.17.1.
3. Timing: Thin when foliage of adjacent plants has begun to touch - approximately every 2-3 yrs – report to LA before commencement of any thinning.
4. Roots
 - 4.1. Disturbance to adjacent plants: Minimise.
 - 4.2. Soil: Refill holes with topsoil to leave an even graded surface.
 - 4.3. Mulch: Maintain mulch as original specification.
5. Adjacent plants: Make good any minor damage immediately.
6. Plants for retention: Select plants with a strong healthy habit.
7. Mature planting density: full coverage

Shrubs/trees/hedges

500A Establishment of new semi mature tree planting

1. Defects period for the construction programme will be 24months.

500B Replacements at the end of the defect liability period

1. A full list of any trees, shrubs and/or hedging replaced at the end of the Defects Liability period will be provided and replaced stock clearly identified with a physical tag, and clearly marked on a plan.

500C Establishment of new planting

1. Duration: 12 months
2. Weed control
 - 2.1. Method: Keep planting beds clear of weeds:
 - 2.2. Ornamental shrub flower beds: by hand as clause 655 - 670
 - 2.3. utlying shrub and woodland planting: herbicide application as clause 655 - 670
 - 2.4. 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 clause 155A
5. Trees: When in leaf, spray crowns in the evening during warm weather.

502 Establishment of new planting – fertilizer

1. Time of year: March or April.
2. Type: Slow release granular general purpose - Enmag or similar
3. Spreading: Spread evenly. Carefully lift and replace any mulch materials.

3.1. Application rate: 70-100 g per m² dependant on site conditions

515 Tree guy wires

1. Inspection/ Maintenance times: November and March, and after strong winds / storms
2. Operations
 - 2.1. Replace or resecure loose or missing guy wires.
 - 2.2. Adjust to suit stem growth and to provide correct and uniform tension.
3. Removal: to be agreed with LA

520A Refirming of trees and shrubs

1. Timing: After strong winds, frost heave and other disturbances.
2. Refirming: Tread around the base until firmly bedded. Adjust underground ties or stakes as required after firming.
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.

540A 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 to LA at the next monthly progress meeting if detected.
5. Growth retardants, fungicide or pruning sealant: Do not use unless instructed.

545 Pruning of excessive overhang

1. Timing: Late summer / Early Autumn
2. Operations: Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.
3. Special requirements: Feathered discrete pruning to avoid large cut limbs being visible - extent to be agreed with LA

550 Pruning of excessive height

1. Timing: Late Summer / Early Autumn
2. Operations: Remove excessive height Remove excessive height as agreed with LA.

555A Pruning trees and shrubs

1. Standard: To BS 7370-4.
2. Special requirements:
 - 2.1. Feathered discrete pruning to avoid large cut limbs being visible - extent to be agreed with LA
 - 2.2. Tilia sp: keep free from basal suckers and epicormic growth at all times

- 2.3. **Amelanchier sp:** keep free from additional basal suckers and epicormic growth at all times ·
Dead wood: prune out dead wood from canopies.

570 Formative pruning of young trees

1. **Standard:** Type and timing of pruning operations to suit the plant species.
2. **Time of year:** Do not prune during the late winter/ early spring sap flow period.
3. **Young trees up to 4 m high**
 - 3.1. **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.
 - 3.2. **Remove duplicated branches** and potentially weak or tight forks. In each case cut back to live wood.
4. **Whips or feathered trees:** Do not prune.
5. **Operatives:** Extensive pruning of young trees and any surgery to larger trees must be carried out by an approved member of the Arboricultural Association or other approved specialist

575 Pruning ornamental shrubs

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

580 Pruning flowering species of shrubs and roses

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

590 Pruning particular species

1. **Species to be pruned to separate specific instructions:** Amelanchier – to retain loose ‘umbrella’ form

600A Hedge trimming generally

1. **Dimensions:** All hedges on site are required to be kept clipped to their original dimensions unless specifically stated otherwise.
2. **Timing:** Hedge clipping must comply with Wildlife and Countryside Act 1981. This protects birds during their nesting season, nominally 1 March- 31 July.
3. Any hedge cutting should avoid this period if possible, but given the aesthetic requirements this may not be possible.
4. **Physical Checks:** should be made before cutting during this period to ensure there are no nesting birds present.
5. **Tools:** Appropriate, well maintained and sharp.

601A Hedge trimming - yew hedges

1. **Objective:** These hedges create evergreen structure within courtyard garden spaces.
2. **Dimensions:** 1200mm ht x 600mm width, rectangular and curved forms.
3. **Specific Cutting:** throughout the growing season use hand shears to trim excessive shoots that detract from the overall appearance of the hedge and maintain design shape.
4. **Arisings:** collected and removed as clause 170A.

5. **Fertiliser:** as clause 695.
6. **Irrigation:** as clause 155A - 160A inclusive
7. **Tools:** Mechanical Shears except for 'Specific Cutting'
8. **Trim:** Remove current growth rather than old wood.
9. **Form:** Trim carefully and neatly to regular line and shape, with the width at the top less than that at the base.

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:** immediately upon discovery
2. **Replacement:** to be programmed with the LA. Report through the monthly progress reports to FM.

635 Reinstatement of shrub/ Herbaceous areas

1. **Dead and damaged plants:** Remove.
2. **Mulch/ matting materials**
 - 2.1. Carefully move to one side and dig over the soil, leaving it fit for replanting.
3. Do not disturb roots of adjacent plants.
4. **Replacement plants**
 - 4.1. **Use pits and plants:** To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.
 - 4.2. **Additional requirements:** None
5. **Dressing:** Slow release fertilizer:
 - 5.1. **Type:** Slow release granular general purpose – enmag or similar approved
 - 5.2. **Application rate:** Spread evenly. Carefully lift and replace any mulch materials. 70 – 100 g/m² dependant on site conditions

640A Thinning by removal of surplus plants

1. **Plants to be thinned:** All shrub, woodland and flower beds as appropriate
2. **Standard:** BS 7370-4.
3. **Timing:** Feb / March as agreed with LA in previous Autumn
4. **Roots**
 - 4.1. **Disturbance to adjacent plants:** Minimise.
 - 4.2. **Soil:** Refill holes with topsoil to leave an even graded surface.
 - 4.3. **Mulch:** Maintain mulch as original specification and in accordance with clause 690.
 - 4.4. **Adjacent plants:** Make good any minor damage immediately.
5. **Plants for retention:** Select plants with a strong healthy habit.
6. **Mature planting density:** to achieve full coverage or other as agreed with LA

642A Thinning by transplanting surplus plants

1. **Plants to be thinned:** All shrub, woodland and flower beds as appropriate
2. **Standard:** BS 7370-4.
3. **Timing:** Feb / March as agreed with LA in previous Autumn
4. **Roots**

- 4.1. Disturbance to adjacent plants: Minimise.
- 4.2. Soil: Refill holes with topsoil to leave an even graded surface.
- 4.3. Mulch: Maintain mulch as original specification and in accordance with clause 690 – 693.
- 4.4. Adjacent plants: Make good any minor damage immediately.
5. Plants for retention: Select plants with a strong healthy habit.
6. Mature planting density: to achieve full coverage or other as agreed with LA

645 Weed control generally

1. Weed tolerance: all areas to be weed free at all times
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.

655 Weed cutting by hand or machine

1. Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 200mm before application of herbicide to promote vigorous regrowth.
2. Herbicides: Glyphosate of similar pre approved by LA

657 Herbicide to kill regrowth

1. Type: Suitable foliar acting herbicide to kill regrowth.
2. Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

665 Weed control with winter herbicide

1. Type: Suitable residual soil acting herbicide.
2. Time of year: Unless otherwise agreed, complete before end of March.
3. Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

670 Weed control with summer herbicide

1. Type: Suitable foliar acting herbicide.
2. Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

680 Soil aeration

1. Compacted soil surfaces
 - 1.1. Prick up: To aerate the soil of root areas and break surface crust.
 - 1.2. Size of lumps: Reduce to crumb and level off.
 - 1.3. Damage: Do not damage plants and their roots.

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.

690A Maintenance of ornamental grade mulch

1. **Location:** Trees, ornamental flower and shrub beds in close proximity to the buildings and site infrastructure.
2. Well composted ornamental grade bark mulch
 - 2.1. Particle size: 5-35mm,
 - 2.2. Free from foreign material and weed seeds
 - 2.3. Less than 5% wood chippings.
 - 2.4. Ph to be between 4.5 and 5.5.
 - 2.5. comply with BS 4790: 1987 fire rating
3. **Thickness (minimum):** 50 mm.
4. **Timing:** in March after weed clearance
5. **Dry Weather:** Water planting bed thoroughly immediately prior to relaying mulch if soil is dry.
6. Water mulch thoroughly following top up.
7. **Waterlogged beds:** Delay mulch spreading if ground is wet or excessively waterlogged. Mulch spill on adjacent areas: Remove weeds and rubbish and return mulch to planted area.
8. **Weeding:** Remove weeds growing on or in mulch by hand
9. **Perennial Weeds:** use a spade to dig up deep rooted perennial weeds. Replace soil and re-mulch
10. **Supply:** Melcourt Industries Ltd, Boldridge Brake, Long Newton, Tetbury, Glos. GL8 8RT or equal and approved.

690B Maintenance of compost mulch

1. **Type:** Sanitized and stabilized compost. Supplied as part of Clause 170
2. **Standard:** To BSI PAS 100.
3. **Horticultural parameters:**
 - 3.1. pH (1:5 water extract): 7.0-8.7.
 - 3.2. Electrical conductivity (maximum, 1:5 water extract): 200 mS/m.
 - 3.3. Moisture content (m/m of fresh weight): 35-55%.
 - 3.4. Organic matter content (minimum): 25%
 - 3.5. Grading (air dried samples): 99% passing 25 mm screen, and 90% passing 10mm screen mesh aperture.
 - 3.6. Carbon : Nitrogen ratio (maximum): 20:1.
 - 3.7. Texture: Friable.
 - 3.8. Objectionable odour: None.
4. **Composting Association certification:** Required.
5. **Other requirements:** Submit details of recent chemical and physical analysis before ordering.
6. **Coverage:** 50mm thick layer.
7. **Timing:** in March after weed clearance
8. **Dry Weather:** Water planting bed thoroughly immediately prior to relaying mulch if soil is dry.
9. Water mulch thoroughly following top up.
10. **Waterlogged beds:** Delay mulch spreading if ground is wet or excessively waterlogged. Mulch spill on adjacent areas: Remove weeds and rubbish and return mulch to planted area.
11. **Weeding:** Remove weeds growing on or in mulch by hand
12. **Perennial Weeds:** use a spade to dig up deep rooted perennial weeds. Replace soil and re-mulch.
13. **Woodland Planting:** maintain a mulch ring around each shrub / tree, 300mm diameter. Fully remove grass / weeds before reapplication of mulch.

695A Fertilizing established trees and shrubs

1. Time of year: March or April
2. Type of fertilizer: Slow release granular general purpose - Enmag or similar approved
3. Application: Spread evenly. Carefully lift and replace any mulch materials.
 - 3.1. Rate: 70 – 100 g/m² dependant on site conditions

700 Snow removal from shrubs/ Trees

1. Standard: To BS 7370-4.
2. Plants subject to snow removal: - Courtyard planting- Hedges
3. Timing: as required to prevent snow weight breaking / damaging branches

705A Winter leaf removal

1. Operations: All roads, pavements, car parks and hard standings are to remain free from leaves and autumn debris at all times. Removal of fallen leaves on lawns, shrub beds and the like is to take place as required to avoid excessive build up.
2. Frequency hard paving: As required to achieve objectives.
3. Frequency ornamental soft landscape areas: Not less that weekly during peak autumn defoliation.
4. Transport leaves in closed / netted vehicle to prevent re-dispersal during transport.
5. Disposal: Shred and dispose as Clause 170A.

Tree work

810A Tree work generally

1. Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
2. Protection: Avoid damage / disruption to adjacent trees / shrubs. Repair any damage as clause. 380 and/or 635
3. Standards: In accordance with;
 - 3.1. BS 5837: 2005 Trees in relation to construction. Recommendations
 - 3.2. BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
4. Removing branches: Cut as Arboricultural Association Leaflet 'Mature tree management'. Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
5. Appearance: Leave trees with a well balanced natural appearance.
6. Chain saw work: Operatives must hold a Certificate of Competence.
7. Tree work: Assessment and operations to be carried out by an approved member of the Arboricultural Association.

815A Additional work

1. Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice to LA at the next monthly progress meeting if detected.

820 Prevention of wound bleeding

1. Standard: To BS 3998, clause 8.

825 Prevention of disease transmission

1. Standard: To BS 3998, clause 9 and Appendix B.

830 Cleaning out and deadwooding

1. Remove
 - 1.1. Dead, dying, or diseased wood, broken branches and stubs.
 - 1.2. Fungal growths and fruiting bodies.
 - 1.3. Rubbish, windblown or accumulated in branch forks.
 - 1.4. Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
 - 1.5. Other unwanted objects, e.g. tree houses, swings.
 - 1.6. Climbing plants are to remain in woodland areas unless as directed by LA.

835A 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 to LA at the next monthly progress meeting if detected. Do not apply fungicide or sealant unless instructed.

840 Crown reduction/ Shaping

1. **General:** Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.
2. **Operations:** Only as required and agreed with LA, and Planning Service where work is required to TPO'd trees. Make recommendations to LA at the earliest opportunity to work deemed to be necessary in the opinion of the Contractor and in accordance with clause 810A

845A Crown lifting

1. **Clearances:** Remove branch systems to give clearance.
 - 1.1. **Height:** as directed to allow pedestrian and / or vehicle traffic as required
2. **Removing branches:** Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.
3. **Operations:** Only as required and agreed with LA, and Planning Service where work is required to TPO trees. Make recommendations to LA at the first available monthly progress meeting to work deemed to be necessary in the opinion of the Contractor, and in accordance with clause 810.

850A Crown thinning

1. **Removing branches:** Remove inward growing, crossing, rubbing, dead and damaged branches.
2. **Thinning:** Selectively remove an agreed % of secondary and small live branch growth evenly throughout the crown.

3. **Cutting:** Make no cuts of more than 50 mm diameter.
 - 3.1. **Branches:** Cut back to lateral or sublateral buds or branches without leaving stumps.
4. **Appearance:** Leave a uniform and well balanced structure of branches and foliage.
5. **Operations:** Only as required and agreed with LA, and Planning Service where work is required to TPO trees. Make recommendations to LA at the first available monthly progress meeting to work deemed to be necessary in the opinion of the Contractor and in accordance with clause 810.

855A Cutting tree roots

1. In accordance with clause 810A.
2. **Excavating:** Use hand tools only.
3. **Protected area:** Calculate the accurate Root Protection Zones as prescribed in BS 5837:2005 when required work occurs within:
 - 3.1. The branch spread of the tree.
 - 3.2. An area with a radius of half the tree's height, measured from the trunk.
4. **Outside protected area:** Give notice to LA of roots exceeding 50 mm in diameter. Do not cut without approval.
5. **Cutting**
 - 5.1. **Cutting:** Make clean smooth cuts with a hand saw.
 - 5.2. **Wounds:** Minimize. Avoid ragged edges.
 - 5.3. **Finishing:** Pare cut surfaces smooth with a sharp knife.
6. **Backfilling**
 - 6.1. **Protection:** Cover cut roots with clean sharp sand.
 - 6.2. **Material:** Backfill with original topsoil.

860A Removing trees, shrubs and hedges

1. **Standards:** To BS 3998, Appendix A and Health & Safety Executive (HSE)/ Arboricultural and Forestry Advisory Group Safety Leaflets.
2. **Existing services:** Check for below and above ground services. Give notice to LA if they may be affected.
3. **Shrubs and smaller trees:** Cut down and grub up roots.
4. **Tree stumps**
 - 4.1. **Removal:** Remove mechanically to a minimum depth of 300 mm below ground level
 - 4.2. **Removal by winching:** not permitted.
5. **Protection:** Avoid damage to neighbouring trees, plants & grass. Repair any damage as clause. 380 and/or 635
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.
8. **Operations:** Only as required and agreed with LA, and Planning Service where work is required to TPO trees. Make recommendations to LA at the first available monthly progress meeting to work deemed to be necessary in the opinion of the TC and in accordance with clause 810.

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.

870A Cavities in trees

1. **Investigation:** Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice to LA at the next monthly progress meeting.
2. **Water filled cavities:** Do not drain.
3. **Sound wood inside cavities:** Do not remove.
4. **Cavity openings:** Do not cover

Water areas - Not Used

Hard landscape areas/fencing

900A Ice & snow prevention / snow clearance

1. By client FM team

910A 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. Ensure there is no spray drift onto adjacent grass / shrub beds.
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 & gum removal:** In accordance with BS 7370-2, table 4.

915A Paving sealant

1. Refer to Q25 for details of paving sealants.

940 Site furniture

1. Allow for a maintenance schedule based on the manufacturer's recommendations; refer to specification Q50 for manufacturers.

Ω End of Section

Q40 Fencing

Clauses

2 To be read with preliminaries/ general conditions.

Fencing systems

210A 1.1m High Metal Screen RAL 7048

1. (R1(
2. Manufacturer: to GKE specification
 - 2.1. Product reference: to GKE specification
3. Height: 1.1m
4. Maximum centres of posts: to GKE and Fabricator detail
5. Method of setting posts: to GKE and Fabricator detail
6. Accessories: to GKE and Fabricator detail
7. Contractor to provide sample panels for approval.

210B 1.8m high Metal Screen RAL 7048

1. (R2(
2. Manufacturer: to GKE specification
 - 2.1. Product reference: to GKE specification
3. Height: 1.8m
4. Maximum centres of posts: to GKE specification
5. Method of setting posts: to GKE specification
6. Accessories: to GKE specification
7. Contractor to provide sample panels for approval.
8. Conformity: Submit manufacturer's and installer's certificates, to BS 1722-11.

Gates, posts and stiles - Not Used

Accessories - Not Used

Execution

710 Installation generally

1. Set out and erect
 - 1.1. Alignment: Straight lines or smoothly flowing curves.
 - 1.2. Tops of posts: Following profile of the ground.
 - 1.3. Setting posts: Rigid, plumb and to specified depth, or greater where necessary to ensure adequate support.
 - 1.4. Fixings: All components securely fixed.

720 Setting posts in concrete

1. Standard: To BS 8500-2.
2. Mix: Designated concrete not less than GEN1 or Standard prescribed concrete not less than ST2.

3. **Alternative mix for small quantities:** 50 kg Portland cement to 150 kg fine aggregate to 250 kg 20 mm nominal maximum size coarse aggregate, medium workability.
4. **Admixtures:** Do not use.
5. **Holes:** Excavate neatly and with vertical sides.
6. **Filling:** Position post/ strut and fill hole with concrete to not less than the specified depth, well rammed as filling proceeds and consolidated.
7. **Backfilling of holes not completely filled with concrete:** Excavated material, well rammed and consolidated.

730 Exposed concrete foundations

1. **Filling:** Compact until air bubbles cease to appear on the upper surface.
2. **Finishing:** Weathered to shed water and trowelled smooth.

Completion

910 Cleaning

1. **General:** Leave the works in a clean, tidy condition.
2. **Surfaces:** Clean immediately before handover.

920 Fixings

1. **All components:** Tighten.
 - 1.1. **Timing:** Before handover.

Ω End of Section

Q50

Site/street furniture/equipment

Clauses

2 To be read with preliminaries/ general conditions.

Gates, barriers and parking controls - Not Used

Site and street furniture

199A Samples

199B Workshop drawings

210 Cycle stands

1. Manufacturer: Marshalls
 - 1.1. Product reference: Fin cycle stand
2. Material: Stainless steel
 - 2.1. Finish: Brushed
 - 2.2. Colour: None
3. Number of stands: 9
4. Accessories: None
5. Method of fixing: Root, 300 mm below ground, set in concrete baseRefer to detail drawing XX
TBC

220A Bench

1. REfer to ga's for locations (f1R)
2. Manufacturer: EverEdge
01630 417120
enquiries@everedge.co.uk ;
 - 2.1. Product reference: Seat fixed onto planter
3. Material: Cumaru wood, powder coated A36 steel
 - 3.1. Finish: As manufactured
 - 3.2. Colour: TBC
4. Accessories/ Special requirements: mounting brackets and fastening componenets
5. Method of fixing: Fixed onto planter, as per manufacturer's detail

220B Bench

1. REfer to ga's for locations (f2R)
2. Manufacturer: EverEdge
 - 2.1. Product reference: Double wide backless bench
3. Material: Cumaru wood, powder coated A36 steel
 - 3.1. Finish: As manufactured
 - 3.2. Colour: TBC
4. Accessories/ Special requirements: mounting brackets and fastening componenets
5. Method of fixing: set in concrete base

Installation

510 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: Designated, not less than GEN 1
3. Admixtures: Do not use.
4. Foundation holes: Neat vertical sides.
5. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

515 Setting components in concrete

1. Holes: typically 250 x 250 x minimum 300 mm deep
2. Components: Accurately positioned and securely supported.
3. Concrete fill: Fully compacted as filling proceeds.
4. Concrete foundations exposed to view: Compacted until air bubbles cease to appear on the upper surface, then weathered to shed water and trowelled smooth.
5. Temporary component support: Maintain undisturbed for minimum 48 hours.

550 Damage to galvanized surfaces

1. Minor damage in areas up to 40 mm² (including on fixings and fittings): Make good.
 - 1.1. Material: Low melting point zinc alloy repair rods or powders made for this purpose or at least two coats of zinc-rich paint to BS 4652.
 - 1.2. Thickness: Sufficient to provide a zinc coating at least equal to the original layer.

560 Site painting

1. Timing: Prepare surfaces and apply finishes as soon as possible after fixing.

Ω End of Section

Q52

Play and sports equipment

Clauses

2 To be read with preliminaries/ general conditions.

General - Not Used

System performance - Not Used

Products

320 Balance beam

1. Description: Active Trail Zig Zag Beam Crossing L2 (Y3)
2. Standard: To BS EN 1176-1.
3. Manufacturer: eibe play ltd.
 - 3.1. Product reference: 5 25 002 0710 0
4. Height: fall height under 600mm
5. Method of fixing:

322 Hexagon stepping plates

1. (Y1(
2. Supplier: eibe play Ltd.
3. eibe House
4. Forsyth's Home Farm
5. A3 Bypass Road
6. Hurtmore
7. Surrey
8. GU8 6AD
9. Fon. +44 (0) 14 83/813 834
10. eibe@eibe.co.uk
11. Product code: Basis Platform Siebengebridge 5 15 103 01 10 0, with powder coated yellow HPL edging
12. Lighting integrated underneath play equipment to speirs and major specification
13. Method of fixing: Footing bolted to a base plate to concrete upstand (to eabe specification)

325 Stepping logs 60 and 40 cm high

1. (Y2(
2. Supplier: eibe play Ltd.
3. eibe House
4. Forsyth's Home Farm, GU8 6AD
5. t +44 (0) 1483/813 834
6. Product code: 5553115 (60cm) and 5553105 (40cm)
7. Method of fixing: Footing bolted to a base plate (to Eibe play specification)

Execution

710 Play equipment installation generally

1. **Standard:** To manufacturer's written instructions provided in accordance with BS EN 1176-1.

740 Preservative treated timber

1. **Surfaces exposed by minor cutting and drilling:** Treated by immersion or with two flood coats of a solution recommended for the purpose by main treatment solution manufacturer.

750 Damage to galvanized surfaces

1. **Minor damage in areas up to 40 mm² (including on fixings and fittings):** Make good.
 - 1.1. **Materials:** Low melting point zinc alloy repair rods or powders made for this purpose or at least two coats of zinc-rich paint to BS 4652.
 - 1.2. **Thickness:** Sufficient to provide a zinc coating at least equal to the original layer.

Completion

910 Inspection

1. **Standard:** To BS EN 1176-1
2. **Timing:** Post installation
3. **Period of notice (minimum):** 3 working days.

920 Cleaning

1. **General:** Leave the works in a clean, tidy condition.
2. **Surfaces:** Clean immediately before handover.

930 Testing

1. **Standard:** To BS EN 1176-1.

940 Labels

1. **Standard:** To BS EN 1176-1
2. **Labels:** Provide permanent labelling on all types of play equipment.
3. **Location:** Where visible when erected on site.

950 Documentation

1. **Standard:** To BS EN 1176-1
2. **Contents**
 - 2.1. Copies of test reports.
 - 2.2. General product information.
 - 2.3. Installation information.
 - 2.4. Inspection and maintenance information.
3. **Number of copies:** 2
4. **Submission:** 2 weeks prior to date when work is expected to be practically complete

Ω End of Section

Q55

External decks, boardwalks and bridges

Clauses

2 To be read with preliminaries/ general conditions.

Tendering - Not Used

General - Not Used

System performance - Not Used

Products

350 Structural steel

1. Description: Joist for (p5)
2. Manufacturer: AliDeck

01622 534 038
info@alideck.co.uk
Europa & Jenner House, Victory Park, 1-2 Trident Close, Medway City Estate, Rochester, ME2 4ER

2.1. Product reference: AliDeck Lite Decking System with Class A stainless steel pedestals
3. Finish as delivered: As manufactured

380 Deck boards

1. Description: (p5) aluminium decking
2. Manufacturer: AliDeck

01622 534 038
info@alideck.co.uk
Europa & Jenner House, Victory Park, 1-2 Trident Close, Medway City Estate, Rochester, ME2 4ER

2.1. Product reference: AliDeck Junior Decking System
3. Material: Aluminium.
4. Treatment: Not required
5. Profile: 144 x 20mm
6. Finished size: 144 x 20mm
6.1. Length: Cut to length on site
7. Finish: Polyester Powder Coating - 80 micron slip-resistant- Colour TBC
8. Features: Grooved

395 Support pedestals

1. Description: For (p5)
2. Manufacturer: AliDeck

01622 534 038
info@alideck.co.uk
Europa & Jenner House, Victory Park, 1-2 Trident Close, Medway City Estate, Rochester, ME2 4ER

- 2.1. **Product reference:** AliDeck adjustable Class A stainless steel pedestals
3. **Type:** Adjustable
4. **Material:** Highly durable stainless steel
5. **Accessories:** Not required

Fabrication

510 Fabrication generally

1. **Design:** Complete the detailed design and obtain approval prior to commencing fabrication.
2. **Shop drawings:** Submit.
3. **Structural calculations:** Submit.
4. **Frameworks:** Assemble and brace, including temporary members required for installation.
5. **Contact between dissimilar metals:** Avoid.
6. **Fixings:** Fully bolt together. Tighten bolts.
7. **Temporary support:** Do not subject members to non-design loadings.

Execution

610 Loading

1. **Site activities:** Restrict, to ensure that design loads are not exceeded, or submit proposals for temporary supports.

657 Installation of pedestals

1. Ensure that surface to accept pedestals is clean and free of debris.
2. **Setting out:** Mark centre-point of pedestal on substrate surface, with guidelines to ensure square layout.
 - 2.1. **Orientation:** Align parallel with adjacent features.
 - 2.2. **Spacing:** To supplier's specification
 - 2.3. **Additional pedestals:** At perimeters
3. **Overall movement tolerance (maximum):** 3 mm.

665A Installation generally

1. **Fasteners and methods of fixing:** To supplier's specification.
2. **Structural members:** Do not modify, cut, notch or make holes in structural members, except as indicated on drawings.
3. **Temporary support:** Do not use stairs, walkways or balustrades as temporary support or strutting for other work.

670 Installation of surfacing

1. **Heading joints:** Kept to a minimum, and formed only as butt joints situated over joists.
2. **Length:** Each board must span not less than two bays between joists with joints in adjacent boards staggered.
3. **Gaps between boards:** 6 mm

Completion

950 Documentation

1. **Contents**

- 1.1. General product information.
- 1.2. Installation information.
- 1.3. Inspection and maintenance reports.
2. Number of copies: 2
3. **Submission:** Two weeks prior to date when principal contractor expects work to be practically complete

Ω End of Section

Z11

Purpose made metalwork

Clauses

2 To be read with preliminaries/ general conditions.

To be read with preliminaries/ general conditions.

310 Materials generally

1. Grades of metals, section dimensions and properties: To appropriate British Standards. When not specified, select grades and sections appropriate for the purpose.
2. Prefinished metal: May be used if methods of fabrication do not damage or alter appearance of finish, and finish is adequately protected.
3. Fasteners: To appropriate British Standards and, unless specified otherwise, of same metal as component being fastened, with matching coating or finish.

Fabrication

515 Fabrication generally

1. Contact between dissimilar metals in components: Avoid.
2. Finished components: Rigid and free from distortion, cracks, burrs and sharp arrises.
 - 2.1. Moving parts: Free moving without binding.
3. Corner junctions of identical sections: Mitre.

520 Cold formed work

1. Profiles: Accurate, with straight arrises.

535 Welding and brazing generally

1. Description:
2. Surfaces to be joined: Clean thoroughly.
3. Tack welds: Use only for temporary attachment.
4. Joints: Fully bond parent and filler metal throughout with no inclusions, holes, porosity or cracks.
5. Surfaces of materials that will be self-finished and visible in completed work: Protect from weld spatter.
6. Flux residue, slag and weld spatter: Remove.

540 Welding

1. Description: Of steel
2. Method: Metal arc welding to BS EN 1011-1 and -2.

545 Welding

1. Description: Of stainless steel
2. Method: TIG welding to BS EN 1011-3.
3. Butt welds: Double bevel.

Finishing

710A Finishing welded and brazed joints visible in complete work

1. Standard: To BS EN ISO 8501-3.
2. Butt joints: Smooth, and flush with adjacent surfaces.
3. Fillet joints: Neat.
4. Grinding: Grind smooth where indicated on drawings.

745 Preparation for application of coatings

1. General: Complete fabrication, and drill fixing holes before applying coatings.
2. Paint, grease, flux, rust, burrs and sharp arrises: Remove.

780A Galvanizing

1. Standard: To BS EN ISO 1461.
2. Preparation
 - 2.1. Vent and drain holes: Provide in accordance with BS EN 14713-1 and -2. Seal after sections have been drained and cooled.
 - 2.2. Components subjected to cold working stresses: Heat treat to relieve stresses before galvanizing.
 - 2.3. Welding slag: Remove.
 - 2.4. Component cleaning: To BS EN ISO 8501-3.

Products - Not Used

Ω End of Section

Z21 Mortars

To be read with preliminaries/ general conditions.

2A Specialist mortars to be used for all external paving works

3A Proprietary mortar systems

1. SteinTec®
2. 728 London Road
3. West Thurrock
4. Grays, Essex
5. RM20 3LU
6. Tel: 01708 860 049
7. Email: info@steintec.co.uk
8. website: www.steintec.co.uk

Cement gauged mortars

120 Sand for site made cement gauged masonry mortars

1. Standard: To BS EN 13139.
2. Grading: 0/2 (FP or MP).
 - 2.1. Fines content where the proportion of sand in a mortar mix is specified as a range (e.g. 1:1: 5-6):
 - 2.1.1. Lower proportion of sand: Use category 3 fines.
 - 2.1.2. Higher proportion of sand: Use category 2 fines.
3. Sand for facework mortar: Maintain consistent colour and texture. Obtain from one source.

131 Ready-Mixed lime:sand for cement gauged masonry mortars

1. Standard: To BS EN 998-2.
2. Lime: Nonhydraulic to BS EN 459-1.
 - 2.1. Type: CL 90S.
3. Pigments for coloured mortars: To BS EN 12878.

135 Site made lime:sand for cement gauged masonry mortars

1. Permitted use: Where a special colour is not required and in lieu of factory made ready-mixed material.
2. Lime: Nonhydraulic to BS EN 459-1.
 - 2.1. Type: CL 90S.
3. Mixing: Thoroughly mix lime with sand, in the dry state. Add water and mix again. Allow to stand, without drying out, for at least 16 hours before using.

160 Cements for mortars

1. Cement: To BS EN 197-1 and CE marked.
 - 1.1. Types: Portland cement, CEM I.
 - 1.1.1. Portland limestone cement, CEM II/A-L or CEM II/A-LL.
 - 1.1.2. Portland slag cement, CEM II/B-S.

- 1.1.3. Portland fly ash cement, CEM II/B-V.
- 1.2. Strength class: 32.5, 42.5 or 52.5.
- 2. Portland slag cement, CEM II/B-S.
- 3. Portland fly ash cement, CEM II/B-V.
 - 3.1. Strength class:
- 4. White cement: To BS EN 197-1 and CE marked.
 - 4.1. Type: Portland cement, CEM I.
 - 4.2. Strength class: 52.5.
- 5. Sulfate resisting Portland cement
 - 5.1. Types: To BS EN 197-1 Sulfate resisting Portland cement, CEM I/SR and CE marked.
 - 5.1.1. To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
 - 5.2. Strength class: 32.5, 42.5 or 52.5.
- 6. To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
 - 6.1. Strength class:
- 7. Masonry cement: To BS EN 413-1 and CE marked.
 - 7.1. Class: MC 12.5.

210A Making cement gauged mortars

- 1. Batching: By volume. Use clean and accurate gauge boxes or buckets.
 - 1.1. Mix proportions: Based on dry sand. Allow for bulking of damp sand.
- 2. Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
 - 2.1. Mortars containing air entraining admixtures: Mix mechanically. Do not overmix.
- 3. Do not mix mortar when the air temperature is at or below 3oC and falling or below 1oC and rising.
- 4. Working time (maximum): Two hours at normal temperatures.
 - 4.1. Use retarded mortar within the time and site temperatures recommended by the manufacturer.
 - 4.2. Mortar may be re-tempered to restore workability, but only within these time limits.
- 5. Contamination: Prevent intermixing with other materials.

Lime:sand mortars - Not Used

Ω End of Section

Z22 Sealants

To be read with preliminaries/general conditions.

110A Sealant types

1. As specified in the relevant section A

Products - Not Used

Execution

610A Suitability of joints

1. Presealing checks
 - 1.1. Joint dimensions: Within limits specified for the sealant.
 - 1.2. Substrate quality: Surfaces regular, undamaged and stable.
 - 1.3. Preparatory work which must be done before assembly of the joint has been carried out.
2. Inform PM if joints are not suitable to receive sealant and submit proposals for rectification.

620 Preparing joints

1. Surfaces to which sealant must adhere
 - 1.1. Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.
 - 1.2. Clean using materials and methods recommended by sealant manufacturer.
2. Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.
3. Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.
4. Protection: Keep joints clean and protect from damage until sealant is applied.

630A Applying sealants

1. Ensure that operatives observe manufacturers and statutory requirements for storage and safe usage of sealants.
2. Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.
3. Environmental conditions: Do not dry or raise temperature of joints by heating.
4. Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.

For Porcelain Tiles laid on permeable concrete mix base using a slurry primer, ensure joints are free-draining.

5. Sealant profiles
 - 5.1. Butt and lap joints: Slightly concave.
 - 5.2. Fillet joints: Flat or slightly convex.
6. Protection: Protect finished joints from contamination or damage until sealant has cured.

Ω End of Section

Z31

Powder coatings

To be read with preliminaries/ general conditions.

120 Powder coating materials

1. Manufacturer: Obtain from one only of the following: metalwork or furniture manufacturer.
2. **Selected manufacturer:** Submit details before commencement of powder coating including:
 - 2.1. Name and contact details.
 - 2.2. Details of accreditation schemes.
 - 2.3. Technical data of product including current Agrément certificates.

120A Powder coating materials

1. **Selected manufacturer:** EverEdge for all planters:
2. United Kingdom
3. T. 01630 417120
4. E. enquiries@everedge.co.uk
5. **Colour:** RAL 1036

210 Working procedures

1. Comply with the follow following standards.
 - 1.1. **Aluminium components:** To BS 6496 or BS EN 12206-1.
 - 1.2. **Steel components:** To BS EN 13438.
 - 1.3. **Safety standards:** To British Coatings Federation 'Code of safe practice - Application of thermosetting powder coatings by electrostatic spraying'.

220 Powder coating applicators

1. **Applicator requirements**
 - 1.1. Approved by powder coating manufacturer.
 - 1.2. Currently certified to BS EN ISO 9001.
 - 1.3. Comply with quality procedures, guarantee conditions, standards and tests required by powder coating manufacturer.
 - 1.4. Applicator to use only one plant.
 - 1.5. **Selected applicator:** Submit details before commencement of powder coating including:
 - 1.5.1. Name and contact details.
 - 1.5.2. Details of accreditation schemes.

225 Guarantees

1. **Powder coating manufacturer and applicator guarantees**
 - 1.1. Submit sample copies before commencement of powder coating.
 - 1.2. Submit signed project specific copies on completion of work.

230 Control samples

1. **Sequence:** Prior to ordering materials for the works, obtain approval of appearance for:
 - 1.1. **Powder coated samples:** Of various grades and forms of background metal to be used, showing any colour, texture and gloss variation.

- 1.2. **Fabrication samples:** Showing joint assembly, how powder coating is affected and how any cut metal edges are finished and protected.
2. **Samples to include the following information**
 - 2.1. Product reference.
 - 2.2. Colour.
 - 2.3. Reference number.
 - 2.4. Name.
 - 2.5. Gloss level.

320 Pretreatment of steel components

1. **Condition of components to be pretreated**
 - 1.1. Free from corrosion and damage.
 - 1.2. All welding and jointing completed and finish off as specified.
 - 1.3. Free from impurities including soil, grease, oil.
 - 1.4. Suitable for and compatible with the pretreatment process.
2. **Conversion coating requirements:** To BS EN 13438.
3. **Rinsing requirements:** Use demineralized water. Drain and dry.

435 Application of powder coatings

1. **Surfaces to receive powder coatings:** Free from dust or powder deposits.
2. **Powder colours:** Obtain from one batch of one manufacturer.
3. **Commencement of powder coating:** To be continuous from pretreatment.
4. **Jig points:** Not visible on coated components.
5. **Curing:** Controlled to attain metal temperatures and hold periods recommended by powder coating manufacturer.
6. **Stripping and recoating of components:** Only acceptable by prior agreement of powder coating manufacturer. Stripping, pretreatment and powder coating are to be in accordance with manufacturer's requirements.
7. **Overcoating of components:** Not acceptable.

440 Performance and appearance of powder coatings

1. **For aluminium components**
 - 1.1. **Standard:** To BS 6496 or BS EN 12206-1.
2. **For steel components**
 - 2.1. **Standard:** To BS EN 13438.
3. **Visual inspection after powder coating:** Significant surface viewing distances to be as specified in the relevant Standard, unless specified otherwise.
4. **Colour and gloss levels:** To conform with approved samples.

470 Fixings

1. **Exposed metal fixings:** Powder coat together with components, or coat with matching repair paint system applied in accordance with the powder coating manufacturer's recommendations.

480 Damaged components – repair or replacement

1. **Before delivery to site:** Check all components for damage to powder coatings. Replace damaged components.
2. **Site damage:** Submit proposals for repair or replacement.

510 Protection

1. Powder coated surfaces of components: Protect from damage during handling and installation, or by subsequent site operations.
2. Protective coverings: Must be:
 - 2.1. Resistant to weather conditions.
 - 2.2. Partially removable to suit building in and access to fixing points.
3. Protective tapes in contact with powder coatings: Must be:
 - 3.1. Low tack, self adhesive and light in colour.
 - 3.2. Applied and removed in accordance with tape and powder coating manufacturers' recommendations. Do not use solvents to remove residues as these are detrimental to the coating.
4. Inspection of protection: Carry out monthly. Promptly repair any deterioration or deficiency.

535 Documentation

1. Submit the following information for each batch of powder coated components
 - 1.1. Supplier.
 - 1.2. Trade name.
 - 1.3. Colour.
 - 1.4. Type of powder.
 - 1.5. Method of application.
 - 1.6. Batch and reference number.
 - 1.7. Statutory requirements.
 - 1.8. Test certificates.
 - 1.9. Maintenance instructions.

540 Completion

1. Protection: Remove.
2. Cleaning and maintenance of powder coatings: Carry out in accordance with procedures detailed in powder coating manufacturer and applicator guarantees.

Ω End of Section



Specification created using NBS Chorus