Phase 1a MSCP

0198_MAY-SEW-N01-ZZZZ-SP-L-207000

Hard Landscape

24-03-2026

Studio Egret West

3 Brewhouse Yard,
London
EC1V 4JQ

Phase 1a MSCP

0198_MAY-SEW-N01-ZZZZ-SP-L-207000

Status: Stage 3

24-03-2026

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NBS Specification

Project:	**Mayfield Phase 1_Public Realm**
Project Number:	**0436**
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Rev	**Date**	**Reason for Issue**	**Issued by**
P01	20.03.26	Stage 3	TH

A – General Requirements

Specification Format.

- Read the Specification in conjunction with the Conditions of Contract, Preliminaries, Design Drawings, and Instructions to tenderers, supplemental information and other relevant documents.
- Performance criteria where specified shall be considered as minimum standards with which the Contractor's Proposals shall comply.

Supplemental Information

This specification must be read with the relevant detail drawings, supporting specifications and performance specifications. Refer to the requirements of the following drawings, reports and supplemental information as relevant:

- Planning Conditions Schedule.
- Civil Engineer's documentation.
- Structural Engineer's documentation.
- Landscape Architect's documentation.
- Lighting Designers documentation.
- Agreed site samples
- Plot architects documentation
- S278 and Highway design

The following parts of the design have not been completed and do not currently form part of this tender:

- Wayfinding
- Art Strategy
- Highway Design

General Contractor Responsibilities

- Complete the Design of the Works maintaining the function, visual requirements, performance and design intent.
- In addition to the performance and design intent requirements indicated in the Specification or on the Design Drawings, design the Works to take into account any additional criteria which an experienced designer with specialist knowledge would deem to be relevant.
- The design and visual character of the project is important and shall be maintained. There shall be no variation in the final surface finish of similar materials, which shall remain visually consistent, including colour and texture, regardless of orientation or natural grain within agreed tolerances and agreed samples.

• Submit Working Drawings and technical information to demonstrate compliance with the Design Drawings and the Specification. The Contractor's final Detailed Design shall be based on the Design Drawings. A design risk assessment shall be submitted as part of the documentation.

• Where proprietary products are to be installed, be responsible for providing any modification, additional bracing, reinforcing, suitable fixings, etc. so that the products achieve the requirements of the Specification. Convey any concerns that the manufacturers may have expressed regarding the suitability of products for the purpose intended.

• Be responsible for fixings and other aspects not fully detailed or specified on the Design Intent Drawings and/or Specification.

Supply of Supplemental Information

• Submit supplemental information in respect of design, materials, systems, methods, installation and procedures as required by the Employer after Contract award.

• Supplemental information shall comply fully with the design intent, functional and performance requirements of the Design.

• Where alternative systems, products, materials, manufacturers or subcontractors are proposed, they shall not be utilised until written acceptance is received from the Employer.

Systems, Products and Materials Preferences

• Where the Specification identifies preferred systems, products and materials, confirm these as being suitable for their specified and intended purpose with the tender return. If no such specific confirmation is received, then the submission of the tender return constitutes such a confirmation. If the preferred systems, products and materials are considered unsuitable, confirm at the time of tender.

• Acceptance of alternative proposals by the Employer shall not relieve the Contractor from responsibility to provide suitable systems, materials, components and assemblies, which shall be used as intended by the manufacturer and in compliance with the Contract Documents.

• If, with the tender return, the Contractor submits no such alternative proposal to any of the preferences indicated in the tender documents, then the solutions proposed in the Specification and on the Design Drawings shall be deemed to be acceptable and be warranted by the Contractor.

Safety, Health and Welfare Regulations

• Comply with the latest safety, health and welfare regulations. Give full consideration to the health and safety of operatives when completing the Detailed Design, manufacturing, installing or operating and maintaining the Works.

• The Working Drawings shall only incorporate methods of manufacture, installation, maintenance and use that are safe and comply with health and safety regulatory requirements.

• Submit safety risk assessments.

Samples Samples Generally:

- Samples shall include various products, natural materials, fabricated items, equipment, devices, appliances or components thereof, as may be required to achieve the visual appearance and technical requirements of the Design.

- Provide ranges of samples where a considerable range of colour, graining, texture, smoothness and other characteristics may be anticipated in the Works.

- Where bespoke colours are specified, submit samples that illustrate precise colours, textures, patterns and finishes for review by the Employer.

Pre-contract Samples:

- Submit samples with the tender or during the Evaluation prior to Contract award.

- Samples which are required to verify the visual appearance of such items for compliance with the requirements of the Design Drawings and Specification to be as indicated in the Sections.

- Label pre-contract samples, which shall be kept by the Employer as a record of materials agreed for Contract until completion/ handover.

Post Contract Award Samples:

- Check samples submitted during the Detailed Design against the pre-contract samples, where applicable, and the Specification.

- At the appropriate time provide the Employer with samples indicated in Sections, which will be kept as a record of materials to be incorporated in the Works and used as references for controlling consistency throughout the Works.

- Post contract award samples shall comprise materials in their final form.

- Samples to include relevant trade literature and technical specifications.

Performance Requirements

- All works and materials to be in accordance with current applicable statutory legislation and to comply with all relevant Codes of Practice & British Standards, Refer also to the Engineer's documentation for specific performance requirements where applicable.

- The performance criteria included in the Specification sets the minimum standards with which the Detailed Design shall comply.

Workmanship - Skilled Personnel

- Execute the Works using persons skilled in the processes to be adopted. Where requested, submit such documentation necessary to demonstrate an individual's ability to carry out the work to which he has been assigned.

Conflicting Requirements

Bring to the attention of the Employer for consideration, any matters such as performance requirements within this Specification, which the Contractor considers to be in conflict with the stated Sustainability aims and requirements of the Specification

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E10
Mixing/casting/curing in situ concrete

Concrete

101 Specification

1. Concrete generally: In accordance with BS EN 206 and BS 8500-2.
2. Exchange of information: Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.

185A Pre-blended concrete for Retaining Walls and Steps Wing Walls W01

1. Description: **Wall Type W01** Insitu concrete retaining wall, step wing walls and step parapet. Refer to **0198_MAY-SEW-N01-1000-DR-L-201101** for locations **0198_MAY-SEW-N01-1000-DR-L-201305** for details
2. Manufacturer: CEMEX
   - 2.1. Product reference: Mix sourced from CEMEX including **50/50 mix** of **Tudor Griffiths decorative aggregate**
3. Compressive strength class: C40/50 for Exposed Aggregate
4. Storage: As manufacturers instructions.
   - 4.1. Shelf life: As manufacturers instructions.
5. Mixing: As manufacturers instructions.
   - 5.1. Quantity of water (maximum): As manufacturers instructions.
6. Other requirements: **To match concrete specification for insitu concrete in Mayfield Park.**
   - 6.1. Shuttering for exposed aggregate finish: To be treated with **Pieri DRC6/200** Orange Retarder (used for exposed vertical face and chamfer)
     25mm Chamfer to be exposed aggregate finish
   - 6.2. Polished finishes: Horizontal Faces
     - 6.2.1. First Stage: Abrade top of wall with handheld rotary grinder , remove up to 2mm with no score marks. Use polymer diamond head disc cutter from SPE.
     - 6.2.2. Second Stage: Polish surface with fine polymer diamond head to a smooth ‘terrazzo’ surface. If excessive blowholes revealed on first stage grinding , grout surface with cement allow to set. Then fine polish surface.
   - 6.3. Sealer: **RBS Hardseal XS** concrete sealer. Applied to Manufacturer's specification

185B Pre-blended concrete for Insitu concrete steps ST01

1. Description: **Step Type ST01** Insitu concrete steps. Refer to **0198_MAY-SEW-N01-1000-DR-L-201101** for locations **0198_MAY-SEW-N01-1000-DR-L-201305** for details
2. Manufacturer: CEMEX

2.1. Product reference: Mix sourced from CEMEX including **50/50 mix** of **Tudor Griffiths decorative aggregate**

3. Compressive strength class: C40/50 for Exposed Aggregate
4. Storage: As manufacturers instructions.
   4.1. Shelf life: As manufacturers instructions.
5. Mixing: As manufacturers instructions.
   5.1. Quantity of water (maximum): As manufacturers instructions.
6. Other requirements: **To match concrete specification for insitu concrete in Mayfield Park.**
   *** No chamfer required**
   6.1. Shuttering for exposed aggregate finish: **Treads** to steps.
   Shutter treated with **Pierri VBA Blue retarder.**
   6.2. Fair Face Plain finish: **Risers** to steps
   6.3. Sealer: **RBS Hardseal XS** concrete sealer. Applied to Manufacturer's specification

Materials, batching and mixing

215 Ready-mixed concrete

1. Production plant: CEMEX
2. Source of ready-mixed concrete: Obtain from one source if possible . Otherwise, submit proposals.
   2.1. Name and address of depot: Submit before any concrete is delivered.
   2.2. Delivery notes: Retain for inspection.
3. Declarations of nonconformity from concrete producer: Notify contracts administrator and/ or specifier immediately.

230 Interruption of supply during concreting

1. Elements without joints: Where elements are detailed to be cast in a single pour without joints, make prior arrangements for a back-up supply of concrete.
2. Elsewhere
   2.1. Preparation: Manage pour to have a full face, and have materials available to form an emergency construction joint while concrete can still be worked.
   2.2. Before pour is completed: Submit location and details of joint, make proposals for joint preparation.

312 Proprietary aggregate

1. Manufacturer: CEMEX
   1.1. Product reference: Tudor Griffiths decorative aggregate
2. Standard: C40/50 structural class for Exposed Aggregates
3. Other requirements: **To match the insitu steps and walls of Mayfield Park**

315 Aggregates for exposed visual concrete

1. Limitations on contaminants: Free from absorbent particles which may cause 'popouts', and other particles such as coal and iron sulfide which may be unsightly or cause unacceptable staining.
2. Colour: Consistent.
3. Supply: From a single source and maintained throughout the contract.
4. Samples: Submit on request.

325 Materials for exposed visual concrete

1. Alterations to sources, types and proportions: Submit proposals.

Project testing/ certification

520 Testing laboratory

1. Laboratory: An independent laboratory accredited by UKAS, or an equivalent accreditation body, as conforming to BS EN ISO/IEC 17021-1 and BS EN ISO/IEC 17025
   1.1. Name and UKAS reference number: Submit well in advance of making trial mixes or concrete for use in the works.

530 Tests results

1. Submission of reports: Within one day of completion of each test.
   1.1. Number of copies:
   1.2. Method of copies:
2. Reports on site: A complete set, available for inspection.

Placing/ compacting/ curing and protecting

648 Adverse temperature conditions

1. Requirement: Submit proposals for protecting concrete when predicted ambient temperatures indicate risk of concrete freezing or overheating.

650 Surfaces to receive concrete

1. Cleanliness of surfaces immediately before placing concrete: Clean and damp with no debris, tie wire clippings, fastenings, free-standing water, oil, grease or chemicals.

660 Inspection of surfaces

1. Notice: Give notice to allow inspections of reinforcement and surfaces before each pour of concrete.
   1.1. Period of notice: Obtain instructions.
2. Timing of inspections:

670 Transporting

1. General: Avoid contamination, segregation, loss of ingredients, excessive evaporation and loss of workability. Protect from heavy rain.
2. Entrained air: Anticipate effects of transport and placing methods in order to achieve specified air content.

680 Placing

1. Records: Maintain for time, date and location of all pours.
2. Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
3. Temperature limitations:
   3.1. Air temperature:
   3.2. Concrete temperature:
4. Continuity of pours: Place in final position in one continuous operation up to construction joints. Avoid formation of cold joints.
5. Discharging concrete: Prevent uneven dispersal, segregation or loss of ingredients or any adverse effect on the formwork or formed finishes.
6. Thickness of layers:
7. Poker vibrators: Do not use to make concrete flow horizontally into position, except where necessary to achieve full compaction under void formers and cast-in accessories and at vertical joints.

690 Compacting

1. General: Compact the concrete to full depth and around reinforcement and corners to remove entrapped air. Continue until air bubbles cease to appear on the top surface.
   1.1. Timing: Begin compaction immediately or as soon as practicable after placing.
   1.2. Areas for particular attention:
2. Consecutive batches of concrete: Amalgamate without damaging adjacent partly hardened concrete.
3. Methods of compaction:

700 Lightweight aggregate concrete

1. Placing and compacting: Prevent flotation of coarse aggregate and formation of excessive blowholes.

720 Vibrators

1. General: Maintain sufficient numbers and types of vibrator to suit pouring rate, consistency and location of concrete.
2. External vibrators: Obtain approval for use .

730 Plastic settlement

1. Settlement cracking: Inspect fresh concrete closely and continuously wherever cracking is likely to occur, including the top of deep sections and at significant changes in the depth of concrete sections.
   1.1. Timing: During the first few hours after placing and whilst concrete is still capable of being fluidized by the vibrator.
2. Removal of cracks:

810 Curing generally

1. Requirement: Keep surface layers of concrete moist throughout curing period, including perimeters and abutments, by either restricting evaporation or continuously wetting surfaces of concrete.
   1.1. Timing: Curing and protection should start immediately after compaction.
   1.2. Surfaces covered by formwork: Retain formwork in position and, where necessary to satisfy curing period, cover surfaces immediately after striking.
   1.3. Surfaces not covered by formwork: Cover immediately after placing and compacting. If covering is removed for finishing operations, replace it immediately afterwards.
2. Surface temperature: Maintain above 5 °C throughout the specified curing period.
3. Records: Maintain details of location and timing of casting of individual batches, removal of formwork and removal of coverings. Keep records on site, available for inspection.

840 Protection

1. Prevent damage to concrete, including
   1.1. Surfaces generally: From rain, indentation and other physical damage.
   1.2. Surfaces to exposed visual concrete: From dirt, staining, rust marks and other disfiguration.
   1.3. Immature concrete: From thermal shock, physical shock, overloading, movement and vibration.
   1.4. In cold weather: From entrapment and freezing expansion of water in pockets, etc.

Ω End of Section

Q00
SEW Hard landscape drawings

Clauses

10 SEW Hard landscape drawings

1. **General Arrangement**
2. 0198_MAY-SEW-N01 -1000-DR-L-201100 - Landscape General Arrangement
3. 0198_MAY-SEW-N01 -1000-DR-L-201101 - Hard Landscape General Arrangement
4. 0198_MAY-SEW-N01 -1000-DR-L-201102 - Kerbs and Edges General Arrangement
5. 0198_MAY-SEW-N01 -1000-DR-L-201105 - Street Furniture Plan
6. **Hard Landscape Details Drawings**
7. 0198_MAY-SEW-N01 -1000-DR-L-201301 - Typical Hard Landscape Details - Paving Build-ups
8. 0198_MAY-SEW-N01 -1000-DR-L-201302 - Typical Hard Landscape Details - Paving Laying Patterns
9. 0198_MAY-SEW-N01 -1000-DR-L-201303 - Edging and Interface Details
10. 0198_MAY-SEW-N01 -1000-DR-L-201304 - Rain Garden Detail - Nether Street
11. 0198_MAY-SEW-N01 -1000-DR-L-201305 - Typical Step Detail
12. 0198_MAY-SEW-N01 -1000-DR-L-201306 - Typical Balustrade Detail
13. **Specification**
14. 0198_MAY-SEW-N01 ZZZZ-SP-L-207000 - Hard Landscape Specification

Ω End of Section

Q10
Kerbs/ edgings/ channels/ paving accessories

Clauses - Not Used

Types of kerbs/edgings and channels

112 Precast concrete Edging Type 04

1. Description: **Edge Type E04** - textured concrete flush kerb. Refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201102** for locations
2. Standard: To BS EN 1340.
3. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
4. Designations: as manufactured
5. Manufacturer:: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472
6. Product reference:: Flush road kerb
7. Size (width x height x length): 255 x 205 x 915 mm
8. Special shapes: n/a
9. Finish: Reconstituted granite
10. Colour: Silver Grey
11. Bending strength: To Civil Engineer's Specification
12. Weathering resistance: Class 3
13. Abrasion resistance: = 23mm (Wide Wheel AbrasionTest)
14. Slip/ skid resistance: To Civil Engineer's Specification
15. Bedding: Cement mortar -To Civil Engineer's Specification
16. Joints generally: Butt jointed - To Civil Engineer's Specification
17. Sealant movement joints: At 5m (maximum) centres- To Civil Engineer's Specification
18. Accessories: None

112A Precast concrete Edging Type 05

1. Description: **Edge Type E05** - textured concrete upstand kerb, refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201102** for locations
2. Standard: To BS EN 1340.
3. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
4. Designations: as manufactured
5. Manufacturer:: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472
6. Product reference:: Conservation kerb
7. Size (width x height x length): 255 x 205 x 915 mm
8. Special shapes: n/a

9. Finish: Reconstituted granite
10. Colour: Silver Grey
11. Bending strength: To Civil Engineer's Specification
12. Weathering resistance: Class 3
13. Abrasion resistance: = 23mm (Wide Wheel AbrasionTest)
14. Slip/ skid resistance: To Civil Engineer's Specification
15. Bedding: Cement mortar - To Civil Engineer's Specification
16. Joints generally: Butt jointed - To Civil Engineer's Specification
17. Sealant movement joints: At 5m (maximum) centres - To Civil Engineer's Specification
18. Accessories: None

112B Precast concrete Edging Type 06

1. Description: **Edge Type E06** - textured concrete drop kerb for transition refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201102** for locations
2. Standard: To BS EN 1340.
3. Manufacturer: Marshall's plc.(www.marshalls.co.uk) +44 (0)330 0574472
   3.1. Product reference: Drop kerb
4. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
5. Designations: Transition kerb as manufactured,
6. Size (width x height x length): (L x W x D) 915 mm x 205 x 255
7. Special shapes: n/a
8. Finish: Reconstituted granite
9. Colour: Silver Grey
10. Bending strength: To Civil Engineer's Specification
11. Weathering resistance: Class 3
12. Abrasion resistance: = 23mm (Wide Wheel Abrasion Test)
13. Slip/ skid resistance: To Civil Engineer's Specification
14. Bedding: Cement mortar -To Civil Engineer's Specification
15. Joints generally: Narrow mortar - To Civil Engineer's Specification
16. Sealant movement joints: At 5 m (maximum) centres - To Civil Engineer's Specification
17. Accessories: None

112C Precast concrete Edging Type 09

1. Description: **Edge Type E09** - Concrete Pin Kerb. Refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201102** for locations
2. Standard: To BS EN 1340.
3. Manufacturer: Marshal's plc.(www.marshalls.co.uk) +44 (0)330 0574472 Or equal and approved

3.1. Product reference: Bullnosed concrete Pin Kerb

4. Recycled content: 20% (minimum) to BS EN ISO 14021, manufactured with up to 48.3%
5. Designations: Pin kerb along temporary asphalt road
6. Size (width x height x length): (LxWxH) 914 x 150 x 50
7. Special shapes: n/a
8. Finish: Concrete
9. Colour: Natural
10. Bending strength: To Civil engineers detail and specification
11. Bedding: To Civil engineers detail and specification
12. Joints generally: Narrow mortar - To Civil Engineer's Specification

125A Reclaimed Cobble Stones Edging Type 10

1. Description: **Edge Type E10** Reclaimed Granite kerb stones laid on edge to planting beds refer to drawings **0198_MAY-SEW-N01-1000-DR-L-201102** for locations **0198_MAY-SEW-N01-1000-DR-L-201303 detail 04**
2. Size: nominal 200x100x100mm reclaimed units
3. Upstand: 100mm
   As per **Detail 04** on drawing **0198_MAY-SEW-N01-1000-DR-L-201303**
4. Preparation: Care to be taken removing all traces of old mortar jointing and tar bedding.
   Minimise cutting of cobbles/kerb stones, only use intact and complete cobbles
5. Bedding: To Civil Engineer's Specification.
   To accommodate any variation in thickness between individual reclaimed unit, the bedding depth is increased rather than reduced to maintain a consistent height to the edging
6. Joints generally: To Civil Engineer's Specification

170A Linear slot drainage channels Edge Type 11

1. Description: **Edge Type E11** linear slot drain to form edge between level changes where additional surface water drainage to surfaces is required. Refer to drawings **0198_MAY-SEW-N01-1000-DR-L-201102** for locations.
2. Manufacturer: Contractor's choice
   2.1. Product reference: To Civil Engineer's specification.
   Submit proposals.
3. Standard: To BS EN 1433.
4. Third party certification: CE Certified in accordance with BS EN 1433.
5. Slot body
   5.1. Material: Galvanized Steel.
   5.2. Upstand height: To accommodate vary depths of paved surface build-up refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201303 detail 02** for interface details.
6. Load class (minimum): To Civil Engineer's specification.

7. Channel unit dimensions
   7.1. Width (nominal): To Civil Engineer's specification.
   7.2. Overall depth: To Civil Engineer's specification.
   7.3. Length: To Civil Engineer's specification.
8. Integral accessories: To Civil Engineer's specification.
9. Capacity: To Civil Engineer's specification.

200A Rigid metal edge Type E01

1. Description: **Edge Type E01** - Rigid metal edge (To match Mayfield park). Refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201102** for locations
2. Manufacturer: EverEdge Ltd.
   2.1. Product reference: Titan [TT1540]
   2.2. Size: 2.5mm x 150mm
   2.3. Unit Lengths: 2500mm
   2.4. Thickness: 4mm
3. Type/ Material: Straight and Curved Steel edging with interlocking joints to accommodate design layout. (Confirm units to be used with Landscape Architect before ordering).
   3.1. Finish: Hot Dipped Galvanised
4. Fixings: 400mm length16mm dia.rebar pins inserted through 5 No. lugs welded to rear at approximately 500mm centre.
   4.1. Rebar pin bedded into concrete haunch. Sufficient reinforcement to accommodate vehicle loading as required for temporary events set up in the Park.
   4.2. Consult manufacturer for confirmation of installation details.

200B Special - Concrete check dams to Rain Garden

1. Description: Edge type - Concrete check dams to rain garden
   Refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201304**
2. Size: Refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201304**
3. Type/ Material: Concrete
   3.1. Finish: Refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201304**
   3.2. Colour: Refer to drawing **0198_MAY-SEW-N01-1000-DR-L-201304**
4. Accessories:
5. Bedding: **To Civil engineer's detail and specification**
6. Joints: **To Civil engineer's detail and specification**

201 Step nosing ST01

1. Step nosing part of step type **ST01** refer to drawing **0198_MAY-SEW-N01-1000-DR-L-20110** for locations and **0198_MAY-SEW-N01-1000-DR-L-201305** for details.
2. Manufacturer: AATi Rail Limited (To match Mayfield park)
   2.1. Product: SN93/SL3/140

2.2. Cross-Section Dimension: 140mm x 55mm

2.3. Lengths: Uniform lengths across all steps (Refer to Drawings)

2.4. Finish: Nickel Bronze and Black

3. Installation: Fitting of Step Nosing to follow AATi concrete installation guide; 'SN9-55 Cast into Concrete Installation Guidelines Rev03'. Refer to Drwg. No: **0198_MAY-SEW-N01-1000-DR-L-201305**

250 Material samples

1. Samples representative of colour and appearance of designated materials: Submit before placing orders.

1.1. Designated materials: Precast concrete kerbs, metal edging and step nosing

Roads/paving accessories/ marking/ demarcation - Not Used

Laying

510 Laying kerbs, edgings and channels

1. Cutting: Neat, accurate and without spalling. Form neat junctions.

1.1. Long units (450 mm and over) minimum length after cutting: 300 mm.

1.2. Short units minimum length after cutting: The lower of one third of their original length or 50 mm.

2. Bedding of units: Positioned true to line and levelled along top and front faces, in a mortar bed on accurately cast foundations or on a race of fresh concrete.

3. Securing of units: After bedding has set, secured with a continuous haunching of concrete or on a race of fresh concrete with backing concrete cast monolithically.

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.

530 Concrete for foundations, races and haunching

1. Standard: To BS 8500-2.

2. Designated mix: Not less than GEN0 or Standard mix ST1.

3. Workability: Very low.

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.

630 Narrow mortar joints

1. Jointing: Ends of units buttered with bedding mortar as laying proceeds. Joints completely filled, tightly butted and surplus mortar removed immediately.
   1.1. Joint width: 3 mm.

Ω End of Section

Q22
Asphalt roads/ pavings

Clauses

2 To be read with preliminaries/ general conditions.

Types of paving

140B Hot rolled asphalt paving Type P07A

1. Description: **Surface Type P07a** Asphalt surface for vehicular traffic.
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations and **0198_MAY-SEW-N01 -1000-DR-L-201301** for details.
2. Standard: To Highways Design Guide
3. Subgrade improvement layer: To Highways specification
   3.1. Compacted thickness: To Highways specification
4. Subgrade improvement layer: To Civil engineers detail and specification
5. Granular sub-base: 275mm thick Type 1 sub-base (min 5% cbr) in accordance with BS EN 13285 and MCHW TABLE 8/1 and Clause 803
   To Civil engineers detail and specification
6. Base: 150mm thick heavy duty base course: AC32 Dense base 100 /150 to BS EN 13108-01
   To Civil engineers detail and specification
7. Binder course: 60mm thick dense binder course: AC20 Dense Bin 100 /150 to BS EN 13108-1
   To Civil engineers detail and specification
8. Surface course: **40mm** thick SMA **10mm** aggregate surface course
   PMB to BS EN 13108 PD6691
   To Civil engineers detail and specification
   8.1. Paving grade: To Civil engineers detail and specification
9. Reclaimed content
   9.1. Standard: To BS EN 13108-8.
   9.2. Value (maximum): Submit proposals

140C Hot rolled asphalt paving Type P07B

1. Description: **Surface Type P07b** Asphalt surface for pedestrian traffic.
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations and **0198_MAY-SEW-N01 -1000-DR-L-201301** for details
2. Standard: To Highways Design Guide
3. Subgrade improvement layer: To Highways specification
   3.1. Compacted thickness: To Highways specification
4. Subgrade improvement layer: To Civil engineers detail and specification
5. Granular sub-base: To Civil engineers detail and specification

6. Base: 150mm thick heavy duty base course: AC32 Dense base 100 /150 to BS EN 13108-01
   To Civil engineers detail and specification
7. Binder course: 60mm thick dense binder course: AC20 Dense Bin 100 /150 to BS EN 13108-1
   To Civil engineers detail and specification
8. Surface course: **20mm** thick surface course HRA 30/14 F SURF **6mm** aggregate
   To Civil engineers detail and specification.
   8.1. Paving grade: To Civil engineers detail and specification
9. Reclaimed content
   9.1. Standard: To BS EN 13108-8.
   9.2. Value (maximum): Submit proposals

Preparatory work/ requirements

220 Bituminous materials generally

1. Suppliers names: Submit.
   1.1. Timing (minimum): Two weeks before starting work.
2. Test certificates: At the time of delivery for each manufacturing batch submit certificate:
   2.1. Confirming compliance with this specification and the relevant standard.
   2.2. Stating full details of composition of mix.

230 Samples

1. Submit: Submit representative sample : P05 to match Mayfield park tarmac with chippings surfaces

240 Acceptance of surfaces

1. Surface: Sound, clean and suitably close textured.
2. Level tolerances: To BS 594987.
3. Kerbs and edgings: Complete, adequately bedded and haunched and to the required levels.

250 Abutments

1. Vertical edges of manholes, gullies, kerbs and other abutments: Clean and paint with a thin uniform coating of hot applied 40/60 paving grade bitumen.
2. Finishing: Tamp surface around projections.
   2.1. Level: Flush or not more than 3 mm above projections.

Laying

310 Laying generally

1. Preparation: Remove all loose material, rubbish and standing water.

2. Adjacent work: Form neat junctions. Do not damage.
3. Channels, kerbs, inspection covers etc: Keep clean.
4. New paving
   4.1. Keep traffic free until it has cooled to prevailing atmospheric temperature.
   4.2. Do not allow rollers to stand at any time.
   4.3. Prevent damage.
   4.4. Lines and levels: With regular falls to prevent ponding.
   4.5. Overall texture: Smooth, even and free from dragging, tearing or segregation.
   4.6. State on completion: Clean.

320 Adverse weather

1. Frozen materials: Do not use.
2. Suspend laying
   2.1. During freezing conditions
   2.2. If the air temperature reaches 0°C, or in calm dry conditions -3°C, on a falling thermometer.
   2.3. Hot rolled asphalt: During periods of continuous or heavy rain or if there is standing water on the base.

330 Levels

1. Permissible deviation from the required levels, falls and cambers (maximum): In accordance with BS 594987, clause 5.2.

340 Flatness/ Surface regularity

1. Deviation of surface: Where appropriate in relation to the geometry of the surface, the variation in gap under a 3 m straightedge placed anywhere on the surface to be not more than:
   1.1. Base: Machine laid, 25 mm
   1.2. Binder course: Machine laid, 13 mm
   1.3. Surface course: Machine laid, 7 mm
   1.4. Where a straightedge cannot be used the surface must be of a comparable standard of accuracy when judged by eye.

Completion - Not Used

Ω End of Section

Q23
Gravel/ hoggin/ woodchip/ resin bound roads/ paving/ overlays

Clauses

2 To be read with preliminaries/ general conditions.

Types of surfacing

160A Loose gravel Type P06

1. Description: **Surface Type P06** - Ornamental gravel layer (To match Mayfield Park) Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations
2. Geotextile: Geotextile membrane
    2.1. Manufacturer: Terram
        2.1.1. Product reference: 1000
3. Granular sub-base: 100mm Type 1 Subbase In accordance with BS EN 13285 and MCHW Table 8/1 and Clause 803
   To Civil Engineer's Specification
4. Gravel: Loose laid and raked to uniform thickness.
    4.1. Type: quartzite gravel
    4.2. Source: Long Rake Spar Co. Ltd, Derbyshire E: sales@longrakespar.co.uk
    4.3. Colour: Staffordshire Pink aggregate
    4.4. Size: 10 mm single size
    4.5. Thickness: 50 mm

165B Boulders Type N01

1. Description: **N01 Stone Boulders** to planting beds. Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201105** for locations
2. Supplier:: Marchington Stone Ltd,
   Buxton Road,
   High Lane,
   Stockport,

   SK6 8DX
   T: 01663 765000
   E: sales@marchington.net
3. Product reference: - Boulder (Shire Hill quarry) Landscape architects to approve boulders prior to transportation to the site.
4. Material: Natural stone quarry blast rocks
    4.1. Approximate Size: Varied Size (400-1000mm) UK sourced
5. Method of fixing:: To Civil engineers detail and specification.

225A Proprietary resin bound chippings Type P03

1. Description: **Surface Type P03** - Permeable resin bound gravel for occasional vehicular overrun. Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations
2. Subgrade improvement layer: [Type 1 unbound mixture, to Civil Engineers Specification].
   2.1. Compacted thickness: to Civil Engineers Specification
   2.2. Geotextile: Full width of path. A geotextile membrane to prevent upward migration of fine soil particles.
3. Granular sub-base: As per Manufacturers' specification: 300mm thick Type 3 sub-base in accordance with BS EN 13285 and MCHW TABLE 8/1 and Clause 803
   Civil Engineers to comment
4. Geotextile: A geotextile membrane to prevent upward migration of fine soil particles
   4.1. Manufacturer: Terram
      4.1.1. Product reference: 1000
   4.2. Manufacturer:
5. Base course: As per Manufacturers' specification: 100mm thick AC20 Open bin 100/150
   Civil Engineers to comment
6. Binding Course: As per Manufacturers' specification: 40mm thick AC10 Open surf 100/15
   Civil Engineers to comment
   6.1. Thickness: [40 mm].
7. Surface course
   7.1. Manufacturer: Addagrip Terraco Ltd.
   7.2. Product reference: Addaset Resin Bound Porous Decorative Surfacing.
   7.3. Depth: Minimum 20mm depth
   7.4. Chippings Size: 6 mm
   7.5. Colour: Hazelnut.(To match Mayfield park)

Laying

315 Materials

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

320A Sample areas

1. Lay Sample Areas for inspection prior to laying all types of paving. Maintain these areas during the construction period.

340 Laying generally

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

350 Cold weather working

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

380 Laying granular surfaces in pedestrian areas and cycle tracks

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

390 Protection from traffic and plant

1. Paved areas: Restrict access to prevent damage.

Completion

400 Slip resistance testing

1. Surfaces to be tested: Permeable resin bound gravel
   1.1. Surface condition: Dry and wet. PTV to BS7976-2 of 45 (water) wet
2. Timing: Two weeks prior to handover, but after initial cleaning.
3. Period of notice (minimum): 3 working days.
4. Test standard: To BS 7976-2
   4.1. Testing authority: An approved laboratory
   4.2. Witnessing/ Certification: Arrange for tests to be witnessed/ certified by: Contract administrator.
   4.3. Report: Submit.
   4.4. Format: As required under BS 7976-2.

Ω End of Section

Q24
Interlocking brick/ block roads/ pavings

Types of paving

120 Conventional clay paver paving Type P01

1. Description: **Paving Type P01** - Running bond clay paving brick for pedestrian and vehicular access . (To match Mayfield park) Refer to drawings **0198_MAY-SEW-N01-ZZ-DR-L- 201100** and **201101** for locations
2. Subgrade improvement layer: To Civil Engineer's Specification
   2.1. Compacted thickness: To Civil Engineer's Specification
3. Geotextile: To Civil Engineer's specification
4. Granular sub-base: 200mm thick Type 1 sub-base accordance with BS EN 13285 and MCHWTABLE 8/1 and clause 803
   To Civil Engineer's specification
5. Base course:

   80mm thick asphalt base course AC20 dense bin 100/150 rec to BS EN 13108-1
   To Civil Engineer's specification
6. Laying course
   6.1. Material: 30mm thick Sand laying course to BS 7533-101.
   To Civil Engineer's specification
   6.2. Method of screeding, in accordance with BS 7533-3: **To Civil Engineer's specification**
   6.3. Nominal thickness after compaction: **To Civil Engineer's specification**
7. Pavers: To BS EN 1344:
   7.1. Manufacturer: Ketley Brick Company Ltd.
      7.1.1. Product reference: Staffordshire patterned pavers.
   7.2. Sizes: **200 x 100 x 65mm**
   7.3. Special pavers: Confirm with Landscape Architect
   7.4. Arrises: Square Edged
   7.5. Colour/ Finish: **Staffordshire Blue** / **Diamond Chequered**
   7.6. Requirements:
      7.6.1. Dimensional deviations: [Class R1].
      7.6.2. Freeze/ thaw resistance class: [FP100].
      7.6.3. Mean transverse breaking load: [Class T4].
      7.6.4. Abrasion resistance (mm): [Class A2].
      7.6.5. Slip/ Skid resistance: [PTV to BS 7976-2 of 45].
      7.6.6. Acid resistance: [No requirement].
8. Priming:
   8.1. Application: Clean underside of bricks before placing on bedding sand
9. Jointing

9.1. Material: Fine Jointing Sand In accordance with BS 7533-3.
Civil Engineer to comment

9.2. Joint width: 3 mm. **Civil Engineers to comment**

10. Setting out

10.1. Bond: Bond: 1/3 Running bond - to be laid at staggered quarter bond in order to maintain the pattern throughout the paved area.

10.2. Features: Smooth Clay Paving Brick Trim, Laid as single stretcher course at changes in direction, against surface drains and retaining walls. Refer to drawing **0198_MAY-SEW-N01-ZZ-DR-L-201302** for typical clay paving patterns.

11. Accessories: **Recessed Manhole Cover** - for wherever manholes occur within paved areas a recessed cover should be used with a
paved infill to match the corresponding paving type. All joints to the paved recessed cover are to be 3mm wide using as per Spec Clause **Q24/120.** Refer to drawing **0198_MAY-SEW-N01-ZZ-DR-L-201301 Detail 02** and **0198_MAY-SEW-N01-ZZ-DR-L-201302 Detail 03**

11.1. Access covers: Galvanised steel recessed cover

11.1.1. Manufacturer: Jones of Oswestry or equal and approved, Telephone: 01691 653251

Execution

200 Execution generally – concrete block and clay paver paving

1. Standard: In accordance with BS 7533-3.

211 Colour banding

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

230A Control samples

1. General: Carry out sample area of finished work:
   1.1. Location: To be agreed with Client
   1.2. Size (minimum): 2mx2m
   1.3. Features to be included: Edging
2. Give notice: When ready for inspection.
3. Timing: Obtain approval of appearance before proceeding.
4. Sample Area:: Retain Sample Area during the entire works.

240 Adverse weather

1. General: Do not use frozen materials or lay bedding on frozen or frost covered sub-bases.

450 Laying geotextile sheet for conventional paving

1. Location: Immediately below laying course.

2. Jointing: Lap by 300mm
3. Laying: Fit neatly at edge restraints and other features that interrupt the sand laying course, e.g. drainage fittings, channels, manholes and kerbs.
   3.1. Edge detail: Turn sheet up to form an upstand against features.
      3.1.1. Height (minimum): Thickness of sand laying course.

485 Laying blocks/ pavers/ setts

1. Setting out: Start from an edge restraint.
2. Cutting: Cleanly, accurately and vertically, without spalling. Do not mark or damage visible surfaces.
3. Cut edges: Turn inwards where possible; do not position against edge restraints or other features.
4. In situ mortar or concrete infill:
5. Compaction: Vibrate to produce thoroughly interlocked paving of even overall appearance with regular joints and accurate to line, level and profile. Do not mark or damage paving units, kerbs and adjacent work.
   5.1. Concrete blocks and clay pavers: In accordance with BS 7533-3, Annex F, to site category required for laying course material.

505 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.

Completion

615 Completion of paving

1. Final compaction of the surface course: In accordance with BS 7533-3.
2. Vacuum cleaning machines: Not allowed.

620 Slip resistance testing

1. Surfaces to be tested: Brick paving
   1.1. Surface condition: Dry and wet. PTV to BS7976-2 of 45 (water) wet
2. Timing: Two weeks prior to handover, but after initial cleaning.
3. Period of notice (minimum): 3 working days.

4. Test standard: To BS 7976-2.
   4.1. Testing authority: An approved 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 7976-2.

Ω End of Section

Q25
Slab/brick/sett/cobble pavings

Clauses

2 To be read with preliminaries/ general conditions.

General

110A Natural stone slab paving Type P12

1. Description: **Paving Type P12 - to match adjacent S278 Highways Works**
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations and **0198_MAY-SEW-N01 -1000-DR-L-201301 detail 04**
2. Subgrade improvement layer: To Civil Engineer's Specification
   2.1. Compacted thickness: To Civil Engineer's Specification
3. Granular sub-base: To Civil Engineer's Specification
   3.1. Compacted thickness: To Civil Engineer's Specification
4. Base: To Civil Engineer's Specification
   4.1. Thickness: To Civil Engineer's Specification
5. Laying course: To Civil Engineer's Specification
   5.1. Accessories: **to match adjacent S278 Highways Works**
6. Paving units: Natural stone slabs as per **Q25/310A**
7. Jointing: **to match adjacent S278 Highways Works**
   7.1. Bond: **to match adjacent S278 Highways Works**

System performance - Not Used

Products

310A Natural stone paving slabs Type P12

1. Description: **Paving Type P12 - to match adjacent S278 Highways Works.**
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations and **0198_MAY-SEW-N01 -1000-DR-L-201301 detail 04**
2. Supplier: Hardscape Products Ltd
   2.1. Contact details
      2.1.1. Address: Eagley House
      Deakins Business Park
      Egerton
      Bolton
      Lancashire
      United Kingdom
      BL7 9RP
      2.1.2. Telephone: +44 (0)1204 565500
      2.1.3. Web: www.hardscape.co.uk

2.1.4. Email: enq@hardscape.co.uk

2.2. Product reference: Sandstone Paving (Woodkirk)

3. Stone denomination

3.1. Petrological family: Sandstone.

3.2. Colour: **Woodkirk**

4. Physical properties

4.1. Dimensions and associated tolerances

4.1.1. Nominal sizes: 600mm x random lengths
to match adjacent S278 Highways Works

4.2. Finish: Diamond sawn.

5. Thickness: 100mm - **to match adjacent S278 Highways Works**

6. Length: Random lengths - **to match adjacent S278 Highways Works**

7. Width: 600mm - **to match adjacent S278 Highways Works**

320A Tactile flags and slabs Type 01

1. Description: **Tactile Paving Type P08** - Tactile hazard corduroy warning paving (To match Mayfield park)

2. Location: Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations

2.1. Tactile Hazard Corduroy Warning Paving at the top/bottom of step.

2.2.

Buff Corduroy – Install between concrete steps and Blue Paving to ensure colour
contrast in materials.

3. Standard: To DD CEN/TS 15209:2008

4. Subgrade improvement layer: to Civil Engineer's Specification

5. Compacted thickness: to Civil Engineer's Specification

6. Geotextile: to Civil Engineer's Specification

7. Granular sub-base: 150mm Type 1 Subbase In accordance with BS EN 13285 and MCHW Table 8/1 and Clause 803
To Civil Engineer's Specification

7.1. Compacted thickness: [150mm].

8. Laying course: 30mm 3:1 sharp sand/cement semi-dry mix bed bedding to BS 7533-101
To Civil Engineer's Specification

9. Material: Clay Paver

9.1. Manufacturer: Ketley Brick Company Ltd.

9.2. Product reference: PT.3.0

9.3. Nominal sizes: 200 x 100x 65mm

9.4. Colour: Buff

9.5. Type of surface: Tactile ribbed/ corduroy special paver

10. Laying of Pavers:

10.1. Bond: Stack

10.2. Laid to falls

11. Jointing

11.1. Material: Fine dry bedding sand In accordance with BS 7533-3. **Civil Engineer to confirm**

11.2. Joint: 3mm wide
Civil Engineer to confirm

320B Tactile flags and slabs Type 02

1. Description: **Tactile Paving Type P09** - Tactile hazard corduroy warning paving (To match Mayfield park)
2. Location: Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations

2.1. Tactile Hazard Corduroy Warning Paving at the top/bottom of step.

2.2.

Blue Corduroy paving – Install between concrete steps and Resin bound gravel to ensure colour
contrast in materials.

3. Standard: To DD CEN/TS 15209:2008
4. Subgrade improvement layer: to Civil Engineer's Specification
5. Compacted thickness: to Civil Engineer's Specification
6. Geotextile: to Civil Engineer's Specification
7. Granular sub-base: 150mm Type 1 Subbase In accordance with BS EN 13285 and MCHW Table 8/1 and Clause 803
To Civil Engineer's Specification

7.1. Compacted thickness: [150mm]. **To Civil Engineer's Specification**

8. Laying course: 30mm 3:1 sharp sand/cement semi-dry mix bed bedding to BS 7533-101
To Civil Engineer's Specification
9. Material: Clay Paver

9.1. Manufacturer: Ketley Brick Company Ltd.

9.2. Product reference: PT.3.0

9.3. Nominal sizes: 200 x 100x 65mm

9.4. Colour: Blue

9.5. Type of surface: Tactile ribbed/ corduroy special paver

10. Laying of Pavers:

10.1. Bond: Stack

10.2. Laid to falls

11. Jointing

11.1. Material: Fine dry bedding sand In accordance with BS 7533-3. **Civil Engineer to confirm**

11.2. Joint: 3mm wide **Civil Engineer to confirm**

322 Tactile flags and slabs Blister paving Type 01

1. Description: **Tactile Blister Paving Type P10** - Corduroy paving, at crossings. To match Mayfield Park
2. Location: Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201101** for locations
   2.1. Blister warning Paving at pedestrian crossing
   2.2. Install between driveway entrance intersecting pedestrian pathway.
3. Standard: To DD CEN/TS 15209:2008
4. Subgrade improvement layer: to Civil Engineer's Specification
5. Compacted thickness: to Civil Engineer's Specification
6. Geotextile: to Civil Engineer's Specification
7. Granular sub-base: 150mm Type 1 Subbase In accordance with BS EN 13285 and MCHW Table 8/1 and Clause 803
   To Civil Engineer's Specification
   7.1. Compacted thickness: **To Civil Engineers Specification.**
8. Laying course: 30mm 3:1 sharp sand/cement semi-dry mix bed bedding to BS 7533-101
   to Civil Engineer's Specification
   8.1. Material: Sand/Cement
   To Civil Engineer's Specification
   8.2. Method of screeding, in accordance with BS 7533-3: Compaction.
   8.3. Nominal thickness after compaction: [30 mm]. **To Civil Engineer's Specification**
9. Material: Concrete Paver
   9.1. Manufacturer: Marshalls PLC.
   9.2. Product reference: Tactile Hazard Warning Textured
   9.3. Nominal sizes: 400 x 400 x 50mm
   9.4. Colour: Buff
   9.5. Type of surface: Tactile Blister/ corduroy special paver
10. Laying of Pavers:
    10.1. Bond: Stack
    10.2. Laid to falls
11. Jointing
    11.1. Material: Fine dry bedding sand In accordance with BS 7533-3. **Civil Engineer to confirm**
    11.2. Joint: 3mm wide **Civil Engineer to confirm**

365A Geotextile sheet

1. Description: -below laying course
2. Manufacturer: Terram
   2.1. Product reference: T1000
   2.2. Recycled content: None permitted

3. Recycled content:

435A Primer for underside of flags and slabs

1. Description: Clay pavers and quarry tiles
2. Manufacturer: Steintec
   2.1. Product reference: Tuffbond priming mortar

Execution

615 Control samples

1. Sample areas: Complete as part of the finished work.
   1.1. Types of paving: Brick paving
   1.2. Location: to be agreed with client
   1.3. Size (minimum): 2x2m
   1.4. Included features: Edging
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/ fine aggregate
   3.1. Stockpiled laying course sand/ fine aggregate: Protect from saturation.
   3.2. Exposed areas of unbound laying course and uncompacted areas of unbound paving: Protect from heavy rainfall.
   3.3. Saturated unbound laying course: Remove and replace, or allow to dry before proceeding.
   3.4. Laying dry sand/ fine aggregate 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.

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): 2 days
   4.2. Vehicular traffic (minimum): 7 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 unbound 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: Brick and Concrete Paved areas
   1.1. Surface condition: Dry and wet
2. Timing: Two weeks prior to handover, but after initial cleaning
3. Period of notice (minimum): 3 working days.
4. Test standard: To BS 7976-2
   4.1. Testing authority: An approved 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

Q41
Barriers/ guard rails

Types of barriers/ guard rails

240A Handrail and post to Steps ST01

1. Description: Handrail and post to external steps **ST01.**
   Refer to drawing for locations **0198_MAY-SEW-N01-1000-DR-L-201101 and 0198_MAY-SEW-N01-1000-DR-L-201306** for details.

   ***To match Mayfield Park handrails and post.**
2. Standard: To BS 8300-1
3. Material: As drawing **0198_MAY-SEW-N01-1000-DR-L-201306**
   - 3.1. Post: : Mild steel I-Section 100 x 100 x 15mm
   - 3.2. Handrail: : Galvanised Steel
     - 3.2.1. Cross section: 48mm dia. (handrail)
   - 3.3. Finish:
     - 3.3.1. Post: Hot dipped Galvanised and polyester powder coated **RAL 7021** (Dark Grey)
       ***to match finish in Mayfield Park**
     - 3.3.2. Handrail: Galvanised Steel finish to BS EN 10255:2004
       ***to match finish in Mayfield Park**
4. Height above ground surface (to upper surface of handrail)
   - 4.1. Upper handrail:

     1000mm above landings
     900mm above pitch of steps
     As drawing **0198_MAY-SEW-N01-1000-DR-L-201306**
5. Extent of handrail: As drawing **0198_MAY-SEW-N01-1000-DR-L-201306**
6. Fixings/ foundations:
   - 6.1. Base plate: Polyester powder coated to **RAL 7021.** To fabricator's detail and specification
   - 6.2. Fixings: Corners and connections mitred and welded with matching end caps. Stem brackets, with concealed fixings securely fixed to substrate. Galvanized steel where visible.
     finish to BS EN 10255:2004.
7. Accessories: Integral lighting - recessed luminaires. Provide cover plate on handrail/ balustrade post to hide lighting ducting.
   ***to match finish in Mayfield Park**

Performance/ inspection/ testing

335 Performance of sports ground barriers

1. Description:

2. Standard:
3. Type of barrier:
4. Design loading class:
5. Imposing load:
   5.1. Height of application:
   5.2. Category:
6. Verification:
   6.1. Submittals:
   6.2. Timing:

Installation

480 Concrete foundations for posts

1. Standard: To BS 8500-2.
2. Excavations:
3. Concrete mix:
4. Filling:
5. Temporary support to posts:

490 Making good galvanized surfaces

1. Standard: To BS EN ISO 1461.
2. Areas of repair
   2.1. Total area of repair not to exceed 0.5% of total surface area.
   2.2. Each area not to exceed 100 mm².
3. Treatment of minor damage (including on fasteners and fittings): Use 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

Completion - Not Used

Ω End of Section

Q50
Site/street furniture/equipment

Clauses

2 To be read with preliminaries/ general conditions.

Gates, barriers and parking controls

190A Sliding Bollard System BT01a

1. Description: **Bollard Type BT01a** - Sliding Bollard system
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201105** for locations
2. Manufacturer: HEALD
   info@heald.uk.com
   tel:+4401964535858

   2.1. Product reference: **HEALD Matador 6-HT2**
3. Security Rating: PAS 68: 2013 Bollard V/7500(N2)/64/90:0.7/0.0
4. Sleeve Material: Stainless steel
   4.1. Finish as delivered: Stainless steel
5. Height above ground: 1100mm
6. Height below ground: To manufacturers recommendation (150mm)
7. Sectional size: 220mm
   7.1. Top: Flat
8. Method of fixing: As Manufacturers Recommendations to achieve Security Rating. **Civil and or Structural Engineer to comment**

192A Fixed bollards BT01b

1. Description: **Bollard Type BT01b** - Retractable Bollard system
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201105** for locations
2. Manufacturer: ATG Access Ltd.
   2.1. Product reference: SP100 Fixed Bollard
3. Security Rating: : 3,500 kg at 48 kph (30 mph)
   Minimum array – 2 units
4. Sleeve Material: Mild Steel, hot dipped galvanised
   4.1. Finish as delivered: Polyester Powder Coated
   4.2. Colour: RAL 7021
5. Height above ground: 900mm
6. Sectional size: 141mm (sleeved)
   6.1. Top: Flat
   6.2. Additional Requirements: 2No. 50mm recessed contrasting coloured strips (Colour to be confirmed by Landscape Architect)

7. Method of fixing: As Manufacturers Recommendations to achieve Security Rating.

Site and street furniture

221A Benches Type 01b

1. Description: **Street furniture type S01b** Solid bench,
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201105** for locations
2. Manufacturer: STREETLIFE BV.
   2.1. Product reference: **Solid 8 bench - modified**
3. Material Seat: FSC Hardwood II - Virgin
   3.1. Finish: As manufactured
4. Material Metal Fixing:
   4.1. Finish: Galvanised
5. Material Base: Corten
6. [As manufactured]
7. Size: Bespoke depth to achieve 500mm seating depth with backrest.
   Length as per plan (2400mm-3000mm) allow for extension modules.
   Please note: An extra slat is required to the standard product (increasing the number of slats from
   8No. to 9No.) to increase the total depth of the bench to 690mm to achieve a **DFA 2**
   compliant seating depth of 500mm with backrest.
   - **To match the benches in Mayfield Park**
8. Accessories/ Special requirements:
   8.1. Double Quatro 1800mm **Backrest** (allow for extension modules to match varying lengths)
   8.2. **Armrest** : Finish To match Mayfield park.
   8.3. 20 x 30mm (D x W) **lighting** recess in underside of front timber slat
9. Method of fixing: Foundation and fixings to manufacturers detail.
   Civil and or Structural Engineer to comment

240A Litter bins Type 02

1. Description: **Waste bin type 02** waste and recycling bin (To match Mayfield park).
   Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201105** for locations
2. Manufacturer: Vestre AS.
   2.1. Product reference: 2145 Acceptor 160
   2.2. Capacity: 2 x 160Litres
3. Material: Mild Steel, Hot dip galvanised (Confirm with Manufacturer)
   3.1. Finish: Powder Coated.
   3.2. Colour: Black Grey - RAL 7021 (To match Mayfield park)
   3.3. Top Colour:: Light Grey RAL 7035
   3.4. Text Colour:: Light Grey RAL 7035

3.5. Symbol Colour: : Light Grey RAL 7035

4. Size: 1003mm x 505mm x 1320mm
5. Method of fixing: Foundation and fixings to manufacturers detail.
   Civil and or Structural Engineer to comment

390B Bib taps Type BI01

1. **BI01** - Bib taps to planting beds - Refer to drawing **0198_MAY-SEW-N01 -1000-DR-L-201105** for locations
2. Manufacturer: Edward standpipes or equal and approved
   2.1. Product reference: PLC34 - Plinth standpipe with 3/4'' Brass bib tap
3. Material: Stainless steel
   3.1. Finish: As manufactured
   3.2. Unit length: 830mm
   3.3. Unit section: 110mm x 130mm
   3.4. Outlet tap cover: 250mm x 180mm x 130mm
   3.5. Stabilising base: 250mm x 230mm
4. Method of fixing: To manufacturers installation recommendations.
   Civil and or Structural Engineer to comment
5. Special requirements: Tamper-proof casing/ lockable

390C Pop up power socket

1. PS 01- Pop up power sockets
2. Manufacturer: U POP UP
   HEAD OFFICE PO Box 1447 Ilford, Essex IG2 6GT
   Tel: +44 (0)20 8227 0208
   2.1. Product reference: PUPS 04
3. Cover type: Recessed Cover to fill AISI304 20t load
   3.1. Finish: Stainless steel
   3.2. Unit length: As manufactured
   3.3. Unit section: As manufactured
4. Electrical Configuration: 6 no. 16 amp 2P sockets with RCBO protection (HL to confirm)
5. Type of movement: Manual lifting.
6. Structure: Stainless steel, Cast iron and concrete

Installation

510 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: Standard prescribed, not less than ST2
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: 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.

Ω End of Section