

JERSEY WHARF

HARD AND SOFT LANDSCAPE SPECIFICATION

PURPOSE OF ISSUE:
STAGE 4

STATUS:
S3-REVIEW AND COMMENT

Gillespies

DOCUMENT NUMBER EYJW-GIL-EX-00-TS-L-900501

ISSUE	REV	DESCRIPTION	BY	DATE
STAGE 4	P01	FIRST STAGE 4 ISSUE	SB	04.07.2024

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L37

External stair, ramps, handrail and balustrades systems

General

110 Stair systems

1. Description: To resident's garden
2. Type: Precast concrete fabricated off-site
3. Base/ Fabric: To engineer's specification
4. Accessories: 'Corduroy' hazard warning surface as section Q25
5. Refer to:: Detail - EYJW-GIL-EX-00-DR-L-900320
Handrails - L37/ 150
Treads - L37/ 315
Top Tread - L37/ 315A

150 Handrail systems

1. Description: Handrails to steps in resident's garden area
2. System manufacturer: Contractor's choice
3. Material: Flat bar powder coated posts with 316 stainless steel top rail
 - 3.1. Cross section: As per drawing EYJW-GIL-EX-00-DR-L-900320
 - 3.2. Finish: Powder coated steel to match architectural metal work.
4. Height (to upper surface of handrail)
 - 4.1. Above pitch line: 1000-1100 mm
 - 4.2. Above landing: 1000-1100 mm
5. Accessories: Integral lighting (design by others)
6. Refer to:: EYJW-GIL-EX-00-DR-L-900320

160 Balustrade systems

1. Description: Along canal edge
2. System manufacturer: Lang + Fulton or similar approved
 - 2.1. Address: Technical & Sales, Newbridge Industrial Estate, Newbridge, Edinburgh, EH28 8PJ
 - 2.2. T: [0131 441 1255](tel:01314411255)
 - 2.3. W: <https://langandfulton.co.uk/>
 - 2.4. E: sales@langandfulton.co.uk
3. Product: Rimini
4. Guarding
 - 4.1. Material: Steel
 - 4.2. Finish: Polyester powder-coated
5. Rail
 - 5.1. Cross section: Refer to drawing EYJW-GIL-EX-00-DR-L-900333
 - 5.2. Material: Steel
 - 5.3. Finish: Polyester powder-coated RAL to match architectural metalwork
6. Height (to upper surface of rail)
 - 6.1. Above pitch line: 1100mm

System performance - Not Used

Products

315 Concrete step units

1. Description: To residents garden
2. Manufacturer: [Tobermore](#)
 - 2.1. Contact details
 - 2.1.1. Address: 2 Lisnamuck Road
Tobermore
Co L'derry
BT45 5QF
 - 2.1.2. Telephone: [+44 \(0\)844 800 5736](tel:+44(0)8448005736)
 - 2.1.3. Web: www.tobermore.co.uk
 - 2.1.4. Email: NBSdataplatfom@tobermore.co.uk
 - 2.2. Product reference: [Granite Step Unit With Contrasting Nosing | Concrete Step \(350 x 150 x 1000 mm\)](#)
3. Standards: To BS EN 1339: 2003.
4. Step unit configuration: Solid step.
5. Colour: Silver.
6. Finish
 - 6.1. Treads: Textured.
 - 6.2. Risers: Textured.
7. PhysicalPropertiesDimensionsAndAssociatedTolerancesNominalSizes: 350 x 150 x 1000 mm.
8. PhysicalPropertiesSlipResistance: Extremely low.
9. PhysicalPropertiesSkidResistance: Extremely low.
10. SurfaceLayer: Not less than 56.4% of granite aggregate in surface layer.
11. TensileStrength: >5MPa (Class 3).
12. Efflorescence: Minimum 12 hour vapour curing to significantly reduce the possibility of efflorescence.
13. BREEAM rating: Refer to the Green Guide to Specification, 4th Edition 2009.
14. Packaged weight: 1200 kg.
15. Accessories: Block contrasting nosing

315A Concrete top step units

1. Manufacturer: [Tobermore](#)
 - 1.1. Contact details
 - 1.1.1. Address: 2 Lisnamuck Road
Tobermore
Co L'derry
BT45 5QF
 - 1.1.2. Telephone: [+44 \(0\)844 800 5736](tel:+44(0)8448005736)
 - 1.1.3. Web: www.tobermore.co.uk
 - 1.1.4. Email: NBSdataplatfom@tobermore.co.uk
 - 1.2. Product reference: [Granite Step Unit With Contrasting Nosing | Concrete Step \(400 x 150 x 1000 mm\)](#)
2. Standards: To BS EN 1339: 2003.

3. Step unit configuration: Solid step.
4. Colour: Silver.
5. Finish
 - 5.1. Treads: Textured.
 - 5.2. Risers: Textured.
6. PhysicalPropertiesDimensionsAndAssociatedTolerancesNominalSizes: 400 x 150 x 1000 mm.
7. PhysicalPropertiesSlipResistance: Extremely low.
8. PhysicalPropertiesSkidResistance: Extremely low.
9. SurfaceLayer: Not less than 56.4% of granite aggregate in surface layer.
10. TensileStrength: >5MPa (Class 3).
11. Efflorescence: Minimum 12 hour vapour curing to significantly reduce the possibility of efflorescence.
12. BREEAM rating: Refer to the Green Guide to Specification, 4th Edition 2009.
13. Packaged weight: 1370 kg.
14. Pack size: 10.
15. Accessories: Black contrasting nosing

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.

620 Concrete foundations generally

1. Refer to:: Engineers design and specification.
2. Standard: To BS 8500-2.
3. Concrete: Designated not less than GEN 1 or standard prescribed not less than ST2.
4. Admixtures: Do not use.
5. Foundation holes: Neat vertical sides.
6. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

650 Installation generally

1. Fasteners: To section Z20.
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 finished work as temporary support or strutting for other work.
4. **Applied finishes:** Substrates to be even, dry, sound and free from contaminants. Make good substrate surfaces and prepare/ prime as finish manufacturer's recommendation before application.

662 Adverse weather

1. **General:** Do not use frozen materials and do not lay on frozen surfaces.
2. **Working limits:** Do not lay blocks/ dressings:
 - 2.1. **Cement gauged mortars:** When the air temperature is at or below 3°C and falling or below 1°C and rising (unless mortar has a temperature of not less than 4°C when laid and work is thoroughly protected).
 - 2.2. **Hydraulic lime:sand mortars:** When the air temperature is at or below 5°C and falling or below 3°C and rising.
3. **Temperature of the work:** Maintain above freezing until mortar has fully set.
4. **Newly erected work:** Protect from precipitation; Prevent rapid drying in hot conditions.
5. **Remedial work:** Rake out and replace mortar damaged by frost.
 - 5.1. **Damaged work:** Rebuild.

680 Site painting and staining

1. **Timing:** Prepare surfaces and apply finishes as soon as possible after installing components.

Completion

910 Inspection

1. **Timing:** Give reasonable notice before covering up
2. **Period of notice (minimum):** 3 working days.

915 Slip resistance testing

1. **Surfaces to be tested:** L37/ all external surfaces.
 - 1.1. **Surface condition:** Dry and wet
2. **Timing:** Post final clean, prior to handover
3. **Period of notice (minimum):** 3 working days.
4. **Test standard:** To BS 7976-2
 - 4.1. **Testing authority:** A UKAS accredited laboratory
 - 4.2. **Witnessing/ Certification:** Arrange for tests to be witnessed/ certified by: Project manager.
 - 4.3. **Report:** Submit.
 - 4.3.1. **Format:** As required under BS 7976-2

920 Documentation

1. **Contents**
 - 1.1. **Copies of structural design calculations/ test reports.**
2. **General product information.**
 - 2.1. **Installation information.**
 - 2.2. **Inspection and maintenance reports.**
3. **Number of copies:** 2
4. **Submission:** Two weeks prior to date when principal contractor expects work to be practically complete

Ω End of Section

Q10

Kerbs/ edgings/ channels/ paving accessories

Types of kerbs/edgings and channels

110 Concrete kerbs REF K2

1. Description: Edge Type K2
2. Manufacturer: [Marshalls plc](#)
 - 2.1. Contact details
 - 2.1.1. Address: Landscape House
Lowfields Business Park
Elland
West Yorkshire
HX5 9HT
 - 2.1.2. Telephone: +44 (0)330 0574472
 - 2.1.3. Web: www.marshalls.co.uk
 - 2.1.4. Email: info@marshalls.co.uk
 - 2.2. Product reference: [Conservation X Kerb](#)
3. Standard: To BS 7533-6:1999.
4. Physical properties
 - 4.1. Colour: Silver grey.
 - 4.2. Finish: Textured.
 - 4.3. Dimensions: 145 x 255 x 915 mm.
 - 4.4. Weathering resistance: $\leq 1.0 \text{ kg/m}^2$ as a mean with no individual value $> 1.5 \text{ kg/m}^2$ (freeze thaw durability).
 - 4.5. Abrasion resistance: $\leq 23 \text{ mm}$ (Wide Wheel Abrasion Test).
 - 4.6. Bending strength: Characteristic bending strength of 3.5 MPa with no individual result less than 2.8 MPa
 - 4.7. Unpolished Slip Resistance Value (USRV) (minimum): > 45 .
5. Laid: 125 mm Uprand

120 Natural Stone Channel REF K4

1. Description: Edge Type K4
2. Standard: To BS EN 1343.
3. Supplier: Marshalls plc
4. Types: Rectangular with radiused exposed edges
5. Stone type: Granite
6. Size (width x height): 100mm(W) x 150 (Depth to be confirmed by engineer) x 1000mm(L)
7. Finish: Bush hammered
8. Colour: Silver Grey
9. Arrises: None
10. Bedding: To Engineer's specification
11. Joints generally: Narrow mortar to match surrounding paving colour
12. Sealant movement joints: To Engineer's specification
13. Specials: 750mm Radius kerbs as per drawing EYJW-GIL-EX-00-DR-L-900103
14. Laid: Flush

170 Linear slot drainage channel systems REF E2

1. Refer to : engineer's specification

200 Metal Edge REF E1

1. Description: Edge Type 1
2. Manufacturer: [Kinley](#)
 - 2.1. Contact details
 - 2.1.1. Address: Northpoint, Compass Park
Junction Road
Staplecross
East Sussex
TN32 5BS
 - 2.1.2. Telephone: [+44 \(0\) 1580313124](#)
 - 2.1.3. Web: www.exceledge.co.uk
 - 2.1.4. Email: sales@exceledge.co.uk
 - 2.2. Product reference: [Fort L-profile Steel Angle Edging \(141320 - 75 mm Height / Untreated\)](#)
3. Material: Steel.
4. Edging
 - 4.1. Form: Flexible.
 - 4.2. Duty: Heavy.
 - 4.3. Length (minimum): 2.4 m.
 - 4.4. Size: 75 mm.
 - 4.5. Colour: Brown.
5. Fixings:
6. Surface finish: Untreated.
7. Thickness: 6 mm.
8. Width: 60 mm.
9. Foot width: 50 mm.
10. Bedding: To Manufacturer's recommendations

210 Raised Planter Metal Edge REF EP1

1. Description: Edge Type EP1
2. Manufacturer: Versa Street Furniture Ltd or similar approved
 - 2.1. Contact details
 - 2.1.1. Address: Units 2 & 5 Tetbury Close
Martland Industrial Park
Wigan
WN5 0LA
 - 2.1.2. Telephone: 01942 214275
 - 2.1.3. Web: <https://www.versauk.co.uk/>
 - 2.1.4. Email: sales@versauk.co.uk
 - 2.2. Product reference: [Raised metal planter 300mm above ground](#)
3. Material: Steel.
4. Edging
 - 4.1. Form: Rigid
 - 4.2. Duty: Heavy.

- 4.3. Thickness: 6 mm.
- 4.4. Colour: RAL TBC
- 5. Fixings: Triangular gusset support brackets 800mm spacing. To manufacturer's detailed design
- 6. Overall height: 600 mm. (300mm above ground)
- 7. Bedding: To Manufacturer's recommendations
- 8. Note: Detailed fabrication drawings to be provided to Landscape Architect for review and comment

210A Raised Planter Metal Edge REF EP2

- 1. Description: Edge Type EP2
- 2. Manufacturer: Versa Street Furniture Ltd or similar approved
 - 2.1. Contact details
 - 2.1.1. Address: Units 2 & 5 Tetbury Close
Martland Industrial Park
Wigan
WN5 0LA
 - 2.1.2. Telephone: 01942 214275
 - 2.1.3. Web: <https://www.versauk.co.uk/>
 - 2.1.4. Email: sales@versauk.co.uk
 - 2.2. Product reference: Raised metal planter 200mm above ground
- 3. Material: Steel.
- 4. Edging
 - 4.1. Form: Rigid
 - 4.2. Duty: Heavy.
 - 4.3. Thickness: 6 mm.
 - 4.4. Colour: RAL TBC
- 5. Fixings: Triangular gusset support brackets 800mm spacing. To manufacturer's detailed design
- 6. Overall height: 500 mm. (200mm above ground)
- 7. Bedding: To Manufacturer's recommendations
- 8. Specials: Sloped transition from EP3 to EP2 required to go from taller planter to lower planter.
Refer to
Detail EYJW-GIL-EX-00-DR-L-900350
AND
Levels Plan EYJW-GIL-EX-00-DR-L-900110
- 9. Note: Detailed fabrication drawings to be provided to Landscape Architect for review and comment

210B Raised Planter Metal Edge REF EP3

- 1. Description: Edge Type EP3
- 2. Manufacturer: Versa Street Furniture Ltd or similar approved
 - 2.1. Contact details
 - 2.1.1. Address: Units 2 & 5 Tetbury Close
Martland Industrial Park
Wigan
WN5 0LA
 - 2.1.2. Telephone: 01942 214275
 - 2.1.3. Web: <https://www.versauk.co.uk/>
 - 2.1.4. Email: sales@versauk.co.uk
 - 2.2. Product reference: Raised metal planter 500mm above ground

3. Material: Steel.
4. Edging
 - 4.1. Form: Rigid
 - 4.2. Duty: Heavy.
 - 4.3. Thickness: 6 mm.
 - 4.4. Colour: RAL TBC
5. Fixings: Triangular gusset support brackets 800mm spacing. To manufacturer's detailed design
6. Overall height: 800 mm. (500mm above ground)
7. Bedding: To Manufacturer's recommendations
8. Note: Detailed fabrication drawings to be provided to Landscape Architect for review and comment

250 Material samples

1. Samples representative of colour and appearance of designated materials: Submit before placing orders.
 - 1.1. Designated materials: Metal edging and stone kerbs

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 engineer's specification

570 Channels

1. Installation: To an even gradient, without ponding or backfall.
2. Lowest points of channels: 6 mm above drainage outlets.

580 Drainage channel systems

1. **Installation:** To an even gradient, without ponding or backfall. Commence laying from outlets.
2. **Silt and debris:** Removed from entire system immediately before handover.
3. **Washing and detritus:** Safely disposed without discharging into sewers or watercourses.

590 Drainage channel systems with built in fall

1. **Installation:** Top of channels level, installed in correct sequence to form an even gradient without ponding or backfall. Commence laying from outlets.
2. **Silt and debris:** Removed from entire system immediately before handover.
3. **Washings and detritus:** Safely disposed without discharging into sewers or watercourses.

610 Angle kerbs

1. **Usage:** Internal and external 90° changes of direction.
2. **Cutting of mitres:** Not permitted.

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

Types of paving

110 Asphalt concrete paving REF P5

1. Description: Asphalt paving to west service access
2. Standard: To BS EN 13108-1
3. Subgrade improvement layer: To Engineers design and specification
4. Surface treatment: To Engineers design and specification.

127 Porous coloured asphalt REF P6

1. Description: Asphalt paving to east service access
2. Standard: To Engineers design and specification.
3. Surface course
 - 3.1. Paving grade: To Engineers design and specification.
 - 3.2. Colour:: Buff / Light
 - 3.3. Slip/ Skid resistance: To Engineers design and specification.
 - 3.4. Compacted thickness: To Engineers design and specification.

Preparatory work/ requirements - Not Used

Laying - Not Used

Completion - Not Used

Ω End of Section

Q23

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

Types of surfacing

120 Resin-bound mixed aggregate REF P4

1. Description: To public realm
2. Supplier:: Sureset Resin
 - 2.1. Address: 32 Deverill Road Trading Estate
Sutton Veny
Warminster
Wiltshire
United Kingdom
BA12 7BZ
 - 2.2. T: +44 (0)1985 841180
 - 2.3. W: www.sureset.co.uk
 - 2.4. E: sales@sureset.co.uk
3. Product: Natural Aggregate Resin Bound Permeable Paving
4. Colour: Aztec Gold
5. Size: 6mm
6. Binder: Polyurethane resin.
7. Depth: 18mm
8. Completion: Compact to produce a firm, regular surface, stable in use.

130 Self binding gravel REF P3

1. Description: Paving Type 3
2. Supplier: CED Ltd
 - 2.1. Address: Hooton Works
Hooton
Wirral
CH66 7NB
 - 2.2. T: 0151 327 5555
 - 2.3. E: enquiries@cedstone.co.uk
 - 2.4. W: <https://www.cedstone.co.uk/>
3. Product: CEDEC Footpath Gravel
4. Colour: Silver
5. Subgrade improvement layer: To engineer's specification
6. Geotextile: To Engineer's specification
7. Granular sub-base: Type 3 To Engineer's specification
8. Surface course: Naturally occurring fine hoggin consisting of sand and gravel, with minimum clay content required to bind the material together, and with no large lumps of clay.
 - 8.1. Size: Minimum of 85% by weight passing a 10 mm BS sieve.
 - 8.2. Maximum particle size: 6mm
 - 8.3. Compacted thickness: 50mm
9. Completion: Compact to produce a firm, regular surface, stable in use.

160 Loose gravel REF P10

1. Description: Rounded pebble gravel
2. Gravel: Loose laid and raked to uniform thickness.
 - 2.1. Type: Locally sourced Buff / Light mixed gravel
 - 2.2. Source: within 25 miles
 - 2.3. Colour: Buff / Light
 - 2.4. Size: 10-20mm
 - 2.5. Thickness: 100mm

Laying

315 Materials

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

320 Samples

1. Submit: Representative samples of all aggregates.

325 Blinding to sub-base

1. Type: To Engineers design and specification.
2. Laying: To Engineers design and specification.
3. Compacted thickness: To Engineers design and specification.

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.

360 Drainage falls

1. Sealed surfaces
 - 1.1. Falls and cross falls (minimum): Refer to EYJW-GIL-EX-00-DR-L-900104

380 Laying granular surfaces in pedestrian areas and cycle tracks

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

390 Protection from traffic and plant

1. Paved areas: Restrict access to prevent damage.

Completion - Not Used

Ω End of Section

Q25

Slab/ brick/ sett/ cobble pavings

General - Not Used

System performance - Not Used

Products

310 Natural stone paving REF P1

1. Description: Paving Type 1
2. Standard: To [BS EN 1341](#).
3. Supplier: [Marshalls plc](#)
 - 3.1. Contact details
 - 3.1.1. Address: Landscape House
Lowfields Business Park
Elland
West Yorkshire
HX5 9HT
 - 3.1.2. Telephone: [+44 \(0\)330 0574472](tel:+44(0)3300574472)
 - 3.1.3. Web: www.marshalls.co.uk
 - 3.1.4. Email: info@marshalls.co.uk
 - 3.2. Product reference: Silver grey Granite
4. Petrographical description/ stone type: Granite
5. Finish: Flamed
6. Sizes: 150/300mm (L) X 150mm(W) X 60mm(D to be confirmed by engineer)
7. Bond:: Stretcher
8. Arrises: Square
9. Slip resistance: PTV to [BS EN 16165](#) of 45
10. Skid resistance: PSV to [HE DMRB: CS 228](#) of 65
11. Surface treatment: None
12. Refer to : General Arrangement EYJW-GIL-EX-00-DR-L-900102
Detail EYJW-GIL-EX-00-DR-L-000301
13. Samples: to be approved by client and planning authority

310A Natural stone paving REF P2

1. Description: Paving Type 2
2. Standard: To [BS EN 1341](#).
3. Supplier: [Marshalls plc](#)
 - 3.1. Contact details
 - 3.1.1. Address: Landscape House
Lowfields Business Park
Elland
West Yorkshire
HX5 9HT
 - 3.1.2. Telephone: [+44 \(0\)330 0574472](tel:+44(0)3300574472)
 - 3.1.3. Web: www.marshalls.co.uk
 - 3.1.4. Email: info@marshalls.co.uk

- 3.2. Product reference: [Scoutmoor Yorkstone Paving \(Diamond Sawn\)](#)
- 4. Standard: To BS EN 1341.
- 5. Stone denomination
 - 5.1. Petrological family: Sandstone.
 - 5.2. Colour: Blue grey to brown fine grained.
 - 5.3. Name (traditional): Yorkshire Stone.
 - 5.4. Origin: Lancashire.
- 6. Physical properties
 - 6.1. Profile
 - 6.1.1. Slab type: Fine grained.
 - 6.2. Finish: Diamond sawn.
- 7. Performance requirements
 - 7.1. Slip resistance: To BS 14231, 92 (dry).
 - 7.2. Breaking load: To EN 12372, 20.57 MPa.
 - 7.3. Water absorption (maximum): To EN 13755, 1.98 %.
- 8. Light reflectance: 27.83.
- 9. Surface roughness: 39 Rz-µm.
- 10. Third-party certification: UKCA marked.
- 11. Abrasion resistance: To EN 14157, 19.16 mm.
- 12. Durability: To EN 12371, 22.95/20.8 MPa.
- 13. Density: To EN 1936, 2522 kg/m³.
- 14. Porosity: To EN 1936, 5.55%.
- 15. CompressiveStrength: To EN 1926, 102 MPa.
- 16. Bond:: Stretcher
- 17. Arrises: Square

320 Concrete tactile flags REF P8

- 1. Description: Paving Type 8
- 2. Standard: To [PD CEN/TS 15209](#).
- 3. Material: Natural stone
 - 3.1. Manufacturer: [Marshalls plc](#)
 - 3.1.1. Contact details
 - 3.1.1.1. Address: Landscape House
Lowfields Business Park
Elland
West Yorkshire
HX5 9HT
 - 3.1.1.2. Telephone: [+44 \(0\)330 0574472](#)
 - 3.1.1.3. Web: [www.marshalls.co.uk](#)
 - 3.1.1.4. Email: [info@marshalls.co.uk](#)
 - 3.1.2. Product reference: Tactile Hazard Warning Paving
- 4. Nominal sizes: 400 x 400
- 5. Colour: Charcoal
- 6. Type of surface: Corduroy
- 7. Refer to : General Arrangement EYJW-GIL-EX-00-DR-L-900102
Detail EYJW-GIL-EX-00-DR-L-000301

8. **Samples:** To be approved by client and planning authority

330 Natural stone setts REF P7

1. **Description:** Paving Type 7
2. **Standard:** To [BS EN 1342](#).
3. **Supplier:** Marshalls
 - 3.1. **Address:** Landscape House
Lowfields Business Park
Elland
West Yorkshire
HX5 9HT
 - 3.2. **T:** [+44 \(0\)330 0574472](tel:+44103300574472)
 - 3.3. **E:** info@marshalls.co.uk
 - 3.4. **W:** www.marshalls.co.uk
 - 3.5. **Product reference:** Granite Setts - Cropped
 - 3.6. **Quarry:** Contractor's choice
4. **Petrographical description/ stone type:** Granite
5. **Colour:** Warm grey tones
6. **Finish:** Cropped
7. **Sizes:** 75mm x 75mm x 75 mm
8. **Slip resistance:** PTV to [BS EN 16165](#) of 45
9. **Skid resistance:** PSV to [HE DMRB CS 228](#) of 65
10. **Surface treatment:** None
11. **Refer to :** General Arrangement EYJW-GIL-EX-00-DR-L-900102
Detail EYJW-GIL-EX-00-DR-L-000301
12. **Samples:** Samples to be approved by client and planning authority
13. **Note:** Reclaimed granite setts from site or local area can be used. Landscape architect to inspect and agree with contractor.

Execution

610 Material samples

1. **Samples representative of colour and appearance of designated materials:** Submit before placing orders.
 - 1.1. **Designated materials:** All pavings

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.

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 maximum 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 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:
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 7533-101](#), 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](#).

710 Laying flag and slab paving – sand/ fine aggregate laying course and jointing

1. **Standard:** In accordance with [BS 7533-4](#).
2. **Flag installation and cutting:** To [Interpave](#) publication [Concrete flag paving](#).
3. **Laying course**
 - 3.1. **Nominal thickness after compaction:** To engineer's specification
4. **Joint width:** 2-5 mm. (to be confirmed by engineer)

730 Laying natural stone sett paving

1. **Standard generally:** In accordance with [BS 7533-101](#).
2. **Laying type:** Rigid.
 - 2.1. **Laying and jointing method:** Moist bed fine concrete with full depth slurry joint
3. **Laying course**
 - 3.1. **Target thickness after compaction:** 40 mm to be confirmed by engineer
4. **Joint width (nominal):** 6-10mm

Completion - Not Used

Ω End of Section

Q28

Topsoil and soil ameliorants

System outline

135 Ornamental planting soil system

1. Description: FOR PLANTING BEDS AND RAIN GARDEN AREAS
2. Composition
 - 2.1. Topsoil: Imported topsoil/ growing medium as per Q28/315
 - 2.2. Depth: 300mm - 400mm
 - 2.3. Subsoil:: as per Q28/315B
 - 2.4. Depth: 300mm minimum
3. Drawing Reference: EYJW-GIL-EX-00-DR-L-900402 Soiling GA
EYJW-GIL-EX-00-DR-L-900410 Soft Details
Refer to engineer's drawings for specification of drainage infrastructure and details

145 Tree pit backfilling topsoil system

1. Description: FOR ALL TREE PITS
2. Composition
 - 2.1. Topsoil: Imported manufactured topsoil/ growing medium as per Q28/315
 - 2.2. Depth:: 400mm
 - 2.3. Subsoil: as per Q28/315B
 - 2.4. Depth: 600mm
3. Drawing Reference: EYJW-GIL-EX-00-DR-L-900402 Soiling GA
EYJW-GIL-EX-00-DR-L-900410 Soft Details

155 Mulching and top dressing system

1. Description: FOR ALL AREAS
2. Composition
 - 2.1. Material: Sanitized and stabilized composted materials certified to PAS 100

Products

300 Preparation materials generally

1. Purity: Free of pests and disease.
2. Foreign matter: On visual inspection, free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like.
3. Contamination: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - 3.1. Corrosive, explosive or flammable.
 - 3.2. Hazardous to human or animal life.
 - 3.3. Detrimental to healthy plant growth.
4. Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
5. Objectionable odour: None.
6. Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

310 Materials not permitted

1. **Materials:** Peat and products containing peat
River and canal dredgings

315 Imported topsoil

1. **Description:** To Planting Beds / Rain Gardens and Tree Pits. Refer to General Arrangements EYJW-GIL-EX-00-DR-L-900402
2. **Quantity:** Refer to
EYJW-GIL-EX-00-DR-L-900402 Soiling GA
EYJW-GIL-EX-00-DR-L-900410 Soft Details
3. **Classification:** Multipurpose
 - 3.1. **Requirements:** Meet 'Multipurpose' category topsoil in accordance with BS3882:2015
 - 3.2. **Soil textural class** to BS 3882, Figure 1: Sandy loam
4. **Source:** Local, within a 50 mile radius

337 Imported subsoil

1. **Description:** To Planting Beds / Tree Pits.
2. **Quantity:** Refer to EYJW-GIL-EX-00-DR-L-900402 Soiling GA
EYJW-GIL-EX-00-DR-L-900410 Soft Details
3. **Classification:** Multipurpose
 - 3.1. **Requirements:** 'Multipurpose' Inert, clean, subsoil in accordance with BS8601:2013
 - SAMPLE AND TEST SHEET TO BE APPROVED BY EMPLOYER.
 - 3.2. **Textural class:** Sandy Loam, Loamy Sand or Sand
4. **Source:** Local, within a 50 mile radius
 - 4.1. **Product reference:** Washed Subsoil Sand

355 Mulch material

1. **Description:** To all areas
2. **Supplier::** Contractor's choice
3. **Type:** Wood chips
4. **Source:** Locally sourced
 - 4.1. **Product reference:** Contractor's choice

Execution

610 Topsoil analysis

1. **Soil to be analysed:** Imported topsoil and any topsoil to be reused on site
2. **Soil analyst:** Tim o'Hare Associated or similar
3. **Samples:** Collect in accordance with BS 3882.
4. **Submit**
 - 4.1. **Declaration of analysis:** In accordance with BS 3882, clause 6 and Table 1.
 - 4.2. **Additional analysis:** Potentially toxic elements (PTEs) Chemical analysis
 - 4.3. **Report detailing soil analyst's recommendations.**

620 Importing topsoil

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

- 1.1. Notice period: 7 days

630 Documentation for imported topsoil

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

635 Documentation for compost and composted materials

1. Description: FOR COMPOST
2. Timing: Submit at handover.
3. Contents
 - 3.1. Full description of all compost components.
 - 3.2. Record of source for all compost components.
 - 3.3. Analyst's report for each test carried out.
 - 3.4. Declaration of compliance: in accordance with PAS 100 and BSI PD CR 13456.
 - 3.5. Quality Compost Protocol certification: Not required
4. Number of copies: Two

650 Notice

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

655 Mechanical tools

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

660 Grading subsoil for:

1. Description:
2. Standard: In accordance with BS 8601.
3. General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
4. Areas of thicker topsoil: Excavate locally.
5. Avoid compaction.
6. Excess subsoil: Remove.

665 Subsoil surface preparation for:

1. Description: ALL AREAS
2. Standard: In accordance with BS 3882.

3. **General:** Excavate and/ or place fill to required profiles and levels, as section D20.
4. **Loosening**
 - 4.1. When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth
 - 4.1.1. Light and noncohesive subsoils: 300 mm
 - 4.1.2. Stiff clay and cohesive subsoils: 450 mm
 - 4.1.3. Rock and chalk subgrades: Lightly scarify to promote free drainage.
 - 4.2. Wet conditions: Do not loosen subsoils.
5. **Stones:** Immediately before spreading topsoil, remove stones larger than 50 mm.
6. **Remove from site:** Arisings, contaminants and debris, Builders rubble

670 Inspecting formations

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

680 Surplus topsoil to be retained

1. **Generally:** Spread and level on site:
 - 1.1. **Locations:** As directed by landscape architect
 - 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 removal from site:** Topsoil remaining after completion of all landscaping work
2. **Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings:** Remove.

690 Topsoil storage heaps

1. **Location:** Contractor's choice
2. **Height (maximum):** 2.0 m
3. **Width (maximum):** 5.0 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.

700 Grading of topsoil

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

705 Handling topsoil

1. **Standard:** In accordance with BS 3882.
2. **Aggressive weeds:** Give notice and obtain instructions before moving topsoil.
3. **Plant:** Select and use plant to minimize disturbance, trafficking and compaction.

4. **Contamination:** Do not mix topsoil with:
 - 4.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 4.2. Other grades of topsoil.
5. **Multiple handling:** Keep to a minimum. Use or stockpile topsoil immediately after stripping.
6. **Wet conditions:** Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall, or when the moisture content is greater than the plastic limit.

710 Spreading topsoil on:

1. **Description:** ALL AREAS
2. **Standard:** In accordance with BS 3882.
3. **Temporary roads/ surfacing:** Remove before spreading topsoil.
4. **Layers**
 - 4.1. **Depth (maximum):** 150 mm.
 - 4.2. Gently firm each layer before spreading the next.
5. **Depth after firming and settlement:** 125 mm
6. **Crumb structure:** Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 Loose tipping of topsoil

1. **Standard:** In accordance with BS 3882.
2. **General:** Do not firm, consolidate or compact topsoil when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

718 Final cultivation

1. **Description:** FOR TURF AREAS AND ORNAMENTAL PLANTING BEDS
2. **Compacted topsoil:** Break up to full depth.
3. **Tilth:** Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
4. **Depth:** 75 mm
5. **Particle size (maximum):** 20 mm
6. **Timing:** Within a few days before planting
7. **Weather and ground conditions:** Suitably dry.
8. **Surface:** Leave regular and even.
9. **Levels:** 25 mm above adjoining paving or kerbs
10. **Undesirable material brought to the surface**
 - 10.1. Remove visible weeds.
 - 10.2. Remove roots and large stones with any dimension exceeding 20 mm.

720 Finished levels of topsoil after settlement

1. **In relation to adjoining paving, kerbs or hard surfaces:** Flush
2. **In relation to adjacent grass areas:** 25 mm above
3. **Seeded areas:** Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.
4. **Sportsfields:** To even levels and within the following permitted deviations:
 - 4.1. From levels or gradients shown on drawings: ± 75 mm.
 - 4.2. From line between boning rods 30 m apart: ± 25 mm.
5. **Within root spread of existing trees and shrubs to be retained:** Do not dig or cultivate.

6. Adjoining soil areas: Marry in.
7. Thickness of turf or mulch: Included.

845 Applying loose mulch

1. Description: FOR PLANTING BEDS AND TREE PITS
2. Timing: Immediately after planting
3. Preparation: Clear all weeds, Ensure that soil is thoroughly moistened, applying water where necessary
4. Coverage of mulch (minimum)
 - 4.1. Planting beds (depth): 50mm
 - 4.2. Trees: 50mm
5. Finished level of mulch: Flush

Completion

920 Applying mulch

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

Ω End of Section

Q30

Seeding/ turfing

General information/requirements

115 Turfed areas

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

120 Climatic conditions

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

145 Watering

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

146 Watering

1. **Quantity:** Wet full depth of topsoil.
2. **Application:** Even and without displacing seed, seedlings or soil.
3. **Frequency:**

150 Water restrictions

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

160 Notice

1. **Give notice before**
 - 1.1. Setting out.
 - 1.2. Applying herbicide.
 - 1.3. Applying fertilizer.
 - 1.4. Preparing seed bed.
 - 1.5. Seeding or turfing.
 - 1.6. Visiting site during maintenance period.
2. **Period of notice:**

170 Setting out

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

Preparation

210 Herbicide

1. **Description:** Not to be used

250 Soil requirements - Refer to Q28

Seeding - Not Used

Turfing

400 Cultivated turf

1. Description: FOR ALL GRASSED AREAS
2. Supplier: Rowlawn or similar approved
 - 2.1. Product reference: Medallion Turf

420 Delivery and storage

1. Timing: Lay turf with minimum possible delay after lifting. If delay occurs, lay turf out on topsoil and keep moist.
2. Frosty weather or waterlogged ground: Do not lift turf.
3. Delivery: Arrange to avoid need for excessive stacking.
4. Stacking height (maximum): 1 m.
5. Dried out or deteriorated turf: Do not use.
6. Certification
 - 6.1. Standard: To BS 3969.

423 Inspection of turf

1. Description: FOR ALL GRASSED AREAS
2. Sampling method: To BS 3969.
3. Give notice: Before lifting turf.
 - 3.1. Period of notice: 3 working days

430 Turfing generally

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

Protecting/cutting

590 Cleanliness

1. Soil and arisings: Remove from hard surfaces.
- Gillespies LLP
04-07-2024

2. **General:** Leave the works in a clean, tidy condition at Completion and after any maintenance operations.

Maintenance

610 Failures of seeding/ turfing

1. **Duration:** Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period.
2. **Defective materials or workmanship:** Areas that have failed to thrive.
 - 2.1. **Exclusions:** Theft or malicious damage.
3. **Method of making good:** Recultivation and reseeding/ returfing.
4. **Timing of making good:** The next suitable planting season

Ω End of Section

Q31

External planting

Clauses

2 To be read with preliminaries/general conditions.

General information/ requirements

112 Site clearance generally

1. **General:** Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
2. **Stones:** Remove those with any dimension exceeding 50 mm.
3. **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
4. **Vegetation:** Clear scrub to ground level by flail mowing and remove arisings; retain and protect trees indicated on drawings
5. **Large roots:** Grub up and dispose of without undue disturbance of soil and adjacent areas.
6. **Additional requirements:** Remove any material likley to affect the planting operations and safety before, during and after installation.

118A Soil conditions

1. **Soil for cultivating and planting:** Reasonably dry (at least 5% below soil's lower plastic limit), friable and (except in aquatic/ marginal planting) not waterlogged.
2. **Frozen or snow covered soil:** Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing.

120 Climatic conditions

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

125 Times of year for planting

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

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: One week

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: For all materials submit a certificate giving supply source, content analysis, confirmation of suitability for purpose and confirmation of absence of harmful substances such as chemical, biological and physical contaminants, all materials should comply with requirements of Q28.
 - 2.2. Give notice before ordering or using.

200A Plants/ trees - general

1. **Condition:** Materially undamaged, sturdy, healthy and vigorous.
2. **Appearance:** Of good shape and without elongated shoots.
3. **Hardiness:** Grown in a suitable environment and hardened off.
4. **Health:** Free from pests, diseases, discoloration, weeds and physiological disorders.
5. **Budded or grafted plants:** Bottom worked.
6. **Root system and condition:** Balanced with branch system.
 - 6.1. **Standard:** The National Plant Specification
7. **Species:** True to name.
8. **Origin/ Provenance:** Recommended nurseries for trees:
9. **Johnsons Nurseries Ltd**
Head Office,
Gilsthwaite Lane, Kirk Hammerton,
York, North Yorkshire,
YO26 8AQ
01423 330234
10. **Ebben Nurseries**
Beerseweg 45, 5431 LB Cuijk
Postbus 124, 5430 AC Cuijk
+31 (0)485 31 20 21

11. **James Coles & Sons (Nurseries) Ltd,**
624 Uppingham Road,
Thurnby,
Leicester,
LE7 9QB (Sat Nav LE7 9RN)
0116 241 2115

12. **Smits tree nurseries Ltd**
Dorney Court
Dorney
SL4 6QP
England
[+31 \(0\) 161 - 432001](tel:+3120161432001)
info@smitsbv.nl

13. **Deepdale Trees**
Tithe Farm,
Hatley Road,
Potton,
Sandy,
Beds.
SG19 2DX
01767 26 26 36
mail@deepdale-trees.co.uk

14. **Definition:** Origin and Provenance have the meaning given in the National Plant Specification.

215 Plants/ Trees – specification criteria

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

221 Trees imported from Italy

- Any trees imported from Italy will need to be tested against the disease *Phytophthora cinnamomi*. Results will need to be in writing and demonstrate the trees are entirely disease free and with the information supplied by an accredited arboriculturalist.
- Any trees imported from Italy will need to have a health certificate approved by the EU.

225 Bulbs/ Corms/ Tubers

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

235 Container grown plants/ Trees

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

245 Labelling and information

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.

246 Labelling and information

1. **Standard:** To BS 3936.

255 Plants/ Trees reserved at supplier's premises

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

255A Plant selection

1. The intention is to select and mark at the earliest appropriate time all plant material listed in the accompanying schedules to meet the size shown in schedules. These sizes must be achieved when the material is delivered to and planted on the site.
2. All selected plant material will be retained in approved areas of the Contractor's nursery or nurseries and clearly marked as being for the project.

255B Nursery visits

1. The Contractor is to make provisions for and to meet the cost of all inspections for all plants at the nursery or nurseries of origin, whether in the UK or overseas at any time whenever requested by the Contract Administrator.
2. The Contract Administrator do not invalidate their ability to reject material previously inspected at the source of supply when it is delivered to the site.
3. The Contract Administrator retains the right at all times to have access to and visit any nursery where plant material for the contract is being grown. The Contractor must confirm their acceptance of this point at the time of tendering.

255C Plant samples

1. Before any planting commences the Contractor shall deliver to the site labelled samples of the plants but not the trees they propose to use. A sample of any variety of plant shall comprise at least five plants which upon the approval of the Contract Administrator for size, quality, shape and variety shall be deemed to be the minimum quality of the sample variety acceptable for incorporation into the works.
2. Approved sample plants shall either be heeled in temporarily, or planted in their final positions as directed by the Contract Administrator. On no account unless so directed in writing by the Contract Administrator shall approved samples be removed and the Contractor shall be deemed to have allowed for their protection in accordance with normal horticultural practice.

3. Samples which are not approved shall be removed at the Contractor's own expense.
4. Any material below the approved standards shall be removed and replaced at the Contractor's own expense with specimens matching the approved samples.

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. Approval: Obtain before making any substitution. Note that in the instance where a substitution is not approved, the submission of further alternatives may be required.

265 Plant handling, storage transport and planting

1. Standard: To CPSE 'Handling and establishing landscape plants'.
2. Frost: Protect plants from frost.
3. Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
4. Plant packaging: Black polyethylene bags
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.

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

292 Prefabricated plant containers

1. Manufacturer: IOTA Garden and Home Limited Wick Road Wick St Lawrence North Somerset BS22 7YQ United Kingdom Or similar and approved
 - 1.1. Product reference: Bespoke powder coated steel planter
2. Material: Galvanized steel
3. Dimensions/ Shape: 1000 x 1500 x 800mm
4. Lining:
5. Accessories:

Preparation of planting beds/ planting materials

305 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, by hand weeding.

387 Bark mulch to trees and specimen shrubs in softscape

1. **Manufacturer:** Melcourt Industries Limited, Boldridge Brake, Long Newnton, Tetbury, Gloucestershire, GL8 8RT, or equal and approved.
 - 1.1. **Product reference:** Pine mini chips mulch.
2. **Timing:** Lay before planting.
3. **Laying:** In close contact with soil surface. Lap or butt joints as recommended by manufacturer, with no gaps.
4. **Planting:** Cut neat slits or flaps. Refit closely around plant stems.
5. **Overlay:** Not required.
6. **Samples:** To be provided for approval by the Landscape Architect prior to procurement.

Planting shrubs/ herbaceous plants/ bulbs

400A Planting mix layout

1. **Description:** To all beds
2. **Setting out:** All plants indicated as non-structural within a mix are to be set out in groups as indicated in the schedule and evenly spaced. Plants noted as structural within a mix are then to be used to infill in groups as shown on plan if more than one structural plant is noted.
3. **Setting-out:** The first planting bed for each mix is to be set-out and have its distribution and setting-out approved on site by the Contract Administrator prior to any specimens being planted. Any planting beds that do not match this benchmark will be rejected and require replanting.
4. **Spacing:** As per planting schedule and drawings.
5. **Density:** As plant schedule.

405 Shrub planting pits

1. **Timing:** Excavate 1-2 days (maximum) before planting.
2. **Sizes:** 150 mm wider than roots when fully spread and to a depth equal to the depth of shrubs planting pot or rootball plus 100mm
3. **Pit bottom improvement** Break up to a depth of 200 mm without disturbing marker layer or drainage mat at base of pit..

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.

450 Planting within the root protection area

1. All planting within the root protection area is to be installed in accordance with the approved method statement.

471 Naturalized hedges

1. **Planting:** In trenches large enough to take full spread of roots. Set out plants evenly.

480 After planting

1. **Watering:** Immediately after planting, thoroughly and without damaging or displacing plants or soil.
2. **Firming:** Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
3. **Top dressing:** Mulching and top dressing system, as section Q28
 - 3.1. **Depth:** As section Q28

Planting trees

505B Tree pits in soft

1. **Podium**
2. **Sizes:** As per EYJW-GIL-EX-00-DR-L-900410
3. **Sloping ground:** Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
4. **Pit bottoms:** Excavate in accordance with planting detail drawings.
 - 4.1. **Treatment:** As section Q28
5. **Pit sides:** Scarify.
6. **Backfilling material:** As per drawings
7. **Accessories:**
 - 7.1. Irrigation and aeration pipework with aluminium lid as per Clause 512A;
 - 7.2. Underground guying system for trees as per Clause 526A
 - 7.3. Root barriers as per Clause 510, when required.

510 Tree pit root barriers

1. **Locations:** Wherever the installed rootball will be within 3 m of an existing or proposed underground service route
2. **Manufacturer:** TERRAM Global Office, A Berry Plastics Company, Fiberweb Geosynthetics Ltd, Blackwater Trading Estate, The Causeway, Maldon, Essex, CM9 4GG, or equal and approved
 - 2.1. **Product reference:** TERRAM Rootguard - Permeable
3. **Thickness:** As supplied
4. **Barrier depth:** To engineer's detail and specification
5. **Foil liner:** Not required
6. **Top of root barrier in relation to finished topsoil level:** As per engineer's recommendations
7. **Installation:** With sides vertical. Remove all sharp objects adjacent to barrier.

512A Tree pit irrigation and ventilation accessories

1. **Locations:** To all tree pits
2. **Manufacturer:** GreeBlueUrban (or equal and approved)
Northpoint
Compass Park
Junction Road

Gillespies LLP
04-07-2024

Bodiam
TN32 5BS
Tel +44 (0)1580 830800
www.greenblueurban.com
enquiries@greenblueurban.com

- 2.1. **Product reference:** Rootrain Arborvent Irrigation and Aeration system:RRARBV1D for tree rootball diameter <895mm; RRARBV2D for tree rootball diameter 895-1530mm; RRARBV3D for tree rootball diameter 1530-2490mm
3. **Type:** Perforated plastics irrigation pipe with inlet
4. **Cover:** RootRain ArborVent. Sample of proposed cover to be provided to and approved by the Landscape Architect prior to ordering.
5. **Pipe diameter:** 60 mm
6. **Ring diameter:** Cut to suit rootball diameter
7. **Inlet:** Black plastics, with anodised square aluminium debris cap
8. **Installation:**
 - 8.1. **Membrane:** Lay in loop around root ball with slight fall away from inlet pipe. Trim length to ensure a close fit around rootball. Connect both ends of membrane securely into slits to plastic inlet.
 - 8.2. **Top cap of inlet:** Protruding slightly above finished surround level when surrounded by soft surfaces. Flush when surrounded by hard surfaces.
 - 8.3. **Backfill material:** Carefully compact in layers.

520B Root director system

1. Ground Floor
2. **Locations:** Where services are within 3m of a tree
3. **Manufacturer:** GreeBlueUrban (or equal and approved)
Northpoint
Compass Park
Junction Road
Bodiam
TN32 5BS
Tel +44 (0)1580 830800
www.greenblueurban.com
enquiries@greenblueurban.com
- 3.1. **Product reference:** RD1500-RSA
4. **Installation:** As per manufacturer's recommendation.
5. **Other notes:** Contractor to be advised by manufacturer as to laying, quantity and location.

526A Underground guying for

1. **Description:** All trees
2. **Manufacturer:** Platipus Anchors Ltd (or equal and approved)
Kingsfield Business Centre,
Philanthropic Road,
Redhill,
Surrey,
RH1 4DP
Tel +44 (0)1737 762300 Fax +44 (0)1737 773395
www.platipus-anchors.com
info@platipus-anchors.com
- 2.1. **Product reference:** Plati-Mat Deadman System RF2RDMP for tree girths 25-45cm
RF3RDMP for tree girths >45cm and all multi-stem trees
3. **Anchoring system:** 3 no pre-cast concrete dead-man anchors

Gillespies LLP
04-07-2024

4. **Installation:** Ensure tree is positioned correctly and vertically prior to tightening guy line tensioners.
5. The underground tree anchorage detail is to be contained within the tree pit, and be fit for its intended purpose.

Woodland/ matrix/ buffer zone planting - Not Used

Protecting/ maintaining/ making good defects

710 Maintenance

1. **Duration:** Carry out the operations in the following clauses from completion of planting until the end of the rectification period.
2. **Frequency of maintenance visits:** In accordance with the agreed maintenance schedule

720 Failures of planting

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

740 Cleanliness

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

750 Planting maintenance generally

1. **Weed control:** Maintain weed free area around each tree and shrub.
 - 1.1. **Diameter (minimum):** The larger of 1 m or the surface of original planting pit.
 - 1.2. **Keep planting beds clear of weeds:** By hoeing
2. **Planted areas:** Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
3. **Precautions:** Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
4. **Firming up:** Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
5. **Trees:** Spray crown when in leaf during warm weather.
 - 5.1. **Timing:** After dusk.
6. **Tree accessories:** Check condition of stakes, ties, guys, guards and irrigation and ventilation systems.
 - 6.1. **Broken or missing items:** Replace.
 - 6.2. **Loose stakes:** Re-firm in the ground or replace as necessary to provide support to the tree.
 - 6.3. **Loose guys:** Re-firm anchor points and adjust as necessary to provide support to the tree.
 - 6.4. **Ties:** Adjust to accommodate growth and prevent constriction or abrasion.
 - 6.5. **Damage to bark:** Cut back neatly with sharp knife. Prevent further damage.
 - 6.6. **Frequency of checks:** At each scheduled maintenance visit
7. **Watering:** As required for healthy establishment, depending on weather conditions

760 Planting maintenance – pruning

1. **General:** Prune to promote healthy growth and natural shape.
 - 1.1. **Dead, dying, diseased wood and suckers:** Remove.
 - 1.2. **Timing:** In accordance with the agreed maintenance schedule
 - 1.3. **Trees:** Favour a single central leading shoot.
2. **Arisings:** Remove.

780 Maintenance instructions

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

790A Final mulching

1. **Timing:** At end of the maintenance period.
2. **Watering:** Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
3. **Planting beds:** Remulch.
4. **Depth (minimum):** 50 mm
5. **Trees:** Remulch.
6. **Depth (minimum):** 50 mm

Ω End of Section

Q35

Landscape maintenance

Generally

--- REFER TO MANAGEMENT AND MAINTENANCE PLAN EYJW-GIL-EX-00-TR-L-900550 ---

Grassed areas - Not Used

Flower beds/ seasonal beddings - Not Used

Shrubs/ trees/ hedges - Not Used

Green walls - Not Used

Tree work - Not Used

Water areas - Not Used

Hard landscape areas/ fencing - Not Used

Ω End of Section

Q40 Fencing

Fencing systems

340 Metal vertical bar pedestrian guard rail systems REF B1

1. Description:: Steel Fencing and Pedestrian Access Gate, single leaf
2. Manufacturer: [Lang+Fulton](#)
 - 2.1. Contact details
 - 2.1.1. Address: Head Office & Technical Centre
Unit 2b
Newbridge Industrial Estate
Edinburgh
United Kingdom
EH28 8PJ
 - 2.1.2. Telephone: [+44 \(0\)131 441 1255](tel:+44(0)1314411255)
 - 2.1.3. Web: www.langandfulton.co.uk
 - 2.1.4. Email: sales@langandfulton.co.uk
 - 2.2. Product reference: [Rimini Fencing](#)
3. Preparatory work: Form holes for concrete infill foundation.
4. Posts: Mild steel S235JR.
5. Post foundations: Ground fixing (concrete mix).
6. Panels: Flat bar, mild steel S235JR.
7. Straight section: 75 x 10 mm flat bar.
8. Corners: 80 x 80 mm SHS.
9. Finish:: Hot-dip galvanized and polyester powder coated, RALto match architectural metalwork
10. Width: 1200 mm Gate
11. Height: 2200 mm
12. Fixing: Stainless steel bolts, domed heads and snap-off security nuts, grade A2.
13. Locking mechanism / access: Padlock system subject to client requirements and confirmation.

340A Metal vertical bar pedestrian guard rail systems REF B2

1. Description:: Bespoke Steel Maintenance Access Gate
2. Manufacturer: [Lang+Fulton](#)
 - 2.1. Contact details
 - 2.1.1. Address: Head Office & Technical Centre
Unit 2b
Newbridge Industrial Estate
Edinburgh
United Kingdom
EH28 8PJ
 - 2.1.2. Telephone: [+44 \(0\)131 441 1255](tel:+44(0)1314411255)
 - 2.1.3. Web: www.langandfulton.co.uk
 - 2.1.4. Email: sales@langandfulton.co.uk
 - 2.2. Product reference: [Rimini Fencing](#)
3. Preparatory work: Form holes for concrete infill foundation.
4. Posts: Mild steel S235JR. 100 x 100 mm

5. Post foundations: Ground fixing (concrete mix).
6. Panels: Flat bar, mild steel S235JR.
7. Straight section: 75 x 10 mm flat bar.
8. Corners: 80 x 80 mm SHS.
9. Finish:: Hot-dip galvanized and polyester powder coated, RAL7016
10. Width: 4000 mm Double leaf gate
11. Height: 2200 mm
12. Fixing: Stainless steel bolts, domed heads and snap-off security nuts, grade A2.
13. Locking mechanism / access: Manual vehicle access gate with magnetic release pedestrian gate to be used in emergencies.

340B Metal vertical bar pedestrian guard rail systems REF B3

1. Description:: Bespoke Steel Maintenance Access Gate
2. Manufacturer: [Lang+Fulton](#)
 - 2.1. Contact details
 - 2.1.1. Address: Head Office & Technical Centre
Unit 2b
Newbridge Industrial Estate
Edinburgh
United Kingdom
EH28 8PJ
 - 2.1.2. Telephone: [+44 \(0\)131 441 1255](tel:+44(0)1314411255)
 - 2.1.3. Web: www.langandfulton.co.uk
 - 2.1.4. Email: sales@langandfulton.co.uk
 - 2.2. Product reference: [Rimini Fencing](#)
3. Preparatory work: Form holes for concrete infill foundation.
4. Posts: Mild steel S235JR. 100 x 100 mm
5. Post foundations: Ground fixing (concrete mix).
6. Panels: Flat bar, mild steel S235JR.
7. Straight section: 75 x 10 mm flat bar.
8. Frame: 20 x 75 mm
9. Finish:: Hot-dip galvanized and polyester powder coated, RAL7016
10. Width: 2nr. 2000 mm Double leaf gate,
1nr. 1200mm Single leaf gate.
11. Height: 2200 mm
12. Fixing: Stainless steel bolts, domed heads and snap-off security nuts, grade A2.
13. Locking mechanism / access: Magnetic access with fob reader and exit buttons subject to client requirements

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.

930 Gates

1. **Hinges, latches and closers:** Adjust to provide smooth operation. Lubricate where necessary.
 - 1.1. **Timing:** Before handover.

Ω End of Section

Q50

Site/ street furniture/ equipment

Gates, barriers and parking controls

190 Lighting steel bollards REF F5

1. Description: To public realm doors
2. Manufacturer: [Artform Urban Furniture Limited](#)
 - 2.1. Contact details
 - 2.1.1. Address: Adlington Business Park
London Road
Adlington
Cheshire
United Kingdom
SK10 4NL
 - 2.1.2. Telephone: [+44 \(0\)1625 877554](tel:+44(0)1625877554)
 - 2.1.3. Web: www.artformurban.co.uk
 - 2.1.4. Email: enquiries@artformurban.co.uk
 - 2.2. Product reference: Moka Bollard
3. Material: Steel
 - 3.1. Finish as delivered: Coreten - sealed weathered steel
4. Height above ground: 1004mm
5. Sectional size: 80 x 80 mm square
6. Top: Flat
7. Special features: None
8. Method of fixing: Root, 300 mm below ground, set in concrete base
9. Refer to : EYJW-GIL-EX-00-DR-L-000330, EYJW-GIL-EX-00-DR-L-000331

200 Lighting steel bollards REF L1

1. Description: Lighting bollard (to be confirmed by Lighting Engineer)
2. Manufacturer: [Artform Urban Furniture Limited](#)
 - 2.1. Contact details
 - 2.1.1. Address: Adlington Business Park
London Road
Adlington
Cheshire
United Kingdom
SK10 4NL
 - 2.1.2. Telephone: [+44 \(0\)1625 877554](tel:+44(0)1625877554)
 - 2.1.3. Web: www.artformurban.co.uk
 - 2.1.4. Email: enquiries@artformurban.co.uk
 - 2.2. Product reference: Moka Bollard
3. Material: Steel
 - 3.1. Finish as delivered: Coreten - sealed weathered steel
4. Height above ground: 1004mm
5. Sectional size: 80 x 80 mm square
6. Top: Flat

7. Special features: Integrated lighting
8. Method of fixing: Root, 300 mm below ground, set in concrete base
9. Refer to : EYJW-GIL-EX-00-DR-L-000330, EYJW-GIL-EX-00-DR-L-000331

Site and street furniture

210 Steel cycle stands

1. Manufacturer: [Marshalls Landscape Protection & Street Furniture](#)
 - 1.1. Contact details
 - 1.1.1. Address: Landscape House
Lowfields Business Park
Elland
West Yorkshire
United Kingdom
HX5 9HT
 - 1.1.2. Telephone: [0370 600 2425](tel:03706002425)
 - 1.1.3. Web: www.marshalls.co.uk/commercial/landscape-protection
 - 1.1.4. Email: StreetFurniture@marshalls.co.uk
 - 1.2. Product reference: [Sheffield Reduced Ferrocast Root Fixed Cycle Stand](#)
2. Stand type: Cycle.
3. Number of stands: 3
4. Base: Root 300 mm below ground, set in concrete base
5. Finish as delivered: Ferrocast: Two Pack polyurethane paint.
6. Height (above ground): 800 mm.

220 Bench Type 1 REF F2A

1. Description: Timber and steel bench
2. Manufacturer: Versa or similar approved
 - 2.1. Contact details
 - 2.1.1. Web: <https://www.versauk.co.uk/>
 - 2.2. Product reference: Crabtree seat
3. Material: Steel
 - 3.1. Finish: Powder Coating
 - 3.2. Colour: RAL 2012 Salmon Orange (Sample required and to be confirmed by Client)
4. Material: FSC-certified hardwood timber
 - 4.1. Finish: Clear UV osmo oil
5. Size: 2475(L) X 465(W) X 470(H)
6. Method of fixing: Surface fixed to concrete slab or pad foundation
7. Refer to:: EYJW-GIL-EX-00-DR-L-000330

225 Bench Type 2 REF F2B

1. Description: Timber and steel seat with back rest
2. Manufacturer: Versa or similar approved
 - 2.1. Contact details
 - 2.1.1. Web: <https://www.versauk.co.uk/>
 - 2.2. Product reference: Crabtree seat
3. Material: Steel

- 3.1. Finish: Powder coated
- 3.2. Colour:

RAL 2012 Salmon Orange (Sample required and to be confirmed by Client)

- 4. Material: FSC-certified hardwood timber
 - 4.1. Finish: Clear UV osmo oil
- 5. Size: 2475 mm (Long)
- 6. Accessories/ Special requirements: Armrests to each end
- 7. Method of fixing: Surface fixed to concrete slab or pad foundation
- 8. Refer to:: EYJW-GIL-EX-00-DR-L-000330

230 Timber Table REF F2C

- 1. Description: Timber and steel picnic table to resident garden
- 2. Manufacturer: Versa or similar approved
 - 2.1. Product reference: Willow Picnic Set
- 3. Material: FSC certified hardwood timber
 - 3.1. Finish: Clear UV osmo oil
- 4. Material: Steel
 - 4.1. Finish: Powder coated
 - 4.2. Colour:

RAL 2012 Salmon Orange (Sample required and to be confirmed by Client)

- 5. Size: 730mm high x 870mm wide x 2300mm long
- 6. Method of fixing: Surface fixed to pad foundations
- 7. Refer to:: EYJW-GIL-EX-00-DR-L-000330

240 Litter bins REF F3

- 1. Description: Timber and steel bin
- 2. Manufacturer: Versa or similar approved
 - 2.1. Contact details
 - 2.1.1. Web: <https://www.versauk.co.uk/>
 - 2.2. Product reference: Heaton triple recycling litter bin
- 3. Material: Mild steel
 - 3.1. Finish: Powder-coated
 - 3.2. Colour: RAL 7016
- 4. Material: FSC certified hardwood timber
 - 4.1. Finish: Clear UV osmo oil
- 5. Method of fixing: Surface fixed to pad foundations

Installation

510 Concrete foundations generally

- 1. Standard: To BS 8500-2.
- 2. Concrete: To engineer's specification
- 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:** To Engineers specification
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.

520 Setting in earth

1. **Holes:** As small as practicable.
2. **Components being fixed:** Accurately positioned and securely supported.
3. **Earth refill:** Well rammed as filling proceeds.

530 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.
2. **Heavily worked sections:** Re-treat.

540 Building in to masonry walls

1. **Components being built in:** Accurately positioned and securely supported. Set in mortar and pointed neatly to match adjacent walling.
2. **Temporary support:** Maintain for 48 hours (minimum) and prevent disturbance.

545 Erection of timber and prefabricated structures

1. **Checking:** 5 days (minimum) before proposed erection date, check foundations, holding down bolts, etc.
2. **Inaccuracies or defects in prepared bases or supplied structures:** Report immediately. Obtain instructions before proceeding.

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



Specification created using NBS Chorus