Austin-Smith: Lord

MACE Group

MACE for Cardiff Council Landscape Support

St Illtyd's School - External Works Specification

P01

08-03-2024

222044 - MACE for Cardiff Council Landscape Support – St Illtyd's School - External Works Specification Client: MACE Group

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Ac_85_30_02/190 Amenity planting maintenance

Activities

Ac_85_30_02/190 Amenity planting maintenance

- 1. Spot weedkilling herbicide: Contractors design.
- 2. Pest control: Contractors design.
- 3. Fertilizer: Contractors design.
- 4. Sealant for cuts to tree roots: Contractors design.
- 5. System facility management: Ac_85_30_02/907 Maintenance of beds of perennials or mixed perennials and annuals; Ac_85_30_02/909 Reinstatement after maintenance; Ac_85_30_02/910 Disposal of arisings; Ac_85_30_02/912 Water restrictions; Ac_85_30_02/913 Watering; Ac_85_30_02/914 Watering beds of perennials or perennials and annuals; Ac_85_30_02/917 Fertilizing amenity planting and herbaceous areas; Ac_85_30_02/921 Weed control generally; Ac_85_30_02/932 Litter removal; Ac_85_30_02/943 Maintenance of loose mulch; Ac_85_30_02/961 Tree work generally; Ac_85_30_02/957 Dead and diseased plants; Ac_85_30_02/962 Pruning amenity trees and shrubs; Ac_85_30_02/970 Pruning ornamental shrubs; Ac_85_30_02/974 Giving notice of defective, diseased or unsafe trees

System facility management

Ac 85 30 02/901 Management objectives for amenity planting

- 1. Duration: 1 year.
- 2. Aims: Enhanced landscape quality. Improved landscape visual amenity. Provide wildlife habitat and increase biodiversity.

Ac_85_30_02/907 Maintenance of beds of perennials or mixed perennials and annuals

- 1. General requirements: Ac 85 30 02/901 Management objectives for amenity planting
- 2. Operations at end of growing season
 - 2.1. Older flowering stems of herbaceous perennials: Trim.
 - 2.2. Redundant plant supports, litter, debris and arisings: Remove.
 - 2.3. Cultivation: Fork over the soil. Do not cause undue disturbance to plants.
 - 2.4. Firming up: Gently firm loosened soil around plants.
 - 2.5. Top dressing application rate (minimum): 60 g/m².

Ac 85 30 02/909 Reinstatement after maintenance

- 1. General requirements: Ac_85_30_02/901 Management objectives for amenity planting
- 2. Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: Reinstate to original condition.
- 3. Cleanliness: Leave the works in a clean tidy condition at completion and after maintenance operations.

Ac_85_30_02/910 Disposal of arisings

- 1. Generally: Maintain the site in a clean, tidy condition.
- 2. Biodegradable arisings: Remove to recycling facility.
- 3. Grass cuttings: Remove to recycling facility.
- 4. Tree roots and stumps: Remove from site.

- 5. Shrub and tree prunings: Remove to recycling facility.
- 6. Litter and nonbiodegradable arisings: Remove from site.
- 7. Diseased plant material: Remove from site.
- Surplus topsoil following routine maintenance: In accordance with the Soil Resource Survey by Tim O'Hare Associates.

Ac 85 30 02/912 Water restrictions

1. General: If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

Ac 85 30 02/913 Watering

- 1. Supply: Contractors choice.
- 2. Quantity: Wet full depth of topsoil.
- 3. Application: Do not damage or loosen plants.
- 4. Compacted soil: Loosen or scoop out. Direct water to rootzone.
- 5. Frequency: As necessary for the continued thriving of all planting.

Ac_85_30_02/914 Watering beds of perennials or perennials and annuals

- 1. New plants: Before and after planting out.
- 2. Ongoing: As necessary for the continued thriving of planting.

Ac_85_30_02/917 Fertilizing amenity planting and herbaceous areas

- 1. Time of year: During April or May.
- 2. Method: Spread evenly.
- 3. Application rate (minimum): Contractors choice.

Ac_85_30_02/921 Weed control generally

- 1. Scope: All planting areas.
- General: Keep clear of weeds and prevent from seeding. Prevent perennial weeds from becoming established.
- 3. Method: By cultivating. By hand weeding. By maintaining full thickness of mulch. By use of suitable herbicides.
- 4. Individual trees and shrubs: Maintain weed-free area around each tree and shrub to the larger of 1 m diameter or the surface of original planting pit (if any).

Ac 85 30 02/932 Litter removal

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

Ac_85_30_02/943 Maintenance of loose mulch

- 1. Thickness (minimum): 75 mm.
- 2. Top up: Annually.
- 3. Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.

Ac_85_30_02/957 Dead and diseased plants

- 1. Dead plant material
 - 1.1. Removal: At the end of the growing season, check shrubs and remove dead foliage, dead wood, and broken or damaged plants, branches and stems.
 - 1.2. Timing: As soon as possible.

1.3. Replacement: In the next suitable planting season.

Ac_85_30_02/961 Tree work generally

- Identification: Before starting work agree which trees, shrubs and hedges to be removed or pruned.
- 2. Protection: Avoid damage to neighbouring trees, plants and property.
- 3. Standards: To BS 3998 and Health and Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.
- 4. Appearance: Leave trees with a well-balanced, natural appearance. Favour a single central leading shoot.
- 5. Dead, dying, diseased wood and suckers: Remove. Prune to promote healthy growth.
- 6. Timing: As appropriate to the species.
- 7. Chain saw work: Operatives must hold a Certificate of Competence.
- 8. Tree work: To be carried out by a member of the Arboricultural Association.
- 9. Tree worker:

Ac_85_30_02/962 Pruning amenity trees and shrubs

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

Ac 85 30 02/970 Pruning ornamental shrubs

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

Ac_85_30_02/974 Giving notice of defective, diseased or unsafe trees

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

 Ω End of Activity

Ac_85_30_50/195 Meadow grass maintenance

Activities

Ac_85_30_50/195 Meadow grass maintenance

- 1. Spot weedkilling herbicide: Contractors design.
- 2. Pest control: Contractors design.
- 3. Seed: Pr_45_30_76_97 Wildflower seeds Wildflower Meadow Mix; Pr_45_30_76_97 Wildflower seeds Flowering Lawn Mix
- 4. System facility management: Ac_85_30_50/943 General maintenance of meadows; Ac_85_30_01/921 Weed control generally; Ac_85_30_01/903 Disposal of arisings during maintenance operations; Ac_85_30_01/923 Spot weedkilling; Ac_85_30_01/961 Mowing operations generally; Ac_85_30_50/970 Mowing meadows containing perennial or mixed perennial and annual wildflowers; Ac_85_30_01/969 Protecting tree stems in grassed or meadow areas

Products

Pr_45_30_76_97 Wildflower seeds Flowering Lawn Mix

Shared by: Ss 45 35 45 33 Grass and wildflower seeding systems

1. Supplied by: Emorsgate Seeds

Limes Farm
Tilney All Saints
King's Lynn
Norfolk
PE34 4RT
(01553) 829028
enquiries@emorsgateseeds.com

- 2. Product:: Emorsgate Seeds Flowering Lawn Mixture EL1
- 3. Standard: In accordance with the Flora Locale Code of practice for collectors, growers and suppliers of native flora. Planting with wildlife in mind.
- 4. Mix type: Flowering lawn.
- 5. Origin and provenance: British native. UK origin.
- 6. Germination testing: Submit germination test results to ISTA International rules for seed testing.
- 7. Freshness: Manufacturers standard.
- 8. Execution: Pr 45 30 76/603 Protection of seeds

Pr 45 30 76 97 Wildflower seeds Wildflower Meadow Mix

Shared by: Ss_45_35_45_33 Grass and wildflower seeding systems

1. Supplied by: Emorsgate Seeds

Limes Farm
Tilney All Saints
King's Lynn
Norfolk
PE34 4RT
(01553) 829028
enquiries@emorsgateseeds.com

- 2. Product:: Standard General Purpose Meadow Mixture EM2
- 3. Standard: In accordance with the Flora Locale Code of practice for collectors, growers and suppliers of native flora. Planting with wildlife in mind.

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- 4. Mix type: General purpose.
- 5. Origin and provenance: British native. UK origin.
- 6. Germination testing: Submit germination test results to ISTA International rules for seed testing.
- 7. Freshness: Manufacturers standard.
- 8. Execution: Pr 45 30 76/603 Protection of seeds

Execution

Pr_45_30_76/603 Protection of seeds

1. Protection during handling, storage and transport: Protect seeds from moisture and frost.

System facility management

Ac_85_30_01/903 Disposal of arisings during maintenance operations

- 1. Generally: Leave the works in a clean, tidy condition after maintenance operations.
- 2. Surplus topsoil and arisings: Remove from site.
- 3. Biodegradable arisings: Remove to recycling facility.
- 4. Grass cuttings: Remove to recycling facility.
- 5. Litter and non-biodegradable arisings: Remove from site.
- 6. Diseased plant material: Remove from site.
- 7. Contamination: Remove from site material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

Ac_85_30_01/921 Weed control generally

- 1. Weed tolerance: At all times, weed cover to be less than 5% and no weed to exceed 100 mm high.
- 2. Method: Application of a suitable selective herbicide.
- 3. Stones brought to the surface: Remove regularly any exceeding 25 mm in any dimension.
- 4. Areas of settlement: Make good.
- 5. Adjacent plants, trees and grass: Do not damage.

Ac_85_30_01/923 Spot weedkilling

1. Weeds to be spot-treated: Injurious weed species listed in the Weeds Act 1959 and Wildlife and Countryside Act 1981.

Ac 85 30 01/961 Mowing operations generally

- 1. Before mowing: Remove litter, rubbish and debris.
- 2. Finish: Neat and even, without surface rutting, compaction or damage.
- 3. Edges: Leave neat and well-defined. Neatly trim around obstructions.
- 4. Adjoining hard areas: Sweep clear and remove arisings.
- 5. Drought or waterlogged conditions: Give notice and obtain instructions prior to proceeding with cutting operations.
- 6. Restrictions to mowing operations:

Ac_85_30_01/969 Protecting tree stems in grassed or meadow areas

- 1. General requirements: Do not damage bark.
- 2. Mowing machinery: Do not use closer than 100 mm to tree stems.
- Nylon filament rotary cutters and other hand held mechanical tools: Do not use closer than 100 mm to tree stems.

4. Operations close to stems: Complete using hand tools.

Ac_85_30_50/943 General maintenance of meadows

- 1. General requirements: Keep free of litter, excessive weed growth and plant debris.
- 2. Waterlogging and compaction of soils: Prevent.

Ac_85_30_50/970 Mowing meadows containing perennial or mixed perennial and annual wildflowers

- 1. Cut in first growing season
 - 1.1. Height: 50 mm.
 - 1.2. Timing: March/ April then every six to eight weeks until autumn.
- 2. Cutting in second growing season
 - 2.1. Height: 50 mm.
 - 2.2. Timing: October, March and August.
- 3. Subsequent cutting
 - 3.1. Height: 75 mm.
 - 3.2. Timing: October and March.
- 4. Arisings: Remove from site.

Ω End of Activity

Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

Systems

Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

- 1. Description: Plug planting.
- 2. Preparatory work
 - 2.1. Herbicide: Contractors design.
- 3. Plants: Pr 45 30 36 65 Perennial plugs
- 4. Execution: Ss_45_35_05/601 Amenity planting generally; Ss_45_35_05/603 Times of year for amenity planting; Ss_45_35_05/605 Climatic conditions for amenity planting; Ss_45_35_05/610 Water restrictions; Ss_45_35_05/612 Cultivation of topsoil; Ss_45_35_05/613 Preparation of undisturbed topsoil; Ss_45_35_05/631 Random setting out of amenity planting; Ss_45_35_05/661 Planting wild flower plugs
- 5. System completion: Ss_45_35_05/801 Operations immediately after planting; Ss_45_35_05/802 Establishment of new planting; Ss_45_35_05/803 Weeding new planting; Ss_45_35_05/806 Watering new planting; Ss_45_35_05/809 Plants that have failed to thrive; Ss_45_35_05/810 Instructions for maintenance

Products

Pr_45_30_36/301 Nursery stock generally – herbaceous and aquatic plants

- 1. General requirements
 - 1.1. Condition: Materially undamaged, sturdy, healthy and vigorous.
 - 1.2. Appearance: Of good shape and without elongated shoots, appropriate to species and variety.
 - 1.3. Hardiness: Grown in a suitable environment and hardened off.
 - 1.4. Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
 - 1.5. Root system: Balanced and appropriate for the species.
 - 1.6. Species: True to name.
- 2. Delivery label requirements
 - 2.1. Labels to provide the following information: Full botanical name; Total number; Number of bundles; Part bundles; Supplier's name; Employer's name and project reference; and Plant specification, in accordance with scheduled National Plant Specification categories.
 - 2.2. Additional information:

Pr_45_30_36_65 Perennial plugs

- 1. General requirements: Pr_45_30_36/301 Nursery stock generally herbaceous and aquatic plants
- 2. Supplied by: Submit proposals.
- 3. Standard: In accordance with the National Plant Specification.
- 4. Botanical name: In accordance with Landscape Architects Planting Plans.
- 5. Root condition: Plants centred in the container, firm and moist on delivery. Root system to be well developed appropriate to the natural characteristics of the species/ cultivar, taking into account its age and growth rate. Surface of the growing medium free of all weeds and moss.
- 6. Plug cell size (minimum): In accordance with Landscape Architects Planting Plans.
- 7. Origin and provenance: British grown.
- 8. Execution: Pr 45 30 36/603 Handling, storage and transport of herbaceous and aquatic plants

Execution

Pr_45_30_36/603 Handling, storage and transport of herbaceous and aquatic plants

- 1. Standard: In accordance with the Committee for Plant Supply and Establishment Handling and establishing landscape plants.
- 2. Plants reserved at supplier's premises
 - 2.1. Species: As Plant schedule.
 - 2.2. Pre-delivery inspection: Required. Give notice.
 - 2.3. Labelling: Identify inspected plants as reserved for use on this project.
- 3. Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- 4. Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped.
- 5. Transportation: In accordance with CPSE Handling and establishing landscape plants. Prevent crushing of plants from overloading and securing straps. Protect from wind damage and drying out.
- 6. Temporary storage
 - 6.1. Location: Stand plants upright on well-drained, weed-free ground protected from wind damage, direct sunlight and frost.
 - 6.2. Duration: Minimum period in accordance with CPSE Handling and establishing landscape plants.
 - 6.3. Watering: Keep roots and compost moist throughout storage period.

Ss_45_35_05/601 Amenity planting generally

Shared by: Ss 45 35 05 67 Pit-planted small tree and shrub systems

- 1. Standard: To HTA Handling and establishing landscape plants.
- 2. Planting: Upright or well balanced with best side to front.

Ss 45 35 05/603 Times of year for amenity planting

Shared by: Ss 45 35 05 67 Pit-planted small tree and shrub systems

- 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. Wildflower plugs: Late August to mid-November or March/ April.
- 5. Container grown plants: At any time if ground and weather conditions are favourable.
- 6. Dried herbaceous bulbs, corms and tubers; September/ October.
- 7. Colchicum (crocus): July/ August.
- 8. Green herbaceous bulbs: After flowering in spring.
- 9. Aquatic plants: May/ June or September/ October.

Ss_45_35_05/605 Climatic conditions for amenity planting

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

1. General: Carry out the work while soil and weather conditions are suitable. Do not plant in strong winds.

Ss 45 35 05/610 Water restrictions

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

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- Planting: If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed.
- 2. After planting: If planting has been carried out, obtain instructions on watering.

Ss_45_35_05/611 Disposal of arisings

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

- 1. Generally: Leave the works in a clean, tidy condition at completion.
- 2. Surplus topsoil: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 3. Biodegradable arisings: Remove to recycling facility.
- 4. Grass cuttings: Remove to recycling facility.
- 5. Tree roots and stumps: Remove from site.
- 6. Shrub and tree prunings: Remove to recycling facility.
- 7. Litter and nonbiodegradable arisings: Remove from site.
- 8. Diseased plant material: Remove from site.
- 9. Stones removed during cultivation and topsoil preparation: Remove from site.
- Contamination: Remove from site material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

Ss_45_35_05/612 Cultivation of topsoil

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

- 1. General requirements: Ss_45_35_05/611 Disposal of arisings
- 2. Grading and cultivation
 - 2.1. Standard: In accordance with BS 4428.
 - 2.2. Category: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 3. Working conditions
 - 3.1. Soil condition: Reasonably dry and workable.
 - 3.2. Timing: Within a few days before planting.
 - 3.3. Weather and ground conditions: Suitably dry.
- 4. Compacted topsoil: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 5. Soil with root spread of trees and shrubs to be retained: Do not dig or cultivate.
- 6. Tilth
 - 6.1. Generally: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
 - 6.2. Depth: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 7. Surface
 - 7.1. Contours: Smooth and flowing, with falls for adequate drainage.
 - 7.2. Hollows and ridges: Not permitted.
- 8. Remove visible weeds, roots and large stones with any dimensions exceeding: 100 mm.
- 9. Give notice: If required levels cannot be achieved by movement of existing soil.

Ss_45_35_05/613 Preparation of undisturbed topsoil

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

- 1. General requirements: Ss 45 35 05/611 Disposal of arisings
- 2. Hard ground: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 3. Remove visible roots and large stones with a diameter greater than: 50 mm.

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- Areas covered with turf or thick sward: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 5. Fallow period (minimum): Contractors choice.
- 6. Weed control
 - 6.1. Timing before cultivation: Contractors choice.
 - 6.2. Treatment: Contractors choice.

Ss_45_35_05/631 Random setting out of amenity planting

- 1. Layout: In accordance with Landscape Architects Planting Plan.
- 2. Planting density: In accordance with Landscape Architects Planting Plan.

Ss_45_35_05/661 Planting wild flower plugs

- 1. Handling: Keep plants watered and in shade until planted. Do not allow to dry out.
- 2. Planting: Place in a hole to suit plug size and shape. Create a cleft at bottom of hole to improve rooting. Gently firm plant into hole.

System completion

Ss 45 35 05/801 Operations immediately after planting

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

- 1. Watering: Immediately after planting, water thoroughly. Do not damage or displace 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.

Ss_45_35_05/802 Establishment of new planting

Shared by: Ss 45 35 05 67 Pit-planted small tree and shrub systems

- 1. Duration: 1 year.
- 2. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.

Ss 45 35 05/803 Weeding new planting

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

- 1. All planting areas: Keep planting beds clear of weeds.
- 2. Trees and shrubs
 - 2.1. Area: Maintain a weed-free area around each tree and shrub.
 - 2.2. Diameter (minimum): The larger of 1 m or the surface of the original planting pit.

Ss 45 35 05/806 Watering new planting

Shared by: Ss_45_35_05_67 Pit-planted small tree and shrub systems

- 1. Quantity: Wet full depth of topsoil.
- 2. Application: Even and without damaging or displacing plants or soil.
- 3. Trees: Spray crown when in leaf during warm weather.
- 4. Frequency: As necessary to ensure establishment and continued thriving of planting.
- 5. Timing: After dusk.

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Ss_45_35_05/809 Plants that have failed to thrive

Shared by: Ss 45 35 05 67 Pit-planted small tree and shrub systems

- 1. Defects due to materials or workmanship not in accordance with the Contract
 - 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: In accordance with an agreed defects rectification programme.

Ss_45_35_05/810 Instructions for maintenance

Shared by: Ss 45 35 05 67 Pit-planted small tree and shrub systems

- 1. Recommended procedures for maintenance of planting work for one year
 - 1.1. Format: Printed report.
 - 1.2. Timing: Before end of maintenance period.
 - 1.3. Content: Schedule of ongoing maintenance problems experienced during the rectification period.

 Ω End of System

Ss_45_35_05_67 Pit-planted small tree and shrub systems

Systems

Ss_45_35_05_67 Pit-planted small tree and shrub systems

- 1. Description: Shrub planting
- 2. Preparatory work to soil
 - 2.1. Fertilizer: Organic fertilizer to contractor's design.
- 3. Trees and shrubs: Pr 45 30 80 08 Bare-root shrubs; Pr 45 30 80 20 Container-grown shrubs
- 4. Mulch: Pr 45 31 63 56 Natural bark
- 5. Protection: Pr_45_63_64_78 Shrub protectors
- 6. Execution: Ss_45_35_05/601 Amenity planting generally; Ss_45_35_05/603 Times of year for amenity planting; Ss_45_35_05/605 Climatic conditions for amenity planting; Ss_45_35_05/610 Water restrictions; Ss_45_35_05/611 Disposal of arisings; Ss_45_35_05/612 Cultivation of topsoil; Ss_45_35_05/613 Preparation of undisturbed topsoil; Ss_45_35_05/633 Regular setting out of amenity planting; Ss_45_35_05/643 Planting amenity shrubs in pits; Ss_45_35_05/691 Applying loose mulch to planting beds; Ss_45_35_05/645 Planting formal hedges in trenches
- 7. System completion: Ss_45_35_05/801 Operations immediately after planting; Ss_45_35_05/802 Establishment of new planting; Ss_45_35_05/803 Weeding new planting; Ss_45_35_05/806 Watering new planting; Ss_45_35_05/807 Final mulching of planting beds and trees; Ss_45_35_05/809 Plants that have failed to thrive; Ss_45_35_05/810 Instructions for maintenance

Products

Pr 45 30 80 08 Bare-root shrubs

- General requirements: Pr_45_30_90/305 Nursery stock generally trees, shrubs and woody climbers
- 2. Supplied by: Contractor's choice
- 3. Standards: Trees and shrubs to BS 3936-1. In accordance with the National Plant Specification.
- 4. Height or spread: In accordance with Landscape Architects details.
- 5. Root condition and protection: Bare root (bagged: co-extruded polythene black inside, white outside), containing and enclosing the whole root system.
- 6. Habit: In accordance with Landscape Architects details.
- 7. Origin and provenance: British grown.
- 8. Execution: Pr 45 30 90/614 Plant handling, storage and transport

Pr 45 30 80 20 Container-grown shrubs

- 1. General requirements: Pr_45_30_90/305 Nursery stock generally trees, shrubs and woody climbers
- 2. Supplied by: Contractor's choice
- 3. Standards: Trees and shrubs to BS 3936-1. In accordance with the National Plant Specification.
- 4. Height or spread: In accordance with Landscape Architects details.
- 5. Root condition and protection: Container grown. Plants to be centred in the container, well rooted, firm and moist on delivery. Surface of the growing medium to be free of all weeds. Container to have adequate holes for drainage when placed on any substrate.
- 6. Size of container: In accordance with Landscape Architects details.
- 7. Habit: In accordance with Landscape Architects details.
- 8. Origin and provenance: British grown.

9. Execution: Pr 45 30 90/614 Plant handling, storage and transport

Pr_45_30_90/305 Nursery stock generally – trees, shrubs and woody climbers

- 1. General requirements
 - Condition: Materially undamaged, sturdy, healthy and vigorous.
 - Appearance: Of good shape and without elongated shoots, appropriate to species and variety.
 - 1.3. Hardiness: Grown in a suitable environment and hardened off.
 - Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
 - 1.5. Budded or grafted plants: Bottom worked. Visible suckers to be removed flush with rootstock. Trees to be budded or grafted on fully compatible rootstock appropriate to the type. Union to be well callused.
 - Root system and condition: Balanced with branch system. 1.6.
 - Species: True to name.
- 2. Delivery label requirements
 - Standard: To the National Plant Specification. To BS 3936-1.
 - 2.2. Labels to provide the following information: Full botanical name; Total number; Number of bundles; Part bundles; Supplier's name; Employer's name and project reference; and Plant specification, in accordance with scheduled National Plant Specification categories.

Pr 45 31 63 56 Natural bark

- 1. Supplied by: Contractor's choice
- 2. Source: Local. Contractors choice
- 3. Quality: Dry, no decomposition, no signs of mould or fungi. Free of methyl bromide and other contaminants.

Pr_45_63_64_78 Shrub protectors

1. Manufacturer: gtSpecifier by Green-Tech Ltd or equal and approved.

Tubex Shrub Shelter Plus Guard. Product Code: 160PS1166-PRO

- 2. Shape: Round.
- 3. Dimensions
 - Width: 144-200 mm.
 - 3.2. Height: 600 mm.
- 4. Colour: Green.
- 5. Execution: Pr 45 63 64/670 Installing tree and shrub protectors

Execution

Pr_45_30_90/614 Plant handling, storage and transport

- 1. Standard: In accordance with HTA Handling and establishing landscape plants.
- 2. Plants reserved at supplier's premises
 - Species: As Plant schedule. 2.1.
 - Pre-delivery inspection: Required. Give notice. 2.2.
 - Labelling: Identify inspected plants as reserved for use on this project.
- 3. Extreme cold: Protect plants from frost.

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- 4. Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- 5. Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped.

Pr_45_63_64/670 Installing tree and shrub protectors

- 1. General: Do not impede natural movement of plants or restrict growth. Install vertically.
- 2. Installation: To manufacturers recommendation. Drive ground spikes into the ground to full depth.

See Ss_45_35_05/601 Amenity planting generally in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/603 Times of year for amenity planting in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/605 Climatic conditions for amenity planting in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/610 Water restrictions in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/611 Disposal of arisings in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/612 Cultivation of topsoil in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/613 Preparation of undisturbed topsoil in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

Ss_45_35_05/633 Regular setting out of amenity planting

- 1. Spacing: In accordance with Landscape Architects details.
- 2. Planting density: In accordance with Landscape Architects details.

Ss_45_35_05/643 Planting amenity shrubs in pits

- 1. Dimensions
 - 1.1. Plan size (minimum): In accordance with Landscape Architects details.
 - Depth (minimum): In accordance with Landscape Architects details.
- Sloping ground: Maintain minimum depth throughout.
- 3. Pit bottoms
 - 3.1. Generally: Break up base.
 - 3.2. Profile: Slightly raise centre.
 - 3.3. Break up depth (nominal): 150 mm.
- 4. Pit sides
 - 4.1. Profile: Vertical.
 - 4.2. Treatment: Scarify.

Ss_45_35_05/645 Planting formal hedges in trenches

- 1. Trench size
 - 1.1. Width: In accordance with Landscape Architects details.
 - 1.2. Depth: In accordance with Landscape Architects details.
- 2. Backfilling: Partially backfill around each plant as planting proceeds. Complete backfilling to top of trench in batches, firming in plants.

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- 3. Sloping ground: Maintain minimum depth throughout.
- 4. Trench bottoms
 - 4.1. Generally: Break up. Generally horizontal.
 - 4.2. Break up depth (nominal): 150 mm.
 - 4.3. Treatment: Work soil ameliorant into trench bottoms.
- 5. Trench sides: Vertical. Scarify.

Ss_45_35_05/691 Applying loose mulch to planting beds

- 1. Preparation: Clear weeds. Water soil thoroughly.
- 2. Coverage: 75 mm depth.
- 3. Finished level of mulch: 30 mm below adjacent grassed or paved areas.

System completion

See Ss_45_35_05/801 Operations immediately after planting in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/802 Establishment of new planting in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/803 Weeding new planting in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/806 Watering new planting in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

Ss_45_35_05/807 Final mulching of planting beds and trees

- 1. Timing: At end of the maintenance period.
- 2. Watering: Thoroughly moisten soil before remulching. Water where necessary.
- 3. Depth of mulch (minimum): 75 mm.

See Ss_45_35_05/809 Plants that have failed to thrive in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

See Ss_45_35_05/810 Instructions for maintenance in Ss_45_35_05_08 Bed-planted annual, perennial and bulb systems

 Ω End of System

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Habitat management and enhancement systems

Systems

Ss_45_35_08_37 Habitat management and enhancement systems

- 1. Description: Bee Tower
- System manufacturer: Niche Environmental UK office@niche-environmental.co.uk https://www.niche-environmental.co.uk
- 3. Products: Bee Tower (Natural)
- 4. Execution: Ss_40_20_30/617 Formation of holes for cast-in equipment; Ss_25_32_35/602 Alignment
- System completion: Ss_45_35_05/611 Disposal of arisings Type A; Ss_40_20_30/823 Requirements for completion

Execution

Ss 25 32 35/602 Alignment

- Verticality: Plumb.
- 2. Tolerances: ±30 mm of prescribed alignment and, within any 10 m length, ±15 mm from the straight or required radius.

Ss_40_20_30/617 Formation of holes for cast-in equipment

- 1. Dimensions
 - 1.1. Post settings
 - 1.1.1. Hole plan size (minimum): Submit proposals.
 - 1.1.2. Hole depth (minimum): Submit proposals.
 - 1.1.3. Concrete depth (minimum): Submit proposals.
 - 1.2. Struts
 - 1.2.1. Hole plan size (minimum): Submit proposals.
 - 1.2.2. Hole depth (minimum): Submit proposals.
- 2. Formation: Excavate neatly, with vertical sides.

Ss_45_35_05/611 Disposal of arisings Type A

- 1. Generally: Leave the works in a clean, tidy condition at completion.
- 2. Surplus topsoil: Remove from site.
- 3. Biodegradable arisings: Remove to recycling facility.
- 4. Grass cuttings: Remove to recycling facility.
- 5. Tree roots and stumps: Remove from site.
- 6. Shrub and tree prunings: Remove to recycling facility.
- 7. Litter and nonbiodegradable arisings: Remove from site.
- 8. Diseased plant material: Remove from site.
- 9. Stones removed during cultivation and topsoil preparation: Remove from site.
- 10. Contamination: Remove from site material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

System completion

Ss_40_20_30/823 Requirements for completion

- 1. Condition: Leave the works in a clean, tidy condition. Clean immediately before handover.
- 2. Spares to be supplied: To be confirmed by client.
- 3. Tools: Supply tools required for operation, maintenance and cleaning purposes.

 Ω End of System

Ss_45_35_45_33 Grass and wildflower seeding systems

Systems

Ss_45_35_45_33 Grass and wildflower seeding systems

- 1. Description: Wildflower Meadow and Flowering Lawn
- 2. Topsoil preparation
 - 2.1. Herbicide: Contractors design.
- 3. Seed: Pr_45_30_76_97 Wildflower seeds Wildflower Meadow Mix; Pr_45_30_76_97 Wildflower seeds Flowering Lawn Mix
- 4. Execution: Ss_45_35_45/602 Water restrictions; Ss_45_35_45/612 Cultivation of topsoil; Ss_45_35_45/603 Disposal of arisings; Ss_45_35_45/621 Preparation of undisturbed topsoil; Ss_45_35_45/623 Finished levels of topsoil after settlement; Ss_45_35_45/624 Setting out of seeded and turfed areas; Ss_45_35_45/631 Final preparatory works to seed beds and areas to be turfed; Ss_45_35_45/635 Wildflower seeding
- 5. System completion: Ss_45_35_45/801 Seeding and turf maintenance up to practical completion; Ss_45_35_45/802 Seeding and turf maintenance up to the end of the rectification period; Ss_45_35_45/803 Failures in the establishment period; Ss_45_35_45/811 Watering; Ss_45_35_45/821 Finishing edges to seeded or turfed areas; Ss_45_35_45/854 Cutting meadows prior to practical completion

Products

See Pr_45_30_76_97 Wildflower seeds Flowering Lawn Mix in Ac_85_30_50/195 Meadow grass maintenance

See Pr_45_30_76_97 Wildflower seeds Wildflower Meadow Mix in Ac_85_30_50/195 Meadow grass maintenance

Execution

See Pr 45 30 76/603 Protection of seeds in Ac 85 30 50/195 Meadow grass maintenance

Ss 45 35 45/602 Water restrictions

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

Ss 45 35 45/603 Disposal of arisings

- 1. Generally: Leave the works in a clean, tidy condition at completion.
- 2. Surplus topsoil: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 3. Biodegradable arisings: Remove to recycling facility.
- 4. Grass cuttings: Remove to recycling facility.
- 5. Tree roots and stumps: Remove from site.
- 6. Shrub and tree prunings: Remove to recycling facility.
- 7. Litter and non-biodegradable arisings: Remove from site.
- 8. Diseased plant material: Remove from site.
- 9. Stones removed during cultivation and topsoil preparation: Remove from site.
- 10. Contamination: Remove from site material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

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Ss_45_35_45/612 Cultivation of topsoil

- 1. Grading and cultivation
 - 1.1. Standard: In accordance with BS 4428.
 - 1.2. Category: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
 - 1.3. Depth: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 2. Timing: Contractors choice.
- 3. Working conditions
 - 3.1. Soil condition: Reasonably dry and workable.
 - 3.2. Weather conditions: Suitably dry.
- 4. Compacted topsoil: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 5. Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate.
- 6. Surface
 - 6.1. Contours: Smooth and flowing, with falls for adequate drainage.
 - 6.2. Hollows and ridges: Not permitted.
- 7. Remove visible weeds, roots and large stones with any dimensions exceeding: 50 mm.
- 8. Marrying in with adjacent levels: Extend cultivation into adjacent areas sufficiently to ensure full marrying in with no step in level.
- 9. Notice: Give notice if required levels cannot be achieved by movement of existing soil.

Ss 45 35 45/621 Preparation of undisturbed topsoil

- 1. Cultivation: Plough or dig over to full depth of topsoil.
- 2. Hard ground: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- Remove visible roots and large stones with a diameter greater than: 50 mm.
- 4. Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate.
- 5. Fallow period (minimum): Contractors choice.
- 6. Weed control
 - 6.1. Treatment: Contractors choice.

Ss_45_35_45/623 Finished levels of topsoil after settlement

- Finished level of topsoil for grass or meadows in relation to adjoining paving, kerbs or hard surfaces: 25 mm below.
- 2. Finished level of topsoil for grass or meadows in relation to DPC of adjoining buildings (minimum): 150 mm below.
- 3. Finished level of topsoil for grass or meadows in relation to adjoining planting areas: 25 mm below.
- 4. Tolerance for specified levels on sportsfields
 - 4.1. From levels shown on drawings: ±75 mm.
 - 4.2. Evenness along a 2 m straight edge: ±25 mm.
- 5. Within root spread of existing trees: Do not change levels.
- 6. Adjoining grassed areas: Marry in with adjacent levels.
- 7. Thickness of turf or top dressing: Included in stated values.

Ss_45_35_45/624 Setting out of seeded and turfed areas

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

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Ss_45_35_45/631 Final preparatory works to seed beds and areas to be turfed

1. Seed bed

- 1.1. Generally: Loosen, aerate and break up topsoil to a tilth suitable for blade grading. Reduce to fine, firm tilth with good crumb structure. Remove visible weeds.
- 1.2. Depth of final cultivation: In accordance with the Soil Resource Survey by Tim O'Hare Associates.
- 1.3. Surface preparation: Rake to a regular, even surface, friable and lightly firmed but not over compacted.
- 1.4. Size (minimum) of surface stones and earth clods to be removed
 - 1.4.1. General grass areas to be seeded: 10 mm.
 - 1.4.2. Fine lawn areas to be seeded: 10 mm.
 - 1.4.3. Areas to be turfed: 25 mm.
 - 1.4.4. Meadow areas: 50 mm.

Ss 45 35 45/635 Wildflower seeding

- 1. Generally: Establish good seed contact with the seed bed.
- 2. Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.
- 3. Distribution: Two equal sowings at right angles to each other.
- 4. Timing: March to May or August to October.
- 5. Application rate: In accordance with Landscape Architects Planting Plan.
- 6. Raking and firming of seed bed: Lightly rake or harrow the seed bed after seeding. Firm with a lightweight roller.

System completion

Ss 45 35 45/801 Seeding and turf maintenance up to practical completion

- Generally: Maintain in a manner appropriate to the intended use. Leave the works in a clean, tidy condition.
- 2. Seeded and turfed areas
 - 2.1. Condition: Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - 2.2. Waterlogging and compaction: Prevent.
 - 2.3. Damage: Repair trampling, abrasion or scalping.
 - 2.4. Litter and fallen leaves: Remove regularly to maintain a neat appearance.
- 3. Visits to site for inspection
 - 3.1. Notice: Give notice before visiting site up to practical completion

Ss_45_35_45/802 Seeding and turf maintenance up to the end of the rectification period

- Generally: Maintain in a manner appropriate to the intended use. Leave the works in a clean, tidy condition.
- 2. Seeded and turfed areas
 - 2.1. Condition: Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
 - 2.2. Waterlogging and compaction: Prevent.
 - 2.3. Damage: Repair trampling, abrasion or scalping.

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- Litter and fallen leaves: Remove regularly to maintain a neat appearance.
- 3. Visits to site for inspections
 - 3.1. Notice: Give notice before visiting site up to the end of the rectification period.

Ss 45 35 45/803 Failures in the establishment period

- 1. Defective materials or workmanship: Areas that have failed to thrive.
- 2. Exclusions: Theft or malicious damage.
- 3. Method of making good: Re-cultivation and re-seeding/ re-turfing.
- 4. Timing of making good: The next suitable planting season.

Ss_45_35_45/811 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 seeding and turfing.

Ss_45_35_45/821 Finishing edges to seeded or turfed areas

- 1. Finishing edges: Draw back adjacent topsoil and re-form edges to neat straight lines or smooth flowing curves, sloping slightly back from vertical. Keep clear of adjacent topsoil or mulch.
- 2. Turf edging: Keep moist at all times.

Ss_45_35_45/854 Cutting meadows prior to practical completion

- 1. Conditions for cutting: When the sward is reasonably dry.
- 2. Preparation: Before each cut remove litter and debris.
- 3. Initial cutting
 - 3.1. Height: 25mm for Flowering Lawn. 75 mm for Wildflower Meadow and Wetland Meadow.
 - Timing: Submit proposals.
- 4. Cuttings: Remove from site.

Ω End of System

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Specification created using NBS Chorus