

North View New Mental Health Unit, North Manchester General Hospital

Greater Manchester Mental Health Trust with IHP Vinci Plc.

Landscape/Habitat Management and Maintenance Plan

NMGNPH-ITR-VV-XX-RP-L-9009 P04

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0. Report Status

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1. Introduction

1.1 Purpose of the Plan

The purpose of this Landscape/Habitat Management and Maintenance Plan (LHMP) is to guide the establishment and maintenance of the landscape works for a period of 5 years following completion, as well as to provide a Habitat Management Guide for a period of 20 years. The aim of the LHMP is to achieve a biodiversity net gain on site comparatively to the baseline prior to the development, through creation of habitats of a higher biodiversity value.

It has been prepared in accordance with BS42020:20131 section 11.1, and relates to the planning condition no 25 to promote and enhance biodiversity (Policy EN12 of Manchester Core Strategy and NPPF.

This document does not detail the actual site preparation and habitat creation work but relates to the management and maintenance of the site once habitat creation works have been completed.

To achieve this, the document sets out specific proposals for management and maintenance tasks which will help achieve the long- term design objective and to enhance the ecological value of the site.

A description of ecological features on site are discussed in Section 3.

1.2 Long Term Design Objective for the External Environment

- Create an attractive environment for site users which is sympathetic to the character of the existing site setting and wider context
- Provide safe and secure external spaces
- Provide an easily maintained and managed landscape
- Enhancement of the site in comparison to the baseline prior to the development to ensure biodiversity enhancement or target Biodiversity Net Gain (BNG) is the desired result of a process applied to development so that overall, there is a positive outcome for biodiversity

1.3 Site Area

- The area to be managed is indicated on drawing:
- NMGNPH-ITR-00-XX-DR-L-0010 - Overall Landscape Masterplan

This LHMP should be read in conjunction with the following drawings, schedules, specification (and referenced reports by WSP):

- NMGNPH-ITR-00-XX-DR-L-0013 - Soft Landscape and Planting Strategy
- NMGNPH-ITR-00-XX-SH-L-1000 Plant Schedule
- NMGNPH -ITR-XX-XX-DR-L-0032-0036, 0121-0127, -0221-0227 and 0321-0323 series Detailed Planting Plans (available from GMMHT)
- National Building Specification Q35 Landscape Maintenance
- Phase 1 Survey and Preliminary Ecological Appraisal (PEA) Report ECO 2020 - prepared by WSP.
- RIBA Stage 4 BREEAM Assessment and GN40 information 2022 prepared by WSP 2022.

1.4 Management Responsibilities

The delivery of the management operations as outlined in this LMMP will be the responsibility of the (Greater Manchester Mental Health) GMMH Trust Estates site management team at North Manchester General Hospital and Prestwich HQ although it is understood that on completion of the works the contractor will be responsible for the maintenance of the planting during the Rectification Period in line with the operations set out in this document.

The following schedule of maintenance operation tasks are identified as either ‘Routine’ maintenance including regular (assumed weekly) site inspections and monitoring and ‘Responsive’ maintenance activities which need to be implemented on an ‘as required’ basis in response to specific site events.

The LHMP will outline proposed activities in year one, years two to five and years five to 20 with an indication of when habitats should meet the future guidance for BNG values.

It is proposed that the created habitats will be reported on in year 1, 2, 5, 10, and 20 to measure the effectiveness of the LMMP. This will be carried out by a suitably qualified ecologist who is capable in undertaking habitat condition assessments as per the Defra Metric 3.19 (Natural England JP039) biodiversity standards and methodology.

When reference is made to seasons, please refer to the following periods:

- Winter – Mid November to Mid-March – 17 weeks
- Spring – Mid-March to Early May – 8 weeks
- Summer – May to Late September – 20 Weeks
- Autumn – October to Mid-November – 7 weeks

1.5 Restrictions

Use of mechanical equipment is not permitted outside the hours of 8am to 4pm Monday to Friday, or by agreement with the site management team.



North View NMGNPH-ITR-00-XX-DR-L-0010 - Overall Site Landscape Masterplan

2. Planting Character Types

2.1 General

The development of the planting character types identified below is central to achieving the landscape vision for the scheme, using native and ornamental species that enhance the ecological value of the site and increase the integrated biodiversity.

This scheme presents the opportunity for a rich diversity of planting characters within the site area as well as connecting with adjacent habitats.

The total measured areas of newly provided soft landscape areas within the site are as follows:

- 1,400sqm Mown grass/garden lawns
- 5,620sqm Perimeter areas native ground cover and low shrub planting
- 2,630sqm Arrival space, private gardens and courtyards planting (mixed including native plants/ornamentalplants/ ornamental grasses/sedums/ground cover)
- 97no Native trees to perimeter areas and public realm arrival space
- 134no Garden small trees/shrubs (native, edible fruiting, ornamental)
- 2000lin m Native hedging to perimeter area on the east side

These areas are broadly covered by following types:

2.2 Boundaries- Native Species Hedges and Planting

Planting to the site boundaries and edges should have ecological value and greatly increase the biodiversity, providing enclosure and opportunities for wildlife corridors linking:

- East side - adjacent wooded areas across Crescent Drive.
- West side - row of existing trees to realigned new road
- South side - trees and vegetation off Eyam Road
- North side - new trees and planted areas to existing hospital estate

Native species have been selected mixed with ornamental planting to ensure the scheme is diverse and attractive.

It is important that these areas are robust and maintainable within the Trust's current ability.

2.3 Trees

The proposed trees will provide accents and vertical elements to soften and integrate the proposed building into the site and in context with it's urban setting.

The trees are selected to provide ecological benefit, seasonal variety with a deciduous and evergreen forms that will also contribute to the enhancement of the site.

2.4 Arrival Space Public Realm including Lawns

This area contains a number of native trees set into paving and grass lawns. Planting beds contain a variety of ornamental grasses and ground cover species greatly enhances the biodiversity and ecological value of these areas, while ensuring it is accessible and functional for use.

2.5 Gardens

The ward gardens and courtyards will be more intensively maintained but provide variety of native and ornamental species including garden trees.



Aerial View North Manchester General Hospital:
North View site is outlined in blue



North View - NMGNPH-ITR-00-XX-DR-L-0013 Soft Landscape and Planting Strategy Plan

Key



Boundaries - Native Species Hedges and Planting



Trees



Arrival Space Public Realm incl Lawns



Gardens

3. Ecological Management Guidelines

3.1 Ecological Management Guidelines

The existing site baseline, as outlined in the initial Phase 1 survey and Preliminary Ecology Appraisal (PEA) was identified as being mainly buildimnghs and hardstanding with scattered trees so generally of poor ecological value. A detailed bat survey was undertaken that identified some of the existing trees were of moderate roosting potential. The site has been toatally cleared so the new scheme will provide opportunities for the creation of new habitats.

Construction of the proposed site is based on the landscape masterplan and strategy plans, and will include UKHab habitat types such as Grassland, Trees and Mixed Scrub. The scheme also includes Gardens as a major element that does not strictly form a specific UKHab category but will enrich the habitat infrastructure of the site.

As part of the development proposals, a combination of ornamental and native species planting has been specified and reviewed with the project ecologist to create a balance between ecological value, maintenance requirements and aesthetics. Despite the loss of existing vegetation, the intention is that the proposed scheme will create a better environment in terms of biodiversity, benefiting and increasing the inherent ecology of the site.

The Ecological Appraisals were undertaken in 2020 prior to The Environment Act 2021 Biodiversity Net Gain (BNG) allocations came into so it is not possible to calculate the current biodiversity net gain benefit.

These ecological management guidelines will however cover the different landscaped areas of the site. These management guidelines can be adapted when necessary, and this document reviewed and updated if required.

3.2 Tree Planting

The planting of native and ornamental trees on site will mitigate against the loss of the existing trees to facilitate development. This will also provide an ecologically valuable habitat within the site, as well as providing sheltering, nesting and foraging habitat for bird and mammal species.

As per the proposed planting regime, trees will include native species offering a medium - high distinctiveness habitat. The target condition of the planted trees will be achieved through selection of predominantly native species along with appropriate management and maintenance to ensure tree health.

Larger native tree species will provide longer term benefits for the site via provision of an ecological niche for fauna e.g., nesting bird habitat and holes/crevices for insects, invertebrates and nectivorous species. Such species will also create a ‘green canopy’ on the site.

It is intended that the native species selected will attract nesting and foraging birds when mature.

- Species to benefit from this habitat:
- Invertebrates
 - Birds
 - Bats

Bird and Bat Boxes
No bat or bird boxes are proposed for the development. Due to the nature of the buildings use for mental healthcare, service users may be alarmed by the presence of such features. No existing mature trees have been retained within the site boundary. Once new trees reach maturity the Trust may install bat or bird boxes at their discretion to encourage wildlife.

3.3 Native Hedges and Perimeter Planting

This habitat will provide a range of native and ornamental flowering plants, native woody species and native non-woody flowering species which are suitable for wildlife and pollinators such as butterflies, bees and beetles.

As per the proposed planting regime, there will be two distinct scrub/shrub habitats; Mixed hedge and woodland edge scrub (predominantly native species) which offers an anticipated future medium to high distinctiveness biodiversity value. Mixed native and ornamental ground cover offers a medium biodiversity value.

This scrub category of planting will be maintained to allow a varied structure at the end of the proposed LMMP (20 years).

Non-native invasive plant species are not present within the scrub area.

Urban scrub for landscaping and visual purposes will be managed to offer opportunities for foraging species through pruning and management of shrubs. This will ensure individual shrubs are maintained in a good condition with a dense structure to offer refuge for small mammal species and nesting birds.

Flowering plant species that are used as standard in ornamental beds tend to be more prolific and therefore provide more nectar for insect life.

Flower mixes that offer an even distribution of flowers throughout the spring and summer periods will be used, so as to provide a sustained food source for insects and other invertebrates.

Secondary ecological benefits will be experienced by bird and bat species, which will be able to feed on the insect species supported by the flowering plants.

- Species to benefit from this habitat:
- Invertebrates, in particular, nectivorous species,
 - Birds

3.4 Arrival Space Public Realm incl Lawns

The specified lawn grass (Neutral Grassland) is to be maintained as per standard mowing regime. The lawn grass contains mainly Fescues and Browntop Bent Grass as these areas have to be maintained as formal lawns to allow for public to sit during the summer months.

Flowering plant species that are used within the planting beds are a mix of native and ornamental grasses and flowering plants that tend to be more prolific and therefore provide more nectar for insect life.

Flower mixes that offer an even distribution of flowers throughout the spring and summer periods will be used, so as to provide a sustained food source for insects and other invertebrates.

Secondary ecological benefits will be experienced by bird and bat species, which will be able to feed on the insect species supported by the flowering plants.

- Species to benefit from this habitat:
- Invertebrates, in particular, nectivorous species,
 - Birds

3.5 Gardens

Generally more intensively maintained designed landscapes such gardens do not fall under specific habitat opportunities but this site offers a variety of garden spaces including native and ornamental trees, grassland (lawns), ornamental grasses and herbaceous/flowering species. These will contribute to attracting pollinators such as bees and butterflies.

- Species to benefit from this habitat:
- Invertebrates and birds.

3.6 Ecological Enhancements

Where possible, arisings from vegetation clearance and tree removal should be used to create habitat piles and hibernacula within the perimeter areas to the south andeastern edges of the site where possible. Habitat piles and hibernaculum will provide hibernation and refuge opportunities for species such as invertebrates.

Habitat piles and hibernaculum will require little management and maintenance, with occasional (e.g., every 5 – 10 years) topping-up with new rocks, woody material obtained during pruning activities and soil.

3.7 Value and Condition of the Site at Handover

Over time, the proposed landscape will develop and mature to an optimum level, providing the site with the most ecological value. The following tables in section 4 indicate an outline of timescales to optimum maturity based on specified planting specifications.

4. LHMP and Reporting Guidance

4.1 Work Schedules

Habitat Clearance: Existing habitat clearance commenced in early 2021, which included scrub clearance and tree removal.

Habitat Creation: Habitat creation commences on completion of construction of the new North View MH Unit on site (September 2024).

Habitat Management and Maintenance schedule is detailed in Tables below.

4.2 Habitat Areas

The summary tables indicated on pages 8-9 shall be read in conjunction with:

- Colour coded Planting Character Types (Section 2),
- Overall Site Plant Schedule List (Section 6)
- NBS Section Q35 (Section 7).

Note:

As outlined in the introduction of this document, following practical completion it is the responsibility of the contractor to maintain the soft landscape during the Rectification Period (typically 12 months, but as defined in the project contract) in line with the operations set out in this document.

Following the Rectification Period, the delivery of the management operations within this Habitat Management and Maintenance Plan will be the responsibility of the site management team at North View.



Key Plan for Landscape/Habitat Management and Maintenance Plan Schedule

4.3 Landscape/Habitat Management and Maintenance Plan Schedule

Habitat Type	Target Condition	LHMP Year 1	LHMP Year 2 - 5	LHMP Year 5 - 20
Trees	(Future BNG Assessment)	Trees where possible should be planted between November and February with placement of bark mulch around the base of the trees to prevent weed growth and ensure moisture control. Fertilizer substrate should be present within the compost mix when planted. Tree ties and stakes should be put in place and if required tree guards placed around the trunks/whips (if potential for browsing animals on site). Newly planted trees will require regular watering within the first few weeks of planting and through establishment period as necessary to maintain healthy growth. Any failed tree saplings should be removed and replaced with an appropriate alternative species. Note see section 3.2: no bird and bat boxes are proposed due to the nature of the development.	The urban trees during this period are to be established with management and maintenance focused to ensure good tree health and optimal growth; The area around the trees will be kept clear of vegetation for up to five years after planting using mulch. Fertilizer should be applied to the bases of trees in April for the first two years, and weeding should be undertaken around the trees on a monthly basis during the main growth period, April to October (inclusive). Trees should be inspected annually during the growing season for damage, disease or death. Trees should be removed where damage would jeopardise the long-term survival of the tree and should be replaced in the next planting season. This annual inspection should also be used to re-firm trees where leaning/uneven soil and check staking and tree ties to be replaced if necessary. Tree ties and stakes (and where relevant, tree guards) should be removed in year 3 if the tree has reached establishment, if not this should be reviewed in years 4 and 5.	Standard time to target condition is ten years –therefore, it is anticipated that once the condition is reached (poor), activities will be standard maintenance as outlined below with management and maintenance from years five to ten being the same as two to five (outlined in the column to the left); Trees should be inspected annually during the growing season for damage, disease and death. Trees should be removed where damage would jeopardise the long-term survival of the tree and should be replaced in the next planting season. This annual inspection should also be used to re-firm trees where leaning/uneven soil and check staking and tree ties to be replaced if necessary. Pruning, where necessary, should be undertaken during January and early February with the aim of achieving a dense structure suitable for nesting birds. Pruning should be avoided during February and September (inclusive) to ensure nesting birds are not affected by management works.
Native and Planting, Hedges, Edges and Ground Cover to Perimeter Areas	(Future BNG Assessment)	Scrub and shrub species where possible should be planted between November and February with placement of bark mulch around the base of the shrubs to prevent weed growth and ensure moisture control. Newly planted shrubs should be checked during site inspections for signs of damage, disease or pests. All broken and badly damaged branches should be pruned from the plant. Newly planted shrubs should be watered fortnightly between April and the end of September (up to a maximum of 15 visits) at a rate of 25 litres per shrub. This should be increased during periods of drought, at the discretion of the client. Suitable refuge / hibernaculum for amphibians, small mammals and invertebrates should be established within mixed scrub area; use of building materials such as bricks, blocks and gravel with leaf litter, bark chip, soil and branches/twigs – an example can be found; Hibernaculum.pdf (froglife.org)	Standard time to target condition is one year –therefore, it is anticipated that once the condition is reached activities will be standard maintenance as outlined below; Pruning should be undertaken to promote flowering and fruiting in accordance with the species and the age of the plant. Bark Mulch may be used where considered appropriate on an annual basis (in March) to ensure effective weed suppressant and moisture control. If numerous shrubs/scrub plants are damaged or dying in a single area these can be replaced with a suitable alternative species. Watering maybe required in times of drought at the discretion of the client.	Maintain condition of mixed scrub through management and maintenance activities in line with the condition assessment (poor) and reporting; ensuring no invasive or unwanted non-native species introduced becoming dominant with the emphasis being to ensure the majority of scrub is native (any shrubs requiring replacement due to failing are replaced with native species). Creation of small clearings where suitable, within scrub to open up areas for new growth and provide sheltered edges for foraging species. Where required replace any dying or damaged shrubs with suitable native alternatives. Pruning/cutting management where required to manage and maintain scrub habitat.

4.3 Landscape/Habitat Management and Maintenance Plan Schedule (continued)

Habitat Type	Target Condition	LHMP Year 1	LHMP Year 2 - 5	LHMP Year 5 - 20
Arrival Space Public Realm incl Lawns	(Future BNG Assessment)	Establishment of seed mix with appropriate species to be carried out, over-seeding can be undertaken if required during year 1 and 2. For the lawns first year management; cut regularly throughout the growing season in establishment year to 30-40mm. Maintenance cutting where required, should ensure the sward length is retained at a minimum of 25mm during establishment. Cuttings/arising to be removed from site and placed in an appropriate green waste disposal unit. Remove any dominant/invasive weeds through hand pulling or mechanically. See Gardens section below for scrub and shrub species management.	For grassed lawns cuttings/arising to be removed from site and placed in an appropriate green waste disposal unit. Any unwanted weeds i.e. docks, thistles, bristly ox tongues can be removed by hand, mechanically or through herbicide use. See Gardens section below for scrub and shrub species management.	For grassed lawns cuttings/arising to be removed from site and placed in an appropriate green waste disposal unit. Any unwanted weeds i.e. docks, thistles, bristly ox tongues can be removed by hand, mechanically or through herbicide use. See Gardens section below for scrub and shrub species management.
Gardens	N/A	Scrub and shrub species where possible should be planted between November and February with placement of bark mulch around the base of the shrubs to prevent weed growth and ensure moisture control. Newly planted shrubs should be checked during site inspections for signs of damage, disease or pests. All broken and badly damaged branches should be pruned from the plant. Newly planted shrubs should be watered between April and the end of September (as necessary to maintain healthy growth) at a rate of 25 litres per shrub. This should be increased during periods of drought, at the discretion of the client.	Standard time to target condition is one year – the proposed habitat offers very little biodiversity value (0.01 habitat units delivered) – however management and maintenance activities should aim to ensure the habitat is both visually pleasing and offers foraging and sheltering for wildlife species through regular maintenance; Pruning should be undertaken annually to promote flowering and fruiting in accordance with the species and the age of the plant. Bark mulch may be used where considered appropriate on an annual basis (in March) to ensure effective weed suppressant and moisture control. If numerous shrubs/scrub plants are damaged or dying in a single area, these can be replaced with a suitable alternative species.	Maintain condition of urban scrub through management and maintenance activities in line with the condition assessment (N/A) and reporting; Where required replace any dying or damaged shrubs with suitable alternatives. Pruning/cutting management where required to manage and maintain scrub habitat.

4.4 LHMP Monitoring and Reporting

As outlined in Sections 3 and Table 4.3, BNG guidance for each habitat will be achieved through initial planting and species composition and then through routine management and maintenance of each habitat on site.

To assess the success of the habitat creation in achieving the future net gain, each habitat type should be surveyed by a suitably qualified ecologist and a condition assessment reported, utilising the original metric guidance (Defra 3.1) in year 1, 2, 5, 10 and 20. Where a previous biodiversity metric remains applicable, as confirmed by the site survey, this would be used to provide biodiversity reconciliation calculations if applicable as this scheme has been commenced prior to the BNG regulations enforcement date.

For guidance:

Year 1:
The aim will be to ensure the establishment of habitats with the proposed species present and diversity of seeding / planting. Notification of any potential issues with regards to planting should be raised and remedial actions given detailed to the client / landscaping contractor by the ecologist. It should be anticipated in Year 1 that plants are generally immature and will grow to establish during years 2 to 5 once the management regime is in place and plants/trees have had time to establish.

Year 2:
If applicable a suitably qualified ecologist can conduct an assessment of target condition for the other neutral grassland and both scrub habitats, to assess the habitat condition using the Defra Metric condition assessment guidance. If a habitat fails to meet the target condition, the suitably qualified ecologist will provide details of reasoning behind the habitat failure and propose remedial action to achieve the target condition which may include re-seeding/planting of shrubs in failed areas.

The trees will be checked and notes made on any significant changes in the condition of the trees. Advice will be given for species selection if any trees have died in year 1.

Year 5:
If applicable an update survey can be carried out to ensure the grassland (if applicable) and scrub habitat are meeting the proposed target condition, utilising the Defra Metric condition assessment guidance notes, will be carried out by a suitably qualified ecologist. At this stage the routine maintenance should be retaining the species diversity of the grassland (if applicable) and scrub areas.

If applicable the survey of the grassland will focus on species present and record if any areas of bare-ground or non-native invasive species are present. At this point it would be anticipated that a minimum of ten to twelve species of the seed mix should be present within any 1m² area. If non-native or unwanted species such as dock Rumex sp. and creeping thistle Cirsium arvense are prevalent, the LHMP will be updated as how best to remove utilising tools and / or herbicides.

Within the mixed scrub and urban tree habitat, the survey will carry out a check of tree/shrub health and note down the percentage cover of shrub species to ensure the diversity has been retained. If required, the habitat management plan will be updated to include remedial management as required due to monitoring findings in agreement with the landscaping contractor. Remedial management will be prescribed such as re-seeding or re-planting of areas that have been subject to damage with suitable species.

The trees will be checked to ensure tree anchors need to be removed or can remain in the ground and trees are healthy and self-supporting.

Year 10 and 20:
All habitats on site should be at their target condition and well established with routine management and maintenance being undertaken as per the LHMP in Table 4.3 to retain the proposed habitat condition.

A condition assessment of all habitats on site as per the Defra Metric guidance will be undertaken by a suitably qualified ecologist. If a habitat is failing to meet the proposed target condition the habitat management plan will be updated to include remedial management in agreement with the landscaping contractor; this may include change of mowing regime, re-seeding or re-planting damaged are diseased areas with suitable species and management of trees such as pruning, pollarding or crown lifts to ensure tree health.

5. General Notes and Health & Safety Guidelines

5.1 General Notes

- Consult Seed Supplier - Operations should be carried out in consultation with the seeding supplier, the actions identified above are provided for costing purposes and guidance. Generally, most new seeding should be carried out during early autumn i.e. September. However, as advised by the seeding suppliers, over seeding can work well whenever the soil temperature is favourable, the minimum soil temperature for germination is 10C with the optimum range being 16-22C, ideally the conditions would be when there is not an extreme extended warm period when additional irrigation would be required.
- Timing – Ideally all seeding work would be carried out during September, when the soil is still warm and precipitation is higher. This period may extend into early October [subject to weather conditions].
- Protective fencing should be maintained until then. Inspections should be carried out in November and March to check areas establishment. Timings indicated in the above schedule are based on best case, timing of seeding, fertilising etc should be carried out as per seeding supplier recommendations. The Contractor to submit a programme of works for approval.
- Stone/Rubbish Picking – Any surface stones/ earth clods / surface vegetation matter exceeding a dimension of 20mm should be collected and removed from the site.
- General site preparation – All areas graded as required to ensure all mounds, depressions, ruts are removed. The contractors should carry out a final rake to a true, even surface, friable and lightly firmed but not over compacted. The purpose of the final ‘rake’ is to loosen seed bed surface and create ‘striations’ thus ensuring good contact is made between the soil and the seed.

5.2 Health & Safety

Certain cleaning methods described involve the use of chemicals. Therefore, it is important that any safety warnings issued by the chemical suppliers should be carefully read and strictly adhered to at all times.
In general, the following precautions should be taken:

- Prior to maintenance/cleaning being undertaken a site specific risk assessment is to be carried out.

- Prior to any chemicals being used a COSHH assessment is to be undertaken.
- When using chemicals, protective clothing such as gloves, goggles, boots and overalls should be worn.
- Adequate ventilation is required when using chemicals in confined spaces.
- When using flammable materials i.e. cigarettes, naked flames and other sources of ignition should be carefully controlled.
- When diluting acids, ALWAYS add acid to water and not water to acid.
- Any clothing that is contaminated with chemicals should be disposed of safely.
- When using any chemicals, care must be taken not to damage, contaminate or stain any adjoining materials, landscaping or finishes.
- Care must be taken to protect personnel operating in the area of the cleaning from any injury or hazard created by the cleaning. The appropriate First Aid must be available on-site.
- Before undertaking any cleaning operation a trial should be carried out on a small, preferably inconspicuous area, to determine the effect of the chemicals before treating a large area.

5.3 Safe Access and Maintenance

- Prior to any maintenance activities on site all contractors must submit a detailed method statement to the Victoria Infirmary management team for approval.
- All method statements must be written in line with Mersey Care NHS Foundation Trust’s own health and safety policy.

6. Overall Site Plant List and Schedule

No	Abbre	Notes	Species	National Plant Specification/Description	Root/condition	Density and Planting Requirements (page 1 of 8)
1. General Native/Ornamental Structure Trees to Public Realm Arrival Space and Perimeter Areas outside Secure Building Zones						
Note: Plant List 1= Total 99 proposed perimeter area native and ornamental trees as follows:						
3	Ac cam	CONTAINERISE	Acer campestre	Extra Heavy Standard 14-16cm girth, 400-450cm height	Rootballed or containerised for planting outside season	As shown on plans. Pits not less than 1800mm dia x 1000mm depth. Pits to at least 250mm deeper and 500mm wider than root system when fully spread or planting pits to be 150mm wider and 150mm deeper than root system when fully spread.
6	Am lam	CONTAINERISE	Amelanchier lamarkii	Multi stemmed/250-300cm height	As above	
11	Bet jac	CONTAINERISE	Betula jacquemontii (Himalayan Birch)	Extra Heavy Standard 14-16cm girth, 400-450cm height	As above	
6	Bet erm	CONTAINERISE	Betula ermanii (Golden Birch)	Extra Heavy Standard 14-16cm girth, 400-450cm height	As above	
7	Bet pen	CONTAINERISE	Betula pendula (Native Birch)	Select Standard 10-12cm girth, 200-250cm ht	As above	
5	Mal syl	CONTAINERISE	Malus sylvestris (Crab Apple)	Extra Heavy Standard 14-16cm girth, 400-450cm height	As above	
3	Cra PS	CONTAINERISE	Crataegus 'Pauls Scarlet'	Extra Heavy Standard 14-16cm girth, 400-450cm height	As above	
3	Qu rob	CONTAINERISE	Quercus robur (English Oak)	Extra Heavy Standard 14-16cm girth, 400-450cm height	As above	
7	Pin pn A	CONTAINERISE	Pinus nigra Austriaca (Austrian Pine)	5x, 350-400cm ht, clear stem min height 1.75m good branch form	As above	
11	Pin syl	CONTAINERISE	Pinus sylvestris (Scots Pine)	3x, 180-250cm ht, good branch form	As above	
6	Pru av	CONTAINERISE	Prunus avium (Wild Cherry)	Extra Heavy Standard 14-16cm girth, 400-450cm height	As above	
18	Pyr xc C	CONTAINERISE	Pyrus x calleryana 'Chanticleer' (substitued the Prunus on west side)	Feathered min 300-350cm height	As above	
4	Sor auc	CONTAINERISE	Sorbus aucuparia (Mountain Ash)	Extra Heavy Standard 14-16cm girth, 400-450cm height	As above	
8	Mal RS	CONTAINERISE	Malus 'Red Sentinel'	Extra Heavy Standard 14-16cm girth, 400-450cm height (clear stem height to 210cm)	As above	
1	Pic bre	CONTAINERISE	Picea breweriana	4x, 300-350cm ht, good branch form	As above	

No	Abbre	Notes	Species	National Plant Specification/Description	Root/condition	Density and Planting Requirements (page 2 of 8)
2. Native Mix Hedges/Native Planting to Perimeter Retaining Walls						
Note Plant List 2 = 295 lin m for hedges = 800 Plants						
280	Cra mon	35%	Crateagus monogyna (Hawthorn)	60-80cm height, good strong branching form, at least three breaks in lower third	Bare root/Rootballed or containerise if outside season	Planted in groups of 2-3 plants at 75cm centres, double staggered row. Planting pits to be 150mm wider and 150mm deeper than root system when fully spread.
200	Cor ave	25%	Corylus avellana (Hazel)	60-80cm height, good strong branching form, at least three breaks in lower third	As above	
80	Ilex aq	10%	Ilex aquifolium (Holly)	60-80cm height, good strong branching form, at least three breaks in lower third	As above	
80	Pru spin	10%	Prunus spinosa (Blackthorn)	60-80cm height, good strong branching form, at least three breaks in lower third	As above	
80	Ros can	10%	Rosa canina	60-80cm height, good strong branching form, at least three breaks in lower third	As above	
80	Vib op	10%	Viburnum opulus (Guelder Rose)	60-80cm height, good strong branching form, at least three breaks in lower third	As above	
Note: Plant List 2						
1290	Cor san		Cornus sanguinea (Dogwood)	80-100cm height, good strong branching form, at least three breaks in lower third	Bare root	75cm centres or 2 plants/m
2600	Car syl		Carex sylvatica (Wood Sedge)	30-40cm ht, good clump form	2L pot	45cm centres or 5 plants/m
3585	Hed hel		Hedera helix	20-30cm ht, good clump form	2L pot	45cm centres or 5 plants/m
2610	Hyp cal		Hypericum calycinum	30-40cm ht, good clump form	2L pot	45cm centres or 5 plants/m
10,660	Sym chen H		Symphoricarpus x chenaultii 'Hancock'	30-40cm height, good strong branching form	3L pot	45cm centres or 5 plants/m
160	Hyd pet	Climber	Hydrangea petiolaris	80-100cm ht, good branching form	5L pot	45cm centres or 5 plants/m
365	Pyr cocc	Climber	Pyracantha coccinea	80-100cm ht, good branching form	5L pot	45cm centres or 5 plants/m

No	Abbre	Notes	Species	National Plant Specification/Description	Root/condition	Density and Planting Requirements (page 3 of 8)
3. General Ornamental Trees and Large Shrubs to Ground Level Courtyards and Gardens (selected species for Roof Gardens in raised planters only)						
3	Acer jap	1 to CONTAINERISE	Acer japonicum 'Aconitifolium' (Amur Maple)	Multi stemmed, 200-250cm height. 3x tr	Rootballed or containerised for planting outside season	As shown on plans. Pits not less than 1800mm dia x 900mm depth. Pits to at least 250mm deeper and 500mm wider than root system when fully spread.
5	Acer pal O	4 to CONTAINERISE	Acer palmatum 'Osakazuki'	Multi stemmed, 180-200cm height. 3x tr	As above	
11	Cor kou	4 to CONTAINERISE	Cornus kousa	Multi stemmed, 180-200cm height. 3x tr	As above	
3	Pru ser		Prunus mume 'Beni-Chidori'	Multi stemmed, 180-200cm height. 3x tr	As above	
11	Pru pan	4 to CONTAINERISE	Prunus pandora	Multi stemmed, 180-200cm height. 3x tr	As above	
6	Fruit Tree		Malus domestica Red Falstaff	Grafted 120-150cm height.	As above	
3	Fruit Tree		Malus domestica Greensleeves	Grafted 120-150cm height.	As above	
15	Acer pal LP	shrub	Acer palmatum 'Dissectum'	100-120cm ht, multi stemmed	min 7.5L pot	
11	Pru incK	shrub	Prunus incisa Kojo-no-mai'	100-150cm ht, multi stemmed	min 7.5L pot	
14	Phy nig	bamboo-visual only	Phyllostachys nigra (Black Bamboo)	Strong clump 200cm-250cm height	7.5L pot	
5	Rhu typ L		Rhus typhina 'Laciniata'	175-200cm ht multi stemmed. Strong branched forms	min 7.5L pot	As shown or 3/m2
11	Tra for	Chusan Palm	Trachycarpus fortunei (large)	150-175cm ht good form	10L pot	
243	Cor san AS	shrub	Cornus sanguinea 'Arctic Sun'	120-150 cm height, good strong branching form, at least three breaks in lower third	5L pot	
9	Cort sell	Om grass	Cortaderia selloana (Pampus Grass)	100cm ht, good form	min 7.5L pot	
4	Hyd asp vil	sbrub	Hydrangea aspera villosa	100-120 cm ht, multi stemmed	min 7.5L pot	
7	Hyd que	sbrub	Hydrangea quercifolia	100-120 cm ht, multi stemmed	min 7.5L pot	
20	Pin mug M	low conifer	Pinus mugo Mughus	70-80cm ht, 3x trans, rounded mound form	5L pot	
57	Phi A	shrub	Philadelphus 'Avalanche'	100-120 cm ht, multi stemmed	min 7.5L pot	
11	Vib bod D	shrub	Viburnum bodnatense 'Dawn'	100-120 cm ht, multi stemmed	min 7.5L pot	

No	Abbre	Notes	Species	National Plant Specification/Description	Root/condition	Density and Planting Requirements (page 4 of 8)
4. General Plants and Ground Cover to Main Arrival Space, Gardens, Courtyards and Roof Gardens						
270	Ane bl WS	Mix A, Mix L	Anemone x hybrida Honorine Jobert (to subst. blanda)	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
243	Ane hup S	Mix E, Mix J	Anemone hupehensis 'Splendens'	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
138	Ane hup PH	Mix G	Anemone hupehensis Prinz Heinrich	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
108	Ane syl	Mix R	Anemone sylvestris	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
180	Alc mol	Mix L	Alchemilla mollis	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
152	Ast m m	Mix F, single	Astrantia major mix (Alba/Claret/Roma)	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
180	Aub BC	single	Aubrietia Blue Cascade	20-30cm ht, good clump form	2L pot	30cm centres or 11 plants/m
270	Bru mac JF	Mix C	Brunnera macrophylla 'Jack Frost'	20-30cm ht, good clump form	2L pot	30cm centres or 11 plants/m
14	Carel A	single species	Carex elata 'Aurea'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
594	Car mo V	single species	Carex morrowii 'Variegata'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
1206	Car gla BZ	single species	Carex glauca 'Blue Zinger'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
140	Croc cit	Mix M	Crocsmia 'Citronella'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
140	Croc luc	Mix G	Crocsmia 'Lucifer'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
69	Cen mon	Mix D	Centaurea montana	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
18	Cis pur	single species	Cistus purpureus	60-80cm height, good strong branching form	3L pot	75cm centres or 2 plants/m or as shown
127	Cir jap	Mix E	Cirsium japonicum	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
14	Cor aus	single species	Cordyline australis	60-80cm ht good form	5L pot	As shown
498	Dry fe mas	Mix A, Mix B, Mix R	Dryopteris felix-mas (Male Fern)	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
108	Ery Pla	Mix R	Eryngium 'Planum'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
760	Far m S		Fargesia murielae 'Simba' or 'Winter Joy'	80-100cm ht, good clump form-lower	3L pot	50cm centres or 2 plants/m as a single row

No	Abbre	Notes	Species	National Plant Specification/Description	Root/condition	Density and Planting Requirements (page 5 of 8)
223	Fes gla EB	Mix N	Festuca glauca 'Elijah Blue'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
492	Ger JB	single species	Geranium 'Johnsons Blue'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
168	Ger P	single species	Geranium sanguineum	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
140	Geu LD	Mix M	Geum 'Lemon Drops'/'Fire Opal' Mix	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
172	Hak mac	single species	Hakonechloa macra	40-60cm ht, good clump form	3L pot	50cm centres or 4 plants/m
152	Helle mix	Mix F	Helleborus (mixed)	20-30cm ht, good clump form	2L pot	30cm centres or 11 plants/m
180	Heu PPB	Mix D, single	Heuchera 'Petite Pink Bouquet' /mixed	20-30cm ht, good clump form	2L pot	30cm centres or 11 plants/m
152	Heuc tia	Mix F	Heucherella tiarelloides	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
138	Hos mix	Mix A, single	Hosta 'Blue Angel'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
69	Lav sp D	Mix D	Lavandula spica 'Dutch'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
85	Lav Hid	Mix D and single.	Lavandula angustifolia 'Hidcote'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
1442	Lav Mun	single	Lavandula angustifolia 'Munstead'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
701	Mat stru	Mix B, Mix H, Mix L	Matteucia struthiopteris	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
345	Mis sin G	Mix P, single	Miscanthus sinensis 'Gracillimus' (tall)	60-80cm ht, good clump form	5L pot	75cm centres or 2 plants/m or as shown
6	Mis Zeb	single	Miscanthus 'Zebrinus' (tall)	60-80cm ht, good clump form	5L pot	as shown
486	Mol Bre	Mix K, Mix P	Molinia 'Breeze'	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
486	Mol PP	Mix K, Mix P	Molinia 'Poul Petersen'	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
290	Nep ner	mix D, Mix H	Nepeta nervosa	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
570	Op pl Nig	Mix B, Mix C	Ophiopogon planiscarpus 'Nigrescens'	20-30cm ht, good clump form	1L pot	30cm centres or 11 plants/m
488	Pen vil	Mix E, Mix G, Mix N	Pennisetum vilosum	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
496	Pen thu RB	Mix J, Mix K, Mix N	Pennisetum thunbergii 'Red Buttons'	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m

No	Abbre	Notes	Species	National Plant Specification/Description	Root/condition	Density and Planting Requirements (page 6 of 8)
265	Pen set	Mix E, Mix G	Pennisetum setaceum	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
362	Pen alo H	Mix M, Mix N	Pennisetum alopecuroides 'Hameln'	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
401	Per at BS	Mix H, Mix L	Perovskia atriplicifolia 'Blue Spire'	30-40cm ht, good clump form	3L pot	40cm centres or 6 plants/m
2840	Pers aff Su	single	Persicaria affinis 'Superba'	20-30cm ht, good clump form	2L pot	45cm centres or 5 plants/m
300	Pte cre	Mix B,	Pteris cretica - can substitute with Dryopteris crispera Critata	20-30cm ht, good clump form	2L pot	30cm centres or 11 plants/m
139	Rud Gold	Mix M	Rudbeckia 'Goldstrum'	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
116	Rud MB	Mix J	Rudbeckia hirta 'Cherry Brandy'	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
53	Rosa BC	Mix Q	Rosa 'Brother Cadfael'	60-80cm ht, good clump form	3L pot	60cm centres or 2 plants/m or as shown
80	Rosa GJ	Mix Q	Rosa 'Gertrude Jekyll'	60-80cm ht, good clump form	3L pot	60cm centres or 3 plants/m or as shown
55	Rosa SI	Mix Q	Rosa 'Sceptor d 'Isle'	60-80cm ht, good clump form	3L pot	60cm centres or 2 plants/m or as shown
350	Ros off	Mix H, single	Rosmarinus officinalis 'Prostratus'	20-30cm ht, good clump form	2L pot	40cm centres or 6 plants/m
270	Sal arg	Mix C	Salvia argentea	30-40cm ht, good clump form	2L pot	30cm centres or 11 plants/m
127	Sal greg HL	Mix E	Salvia greggii 'Hot Lips'	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
116	Sal greg RB	Mix J	Salvia greggii 'Royal Bumble'	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
550	Sax x urb LP	single edging	Saxifraga x urbium 'London Pride'	20-30cm ht, good clump form	1L pot	30cm centres or 11 plants/m
583	Sax umb P	single edging	Saxifraga umbrosa 'Primuloides'	20-30cm ht, good clump form	1L pot	30cm centres or 11 plants/m
46	Spir x arg	shrub single	Spiraea x arguta	60-80cm height, good strong branching form	3L pot	75cm centres or 2 plants/m or as shown
152	Stac lan	Mix F	Stachys lanata	20-30cm ht, good clump form	1L pot	40cm centres or 6 plants/m
329	Sti gig	Mix P	Stipa gigantea	80cm ht, multi stemmed	5L pot	75cm centres or 2 plants/m or as shown

No	Abbre	Notes	Species	National Plant Specification/Description	Root/condition	Density and Planting Requirements (page 7 of 8)
520	Sti ten	Mix K, Mix M, Mix N	Stipa tenuissima (Anemanthele lessoniana)	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
270	Tia cord	Mix C	Tiarella cordifolia	30-40cm ht, good clump form	2L pot	30cm centres or 11 plants/m
90	Tell gra	Mix A	Tellima grandiflora	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
330	Vero spi Rot	Mix H, Mix R	Veronica spicata 'Rotfuchs'	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
90	Ver vir L	Mix A	Veronicastrum virginicum 'Lavendeltrum'	30-40cm ht, good clump form	2L pot	40cm centres or 6 plants/m
810	Vib dav	single species	Viburnum davidii	20-30cm ht, good clump form	2L pot	45cm centres or 5 plants/m
3	Yuc ros	single	Yucca rostrata 'Blue Swan'	60-80cm height, good form	3L pot	75cm centres or 2 plants/m or as shown
Building Line Edging Plants						
680	Sed CC		Sedum Coral Carpet	Sedum planted blanket min 20mm depth substrate.	2L pot	30cm centres or 11 plants/m
5. Highlight Plants (Main Arrival and Gardens)						
Highlight plants to be scatter planted amongst the mixes in gardens and courtyards as directed by the Landscape Architect						
200	Acan mol	highlight	Acanthus mollis	30-40cm ht, good clump form	3L pot	Plant in groups of 3
200	Ech pur	highlight	Echinacea purpurea	20-30cm ht, good clump form	2L pot	Plant in groups of 3
200	Hem BB	highlight	Hemerocallis - mixed	20-30cm ht, good clump form	2L pot	Plant in groups of 3
200	Kni uva	highlight	Kniphofia uvaria (Red)	20-30cm ht, good clump form	2L pot	Plant in groups of 3
200	Mon Aq	highlight	Monarda 'Aquarius'	20-30cm ht, good clump form	2L pot	Plant in groups of 3
200	Mon CS	highlight	Monarda 'Cambridge Scarlet'	20-30cm ht, good clump form	2L pot	Plant in groups of 3
200	Verb bon	highlight	Verbena bonariensis	30-40cm ht, good clump form	3L pot	Plant in groups of 3
200	Cam qua	highlight	Camassia quamash	20-30cm ht, good clump form	2L pot	Plant in groups of 3
200	Peo lac SB	highlight	Paeonia lactifolia 'Sarah Bernhardt'	30-40cm ht, good clump form	3L pot	Plant in groups of 3

7. NBS Section Q35 - Landscape Maintenance

Generally

110 Notice

1. Give notice before
 - 1.1. Application of herbicide.
 - 1.2. Application of fertilizer.
 - 1.3. Watering.
 - 1.4. Each site maintenance visit.
2. Period of notice: 7 days

130 Reinstatement

1. Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: Reinstate to original condition.

140 Control of mammalian pests

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

155 Watering

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

160 Water restrictions

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

170 Disposal of arisings

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

180 Chipping or shredding

1. General: Not permitted on site.

181 Mechanical equipment

1. General: Minimize.
2. Prohibited equipment: Chippers, Leaf blowers
3. Timing: Use of mechanical equipment allowed between the hours of 10:00 am and 4:00 pm only

190 Litter

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

195 Protection of existing grass

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

197 Cleanliness

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

Grassed areas

210 Maintenance of grassed areas

1. General: Maintain turf in a manner appropriate to the intended use.
2. Soil and grass
 - 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.
3. Ornamental lawns: Maintain reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills.
 - 3.1. Edges: Neat and well defined, in clean straight lines or smooth flowing curves.
4. Litter and fallen leaves: Remove regularly to maintain a neat appearance.

220 Grass cutting generally

1. Before mowing: Remove litter, rubbish and debris.
2. Finish: Neat and even, without surface rutting, compaction or damage to grass.
3. Edges: Leave neat and well defined. Neatly trim around obstructions.
4. Adjoining hard areas: Sweep clear and remove arisings.
5. Drought or wet conditions: Obtain instructions.

226 Tree stems

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

235 Bulbs and corms in grassed areas

1. Before flowering: Do not cut.
2. Interval between end of flowering and start of grass cutting (minimum): 6 weeks

240 Mowing strips

1. Location: Along the base of walls, fences and hedges
2. Width (approximate): 150 mm.
3. Operations: Maintain by hand weeding and cultivation

250 Leaf removal

1. Operations: Collect fallen leaves.
2. Special requirements: Remove by hand raking
3. Disposal: Shred and compost on site

255 First cut of

1. Description: ALL GRASSED AREAS
2. Height of initial growth: 50 mm
3. Preparation
 - 3.1. Debris and litter: Remove.
 - 3.2. Stones and earth clods larger than 25 mm in any dimension: Remove
4. Height of first cut: 40 mm
5. Mower type: Cylinder
6. Arisings: Remove for composting on site

260 Mowing lawns

1. Grass height: Maintain between 25 and 50 mm
2. Arisings: Remove for composting on site

265 Mowing general areas

1. Grass height: Maintain between 25 and 50 mm
2. Arisings: Remove for composting on site

285 Top dressing

1. Location: All lawns
2. Timing: Following scarification and aeration
3. Material: Compost/ sand/ loam mix
4. Supplier: Contractors choice
 - 4.1. Product reference: Submit proposals
5. Declaration of analysis: Submit.
6. Additional analyses: Not required

7. Samples: Not required

8. Application rate: 1 kg/m²

290 Rolling

1. Location: All lawns
2. Timing: February or March, after first mowing
3. Roller: 100 kg
4. Operations: Consolidate turf and reduce frost heave.

295 Spiking

1. Location: All lawns
2. Timing: February or March, after first mowing
3. Operations: Aerate the soil and improve surface water penetration.
4. Depth (minimum): 75 mm into soil

300 Scarifying

1. Location: All lawns
2. Timing: February or March, before first cut
3. Operations: Relieve thatch conditions and remove dead grass.
4. Depth (maximum): 15 mm
5. Arisings: Remove for composting on site

309 Edges to seeded areas

1. Location: Adjacent to planting beds and around trees
2. Timing: After seeded areas are well established.
3. Method: Cut to clean straight lines or smooth curves. Draw back soil to permit edging.
4. Arisings: Remove.

310 Re-forming grass edges

1. Location: All edges
2. Method: Draw back soil and re-form edges to clean straight lines or smooth flowing curves, sloping slightly back from vertical.

320 Levelling hollows and bumps in turf

1. Standard: To BS 7370-3, clauses 12.4 and 12.5.

325 Relieving surface compaction in turf

1. Standard: To BS 7370-3.
2. Method: Spiking
3. Top dressing: Not required
 - 3.1. Depth: 2-3 mm

330 Selective herbicide

1. Location: All lawns
2. Herbicide: Contractor's choice
3. Areas not to be sprayed: Desirable herbaceous plantings,

345 Control of Japanese knotweed

1. Operations: Spot treat in June and September during suitable weather conditions and when plants are growing vigorously.
2. Herbicide: In accordance with the INNSA ‘Code of practice. Managing Japanese knotweed’
3. Application: In accordance with the INNSA ‘Code of practice. Managing Japanese knotweed’
4. Arisings: In accordance with the INNSA ‘Code of practice. Managing Japanese knotweed’

350 Fertilizer – spring application

1. Type: Slow release
2. Application rate: 60 g/m²

360 Fertilizer – autumn application

1. Type: Slow release
2. Application rate: 60 g/m²

375 Pest control

1. Location: Ornamental lawns
2. Treatment: Insecticide
 - 2.1. Manufacturer: Contractor’s choice
 - 2.1.1. Product reference: Contractor’s choice
3. Timing: As manufacturer’s recommendation

380 Reinstatement of damaged lawns

1. Damaged turf: Remove to a depth of 30 mm.
2. Preparation: Cultivate substrate to a fine tilth.
3. Reinstatement: Contractor’s choice of returfing or topsoiling and reseedling:
 - 3.1. Returfing: Quality and appearance to match existing.
 - 3.2. Reseeding: Fill with fine topsoil to BS 3882 multipurpose class, free from stones, debris and weeds. Reseed with a seed mix to match existing grass in quality and appearance.
4. Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

381 Reinstatement of worn or damaged lawns

1. Worn or damaged areas: Make good by returfing or reseedling:
 - 1.1. Returfing standard: To BS 7370-3, Clause 12.2.
 - 1.2. Reseeding standard: To BS 7370-3, Clause 12.6.
2. Turf or seed: To match existing in appearance and quality.
3. Protection and watering: Provide as necessary to promote successful germination and/ or establishment.

Flower beds/ seasonal beddings

460 Beds of perennials or perennials and annuals

1. Plant supports: Stake and tie plants using flower canes.
 - 1.1. Length: 400 mm
 - 1.2. Maintain throughout the growing season.
2. Gaps in planting: Refill by replanting.
3. Watering
 - 3.1. New plants: Before and after planting out.
 - 3.2. Ongoing: As necessary for the continued thriving of all planting.
4. Operations at end of growing season
 - 4.1. Trim: Older flowering stems of herbaceous perennials.
 - 4.2. Remove: Redundant plant supports, litter, debris and arisings.
 - 4.3. Cultivate: Fork over the soil, taking care not to cause undue disturbance to plants.
 - 4.4. Top dress: Apply sanitized and stabilized compost top dressing.

470 Flower beds generally

1. Operations
 - 1.1. Remove: Dead flower heads, fallen leaves, litter and debris.
 - 1.2. Weeds: Thoroughly hand weed.
 - 1.3. Cultivate: Lightly hoe.
 - 1.4. Trim: Clip grass edges.
2. Fungicide: Not required
3. Insecticide: Not required

490 Thinning by removal of surplus plants

1. Plants to be thinned: to be advised by maintenance contractor
2. Standard: BS 7370-4, clause 3.5.17.1.
3. Timing: Thin when foliage of adjacent plants has begun to touch.
4. Roots
 - 4.1. Disturbance to adjacent plants: Minimize.
 - 4.2. Soil: Refill holes with topsoil to leave an even graded surface.
 - 4.3. Mulch: Maintain mulch as original specification.
5. Adjacent plants: Make good any minor damage immediately.
6. Plants for retention: Select plants with a strong healthy habit.
7. Mature planting density: Contractor to present methodology

Shrubs/trees/hedges

500 Establishment of new planting

1. Duration: One full growing seasons from the date of planting
2. Weed control
 - 2.1. Method: Keep planting beds clear of weeds by maintaining full thickness of mulch hoeing and screefing.
 - 2.2. Area: Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
3. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
4. Watering: As necessary to maintain healthy growth

502 Establishment of new planting – fertilizer

1. Time of year: March or April.
2. Type: Slow release
3. Spreading: Spread evenly.
 - 3.1. Application rate: 300 g/m²

515 Tree guy wires

1. Inspection/ Maintenance times: Immediately after strong winds
2. Operations
 - 2.1. Replace or resecure loose or missing guy wires.
 - 2.2. Adjust to suit stem growth and to provide correct and uniform tension.
3. Removal: During spring when no longer required to support the tree

520 Refirming of trees and shrubs

1. Timing: After strong winds, frost heave and other disturbances.
2. Refirming: Tread around the base until firmly bedded.
3. Collars in soil at base of tree stems, created by tree movement: Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

525 Tree guards

1. Loose or defective guards: Adjust, refix or replace to original specification and to prevent chafing.

537 Nesting wild birds

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

qualified ecologist and submit report

2. Accidental disturbance: Report immediately.

540 Pruning generally

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

545 Pruning of excessive overhang

1. Timing: Annually
2. Operations: Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.
3. Special requirements: None

550 Pruning of excessive height

1. Timing: Annually
2. Operations: Remove excessive height Remove excessive height as required to maintain good form.

555 Pruning trees and shrubs

1. Standard: To BS 7370-4.
2. Special requirements: None

570 Formative pruning of young trees

1. Standard: Type and timing of pruning operations to suit the plant species.
2. Time of year: Do not prune during the late winter/ early spring sap flow period.
3. Young trees up to 4 m high
 - 3.1. Crown prune by removing dead branches and reducing selected side branches by one

third to preserve a well-balanced head and ensure the development of a single strong leader.

3.2. Remove duplicated branches and potentially weak or tight forks. In each case cut back to live wood.

4. Whips or feathered trees: Do not prune.

5. Operatives: Approved specialist contractor

575 Pruning ornamental shrubs

1. General: Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.

2. Suckers: Remove by cutting back level with the source stem or root.

580 Pruning flowering species of shrubs and roses

1. Time of year

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

600 Trimming rapidly establishing hedges

1. General: Allow to reach planned height as rapidly as possible.

- 1.1. Form: Trim back lateral branches moderately.

605 Trimming slowly establishing hedges

1. Operations

- 1.1. Timing: Cut back hard in June and September to encourage bushy growth down to ground level.
- 1.2. Form: Allow to reach planned dimensions only by gradual degrees, depending on growth rate and habit.

620 Removal of dead plant material

1. Operations: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

625 Climbing plants

1. Pruning: Remove excess growth, to ensure that signs, light fittings, doors and windows are kept clear at all times.

2. Insecure growth: Attach to supporting wires or structures using Do not use fixings that can be removed by residents.

3. Supporting structures: Check and repair as necessary.

630 Dead and diseased plants

1. Removal: As soon as possible

2. Replacement: In the next scheduled round of replacement planting

635 Reinstatement of shrub/ Herbaceous areas

1. Dead and damaged plants: Remove.

2. Mulch/ matting materials

2.1. Carefully move to one side and dig over the soil, leaving it fit for replanting.

3. Do not disturb roots of adjacent plants.

4. Replacement plants

4.1. Use pits and plants: To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.

4.2. Additional requirements: Submit proposals

5. Dressing: Slow release fertilizer:

- 5.1. Type: Contractor's choice
- 5.2. Application rate: As manufacturer's recommendations

640 Thinning by removal of surplus plants

1. Plants to be thinned: Advised by maintenance contractor

2. Standard: BS 7370-4.

3. Timing: When foliage of adjacent plants has begun to touch

4. Roots

4.1. Disturbance to adjacent plants: Minimize.

4.2. Soil: Refill holes with topsoil to leave an even graded surface.

4.3. Mulch: Maintain mulch as original

specification.

4.4. Adjacent plants: Make good any minor damage immediately.

5. Plants for retention: Select plants with a strong healthy habit.

6. Mature planting density: Contractor to present methodology

645 Weed control generally

1. Weed tolerance: Weed to clear ground every 2 weeks

2. Adjacent plants, trees and grass: Do not damage.

650 Hand weeding

1. General: Remove weeds entirely, including roots.

2. Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.

3. Completion: Rake area to a neat, clean condition.

4. Mulch: Reinstate to original depth.

655 Weed cutting by hand or machine

1. Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 50 mm.

2. Herbicides: Give notice before use

657 Herbicide to kill regrowth

1. Type: Suitable foliar acting herbicide to kill regrowth.

2. Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

665 Weed control with winter herbicide

1. Type: Suitable residual soil acting herbicide.

2. Time of year: Unless otherwise agreed, complete before end of March.

3. Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

670 Weed control with summer herbicide

1. Type: Suitable foliar acting herbicide.

2. Timing: Allow recommended period for herbicide to take effect before clearing dead weeds.

675 Digging over

1. General: Dig over beds. Do not damage existing plants, bulbs and roots.

1.1. Depth of dig (minimum): 100 mm

680 Soil aeration

1. Compacted soil surfaces

1.1. Prick up: To aerate the soil of root areas and break surface crust.

1.2. Size of lumps: Reduce to crumb and level off.

1.3. Damage: Do not damage plants and their roots.

685 Soil level adjustment

1. Level of soil/mulch at edges of beds: Reduce to 50 mm below adjacent grass or hard surface.

1.1. Arisings (if any): Spread evenly over the bed.

690 Maintenance of loose mulch

1. Thickness (minimum): 50 mm

1.1. Top up: Annually

2. Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.

3. Weeding: Remove weeds growing on or in mulch by hand weeding.

695 Fertilizing established trees and shrubs

1. Time of year: After flowering

2. Type of fertilizer: Slow release

3. Application: Spread evenly.

3.1. Rate: 60 g/m²

700 Snow removal from shrubs/ Trees

1. Standard: To BS 7370-4.

2. Plants subject to snow removal: All evergreens

3. Timing: Within 24 hours of snowfall

705 Winter leaf removal

1. Operations: Take down temporary leaf fences. Collect accumulations of drifted leaves from the vicinity and from planting beds.

2. Arisings: Compost on site

Tree work

810 Tree work generally

1. Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.

2. Protection: Avoid damage to neighbouring trees, plants and property

3. Standard: To BS 3998.

4. Removing branches: Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.

5. Appearance: Leave trees with a well-balanced natural appearance.

6. Chain saw work: Operatives must hold a Certificate of Competence.

7. Tree work: To be carried out by an approved member of the Arboricultural Association.

815 Additional work

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

820 Prevention of wound bleeding

1. Standard: To BS 3998.

825 Prevention of disease transmission

1. Standard: To BS 3998.

830 Cleaning out and deadwooding

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

835 Cutting and pruning generally

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

840 Crown reduction/ Shaping

1. General: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.
2. Operations:

845 Crown lifting

1. Clearances: Remove branch systems to give clearance.
 - 1.1. Height: 2.5 m above footpaths

2. Removing branches: Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

850 Crown thinning

1. Removing branches: Remove inward growing, crossing, rubbing, dead and damaged branches.
2. Thinning: Selectively remove secondary and small live branch growth evenly throughout the crown.
 - 2.1. Quantity: 15 %
3. Cutting: Make no cuts of more than 25 mm diameter.
 - 3.1. Branches: Cut back to lateral or sublateral buds or branches without leaving stumps.
4. Appearance: Leave a uniform and well-balanced structure of branches and foliage.

855 Cutting tree roots

1. Excavating: Use hand tools only.
2. Protected area: Do not cut roots within an area which is the larger of:
 - 2.1. The branch spread of the tree.
 - 2.2. An area with a radius of half the tree's height, measured from the trunk.
3. Outside protected area: Give notice of roots exceeding 50 mm in diameter. Do not cut without approval.
4. Cutting
 - 4.1. Cutting: Make clean smooth cuts with a hand saw.
 - 4.2. Wounds: Minimize. Avoid ragged edges.
 - 4.3. Finishing: Pare cut surfaces smooth with a sharp knife.
5. Backfilling
 - 5.1. Protection: Cover cut roots with clean sharp sand.
 - 5.2. Material: Backfill with original topsoil.

860 Removing trees, shrubs and hedges

1. Standard: To BS 3998.
2. Existing services: Check for below and above ground services. Give notice if they may be affected.
3. Shrubs and smaller trees: Cut down and grub up roots.
4. Tree stumps
 - 4.1. Treatment: Remove mechanically to a minimum depth of 300 mm below ground level
 - 4.2. Removal by winching: Give notice. Do not use other trees as supports or anchors.
5. Protection: Avoid damage to neighbouring trees, plants and

property

6. Work near retained trees: Where tree canopies overlap and in confined spaces generally, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.
7. Filling holes
 - 7.1. Material: Use as-dug material and/ or imported soil as required.
 - 7.2. Finishing: Consolidate and grade to marry in with surrounding ground level.

865 Bark damage

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

870 Cavities in trees

1. Investigation: Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.
 2. Water filled cavities: Do not drain.
 3. Sound wood inside cavities: Do not remove.
 4. Cavity openings: Do not cover
- Water areas - Not Used

Hard landscape areas/fencing

900 Snow clearance

1. Clearance: When instructed
2. De-icing: To footpaths
 - 2.1. Material: Grit
 - 2.2. Timing: When freezing precipitation is forecast
 - 2.3. Application rate: Spread evenly at a rate of 10 g/m².

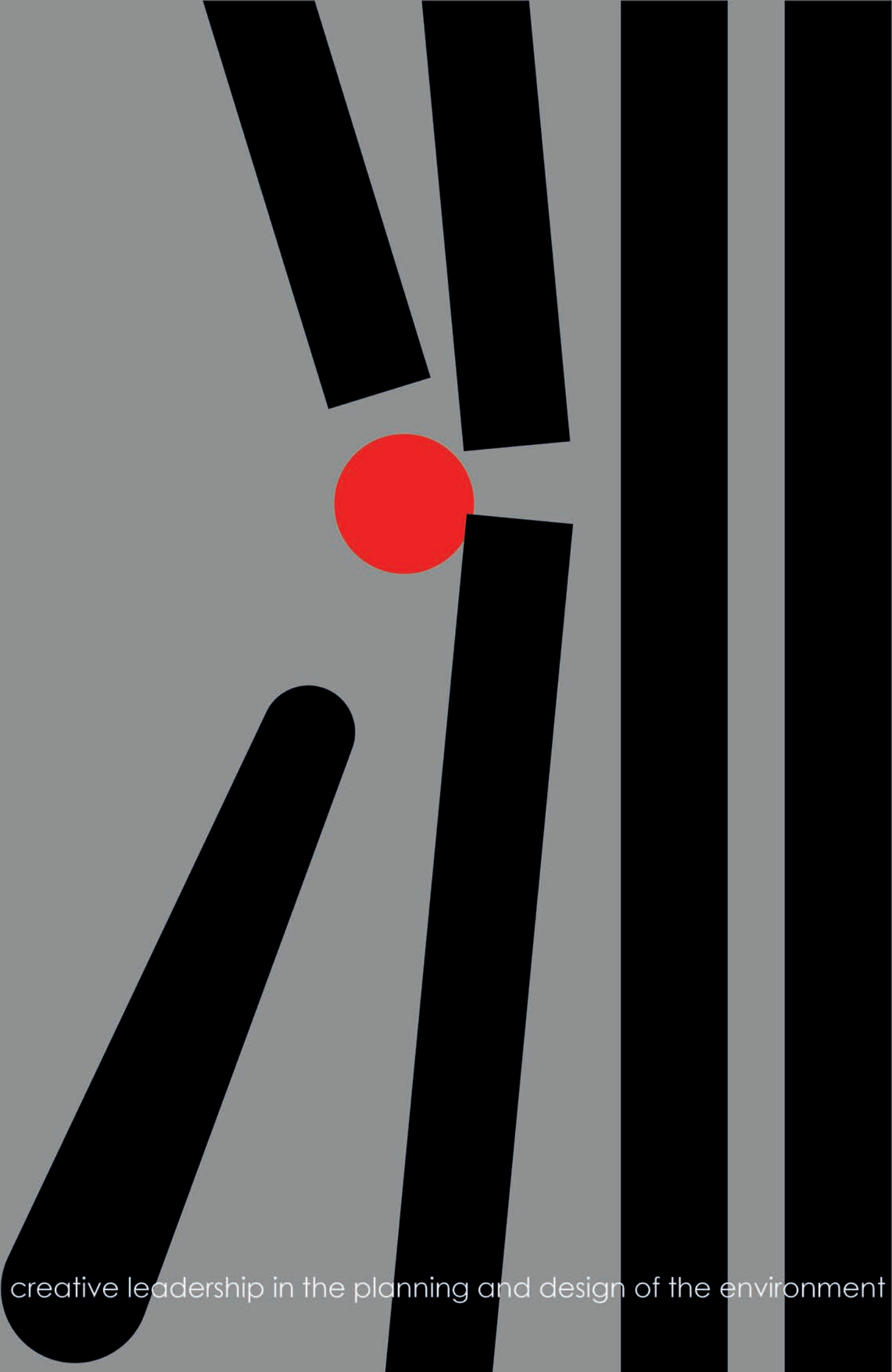
910 Hard surfaces and gravel areas

1. Herbicide: Apply a suitable foliar acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings.
2. Hard surfaces: Remove litter, leaves and other debris.

3. Surface gutters and channels: Remove mud, silt and debris.
4. Drainage gullies: Empty traps and flush clean.
5. Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
6. Repairs to flexible bituminous pavings: In accordance with the original paving specification or BS 7370-2, clause 4.12.
7. Stain removal: In accordance with BS 7370-2, table 4.

920 Fencing

1. Fences: Inspect and repair to maintain protection against intruders.



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