

University of Huddersfield Southgate 2

Landscape Management Plan

SG2-GIL-XX-00-RP-L-70001

March 2025

Gillespies

Date	Revision	Description	Written By	Checked By	Issued By
12/03/2025	C01	Issued for Construction	SVU	WC	SVU

CONTENTS

1. PREFACE

- 1.1 History and Background
- 1.2 Design Concept
- 1.3 Development Brief

SOFT LANDSCAPE

2. LANDSCAPE MANAGEMENT AND MAINTENANCE SOFT LANDSCAPE

- 2.1 Watering
- 2.2 Semi Mature Trees
- 2.3 Mixed Shrub and Perennial Planting
- 2.4 Lawn
- 2.5 Wildflower Meadow

3. SCHEDULE OF MANAGEMENT AND MAINTENANCE SOFT LANDSCAPE YEARS 1 – 5

4. SPECIFIC PRUNING AND THINNING REQUIREMENTS FOR TREE AND SHRUB PLANTING

- 4.1 Pruning Species
- 4.2 Pruning Particular Species
- 4.3 Critical Health and Safety Information

To be read in conjunction with Landscape Drawings (10011 & 40011)

2 PREFACE

The Landscape Management Plan has been written for University of Huddersfield Southgate 2 to help:

- Successful establishment of new trees.
- Protect and enhance the site's ecological value
- Ensure that the quality of the implemented soft and hard landscape is maintained and managed to the highest standards

2.4 The Site

- The soft works for the application site (gross area approximately 150.20m²), the site consists of new high quality concrete paving and seating and raised planters planted with shrubs, herbaceous planting and trees.
- This report sets out maintenance and management, inspection tasks, procedures and regimes for areas of soft landscape only.

1.2 Design Concept

- For external areas Landscape General Arrangement (landscape drawing SG2-GIL-XX-00-DR-L-10011).
- The design of the external landscape has been carefully developed to create a safe, secure and welcoming environment for all students, staff and visitors.
- The shrub and perennial planting through the landscape have been selected for their aesthetic and biodiversity value. This will include a combination of native and non-native species.

1.3 Development Brief

This document has been produced as a Landscape Management Plan for University of Huddersfield Southgate 2 and the site management company to adopt. It provides a resource/guide for management of the soft landscape including planting numbers, layout, and protection measures.

Detailed hard and soft general arrangement drawings are listed below:

- **SG2-GIL-XX-00-DR-L-10011 Landscape General Arrangement**
- **SG2-GIL-XX-00-DR-L-40011 Planting Plan**

The current general arrangement and detailed Planting Plans include the following **3** proposed **soft landscape** types:

1. Proposed Semi-Mature Trees
2. Shrub Planting with Specimen Plants
3. Lawn

Before the end of the 5 year landscape management and maintenance plan period the operators will develop a longer term maintenance regime. This will ensure that the objectives of the landscape design continue to be achieved for years to come and be co-ordinated with the wider campus landscape management plan..

2 LANDSCAPE MANAGEMENT AND MAINTENANCE – SOFT LANDSCAPE

GENERAL

The proposed management and maintenance works detailed in this document will be carried out initially by the Landscape Contractor responsible for the soft landscape implementation works, for a period of 12 months from the date of practical completion (running concurrently with the 12 months Rectification Period). The contractor will provide a guarantee for tree and shrub establishment for **12** months. Any failures within these periods will be replaced to match the original specification. Following this maintenance period, University of Huddersfield Southgate 2 will determine to extend the maintenance contract with the soft landscape contractor or to instruct the Management Company's maintenance team to commence the works.

The contractor shall visit site as necessary to carry out the operations described and allow sufficient resourcing. Before the end of the landscape management period by the installation contractor liaison with the management company's maintenance team should be programmed to ensure a seamless handover of operations.

All plants at the end of the 24 months establishment period shall be well established, healthy and in good condition, free from pests and diseases and any visible signs of die back. Any damage arising from the management and maintenance works must be reinstated to original condition and in accordance with the relevant specification and to the satisfaction of the client.

2.1 Watering

During establishment, the Contractor shall inspect the landscape, looking for problems or potential problems in the landscape.

In periods of abnormally dry weather where watering is required, this shall be at the frequency necessary to ensure the establishment and continued healthy growth of all planting and achievement of the overriding objective. Where compacted soil occurs, this shall be loosened and broken up or scooped out to allow water to reach the root zone. When appropriate water shall be applied at the following rates:

- 2)** Amenity grassed areas – 15 litres/m² evenly sprayed over entire area
- b) Shrub and perennial planting – 25 litres/m² evenly applied directly to the soil surface
- c) Individual trees – 75 litres/tree.

Additional watering must be provided as required in periods of extended dry weather.

Where water restrictions apply (hosepipe bans, drought orders, drought directions, and other emergency legislation) an approved alternative supply of water shall be used.

Post establishment, the landscape scheme will generally rely on hand watering or precipitation for water.

2.2 Landscape Management and Maintenance – Trees

All trees planted by the landscape contractor shall be maintained for a period to be agreed upon at a later date with the site owner. Any tree that fails in this period shall be replaced. Replacement trees shall be approved for size and appearance by the owner's authorised representative prior to planting.

The following table sets out the desired objective and the necessary activities to establish and manage the landscape type in order to fulfil the stated objective.

Soft Landscape Type	Objective	Required Operations
Semi Mature Trees	Clear Stem Specimen Trees located in site to add visual interest and ecological value. These semi mature trees sit in soft standing.	- Inspect planting after strong winds, frost heave and other disturbances. Tread around base of trees to re-firm. Break up collars at base of tree formed by tree movement. Backfill with topsoil and re-firm. Inspect tree guying/tree stakes and adjust/reaffix or replace to original specification. - Replace dead or dying trees to original specification during next planting season and in accordance with Planning Conditions. - Trees to be assessed annually by an appropriate arboricultural consultant. - Ground anchors should be adjusted as necessary to ensure that trees remain level. - Edgings and inlet to tree pits should be inspected for any superficial damage and cleaned once yearly or as required to prevent debris building up on the surface and to ensure the irrigation pipe is free from any debris. - Prune trees to BS 7370-4. Timing/type of pruning to suit species and overall height. - Trees – remove duplicated branches and potentially weak or tight forks. Cut back to live wood. Ensure single strong leader on non multi stemmed trees. - For new trees in grassed areas mulch around base of tree ensuring that it is weed free. Diameter of clear areas to be: Trees – 0.5m - New specimen trees to be have clear stem of 2m and above to allow clear sight lines - Remove and dispose of accumulations of winter leaves to composting facility. - Provide protection and watering as necessary to promote successful establishment.

Single-Stem Trees	Single-Stem Specimen Trees located throughout the site in both soft planting and grass.	▪ Inspect planting after strong winds, frost heave and other disturbances. Tread around base of trees to re-firm. Break up collars at base of tree formed by tree movement. Backfill with topsoil and re-firm. Inspect tree guying/tree stakes and adjust/reaffix or replace to original specification. ▪ Staked trees of varying sizes have been planted throughout the site in grass areas, ornamental and semi-ornamental planting areas and within hardstanding. The stakes and ties should be verified and adjusted twice a year to ensure that the stakes are firm and that the ties are not cutting into the trunk of the tree. Stakes to be removed approx. 5 years after planting. ▪ Ground anchors should be adjusted as necessary to ensure that trees remain level. ▪ Edgings and inlet to tree pits should be inspected for any superficial damage and cleaned once yearly or as required to prevent debris building up on the surface and to ensure the irrigation pipe is free from any debris. ▪ Replace dead or dying trees to original specification during next planting season and in accordance with Planning Conditions. ▪ Trees to be assessed annually by an appropriate arboricultural consultant. ▪ Prune trees to BS 7370-4. Timing/type of pruning to suit species and overall height. ▪ Trees – remove duplicated branches and potentially weak or tight forks. Cut back to live wood. Ensure single strong leader on non multi stemmed trees. ▪ For new trees in grassed areas mulch around base of tree ensuring that it is weed free. Diameter of clear areas to be: Trees – 0.5m ▪ New specimen trees to be have clear stem of 2m and above to allow clear sight lines ▪ Remove and dispose of accumulations of winter leaves to composting facility. ▪ Provide protection and watering as necessary to promote successful establishment.
--------------------------	--	---

2.3 Landscape Management and Maintenance – Shrub Planting with Specimen Planting

The following table sets out the desired objective and the necessary activities to establish and manage the landscape type in order to fulfil the stated objective.

Soft Landscape Type	Objective	Required Operations
Shrub Planting with Specimen Plants	To create a uniform cover within planting beds to provide seasonal interest. Free from invading species and with a consistent and close cover throughout the area.	- During the establishment of the planting and before the canopy closes, some weed control will be necessary. Ensure that the whole of the bed areas are maintained weed free by hand. Lightly hoe soil in planting beds. Hand weed only. - Undertake sufficient watering in accordance with Section 2. - Remove dead foliage and old flowered stems and heads. - Replace dead or dying plants to original specification during spring / early summer of the following year. Where planting fails they should be replaced by the same species unless it is felt the original species was inappropriate. - Monitor health and vigour over plants life and replace when plant is deemed unsuitable. Where plants exhibit poor growth organic fertiliser should be added. - Lift and divide congested groups in spring. - Remove and dispose of accumulations of winter leaves to a licenced composting facility. - Apply top dressing over whole of planting beds during the spring of each year within the car park. Composted bark mulch or composted green waste to a depth of 50mm. - Clear snow off planting. - Where possible replanting of any one bed should be phased so that less than a third of the bed is newly planted at any one time. - In early March cut herbaceous species down to 50mm above ground level and remove arising off site to a compost facility. - Green screen – Ensure that stems and shoots of climbers are encouraged to attach themselves to the green screen system. Use twine where necessary. Remove supporting canes once plants have established. - Lavandula angustifolia: to be clipped to removed dead flower stems immediately after flowering.

2.4 Landscape Management and Maintenance – Lawn

The following table sets out the desired objective and the necessary activities to establish and manage the landscape type in order to fulfil the stated objective.

Soft Landscape Type	Objective	Required Operations
Grass Turf and Seed	Maintain a healthy low maintenance and dense grass sward free from disease, fungal growth, discolouration, scorch, wilt, moss, excessive thatch and weeds.	- Remove fallen leaves from grass prior to mowing. - Maintenance to be carried out in accordance with BS 7370-3, tables 3, 6 and 11. - Litter, debris, stones larger than 25mm. in any dimension and rubbish to be removed before mowing. Grass cuts shall produce a neat and even finish. Arisings to be removed from all hard surfaced areas. - Edges to be left neat and well defined. - Reinstate all damaged and worn areas to original specification, with soil levels being tied to existing levels and then re-turfed/seeded - Mowing: cutting height to be a maximum 50mm, minimum height 25mm. after the grass has reached a height of 75mm from initial growth cut between April and October, with all cuttings removed from site to composting facility. Grass against and around obstacles should be strimmed as part of the same operation. Care to be taken around existing trees where exposed roots may be present - Spike to a minimum depth of 75mm in early autumn. Follow with scarifying to remove moss and thatch build up. - Provide protection and watering as necessary to promote successful establishment. - Spot treat weed growth in all grassed areas. Weed control should be generally managed by hand weeding ensuring the weed and roots are entirely removed - Where hand weeding fails to control weed growth, Contractor to gain approval from the employer to apply herbicide treatment to broadleaved weeds during active growth. - Where damage or wear occurs regularly, consideration should be given to replacing the grass with a more appropriate element such as planting. - Ensure the seed supplier's instructions on sowing and aftercare are followed for the A9 General Outfield seed mix. Seed should be sown on a weed free seed bed and any waste material such as bricks or rubble should be removed from site to a licenced facility. - Water during dry periods to ensure successful establishment.

		▪ For seeded areas the first cut should be assessed on the height of the seedlings rather than a fixed length of time. Ensure seedlings have a firm anchorage before mowing and set the mower to two thirds of the height. Gradually reduce the height of the cut down over a number of weeks to the desired height of 20-25mm. ▪ Remove arising off site to a licenced compost facility. ▪ Remove all litter and debris before cutting.
--	--	--

2.5 Landscape Management and Maintenance – Wildflower Meadow Planting

The following table sets out the desired objective and the necessary activities to establish and manage the landscape type in order to fulfil the stated objective.

Soft Landscape Type	Objective	Required Operations
Meadow Planting	Maintain a healthy low maintenance and wildflower planting.	▪ Cut down to 1-2 inches in length and remove clippings in autumn.

**3 LANDSCAPE SCHEDULE OF MANAGEMENT AND MAINTENANCE
WORKS – YEARS 1 – 5 – SOFT LANDSCAPE**

This table to be read in conjunction with information supplied in Section 2 (LANDSCAPE MANAGEMENT AND MAINTENANCE – SOFT LANDSCAPE).

- Q1 – Spring (March/April/May)
- Q2 – Summer (June/July/Aug)
- Q3 – Autumn (Sept/Oct/Nov)
- Q4 – Winter (Dec/Jan/Feb)

*** One operation per year in yrs. 6-15**

Semi-Mature Trees Single and Multistem

Maintenance	Timing (Quarters)	Number of operations (per year)	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-15*	Years 16-25*
Inspection of works to ensure successful establishment, identify defects, and prepare a programme of remedial action and maintenance	Q1 & Q2	2	✓	✓	✓	✓	✓		
Exclude aggressively competitive plants from 500mm dia. around the base of each Tree	Q1 & Q2	2	✓	✓	✓	✓	✓	✓*	✓*
Signs of disturbance to be rectified and erroneous material removed and disposed of offsite.	Q1-Q4	as needed	✓	✓	✓	✓	✓	✓	✓
Remove litter, rubbish, rubble etc.	Q1-Q4	12	✓	✓	✓	✓	✓	✓	✓
Check tree conditions; dead, dying, damaged and diseased. Replace to ensure retained design aesthetic.	Q1-Q4	1	✓	✓	✓	✓	✓		
Ensure 2m clear stem (or above) on Specimen Clear Stem stock	Q4	1	✓	✓	✓	✓	✓		
Remove Fallen Leaves (do not sweep or blow into adjacent planting beds)	Q3 & Q4	2	✓	✓	✓	✓	✓	✓*	✓*
Inspect Stakes, Ties and Supports. Adjust, reaffix, remove where necessary	Q2 & Q4	2	✓	✓	✓	✓	✓		
Check trees after adverse weather conditions	Q1-Q4	as needed	✓	✓	✓	✓	✓	✓	✓

Hedges

Maintenance	Timing (Quarters)	Number of operations (per year)	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-15*	Years 16- 25*
Inspection of works to ensure successful establishment, identify defects, and prepare a programme of remedial action and maintenance	Q1 & Q2	2	✓	✓	✓	✓	✓		
Undertake watering as required	Q1 & Q2	unknown	✓	✓	✓	✓	✓	✓	✓
Remove weed growth by hand and lightly hoe soil in planting bed	Q1 & Q2	4	✓	✓	✓	✓	✓	✓*	✓*
Signs of disturbance to be rectified and erroneous material removed and disposed of offsite.	Q1-Q4	as needed	✓	✓	✓	✓	✓	✓	✓
Remove litter, rubbish, rubble etc.	Q1-Q4	12	✓	✓	✓	✓	✓	✓	✓
Check hedge conditions; dead, dying, damaged and diseased. Replace to ensure retained design aesthetic.	Q1-Q4	1	✓	✓	✓	✓	✓		
Remove dead leaves and wood (do not sweep or blow into adjacent planting beds)	Q3 & Q4	2	✓	✓	✓	✓	✓	✓*	✓*
Application of a slow release organic fertilizer in accordance with manufacturer's instructions.	Q1	1	✓	✓	✓	✓	✓		
Apply top dressing over whole planting bed	Q3	1	✓	✓	✓	✓	✓		
Check hedging plants after adverse weather conditions	Q1-Q4	as needed	✓	✓	✓	✓	✓	✓	✓
Trim hedges	Q3	1	✓	✓	✓	✓	✓	✓	✓

Shrub Planting with Specimen Plants
(native and non native)

Maintenance	Timing (Quarters)	Number of operations (per year)	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-15*	Years 16- 25*
Inspection of works to ensure successful establishment, identify defects, and prepare a programme of remedial action and maintenance	Q1 & Q2	2	✓						
Undertake watering as required	Q1 & Q2	unknown	✓	✓	✓	✓	✓	✓	✓
Remove weed growth by hand and lightly hoe soil in planting bed	Q1 & Q2	4	✓	✓	✓	✓	✓	✓*	✓*
Prune / Cut / Dead head back as appropriate to species for shape, form and desired features (flowers, fruit, foliage)	Q1 - Q4 (species dependent)	1	✓	✓	✓	✓	✓	✓*	✓*
Plant die back shall be removed at the end of winter	Q4	1	✓	✓	✓	✓	✓	✓	✓
Thin planting density in order for full form of plant to be achieved	Q1	1				✓	✓		
Replace Plant stock at end of aesthetic life	Q1	1					✓	✓*	✓*
Check plants condition; dead, dying, damaged and diseased (replace where necessary and plant at next growing season)	Q1	1	✓	✓	✓	✓	✓	✓*	✓*

Application of a slow release organic fertilizer in accordance with manufacturer's instructions.	Q1	1	✓	✓	✓	✓	✓		
Signs of disturbance to be rectified and erroneous material removed and disposed of offsite.	Q1-Q4	As needed	✓	✓	✓	✓	✓	✓	✓
Apply top dressing over whole planting bed	Q3	1	✓	✓	✓	✓	✓		
Remove litter, rubbish, rubble etc.	Q1-Q4	12	✓	✓	✓	✓	✓	✓	✓
Remove Fallen Leaves	Q3 & Q4	2	✓	✓	✓	✓	✓	✓*	✓*

Grass Turf and Seed

Maintenance	Timing (Quarters)	Number of operations (per year)	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-15*	Years 16-25*
Inspection of works to ensure successful establishment, identify defects, and prepare a programme of remedial action and maintenance	Q1 & Q2	4	✓						
First cut after winter/spring using appropriate machinery (approx. fortnightly in main growth seasons and once in September/October)	Q1-Q3	14	✓	✓	✓	✓	✓	✓	✓
Inspect for weed growth and hand weed where necessary	Q1 & Q2	4	✓	✓	✓	✓	✓	✓	✓
Amenity Grass areas - Annual application of a slow release organic fertilizer in accordance with manufacturer's instructions.	Q3 or Q4	1	✓	✓	✓	✓	✓		
Signs of disturbance to be rectified and erroneous material removed and disposed of offsite.	Q1-Q4	as needed	✓	✓	✓	✓	✓	✓	✓
Remove litter, rubbish, rubble etc.	Q1-Q4	12	✓	✓	✓	✓	✓	✓	✓
Remove Fallen Leaves prior to cutting (do not sweep or blow into adjacent planting beds)	Q3 & Q4	2	✓	✓	✓	✓	✓	✓*	✓*
Aeration Spike to depth of 100mm	Q3	1	✓	✓	✓	✓	✓		
Scarify and Top Dress	Q3	1	✓	✓	✓	✓	✓		

Wildflower Turf

Maintenance	Timing (Quarters)	Number of operations (per year)	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-15*	Years 16- 25*
Inspection of works to ensure successful establishment, identify defects, and prepare a programme of remedial action and maintenance	Q1 & Q2	4	✓						
Cut down to 1-2 inches in length and remove clippings in autumn	late Q3	1	✓	✓	✓	✓	✓	✓	✓
Inspect for weed growth and hand weed where necessary	Q1 & Q2	4	✓						
Signs of disturbance to be rectified and erroneous material removed and disposed of offsite.	Q1-Q4	as needed	✓	✓	✓	✓	✓	✓	✓
Remove litter, rubbish, rubble etc.	Q1-Q4	12	✓	✓	✓	✓	✓	✓	✓

4.0 SPECIFIC PRUNING & THINNING REQUIREMENTS FOR TREES AND SHRUB PLANTING

This section relates to the following planting types identified in Section 1, 2 and 3

4.1 Pruning Generally

Pruning to be in accordance with good horticultural and arboricultural practice:

- a) Do not tear or damage stem when removing branches.
- b) Cut cleanly back to sound wood.
- c) Keep wounds as small as possible.
- d) Always cut above and sloping away from an outward facing bud.
- e) Leave a well-balanced natural appearance.
- f) Always use clean sharp tools.
- g) On larger branches, prune to the branch bark ridge or collar.

Pruning shall be carried out at a time that is appropriate to the species, location, season and stage of growth. Trees must not be pruned during the late winter/early spring as this can lead to sap bleeding.

Pruning trees and shrubs shall be to BS 7374-4.

The proposed formative pruning is intended to achieve the following objectives:

- a) Ornamental/native shrubs – encourage healthy and bushy growth and desirable ornamental features.
- b) Young trees – maintain a well-balanced head and ensure the development of a strong leader and branch structure. Remove duplicated branches and weak or tight forks.
- c) Eliminate nuisance problems such as excessive branch overhang.

4.2 Pruning Particular Species

4.2.1 Trees

- a) Trees that flower in early spring should be pruned immediately after flowering.
- b) Trees and shrubs that flower in the summer or autumn should be pruned during early winter.

NOTE – dead branches can be removed at any time of the year.

4.2.2 Shrubs

- a) Winter flowering shrubs should be pruned in spring.

- b) Shrubs flowering between March and July should be pruned immediately after the flowering period.
- c) Shrubs flowering between July and October should be cut back to old wood in winter.

4.2.3 Perennials

- a) Remove faded flowers after flowering, Summer / Autumn depending on species
- b) Remove dead foliage in spring
- c) Grasses (non-evergreen) - cut back to ground in Winter / Spring
- d) Grasses (evergreen) - comb through plant and remove dead foliage in Spring

4.3 Critical Health and Safety Information

The following hazards should be taken into account during the execution of the works:

- Grass mowing, wood cutting machinery and hand tools
- Presence of students, staff and visitors
- Thorny plants and plants known to be skin irritants
- Steeply sloping ground and planting beds on top of retaining walls
- Tree work including working at height, removal of heavy, damaged branches on semi mature trees and clear felling. Moving the cut/felled timber around the site.
- Pesticides, specifically Glyphosate based herbicides and contractor selected ones for treatment of plant pests and diseases.
- Plant wound sealant and fertilizer products.
- Potentially harmful litter (discarded needle sticks, broken glass, and heavy objects)
- Working at height and from a ladder when pruning.