

31.03.2023

Station Hill Reading (Phase 1)

Document Reference: SHR-LDA-X0-XX-RP-L-19-0001, Station Hill - Planning Conditions 57 & 60

The document referenced above is submitted to Reading Borough Council for approval to

Discharge planning condition Block E OPP 57 & Block F OPP 60, (Landscape Management Plan) prior to occupation

Planning condition 57 & 60) requires the following:

Block E & F

No building within any Plot hereby permitted shall be first occupied until a landscaping management plan, including long term objectives, management responsibilities and maintenance schedules for all landscaped areas within that Plot has been submitted to and approved in writing by the Local Planning Authority. The landscape management plan shall be carried out as approved at all times thereafter.

The following report has been prepared to satisfy Plot E Condition 57 and Plot F Condition 60

SHR-LDA-X0-XX-RP-L-19-0001 (Landscape Management Plan)

This document outlines the assessment has been carried out in accordance with the requirements of Phase 1 Development.

Station Hill Phase 1 Management and Maintenance Plan

Soft & Hard Landscape Management

March 2023

Record of Revisions

Revision	Description	Author	Approved	Date
C01	Final Issue	SL	KN	27/03/23

1.0 Introduction

This landscape establishment maintenance specification document for Station Hill Phase 1 in Reading sets out the performance of the required hard and soft landscape maintenance works to ensure successful establishment. The works are expected to be undertaken and completed to the highest quality befitting of this project.

The softworks package consists of a series of character areas, including Friars Street, Garrard Street, Friars Walk, Block E northern courtyard, Block E southern courtyard, Block E Level 01 podium terraces, Block E Level 07 terrace and Block F level 12 terrace and all green roofs on Block E&F. These areas include various combinations of climbers, hedges, herbaceous, shrubs and tree planting that will become over grown and unkempt if not maintained suitably. The character areas will be a mixture of native and non-native trees up to 8 metres in height, herbaceous and ornamental shrubs and grasses. Each area will have its own unique character through its planting scheme providing colourful seasonal interest and structure to the proposed landscape.

1.1. Conservation Areas & Planning Designations

The proposed development site is not located in a Conservation Area. The site is subject to various planning conditions associated with:

Planning Permission Reference. 192032

Special attention should be given to Condition OPP 57, which requires that details of the proposed arrangements for the maintenance of the landscape works shall be provided and notes that:

'No part of the development hereby approved shall be first Occupied until a landscaping management plan, including long term objectives, management responsibilities and maintenance schedules for all landscaped areas has been submitted to and approved in writing by the Local Planning Authority. The landscape management plan shall be carried out as approved at all times thereafter.'

1.2. Tree Preservation Orders (TPOs)

There are no trees with a TPO designation within the development boundary.

1.3. Landscape and Ecological Designations

There is no landscape or ecological designation on the proposed development site.

1.4. Management Objectives

- To create an interesting, diverse and attractive landscape for all users;
- To create new habitats;
- To enhance the amenity value of the site;

To provide a robust landscape setting to the buildings, defining entrances, routes and promote ease of access and movement.

2.0 Management and Maintenance Responsibilities

2.1. Implementation and Maintenance Works

The Main Contractor is responsible for the implementation of the design in accordance with the design, management and maintenance goals. The Main Contractor is to be responsible for the maintenance of all hard and soft landscape components for the duration of the 2 years Defects Liability Period (DLP) and providing a 2 year guarantee for all trees in accordance with the specifications and drawings. For phased completions and/or handovers, the date commences from handover, with the Client accepting Practical Completion and that all necessary insurances are in place.

The Main Contractor will be responsible for ensuring the site is in a good condition and complete with no outstanding defects up to and at PC and will remain responsible for implementation, establishment and maintenance for all areas duration of the 2 years Defects Liability Period (DLP).

The Estates management team will be responsible for the maintenance and management activities in the public realm area following the 2 years Defect Liability Period. The landscape management of podium and roof terraces will be undertaken by landlord management following the 2 years Defect Liability Period. The Estates management team and landlord management team will not take responsibility for incomplete or non-established works or be responsible for defects.

The Main Contractor has responsibility during the establishment phase as outlined in **Section 3.0** below, noting that establishment period starts from implementation and not completion.

2.2. Future Landscape Management

Landscape management will continue to be the responsibility of the Estates team and/or their appointed contractors. The works required are outlined in Section 4.0 below.

Note: irrigation is deemed to be included in public realm and will be undertaken by a specialist landscape contractor/ the appointed Estate Management Company. The landscape management of courtyards, podium and roof terraces will be undertaken by landlord management.

For the purposes of this document the Contractor is representative company or companies' undertaking the works described.

3.0 Establishment/ Maintenance Programme within the defects liability period

3.1. Hard surfacing/ site furniture

3.1.1. Hard surfacing

- Maintain all hard surfaced areas clear of litter, twigs, leaves, glass, debris and similar on a fortnightly basis. Vacuum sweeper by Estate management team, no vacuum use for first six months. Remove all arisings from site at the end of each work period and take them to the designated location for disposal.
- Drainage systems associated with hard surfaces to be inspected and thoroughly cleaned of any silt, dirt, debris, leaves, litter to prevent blockages.
- Cut back undergrowth, overgrowing or overhanging shrubs, hedges and minor tree branches to maintain an unobstructed route for pedestrians, cyclists and vehicles as appropriate.

3.1.2. Site furniture

- Inspection of fences, handrails & balustrades and site furniture and repair as necessary to ensure safe for public use, performing its original function, and not visually detracting from area. Repair/replace/repaint/re-stain/clean as necessary.

The Contractor shall inform the Estate Management team immediately they are aware of any occurrence of acts of vandalism to these areas.

3.2. Soft Landscape

3.2.1. General

At all times planted areas shall be kept clear of all litter and debris and the Contractor shall ensure that all paths are swept clean of arisings. Soil and arisings are to be removed from hard surfaces and grassed areas and removed from site. Leave the works in a clean, tidy condition and after any maintenance operations. Any graffiti shall be removed immediately.

3.2.2. Trees

- Ensure watering system is working – if not, water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four-week period);
- Collars in soil at base of tree stems, created by tree movement shall be broken up by fork, avoiding damage to roots. Backfill with topsoil and re-firm;
- Check guy fixings and adjust as necessary;
- At all times prevent rubbing of ties and adjust to accommodate growth and prevent chafing. Where chafing has occurred, reposition or replace ties to prevent further chafing. Damage to bark to be cut back neatly with a sharp knife; prevent further damage;
- Inspect trees regularly for stem wounds, pests and diseases and treat early;
- Prune dead, dying, crossing, rubbing and damaged branches and encourage new leader as necessary;
- Check aeration pipes regularly and clear debris as necessary;

- Trees shall have mulch circles of 1000mm maintained weed free at all times. Weeding shall be undertaken by hand or weed wiper ensuring that the plants specified under this contract are not affected;
- Bark mulch to be maintained to a depth of 50mm thickness at all times and inspected three times a year in the active growing season. If mulch of found to be less than an even depth of 50mm, it shall then be topped up. Ensure that mulch does not cover up aeration pipes. Leave a 100mm (4in) collar free of mulch around any woody stems to avoid risk of rotting.
- Fallen leaves are not to accumulate and shall be collected removed off site;
- Apply a slow release fertiliser in spring;
- Control rabbits or other mammalian pests. The contractor will submit a method statement for the approval of the Project Manager and Ecologist;
- Replace any failures of plants within the establishment period with immediate effect with the same species and size, these should be coordinated with Employers Agent and Landscape Architect.

3.2.3. **Shrubs and Climbers**

- Maintain healthy, vigorous shrub planting;
- Ensure watering is working – if not, water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period);
- Ensure mona plant system is working in planters on roof terraces – if not, water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period);
- When planting shrubs ensure that planting pit depth is 50mm greater than the root ball and all soil on sides and bottom of the pit is loose;
- Species specific pruning at appropriate time of year to promote healthy growth and species specific shape and form. Ensure nursery's recommendations are followed for each particular specie;
- Apply a slow release fertiliser in spring;
- Fallen leaves are not to accumulate and shall be collected removed off site;
- Weed planting beds by the most appropriate means either by hand, mechanical and chemical use;
- Bark mulch to be maintained to a depth of 50mm thickness at all times and inspected three times a year in the active growing season. If mulch of found to be less than an even depth of 50mm, it shall then be topped up;
- Replace any failures of plants within the establishment period with immediate effect with the same species and size, these should be coordinated with Employers Agent and Landscape Architect.

3.2.4. Formal Hedges

- Ensure watering system is working – if not, water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four-week period);
- Ensure mona plant system is working in planters on roof terraces – if not, water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four-week period);
- Hand-weed planting area **on a weekly basis** to ensure weeds do not go to seed;
- Re-firm soil around any loose plants without compacting;
- Undertake light pruning in late summer/early autumn to remove any leaders or spur growth. All cuttings are to be removed from site;
- Undertake annual trim in late winter/early spring back specified dimensions of 800mm height x 620mm width for intended effect. At same time, prune weak plants or plants suffering from wind rock by 50% to encourage new stem growth and root development. All cuttings are to be removed from site;
- Replenish bark mulch to original depth of 50mm thickness following pruning, ensuring that plants are not buried. Leave a 10cm (4in) collar free of mulch around any woody stems to avoid risk of rotting;
- Apply a slow release fertiliser in spring;
- Replace any failures of plants within the establishment period with immediate effect with the same species and size, these should be coordinated with Employers Agent and Landscape Architect.

3.2.5. Herbaceous planting to soft landscape areas

- Ensure watering system is working – if not, water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period);
- Ensure mona plant system is working in planters on roof terraces – if not, water as necessary to secure healthy establishment and to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period);
- Hand-weed all soft landscape areas **on a weekly basis** to ensure weeds do not go to seed;
- Re-firm soil around any loose plants without compacting;
- If slug and snail damage becomes apparent, Contractor is to water in nematodes to manufacturer's specification and supplement with an organic slug pellet product;
- Where staking is required for larger perennials, the Contractor is to use a suitable, elegant system to detract from any unsightly interventions;
- Cut back all herbaceous planting in late January/early February and remove arisings from site. Contractor to take care not to disturb emerging bulbs during this time. Any dead foliage or skeletal growth that has collapsed, or looks unsightly, should be removed. The planting design has factored in winter structure as a design feature;
- Fallen leaves are not to accumulate and shall be collected removed off site;
- Apply a slow release fertiliser in spring;

- Control rabbits or other mammalian pests. The contractor will submit a method statement for the approval of the Landscape Architect;
- Replace any failures of plants within the establishment period with immediate effect with the same species and size, these should be coordinated with Employers Agent and Landscape Architect.

3.2.6. **Artificial Grass**

- Inspect for weeds at regular monthly intervals, particularly at joins and edges, and remove by hand as necessary;
- Check joins in surface and at edges at regular monthly intervals, and repair to manufacturer's specification as necessary;
- Vacuum at regular monthly intervals **and immediately after ALL events** to manufacturer's specification to remove light debris, followed by brushing to manufacturer's specification to rejuvenate pile;
- Treat and remove moss and algae at regular intervals to manufacturer's specification as necessary;
- Fallen leaves are not to accumulate and shall be collected and removed off site.

3.2.7. **Green roof**

- Inspect at least twice a year (in spring and autumn) for weeds and seeds and remove unwanted vegetation manually;
- Inspect and remove any vegetation which has invaded into drainage outlets, inspection chambers and walkways at least twice a year (in spring and autumn);
- Check drainage system is clear of debris at regular monthly intervals, and repair to manufacturer's specification as necessary;
- Remove any leaves blown into the gutters and drains as necessary;
- Apply a slow release fertiliser in late April and early September;
- Water as necessary during establishment and dry periods to manufacturer's guidance;
- Replenishment of any areas of settled substrate in spring and autumn;
- Repair bare patches during the main growing seasons of March/April or from late August until the end of September as manufacturer's guidance;

FOR ALL PLANTING SCHEDULES REFER TO THE PLANTING PLANS APPROVED UNDER RESERVED MATTERS APPLICATION 211048.

4.0 Future Landscape Management Programme

4.1. General

At all times planted areas shall be kept clear of all litter and debris and the Contractor shall ensure that all paths are swept clean of arisings. Soil and arisings are to be removed from hard surfaces and grassed areas and removed from site. Leave the works in a clean tidy condition and after any maintenance operations. Any graffiti shall be removed immediately.

4.1.1. Weeding

In the interests of wildlife, hand weeding (including mechanical methods) should take precedence and herbicides should not be used unless essential to ensure the complete removal of noxious weeds or other very significant weed growth. If essential, herbicide application is to only be carried out by a suitably trained person, in periods of low winds, and with careful directional application to ensure no spray/drift onto tree/shrub species. Only suitable herbicide products under current regulations will be used. Where work is near water/swales it must comply with the DEFRA 1995 'Guidelines for the use of herbicides on weeds in or near water courses and lakes'. All precautions recommended by the manufacturer must be observed and containers removed from site immediately after they have been emptied or are no longer required.

4.1.2. Pest and Disease Control

All plant material shall be inspected for the presence of any pests or disease occurring on the site and appropriate action shall be taken to remedy the disease and eradicate pests.

All materials used in connection with these works shall be of an approved type and be applied and used in accordance with the conditions for the use of herbicides which will be outlined in the specification documents at construction stage.

4.1.3. Newly planted trees

The overall management aims can be broken down into the following objectives:

- To create visual interest, structure, focal points, movement and seasonal interest and;
- To create and reinforced the character of different areas

Item of work	Year 1	Year 2	Year 3	Year 4	Year 5 onwards
<i>Newly planted trees (minimum 4 routine maintenance visits per year)</i>					
Carry out twice annual visits, and after high winds, to adjust tree guying systems	✓	✓	✓	✓	✓
Maintain mulched tree surrounds in a weed free condition and allow for topping up mulch when required e.g. after two years	✓	✓			
Ensure watering system is working; if not, spot water as necessary to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period)	✓	✓	✓	✓	✓
Inspect annually when trees are in full leaf and after storms to monitor health of trees	✓	✓	✓	✓	✓
Carry out any works as required for health and safety immediately	✓	✓	✓	✓	✓
Prune annually outside of the bird nesting season to ensure appropriate habit/form, remove obstructions to footpaths/cycle paths/roads/gardens, and remove dead/diseased/damaged wood	✓	✓	✓	✓	✓
Replace any trees which have been removed, uprooted, destroyed or dies within 5 years after planting with trees of the same species and size as the originally planted at the same place, unless the Local Planning Authority gives its written consent for any variation	✓	✓	✓	✓	✓

4.1.4. Formal Hedges

The overall management aims can be broken down into the following objectives:

- Establish hedgerows as architectural landscape features, providing formal elements within the landscape;
- Promote dense, healthy hedges clipped to a neat form, and;
- Maintain the structure and integrity of all hedgerows for the future.

Item of work	Year 1	Year 2	Year 3	Year 4	Year 5 onwards
<i>Formal Hedges (minimum 4 -6 routine maintenance visits per year)</i>					
Re-frim plants after high winds and frost	✓	✓	✓	✓	✓
Maintain mulched surrounds - top up mulch if necessary e.g. after two years	✓	✓			
Maintain plant surrounds for a distance of 500mm from the centre of the hedge, in a weed free condition by hand	✓	✓	✓	✓	✓
Ensure watering system is working; if not, spot water as necessary to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period);	✓	✓	✓	✓	✓
Formal hedges should be kept regularly trimmed as necessary to maintain a dense form and to minimise the risk of the hedge becoming gappy, leggy or excessive size in the long-term with a maximum height of 400cm	✓	✓	✓	✓	✓
Carry out any works as required for health and safety immediately	✓	✓	✓	✓	✓
Check the hedge in spring as the buds burst and replace any plants which have been removed, uprooted, destroyed or dies within 5 years after planting immediately to avoid gaps forming in the hedge. Replacements should be true to type and of a similar size to existing plants at the time of	✓	✓	✓	✓	

re-planting unless the Local Planning Authority gives its written consent for any variation					
Removal of inappropriate weed species including climbers by hand in March, June, September and replant/bulk up as required to ensure a dense vigorous screen is retained					√

4.1.5. Herbaceous and shrubs planting to soft landscape areas

The overall management aims can be broken down into the following objectives:

- Established planting to be maintained as attractive landscape features highlighting key areas and adding form, structure and sensory interest;
- Promote rapid, healthy growth;
- Established planting to achieve a minimum 80% coverage within first 12 months and long term with a closed canopy, in a weed free condition.

Item of work	Year 1	Year 2	Year 3	Year 4	Year 5 onwards
<i>Herbaceous and Shrubs Planting (minimum 4 -6 routine maintenance visits per year)</i>					
Re-frm plants after high winds and frost	√	√	√	√	√
Maintain the full depth of mulch until canopies close	√	√			
Maintain planting beds in a weed free condition through combined techniques of cultivation, hand weeding, and mulching until canopies are closed. Maintain the inside of tree/shrub guards in a weed free condition by hand weeding.	√	√	√	√	√
Apply fertiliser or compost if necessary to encourage vigorous, healthy growth	√	√	√	√	
Ensure watering system is working; if not, spot water as necessary to avoid the need for replacement due to dry periods (less than 30mm rainfall at the end of a four week period)	√	√	√	√	√

Replace any plants which have been removed, uprooted, destroyed or dies with plants of the same species and size as the originally planted at the same place, unless the Local Planning Authority gives its written consent for any variation	√	√	√	√	
Thin out selected species where appropriate e.g. where more vigorous species are taking over others					√

4.1.6. Green Roof areas

The overall management aims can be broken down into the following objectives:

- Ensure established sedum is maintained as attractive landscape features;
- Promote healthy growth in a weed free condition;

Item of work	Year 1	Year 2	Year 3	Year 4	Year 5 onwards
<i>Green Roof (minimum twice a year in spring and autumn)</i>					
Inspect for weeds and remove by hand as necessary;	√	√	√	√	√
Inspect and remove any vegetation which has invaded into drainage outlets, inspection chambers and walkways	√	√	√	√	√
Remove any leaves blown into the gutters and drains as necessary	√	√	√	√	√
Apply a slow release fertiliser to encourage healthy growth	√	√	√	√	√
Water as necessary during establishment and dry periods to manufacturer's guidance	√	√	√	√	√
Replenishment of any areas of settled substrate	√	√	√	√	√
Repair bare patches during the main growing seasons of March/April or from late August until the end of September as manufacturer's guidance	√	√	√	√	√

4.1.7. Artificial Grass

Item of work	Year 1	Year 2	Year 3	Year 4	Year 5 onwards
<i>Artificial Grass (regular visits as necessary)</i>					
Inspect for weeds at regular monthly intervals, particularly at joins and edges, and remove by hand as necessary;	√	√	√	√	√
Check joins in surface and at edges at regular monthly intervals, and repair to manufacturer's specification as necessary;	√	√	√	√	√
Vacuum at regular monthly intervals and immediately after ALL events to manufacturer's specification to remove light debris, followed by brushing to manufacturer's specification to rejuvenate pile;	√	√	√	√	√
Treat and remove moss and algae at regular intervals to manufacturer's specification as necessary;	√	√	√	√	√
Fallen leaves are not to accumulate and shall be collected and removed off site.	√	√	√	√	√

4.1.8. Hard surfacing

The overall management aims can be broken down into the following objectives:

- Ensure hard surfaces remain clear, well defined, safe and suitable for public access, and;
- Maintain a high visual amenity of surfacing.

Item of work	Year 1	Year 2	Year 3	Year 4	Year 5 onwards
<i>Hard surfacing (regular visits as necessary)</i>					
Inspect for damage to ensure safe for public use, performing its original function, and not visually detracting from area. Repair/replace/repaint/re-stain/clean as necessary	√	√	√	√	√

Cut back undergrowth, overgrowing or overhanging shrubs, hedges and minor tree branches to maintain an unobstructed route for pedestrians, cyclists and vehicles as appropriate	√	√	√	√	√
Undertake inspections of the hard landscape areas on a six monthly basis and repair any damaged areas. If any areas are reported as dangerous to users, repair immediately	√	√	√	√	√
Drainage systems associated with hard surfaces to be inspected annually and maintenance work undertaken as necessary, to engineers/suppliers requirements	√	√	√	√	√

4.1.9. Site Furniture and Balustrade

The overall management aims can be broken down into the following objectives:

- Keep furniture and balustrades in a structurally sound and clean condition and in good repair according to the original design/specification, and;
- Ensure repairs do not invalidate specific manufactures guarantees.

Item of work	Year 1	Year 2	Year 3	Year 4	Year 5 onwards
<i>Site Furniture and Balustrade (regular visits as necessary)</i>					
Inspect for damage daily, to ensure safe for public use, performing its original function, and not visually detracting from area. Repair/replace/repaint/re-stain/clean as necessary	√	√	√	√	√
Remove any excess dirt or graffiti	√	√	√	√	√
Remove all litter, glass, animal fouling and similar debris from the street furniture daily	√	√	√	√	√