

Proposed Highway Improvements (Area 18)
Green Park
Reading

Landscape Management and Maintenance Plan

91100-PLA-PUB-XX-RP-LS-00001

Rev. P02

September 2022

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APPENDIX

1 Programme for maintenance works

Revision	Date	Details	Author	Checked
P00	25/04/22	First issue.	CC	KG/GH
P01	05/05/22	Amended following feedbacks	CC	KG/GH
P02	13/09/22	Amended following feedbacks	CC	GH

1.0 INTRODUCTION

- 1.1 This document presents a Landscape Management and Maintenance Plan (LMMP), on behalf of Mapletree, for the proposed highway improvements in Area 18 in Green Park, Reading.
- 1.2 The LMMP has been prepared in order to address the anticipated changes to the management and maintenance of the site on implementation of the proposed highway improvement works, which involves the realignment of bus stop and road, new paving to the footpath and pedestrian crossing, as well as re-provision of ancillary facilities. The planning permission was granted with conditions on 18 October 2021 (planning permission reference: 201754). This document and the drawings stated in Section 1.4 should be read together as one package, and aim to discharge the associated planning condition 4.
- 1.3 This document's purpose is to ensure that the landscape is maintained to an appropriate standard in keeping with the quality of the Green Park Business Park development as a whole. The plan should be reviewed and amended as necessary to ensure that it remains reactive to changing site conditions. The owner/operator shall ensure that the LMMP is adhered to, and any changes to the plan are to be agreed in writing with the appropriate authority.
- 1.4 This plan is to be read in conjunction with the below PLACE Design + Planning drawings:

Title	Reference
Landscape General Arrangements	91100-PLA-PUB-XX-DR-LS-00001
Softworks plan	91100-PLA-PUB-XX-DR-LS-00200
NBS Landscape Specification	91100-PLA-PUB-XX-SP-LS-00001

- 1.5 This management plan has been prepared for the proposed highway improvement works, and to advise the owners/operators of the required management and maintenance procedures to be undertaken to ensure the establishment of a high-quality landscape.

2.0 DESCRIPTION OF THE EXISTING SITE

- 2.1 The site falls within Reading Borough Council boundary.
- 2.2 According to Reading Borough Council Local Plan, the site is located within the designated Core Employment Area in Green Park (EM2a).

Other designations include:

- The site forms part of cycle routes identified as TR4 (Cycle Routes and Facilities).
 - The site falls within Area of Archaeological Potential Policy (EN2).
- 2.3 Located towards the northern end of Brook Drive in Green Park, Reading, the site is currently a bus stop and waiting area. To the northwest of the proposed works is an existing vegetated bund, with a car park designated to 100 Brook Drive beyond.

- 2.4 The existing site consists of passenger waiting area with a bus shelter, a footpath which terminates here, and vegetated bund (with a mix of groundcover, shrubs and trees). A pedestrian crossing is currently provided over the raised table.
- 2.5 The existing planting infrastructure in this location is largely provided by the planted bund that runs along the boundary of 100 Brook Drive. A mix of grass or planted verges provide additional greening.
- 2.6 All existing trees in close proximity along the northeast boundary of the site, are to be retained and protected through construction exclusion zones (areas surrounding the trees' RPA's (Root Protection Areas) and canopies in which construction works, or related activities, will be avoided. This can be achieved through tree protection barriers specified in accordance with BS 5837:2012). This is to avoid soil compaction and severance of roots or canopy damage within these areas.

3.0 LANDSCAPE PROPOSALS

- 3.1 As stated in Section 1.2, the proposed works consist of the realignment of bus stop area and road, new paving for the footpath and pedestrian crossing, as well as the reprovision of ancillary facilities for the bus stop.
- 3.2 The proposed hard landscape infrastructure includes:
- Paving surfaces:
Including resin bonded gravels, concrete tactile paving and tarmac to match existing surfaces.
 - Street furniture and external fixtures:
Including relocation of signage and belisha beacons.
 - Kerbs and edging:
Including footpath edging and road kerbs.

The proposed hard landscaping is created to provide a safe environment accessible by passengers with ease of maintenance.

- 3.3 The proposed soft landscape aims to provide an attractive soft landscape to the bus waiting area with successful and thriving planting whilst maintaining the biodiversity.
- 3.4 The proposed planting includes new groundcover planting to the base of the bund and tree planting.

4.0 ESTATE MANAGEMENT - ROLES & RESPONSIBILITIES

- 4.1 Management of the built and soft landscape of Green Park Business Park is the responsibility of Mapletree, and is currently undertaken by a landscape maintenance team.
- 4.2 All new landscaping (hard and soft) shall be subject to a Rectification Period of 12 months as part of the contract. During the first year the Landscape Contractor shall make maintenance visits at intervals of no less than once every month to ensure the successful establishment of the planting.
- 4.3 The Landscape Contractor shall ensure that the hard and soft landscape areas are maintained appropriately with reference to the routine landscape implementation, management and maintenance programme.

- 4.4 It is expected that the LMMP will come into effect following the installation of the landscape scheme and a suitable post-establishment monitoring period to ensure the landscape is maintained to be fit for purpose, and planting succeeds and thrives.
- 4.5 Mapletree shall provide appropriate access to landscape areas for maintenance works to be carried out by Landscape Contractor.

5.0 MANAGEMENT AIMS AND OBJECTIVES

- 5.1 Key objectives aim to provide an attractive, inviting and well cared for setting for the Green Park Business Park development. The overall long-term objectives of the landscape management works are as follows:
- To ensure the successful establishment and long-term health of all soft landscape elements.
 - To ensure a linked green infrastructure which connects to the surrounding areas providing a sense of place, enhanced biodiversity, and a high-quality user environment.
 - To create a high quality and attractive year-round environment.
 - To ensure that proposed planting consistent with the boundary treatments of the Green Park development through management and planting.
 - To ensure proposed highway improvements are safe and fit for purpose.
 - To include procedures for replacement of decommissioned, broken or failed furniture across the site. Replacement to match original, or be of equivalent value (regarding use and function).
 - To ensure all management and maintenance adopts best practice in sustainability and effective resource management.
 - To ensure compliance with all health and safety, and security commitments and duties under current legislation.
 - To ensure all maintenance operations comply with current UK legislation in relation to management, use and application of pesticides and herbicides.
 - To continually monitor and review the landscape provision and landscape management to ensure it is sufficient to meet the aims and objectives set out in this LMMP.
- 5.2 For the first 12 months of the Rectification Period the site will be maintained by the Landscape Contractor. After which time it will be taken over by Mapletree.
- 5.3 For a subsequent establishment period of four years, the responsibility for maintenance and replacement planting shall be with Green Park landscape maintenance contractor.
- Maintenance operations shall continue and dead, dying or otherwise defective planting shall be replaced with others of species, size and number as originally approved, and appropriate to growing seasons for replacement plants, and retained thereafter unless agreed in writing by Green Park landscape maintenance contractor.
- 5.4 The objective is to manage and maintain all planting to the highest quality: adopting a sustainable and environmentally friendly approach to all operational and maintenance tasks.

6.0 MANAGEMENT PROPOSALS

- 6.1 In addition to the above landscape scope of works and maintenance works generally, the objectives and proposal of the site has been identified to be managed as such:

Key objectives:

- To provide a safe bus waiting area to passengers.
- To maintain clear and accessible pedestrian access.
- To provide a safe pedestrian crossing.

Key proposals:

- To ensure surfaces are free from litter and debris.
- To ensure surfaces are kept clear of vegetation.
- To ensure planting is successful and thriving.
- To provide a safe environment for passing pedestrians and waiting passengers by maintaining a clear sightline, provision of tactile paving and sufficient space for bus waiting area.
- To provide safe bus access and improved circulation for passing traffic.
- To provide an attractive soft landscape setting.

Refer to the 'Programme for maintenance works' (Appendix 1) for detailed maintenance operations.

7.0 LANDSCAPE SCOPE OF WORKS

- 7.1 Maintenance and management operations shall include (but are not limited to) the following actions across the development:

- Watering, with increased frequency during dry periods.
- Weed control.
- Replacement of damaged or failed planting (with the same approved species), as necessary, in line with the management aims.
- Mulch maintenance.
- Thinning, as necessary.
- Control of pests and disease in line with current UK legislation in relation to management, use and application of pesticides and herbicides.
- Keep paths clear of vegetation.
- Litter collection and removal.
- Removal of arisings, composting and green waste management (to be specified by Mapletree).
- Maintenance, cleaning, and refurbishment operations for surfaces (- including replacement, jointing maintenance, maintaining good levels of loose materials).

- 7.2 Any plants found to be dead, dying or otherwise defective shall be replaced with others of species, size and number as originally approved and appropriate to growing seasons for replacement plants. These shall be replaced at the expense of the Landscape Contractor if within the Rectification Period (first 12 months after Practical Completion) or at the expense of the Landscape Maintenance Company after this.

Refer to the 'Programme for maintenance works' (Appendix 1) for detailed maintenance operations.

8.0 MAINTENANCE WORKS GENERALLY

- 8.1 Leaf clearance to paths as required, but particularly between the end of October and December.
- 8.2 All vegetation that fails to thrive in the 5-year period after practical completion will be replaced during the next available growing season. Replacements to match the size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
- 8.3 Watering shall be in line with existing estate maintenance.
- 8.4 Tree branches will be pruned / removed to ensure clearance of 2.75m above paths and 5.5m above the road.
- 8.5 Tree stakes and ties shall be removed after 3 years if the tree is established.
- 8.6 Aphids are host specific and are an important resource within the food chain; they attract predator species that will help to control aphid infestations throughout the site. There shall be no use of pesticides within the communal area of the site to control aphids. Pesticides should be DEFRA approved.
- 8.7 Species listed within the Weed Act 1959 as 'injurious weeds' including spear and creeping thistle, ragwort, curled and broad-leaved dock should be controlled by hand weeding. The use of chemical weed-killers shall be avoided if possible, within the communal areas of the development.
- 8.8 Hard materials should be managed sufficiently to maintain clean and safe surfaces; and provide safe access around the site.
- 8.9 Materials needing repair or replacement, should be made good or replaced as per the original specification where possible, or as equivalent and approved.
- 8.10 External street furniture should be regularly checked, for damage or vandalism, to ensure it is fit for purpose.
- 8.11 Snow and ice should be managed to provide safe pedestrian and vehicular access around the site. Use of sweeping or grit on hard surfaces is preferable to the use of salt.

9.0 MONITORING AND REVIEW

- 9.1 This Landscape Management and Maintenance Plan (LMMP) has been prepared in order to set out the anticipated management and maintenance of the proposed Highway Improvements in Green Park, Reading.
- 9.2 This LMMP will be regularly reviewed to ensure it provides a comprehensive strategy and scope for the management and maintenance of the proposed planting.
- 9.3 Any management plan must be flexible to take account of unpredictable natural and man-made changes, including statutory regulation changes, and the aims and prescriptions should be regularly reviewed and brought up to date.

- 9.4 No changes shall be made to the LMMP without the written agreement of Mapletree, in association with an appropriately qualified person.
- 9.5 It is recommended that this management plan is inspected, reviewed and updated every five years (as a minimum) by an appropriately qualified person, (e.g. landscape architect, landscape manager, landscape contractor), appointed by Mapletree. These reviews shall include inspections of the existing, proposed and additional landscape infrastructure.
- 9.6 Significant unpredictable events such as fire, storms and gales etc., should also trigger a review of the report in response to any changes to site conditions.

Appendix 1: Programme for maintenance works

Proposed Highway Improvements (Area 18), Green
Park, Reading
Apr-22

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Appendix 1

Key	
	Action required
	Minimum maintenance works to be carried out as necessary
	Works to be reviewed after 5-year rectification period

To be read in conjunction with: The Site Manager's 'Health and Safety Plan'.

Maintenance Frequency Programme

Maintenance Frequency Programme		Rectification period												Year 2	Year 3	Year 4	Year 5	Year 6+	Summary notes
		Year 1																	
		J	F	M	A	M	J	J	A	S	O	N	D						
GENERALLY																			
Maintenance visits		2	2	2	4	4	4	4	4	4	4	2	2	As Year 1	As Year 1	As Year 1	As Year 1	Review	Weekly visits to be allowed through April to October. Fortnightly from November to March - to be carried out as required depending on operations/ time of year.
Review of Maintenance Plan														As necessary	As necessary	As necessary	As necessary	Review	Every five years. Significant unpredictable events such as fire, storms and gales etc., should also trigger a review. Reviews shall be carried out by an appropriately qualified person.
Litter collection														As Year 1	As Year 1	As Year 1	As Year 1	As Year 1	As necessary.
Removal of arisings														As Year 1	As Year 1	As Year 1	As Year 1	As Year 1	As necessary. Remove from site to recycling facility.
Responses to complaints/ vandalism														As necessary	As necessary	As necessary	As necessary	As necessary	Respond to client within 24hrs of notification/ discovery.
SOFT LANDSCAPING																			
Watering														As Year 1	As Year 1	As Year 1	As Year 1	As Year 1	Allow for weekly watering of planting during hotter months during the growing season for establishment in Year 1 and 2 as per schedule. As necessary, particularly during dry periods.
Weed control														As Year 1	As Year 1	As Year 1	As Year 1	As Year 1	As necessary. The use of chemical weed-killers shall be avoided within the site.
Control of pests and disease														As Year 1	As necessary	As necessary	As necessary	As necessary	There shall be no use of pesticides within the site to control aphids.
Leaf litter removal														As Year 1	As Year 1	As Year 1	As Year 1	As Year 1	As necessary, but particularly in Autumn and Winter months.
Mulch maintenance														As Year 1	As Year 1	As Year 1	As Year 1	As Year 1	Apply mulch to maintain depth of not less than 75mm.
Removal and replacement of dead/ damaged plants														As Year 1	As Year 1	As Year 1	As Year 1	Review	Replacements to appropriate size and planted in the next available planting season.
Thinning														Review	Review	Review	Review	Review	Planting beds to be initially reviewed at end of establishment period with ongoing monitoring to follow.