# MANAGEMENT STRATEGY AND MAINTENANCE PLAN

# SOFT LANDSCAPE WORKS CHESTER BALMORE

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#### 1.0 INTRODUCTION

- 1.1 This ma nagement plan has been prepared by Charnwood Landscape Design Limited to direct the development of the landscape at Chester and Balmore, Camden.
- 1.2 This document will provide the information required for regular maintenance operations within a managed framework for the medium/long term development of the site landscape. In addition to this any immediate or short-term works required for initial upgrading of specific areas will also be identified.
- 1.3 This document comprises the following sections:
  - Landscape maintenance for soft landscape works associated with the new landscape. Maintenance for years 1-2 after the implementation of new planting.
  - Maintenance specification: covering operations necessary to maintain the landscape in a healthy, attractive condition with information on frequency and seasonal requirements in order to achieve this objective. Maintenance for years 3-10 after the implementation of new planting.
  - Management Strategy: To identify medium/long term issues and changing maintenance regimes.
- 1.4 There is no established landscape associated with the site. Japanese Knotweed had been identified and treated on the adjacent site to the east. The affected areas were subject to herbicide treatment. Further survey work has confirmed that there are no reported live plants. If during construction new growth is identified it will be dealt with in accordance with Environment Agency guidance.
- 1.5 There are no existing trees on site to be retained and therefore, no Tree Preservation Order (TPO) issues. However, the site falls within the area designated as Dartmouth Park Conservation Area, Sub Area 5: Highgate New Town and as such, consent will be needed from Camden Council for works to trees within the site.
- 1.6 The site landscape will consist primarily of new planting, and the installation of living roofs. The physical and visual aspects of the site landscape should be considered in the following ways:
  - i) its context within the general area and its appearance from outside the site, and in views from the pedestrian walkway through the site, linking Chester Road and Balmore Street. (public view).
  - ii) as an attractive setting to the buildings providing a pleasant environment for users of the site.
  - iii) as a new landscape and ecological resource (particularly regarding the living roofs) that will develop as it matures.

- 1.6 The main objectives of the maintenance strategy follow from this as follows :-
  - Maintenance of the landscape in a clean, healthy and attractive condition as a setting to the buildings.
  - Maintenance of the landscape to ensure free movement of site users, avoiding potential hazards/obstructions and controlling growth for visibility/security purposes where required.
  - Maximising the ecological potential of the landscape (particularly regarding the living roofs).

#### 2.0 SITE APPRAISAL & RECOMMENDATIONS

- 2.1 As described above the site landscape will be immature, associated with the construction of the new buildings. Manitenance and management operations and objectives will vary dependant on location, function and visbility.
- 2.2 Planting types include ground level trees, hedges, amenity shrubs and herbaceous perennials, integral balcony planters, green roof sedum and wildflower installation and self seeded habitat on brown roof substrate.
- 2.3 Ground level planting includes areas facing onto the pedestrian link along the eastern site boundary, and the Chester Road frontage. The landscape in this area consists of strong structural ornamental shrub and herbaceous planting with occasional trees. Due to the visual prominence of, and public access to this area, new planting will consist of robust street trees and predominantly groundcover shrubs. The shrub layer will have a strong evergreen content with species selected for seasonal colour and variation, and 'instant' hedge products will be installed for immediate effect. (Refer to Ireland Albrecht drawing 326.04).
- 2.4 Throughout the central area of the site structural planting of trees and shrubs will be augmented by more intimate arrangements of herbaceous perennials, formal shaped shrub specimens and a higher content of flowering plants in the mix. (Refer to Ireland Albrecht drawing 326.07).
- 2.5 Planting has been designed to create good initial visual impact whilst allowing good visibility for safe movement through and across the site.
- 2.6 The roofs will be covered in a living roof substrate, with some areas left for natural colonisation by air bourne seed. Other areas will be installed with a proprietory sedum and wild flower system. (Refer to Charnwood Landscape Design Ltd drawing CLDL/2212/005).
- 2.7 The planting schedule has been developed to incorporate species of wildlife value (nectar, seeds and nesting cover) and to provide for sequential flowering characteristics.

# 3.0 MAINTENANCE SPECIFICATION: Initial Establishment

- 3.1 This section identifies the maintenance for soft landscape works associated with new planting. Maintenance operations detailed below apply for a 1-2 year period after the implementation of new planting.
- WATERING: During establishment of planting, seeding and installation of living roof systems and instant hedges, ensure that sufficient water is applied to maintain healthy growth. Water quantities to reflect soil type and rooting depths. Individual trees to be assessed based on size, soil type, rooting depth and pit size. To ensure establishment of newly planted trees watering to be carried out at least once a fortnight throughout the growing season and once per week in dry periods.
- 3.3 MONITORING: Water as necessary to ensure the establishment and continued thriving of all planting. During prolonged dry periods monitoring of soil moisture levels are to be undertaken and a written report submitted after each maintenance/ watering visit to confirm action taken to maintain adequate water provision.
- 3.4 DROUGHT CONDITIONS: If water supply is or is likely to be restricted by emergency legislation arrange import of second class water from a sewage works or other approved source. Soil moisture levels to be monitored.
- 3.5 LITTER COLLECTION: Collect and remove all extraneous rubbish not arising from the contract work and detrimental to the appearance of the site, including paper, packaging materials, bottles, cans, and similar debris.
- 3.6 CLEANLINESS: Remove soil and arisings from hard surfaces and leave the works in a clean, tidy condition after maintenance operations.

#### 3.7 MAINTENANCE:

Carry out the operations listed below from completion of planting for a 24 month period. Make visits at approximately 2 weekly intervals during the growing season and as necessary to fulfil the requirements of this specification.

3.8 ESTABLISHMENT OF NEW PLANTING: During the initial establishment of newly planted trees and shrubs, carry out maintenance of the planted areas as follows: 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. Keep planting beds clear of weeds, by use of suitable herbicides and hand weeding as appropriate. Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows, taking care not to reduce depth or effect of mulch.

Every visit check condition of guys and stakes. Adjust as required.

ESTABLISHMENT OF GREEN AND BROWN ROOFS: The green roof areas shall not be allowed to dry out during the initial establishment period which is likely to be between 4 and 6 weeks in summer, longer in winter. A coverage of 75% or greater shall be achieved. The area shall then be watered periodically through the first spring/summer growing season, and during prolonged dry periods at other times of the year.

Two maintenance visits/year to the green and brown roof areas will be carried out in the first 2 years following implementation. During these visits the contractor shall ensure the area is kept free from pernicious weeds or invasive weed growth by hand weeding. Area not to be mulched, and no fertiliser shall be applied.

The sward shall be cut in late autumn, by hand shears, strimmer or mower. Arisings shall be removed.

Other operations to be carried out on both green and brown roofs during the site visits: correct localised plant system or substrate problems, check outlets and drainage, and replenish any areas of settled substrate. For green roofs, plant failures over 50% shall be replaced, and dead flower heads shall be removed.

3.10 ESTABLISHMENT OF NEW PLANTING – FERTILIZER (excluding living roofs): In March or April, evenly spread 15:15:15 N:P:K fertilizer, carefully incorporating below mulch materials:

70 g per feathered, standard or larger tree 40 g per transplant.

NB use of fertilisers to these areas only during the establishment period. Future requirements to be instructed if required.

# 3.11 PRUNING GENERALLY:

Prune in accordance with good horticultural practice. Prune larger branches and woody stems in accordance with good arboricultural practice.

Thin, trim and shape appropriately to each species, location, season, and stage of growth, leaving a well balanced natural appearance.

Use clean sharp secateurs, hand saws or other tools approved by the FM (facility manager). Trim off ragged edges of bark or wood with a sharp knife.

Remove branches without damaging or tearing the stem.

Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.

Prune larger branches neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.

Notify the FM of any disease or fungus. Do not apply growth retardants, fungicide or sealant unless instructed by the FM.

- 3.12 MAINTENANCE OF MULCH (excluding green roof native seed zone):
  On an annual basis top up with same type of mulch to thickness of 75 mm.
  Sweep up and replace mulch spilling onto adjacent areas and, if not contaminated with weeds or rubbish, return to planted area.
  Remove weeds growing on or in mulch by hand weeding or herbicide.
- 3.13 REMOVAL OF DEAD PLANT MATERIAL: At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems. Replace planting at the next appropriate planting season. Replacements must match the size of adjacent or nearby plants of the same species or should match the original specification, whichever is the greater.

#### 4.0 MAINTENANCE SPECIFICATION: Post- Establishment/ Short - Medium Term

- 4.1 This specification has been drawn up to identify the regular maintenance operations which are to be introduced. This section addresses the short to medium term development of the site landscape and covers a 10 year period.
- 4.2 An intermediate review is to be carried out by the Landscape Architect/ FM after the first five years at which point any adjustments to the specification can be made. It is also recommended that an annual inspection is carried out (late summer/early Autumn) to monitor progress and also identify any remedial or additional work (due to either unforeseen circumstances or functional changes) that may be required prior to the start of the planting season. A further review by the Landscape Architect will be carried out at 10 years which will allow for the continuance or amendment of the maintenance operations in accordance with the long term requirements identified at section 5.0.

#### 4.3 Landscape Development

- Semi-mature trees it is the intention to allow trees to develop their natural shape and size.
- Ornamental shrub and herbaceous perennials the intention is to encourage the establishment of planting to provide continuous cover using a balanced mixed shrub and herbaceous layer.
- Photinia hedge the intention is to maintain a dense screen from ground level upwards, and for the hedge to eventually shade out associated herbaceous and shrub planting.
- Instant Beech hedges the intention is to provide a medium height dense screen from ground level upwards.
- Green roofs the intention is to provide a natural habitat with native wild flower plants and water retentive succulents.
- Brown roofs the intention is to provide a natural habitat characterised by selfseeded native wild flowers.
- The following general maintenance operations are to be applied to all areas, unless otherwise noted, and are summarised in Table 1.

#### 4.4.1 Pruning Generally:

- Prune in accordance with good horticultural practice. Prune larger branches and woody stems in accordance with good arboricultural practice.
- Thin, trim and shape appropriately to each species, location, season, and stage of growth, leaving a well balanced natural appearance.
- Use clean sharp secateurs, hand saws or other tools approved by the FM. Trim
  off ragged edges of bark or wood with a sharp knife.
- Remove branches without damaging or tearing the stem.
- Keep wounds as small as possible and cut cleanly back to sound wood. Make
  cuts above and sloping away from an outward facing healthy bud, angled so that
  water will not collect on cut area.
- Prune larger branches neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.
- Notify the FM of any disease or fungus. Do not apply growth retardants, fungicide or sealant unless instructed by the FM.
- General: Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
- Suckers: Remove by cutting back level with the source stem or root.
- Special requirements: Topiary forms/ globe headed trees/ box edging/ box balls
   trim to maintain form as stated above.

#### 4.4.2 Mulch:

- On an annual basis top up with same type of mulch to thickness of 75 mm only in areas where plant coverage is inconsistent.
- Sweep up and replace mulch spilling onto adjacent areas and, if not contaminated with weeds or rubbish, return to planted area.
- Remove persistent weeds growing on or in mulch by hand weeding or spot treat with glyphosate.

#### 4.4.3 Dead plant material and fallen leaves:

At the end of the growing season, check all trees and shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems. Replace planting at the next appropriate planting season. Replacements must match the size of adjacent or nearby plants of the same species or should match the original specification, whichever is the greater.

In autumn and winter, collect and remove accumulations of drifted leaves from the vicinity and from planting beds.

#### 4.4.3 Hand weeding:

- General: Remove weeds entirely, including roots.
- Disturbance: Remove the minimum quantity of soil, and disturb plants and mulched surfaces as little as possible.
- Completion: Rake area to a neat, clean condition.
- Mulch: Reinstate to original depth.

#### 4.4.4 Soil aeration:

- Compacted soil surfaces: Aerate the soil of root areas and break surface crust. Reduce clods to crumb and level off. Do not damage plants and their roots.
- 4.5 Additional maintenance operations for specific areas and planting types are as follows:

#### 4.5.1 Semi-Mature, Advanced Nursery Stock and Standard Trees

It is the intention to allow trees to develop their natural shape and size. Inspect at every planned visit and additionally after strong winds. The following operations to be carried out:

- Prune to remove dead, dying, diseased branches. Advise Landscape Architect
  of any major works required and if necessary obtain an assessment from an
  approved arboriculturalist. (FM approval required). Trees to be pruned annually,
  preferably during the dormant season, but exceptionally in spring or summer.
- Remove suckers from base.
- Check condition of stakes and ties. Adjust as necessary to prevent rubbing of bark and to ensure tree is upright. Remove stake or cut down to ground level 3-5 years after date of planting dependant on establishment of stability of tree.
- Check position of semi-mature trees secured underground. Adjust as required to maintain stability and to ensure all trees are upright. Straighten if necessary.
- Firm up trees which have suffered frost heave or are affected by strong winds. Tread around the base until firmly bedded.
- 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.
- Ensure that sufficient water is applied to maintain healthy growth. Refer to landscape specification for initial watering requirements. Water quantities to reflect soil type and rooting depths. Individual trees to be assessed based on size, soil type, rooting depth and pit size. During the establishment period watering of semi-mature and newly planted trees to be carried out at least once a fortnight throughout the growing season and once per week in dry periods. The establishment period to be 5 years for semi-mature trees to be reviewed after 3 years.
- Dependant on location, apply N.P.K. slow release fertiliser (at rates recommended by the manufacturer) on annual or two-yearly basis.

# 4.5.2 Ornamental shrub and herbaceous perennial planting

The intention is to encourage the establishment of planting to provide continuous cover using a balanced mixed shrub and herbaceous perennial layer.

- Keep all beds weed free by hand weeding and/or use of approved herbicides.
- Fork over beds as necessary to keep soil loose with no low or high spots.
- Clear soil and/or mulch from adjacent hard surfaces.
- Until review period (year 5) apply a 15 : 15 : 15 N.P.K. slow release fertiliser during March/April in accordance with manufacturers recommendation.
- Prune shrubs and perennials to remove dead, damaged or diseased branches, dead flowerheads, etc.
- Prune to maintain shape appropriate to the species with additional shaping or height maintenance as specified. Pruning to be carried out at the following times of year:
  - Winter flowering shrubs: Spring.
  - Shrubs flowering between March and July: Immediately after the flowering period.
  - Shrubs flowering between July and October: Back to old wood in winter.
- At end of growing season, trim older flowering stems of herbaceous perennials, remove redundant plant supports, litter, debris and arisings.
- In priority areas remove plants with significant damage or dieback and notify FM of replacement planting required.
- Apply sufficient water to maintain healthy growth.
- Maintain beds rubbish and litter free.
- From year 2, deciduous plants (excluding specimen stock) to be cut back by 50% every 3 years to promote new growth and vigour. Shrub blocks to be cut back on a rotational system.
- From year 2, thin when foliage of adjacent plants has begun to touch. Retain plants with a strong healthy habit. Minimise disturbance to adjacent plants making good any minor damage immediately. Refill holes with topsoil to leave an even graded surface and restore mulch as original specification.
- From Year 2, trim ground cover shrubs to maintain tidy appearace and to limit spread within planting beds.

#### 4.5.3 Hedges:

Trim to enable hedge to reach planned height as rapidly as possible: trim back lateral branches to encourage bushy growth down to ground level and to maintain required shape.

For Photinia hedges allow for 2 cuts annually in spring or early summer. Do not trim after mid August.

For instant beech hedges, trim once a year, preferably in August. Pay particular attention to water demand during establishment.

#### 4.5.4 Formal shaped shrubs:

e.g. box balls and Pittosporum mini-hedges. Clip as required to maintain form. Allow for 2 cuts annually. First cut after first flush (mid-June), second cut late September.

#### 4.5.5 Climbing plants:

- Apply a 15: 15: 15 N.P.K. slow release fertiliser during March/April in accordance with manufacturers recommendation.
- Once dense coverage achieved, trim excess growth as required.
- Tie any insecure growth in to support feamework. Tie loosely to allow growth.
- Check and repair supporting structures as necessary.
- Ensure adequate watering during growing season and prolonged dry period. Pay particular attention due to drier location at base of walls.
- When required coverage is achieved trim back excess growth, trim back lateral growth as necessary to maintain vigorous growth.
- Allow for 2 cuts annually. First cut after first flush (mid-June), second cut late September
- Remove plants with significant damage or dieback and notify FM of replacement planting required.

#### 4.5.6 Living roofs:

Living roofs are to be managed for diversification of wild flora with minimal intervention. Competition from weed growth will be reduced through hand weeding.

- Keep roofs free from pernicious weeds: remove unwanted plant material by hand pulling
- Maintain area rubbish and litter free
- Correct localised plant system problems
- Replace failures over 50%
- Remove dead flower heads
- Check outlets and drainage
- Replenish areas of settled substrate

# 4.5.7 Containers and planting boxes:

- Apply a 15: 15: 15 N.P.K. slow release fertiliser during March/April in accordance with manufacturers recommendation.
- Once dense coverage achieved, trim excess growth as required.
- Ensure adequate watering during growing season and prolonged dry period. Pay particular attention due to drier location.
- When required coverage is achieved trim back excess growth, trim back lateral growth as necessary to maintain vigorous growth.
- Allow for 2 cuts annually. First cut after first flush (mid-June), second cut late September.
- Remove plants with significant damage or dieback and notify FM of replacement planting required.

- 4.6 Maintenance of grassed areas: Maintain turf in a manner appropriate to the intended use.
  - Grass height: Maintain within approved height range. 25-50mm.
  - Soil and grass condition: Maintain a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt.
  - Waterlogging and compaction: Prevent.
  - Damage: Repair trampling, abrasion or scalping caused by mowing.
  - Amenity turf and lawns: Maintain reasonably free from moss, excessive thatch, weeds, frost heave, worm casts and mole hills.
  - Edges: Neat and well defined, in clean straight lines or smooth flowing curves.
  - Litter and fallen leaves: Remove regularly to maintain a neat appearance.
- 4.7 Grass cutting generally:
  - Generally, fortnightly cuts during the growing season. Monthly cuts at other times.
     Additional cuts as required to satisfy the requirements of the specification, dependant on growing conditions.
  - · Before mowing: Remove litter, rubbish and debris.
  - Finish: Neat and even, without surface rutting, compaction or damage to grass.
  - Edges: Leave neat and well defined. Neatly trim around obstructions.
  - Adjoining hard areas: Sweep clear and remove arisings.
  - Drought or wet conditions: Obtain instructions.
- 4.8 Mowing strips:
  - Location: Along the base of walls, fences and hedges
  - Width (approximate): 75 mm.
  - Operations: Maintain by applying a suitable herbicide twice during the growing season.
- 4.9 Removal of leaves from grass areas:
  - Operations: Remove fallen leaves.
  - Special requirements: Remove by hand raking or leaf blower.
- 4.10 Treatment of gress areas with herbicide:
  - Type: Selective herbicide suitable for suppressing perennial weeds.
- 4.11 Spring/Autumn application of fertilizer to grassed areas:
  - Type: Slow release.
  - Coverage: To manufacturer's recommendations.
- 4.12 MAINTENANCE RECORD SHEETS to be completed after each visit to include any damaged or removed plants, activities undertaken and any potential health and safety issues noted. A copy to be signed by the FM or other senior member of staff. Signed copies to be available for review on request.

TABLE 1: NEW PLANTING

Operations	Target area	Frequency/timing	Comments
Monthly maintenance visits - throughout the year	12		
Litter picking	All areas	At least monthly	Attention to all areas
			including hard paving.
Mulch and soil spill	All planting beds	At least monthly	Remove or return to
			planting bed as
			specified
Weeding and/or herbicide	All areas	At least monthly	
Check general condition, plus stability of trees and	All trees	At least monthly	Intermediate checks
large shrubs. Refirm as necessary. Check tree ties			after severe weather.
and stakes. Adjust as required. Remove when no			
longer needed.			
Note any dead, dying, diseased or damaged wood	All trees and shrubs	At least monthly	Balanced form to be
to be remedied during seasonal maintenance			maintained. Advise FM
visits.			of major works required.
Monitor need for additional watering and/or grass	All areas including	At least monthly	
cutting visits	living roofs		
Monitor need for additional pruning, including	All trees and shrubs	At least monthly	Note overcrowding and
where needed to enable development of specimen			dominance issues for
stock.			potential thinning of
			plants by removal.
Remove suckers from base	All trees and shrubs	At least monthly	

Replacement planting herbaceous perennials H	Spring maintenance visit – March/April – additional seasonal operations which may coincide with one or both monthly maintenance visits at this time of year							Living roots – water in prolonged dry weather A						Cut grass A				and wall shrubs	s in paved areas, climbing plants		meet specification.	operations may coincide with monthly maintenance visits, with additional visits which	Motoring and appropriately stated						required	finishes – note condition and action as
Herbaceous perennials only	l seasonal operation:							All living roofs	THE RESERVE THE PROPERTY OF TH					All grassed areas					paving	All areas except		ougnout the year but								All areas
Annually	s which may coincide	times of the year.	conditions at other	according to weather	2 months or	September and every	fortnightly March -	As required. Monitor	other times of year.	weather conditions at	or according to	Then every 2 months	March-September.	At least fortnightly	year.	at other times of	to weather conditions	Monthly or according	March-September.	At least fortnightly										At least monthly
	with one or both																				liay be required seasonally to	during growing season -	areas.	significant, damaged	Notify FM of any	any disturbed areas.	material. Work through	damaged or unsightly	essential. Remove	Neat and tidy finish

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Pruning trees and shrubs	Any trees (if required urgently) and winter flowering shrubs	Annually	Avoid disturbance to nesting birds. Balanced form to be maintained. Advise FM of major works required.
Clip hedges	Photinia hedge only	Twice annually (again in Summer)	
Apply fertiliser	All trees and planting beds including climbers, containers and balcony planters.  NOT living roofs	Annually	Apply in accordance with manufacturers recommendations.
Living roof maintenance as specified:	All living roofs	Annually	
Summer maintenance visit – July/August – additional seasonal operations which may coincide with one or other monthly maintenance visit at this time of year	ional seasonal operati	ons which may coincid	le with one or other
Summer pruning of trees and shrubs including	Any trees (if required	Annually. Twice	Avoid disturbance to nesting birds Balanced
	hedges, shaped features (if required)	hedge (previously trimmed during	form to be maintained. Advise FM of major
	and shrubs flowering March-July	spring) and shaped features (again in Autumn)	works required.
Autumn maintenance visit – September/October – additional seasonal operations whic both monthly maintenance visits at this time of year	<ul><li>additional seasonal</li><li>ear</li></ul>	operations which may	h may coincide with one or
Autumn pruning of trees and shrubs including climbing plants and shaped features	Any trees (if required urgently), shrubs	Annually. Twice annually for shaped	Avoid disturbance to nesting birds. Balanced
	flowered July – October, shaped	features (previously trimmed during	form to be maintained. Advise FM of major
	features (if required) and climbing plants	summer)	works required.

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	Twice annually	All areas	Rake up and remove dead leaves
and the second second		necesary	
		agreed where	
	Annually	as required and	היסקומסטוויסווי קומויוויוט מספט מווע טווו עטט
		maintenance visit	Replacement planting troop and sharks
		since autumn	
	,	shrubs flowering	
	Annually	All trees (if required)	Winter pruning of trees all trees (if required)
collicide with one or	operations which may	year	both monthly maintenance visits at this time of year
		V - additional spasonal	Winter maintenance visit - November - February - additional spacenal operations which may principle with
	Annually	All living roofs	Living Tool maintenance – cut to 50-75mm
replacement planting.			
quotation for			
instructed, provide		balcony planters	
planting required. If		trees, containers and	Spirig
Advise FM of any infill	Annually	All planting beds and	Assess losses for replanting over winter and in
	Annually	All planting beds	Reinstate mulch
	Twice annually (again	All areas	Rake up and remove dead leaves
		and balcony planters	
		including containers	
	Anually	All planting beds	Remove dead plant material
	Annually	All planting and grassed areas	Remove compaction
			Domoro Composition

# 5.0 MANAGEMENT STRATEGY

This section identifies the longer term issues that will arise once the landscape has become established. The longterm objectives of this plan are as follows:-

- Development of visual amenity in a sustainable form
- Compatibility of landscape with user requirements
- Development and enhancement of the ecological resource at roof level
- Development of a robust, low maintenance landscape
- 5.1 High profile/high use –site entrance and pedestrian route.
  - High profile areas subject to high usage may require additional replacements to ensure maximum visual impact is maintained. Dead plants to be removed immediately from high profile areas. Replacement planting to be provided at the next appropriate season.
  - Particular attention to be given to balanced growth of species to avoid overcrowding and/or development of irregular form.
  - Consistent coverage to be established but with species groups to be maintained to reflect their particular characteristics. Layered structure to be developed. (i.e. groundcover, groundcover with emergent specimen planting, medium and tall shrubs). An exception to this is planting along the Photinia hedge, along the site's eastern boundary: here it is anticipated that the hedge will ultimately shade out herbaceous perennials and other shrubs as it establishes. Priority should be given to the establishment of the hedge, and other plants reduced or removed over time.
  - Attention to climber support systems. Remedial work as required. Tie in and secure climber growth as required.
  - Pruning of species as appropriate to promote vigour and control spread as required. PROTECTIVE CLOTHING to be used.
  - For shorter lived species a phased replacement programme to be applied allowing for 50% thinning/removal with replacement stock interplanted. Remaining shrubs to be removed when initial replacement planting is established.
  - Recommendation that an annual inspection is carried out for identification and clarification of any remedial or renewal works.

# 5.2 Other accessible areas – semi-private courtyard and balcony planters

- Lower profile areas but still subject to high usage may require additional replacements to ensure visual impact is maintained for herbaceous planting. Dead plants to be removed as soon as possible. Replacement planting to be provided at the next appropriate season.
- Particular attention to be given to balanced growth of species to avoid overcrowding and/or development of irregular form.
- Consistent coverage to be established but with species groups to be maintained to reflect their particular characteristics. Layered structure to be developed. (i.e. groundcover, groundcover with emergent specimen planting, medium and tall shrubs).
- Attention to climber support systems. Remedial work as required. Tie in and secure climber growth as required.
- Pruning of species as appropriate to promote vigour and control spread as required. PROTECTIVE CLOTHING to be used.
- For shorter lived species a phased replacement programme to be applied allowing for 50% thinning/removal with replacement stock interplanted. Remaining shrubs to be removed when initial replacement planting is established.
- Recommendation that an annual inspection is carried out for identification and clarification of any remedial or renewal works.

#### 5.3 Living roofs

- Establishment of low maintenance/ minimal intervention areas. Emphasis on maximising ecological potential.
- Predominantly native species with emphasis on maintaining continuity of cover with stability of planting. Control of invasive weed growth through hand or mechanical means.
- Maintenance of low nutrient, free-draining zone.
- Recommendation that an annual inspection is carried out for identification of any additional or remedial works required.

#### 5.4 Review Procedure

An annual inspection is recommended which will provide the basis for any review of operations and procedures. The inspection will identify any additional or remedial works required. These can then be implemented in association with on-going maintenance works or, dependant on the circumstances and extent of works required, can be introduced into the regime as an additional, revised or amended procedure.

This will allow for the identification and consideration of any amendments that may be required to specific operation or the planting itself. This will ensure that the overall impact of the landscape remains as an attractive and well maintained amenity having regard to the original design whilst allowing for any changes to Client requirements.

A detailed review will be undertaken at year 5 and again at year 10.