## HIGHGATE NEWTOWN COMMUNITY CENTRE

Landscape Management Plan



OCTOBER 2021 FIRST ISSUE STAGE 5



# **CONTENTS**

1.0	INTRODUCTION
1.1	Programme & Practical Completion
1.2	Landscape Implementation Plan
1.3	Contact Details
2.0	DESCRIPTION OF THE WORKS
2.1	Tree Planting
2.2	Hedging
2.3	Public Realm Gardens
2.4	Courtyard & Private Gardens
2.5	Areas of Paving
3.0	DESIGN OBJECTIVES FOR LANDSCAPE ELEMENTS
3.1	Long Term Design Objectives & Management Activities
4.0	LANDSCAPE MAINTENANCE ACTIVITIES
4.1	Summary of Maintenance Operations Required To Tree, Hedge & Shrub Planting General
4.2	Summary of Maintenance Operations Required To Areas Of Paving
4.3	Summary of Maintenance Operations Required To Roof Areas
4.4	Landscape Management Responsibilities
4.5	Schedule of Landscape Maintenance Activities

## SCHEDULE OF LANDSCAPE MAINTENANCE ACTIVITIES

## APPENDIX

Landscape Plans - Stage 5



#### 1.0 INTRODUCTION

The purpose of the Landscape Management Plan's (LMP) is to describe the proposed soft landscape implementation strategy and long-term maintenance activities required for the development at Highgate Newtown Community Centre and residences. This Landscape Management Plan is to be read in conjunction with landscape drawings in the Appendix.

The following Landscape Management Plan describes the works to be implemented. It identifies the long term design objectives for all soft landscape areas, the parties responsible for the implementation of the Plan, any maintenance activities to be carried out under the construction Contract and later by the Management Company, and finally provides a scheduled summary of all the maintenance operations. This plan will form the basis for any agreements between the Employer and the Management Company that will maintain the site following the defects liability period set out within the Construction contract.

As part of the Construction Contract the below are subject to a Defects Liability Periods to ensure the successful establishment of all landscape elements, to begin from Practical Completion and will be as follows:

- Trees: 24months or until leafing out in the third growing season after planting whichever is the later.
- Hedges: 24 months or until leafing out in the third growing season after planting whichever is the later.
- All perennial planting: 12 months
- All areas of hard landscape constructed as part of the Construction Contract: 12 months

The Contractor must allow for a minimum of 1 maintenance visits to site per week throughout the construction Contract maintenance and establishment period. During these maintenance visits the Contractor must ensure that the maintenance activities described within this Landscape Management Plan are undertaken to the satisfaction of the Employer.

Following the 24 month construction defects Contract maintenance and establishment period the hard and soft landscape areas within the external public realm will be maintained by London Borough of Camden.

Private garden spaces that are inaccessible from the public realm will not be subject to a maintenance and establishment period. Planting within private gardens are excluded from this Maintenance Plan. All planting within inaccessible private gardens will be the responsibility of individual property owners from the date of Practical Completion.

#### 1.1 Programme & Practical Completion

This Landscape Management Plan and the written General Arrangement - Tree & Planting Plan assumes that the opening date for the scheme will be during the summer months (May to August). Once the construction and hand-over programme has been agreed between the Contractor and Employer these planting proposals are to be re-appraised. Where possible the exact planting programme must ensure an attractive and established planted environment at Practical Completion. The Contractor programme must consider seasonal planting requirements to ensure an established planted environment at Practical Completion. The exact programme of all soft landscape works must be confirmed with the Landscape Architect once the programmed completion date has been agreed. The objective is to provide an attractive and established landscape setting at the time of Practical Completion in order to maximise marketing and sales opportunities for the Client.

#### 1.2 Landscape Implementation Plan

The Contractor must prepare a Landscape Implementation Plan to be submitted to the Landscape Architect prior to the commencement of landscape works on site. This Landscape Implementation Plan must include:

- The identification of a Project Landscape Coordinator. This member of the Contractors on site team will be the principal point of contact between the Contractor and Landscape Architect and will be responsible for planning the landscape works.
- · A programme of works for the procurement and installation of all trees, hedges, shrubs, climbing plants and grassed areas etc
- A Contractor programme which allows for the inspection and approval of all trees, hedges, shrubs and climbing plants at the nursery. All plants to be good examples of the species and to be approved by the Landscape Architect.
- A Contractor programme which allows for all trees, hedges, shrubs and climbing plants to be selected and approved by the Landscape Architect at the nursery from a group of at least 200% of the required quantity. Representative photos of trees, hedges, shrubs, and climbing plants to be provided before any nursery visit. Cost of all trees, hedges, shrubs and climbing plants to include travel expenses for nursery visits as necessary.
- · A Contractor statement on the feasibility of early installation of trees, hedges, shrubs, climbing plants and grassed areas to

allow maximum possible period for the establishment of soft landscape works prior to hand over.

- The identification of any temporary protection measures required to prevent other trades compacting areas of installed growing medium or damaging installed planting.
- · A Contractor programme which allows for the reinstatement of soft landscape areas affected by the works.
- The identification of procedures and documentation required for Landscape Architect approval of all installed landscape works prior to Practical Completion. Contractor to ensure all works are 'snagged' and rectified by Contractors on site team prior to any requests for Landscape Architect approval of completed works.
- Project Landscape Coordinator to monitor progress on site against programme with particular regard to seasonal restrictions of soft planting works. Contractor to liaise with Landscape Architect to ensure installed planting provides an attractive and established landscape setting at the time of Practical Completion.

#### 1.3 Contact Details

Brendan Mullens - Development Manager Brendan.Mullens@camden.gov.uk London Borough of Camden T 020 7974 4929

Christos Kouge - Project Manager Ikon Consultancy christos.kouge@ikonconsultancy.com

Alan Beveridge - Principal Designer / Architect Alan@rcka.co.uk RCKa

Marie Shirley Smith - Landscape Architect Camlins marie@camlins.com T 01743 290 779

Jon Price - Arboricultural consultant jon@treestats.co.uk

#### 2.0 DESCRIPTION OF THE WORKS

The external works at HNCC creates a series of public and semi-public landscaped spaces. The public streets encourage pedestrian movement through attractive streetscape with shallow gradients, accessible surfaces and a variety of routes. Where possible dwellings are provided with planted margins that act as a green buffer with areas of pedestrian circulation. The development also includes private garden spaces.

Refer to General Arrangement - Landscape Plan and Tree & Planting Plans - for details of the external landscape planting. These are in the Appendix.

#### 2.1 Tree Planting

Trees are to be planted on the site. Refer General Arrangement for tree planting schedule. For details of tree pit construction and tree planting refer to drawings in the appendix.

All trees planted as part of the construction Contract are subject to a 24 month defects liability period to ensure establishment.

#### 2.2 Hedging

Hedges are to be planted throughout the site.



Refer to Drg. No.'s LL566-300-0001 General Arrangement - Landscape Plan & Drg. No. LL566-300-0081 General Arrangement - Tree & Planting Plan - for details of the external landscape planting.

Any hedges planted as part of the construction Contract would be subject to a 24 month defects liability period.

#### 2.3 Public Realm Planting

Planted margins are to be formed within the public realm. These areas will include shrubs, grasses, perennials and bulb planting. For the location and details of all planting to public realm gardens refer to General Arrangement - Tree & Planting Plan for details of the external landscape planting.

All areas of public realm planting (adjoining communal areas and public streets) undertaken as part of the construction Contracts are to be subject to a 24 month defects liability period.

#### 2.4 Private Gardens

Planting within private residential gardens that are inaccessible from communal areas are to be maintained by individual property owners. As such they are not included within the 24 month defects liability period or long-term maintenance strategy.

#### 2.5 Areas of Paving

The external spaces of HNCC are to be surfaced with granite setts, porphyry pebbles, precast concrete flags, and self-binding gravel. For the location and details of all hard landscape elements refer to General Arrangement – Landscape Plan, General Arrangement – Areas Of Hard Surfaces.

All areas of hard landscape constructed as part of the construction Contract are to be subject to a 12 month defects liability period.

#### 2.6 Green Roof Areas

Refer to Architect's drawings for location of each of the following areas, which contain hard surfacing and planting areas:

- 2.6.1 Brown Roof
- 2.6.2 Extensive Green Roof
- 2.6.3 Semi-Intensive Green Roof
- 2.6.4 Roof Terrace with timber decking

#### 3.0 DESIGN OBJECTIVES FOR LANDSCAPE ELEMENTS

The long-term design objective for the landscape scheme is to provide attractive communal external spaces and gardens. All planting must provide an attractive green setting for the residents. Tree planting provides height and structure within the external landscape and must provide a high quality landscape setting.

The long-term management and maintenance activities set out within this Landscape Management Plan seek to ensure the successful establishment of the external landscape spaces:

- the establishment of healthy trees of good form with a flowing branch line, strong leader and clear stems (dependant on species);
- the establishment of public realm gardens and courtyards with neatly clipped hedgerows and herbaceous perennial / grass borders free from weeds;
- the maintenance of smooth, even pedestrian hard landscape surfaces.

#### 3.1 Long Term Design Objectives & Management Activities

The construction Contract will allow for a defects liability period to ensure the successful establishment of all landscape elements. All areas of soft landscape installed as part of the construction Contract will be subject to a defects liability period from the date of Practical Completion:

- the Contract will include for a 24 month maintenance and establishment period for all areas of grass, shrubs and hedges from the date of Practical Completion
- the Contract will include for a 24 month maintenance and establishment period for all new tree and hedge planting from the date of Practical Completion

Following the 24 months defects liability period London Borough of Camden will continue the maintenance of the external landscape spaces to ensure the continuation of the landscape structure and objectives.

#### 4.0 LANDSCAPE MAINTENANCE ACTIVITIES

The landscape maintenance works required within the construction Contract are specified in an NBS Landscape Specification issued as part of the contract documents. The Design & Build Contract identifies a 24 month Maintenance Period following Practical Completion for all areas of grass, shrubs and perennials and a 24 month Maintenance Period following practical completion for all new tree and hedge planting.

The Defects Liability Periods will begin from Practical Completion and will be as follows:

- Trees: 24 months or until leafing out in the third growing season after planting whichever is the later.
- Hedges: 24 months or until leafing out in the third growing season after planting whichever is the later.
- All perennial planting: 24 months

#### 4.1 Summary Of Maintenance Operations Required To Tree, Hedge & Shrub Planting Generally

- Frequency of maintenance visits: weekly throughout the construction Contract maintenance and establishment period.
- Plants/trees/shrubs that have failed to thrive (unless due to theft or malicious damage after completion) during the defects liability period stated above are to be replaced with equivalent plants/trees/shrubs.
- Replacements are to match size of adjacent or nearby plants of same species or match original specification (allowing for growth of originally planted stock) whichever is the greater size.
- Timing of making good: within 8 weeks of notification of failure (subject to planting season restrictions).
- Weed control: Maintain weed free area around each tree and shrub, minimum diameter the larger of 800mm or the surface of original planting pit. Keep planting beds clear of weeds, by hand and mechanical means.
- Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
- Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
- Staking: Check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Frequency of checks: 4 weeks.
- · Trees: Spray crown when in leaf during warm weather. Carry out in the late afternoon / evening.
- Prune at appropriate times, to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape. Prune trees to favour a single central leading shoot, unless type and form is of a multi stemmed or pleached nature.
- · Watering: As necessary to ensure establishment and proper development at the discretion of the Contractor.

### 4.1.1 Specimen trees

#### TREE WORK GENERALLY

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

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

Standards: To BS 3998 and Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets'.

Removing branches: Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater. Appearance: Leave trees with a well balanced natural appearance.

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

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



#### ADDITIONAL WORK

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

#### CLEANING OUT AND DEADWOODING

- Dead, dying, or diseased wood, broken branches and stubs.
- Fungal growths and fruiting bodies.
- Rubbish, wind blown or accumulated in branch forks.
- Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
- Other unwanted objects, e.g.treehouses, swings.
- Climbing plants: As required.

#### STAKING

Check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Frequency of checks: 4 weeks; Remove stakes 2 years after planting.

#### REFIRMING OF TREES AND SHRUBS

Timing: After strong winds, frost heave and other disturbances.

Refirming: 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.

- Spray crown with water when in leaf during very warm weather. Carry out in the late afternoon / evening;
- Prune at appropriate times, to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape. Prune trees to favor a single central leading shoot, unless type and form is of a multi stemmed or pleached nature. Do not damage or tear the stem or bark. Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outwards branch bark ridge or branch collar as a pruning guide. Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife. Do not use growth retardants, fungicide or pruning sealant unless instructed. All prunings material should be removed from site.
- Regular inspections to check for pests and disease should be undertaken at the appropriate season.

#### **CROWN LIFTING**

Clearances: Remove branch systems to give clearance.

- Height: 2.5m above footpaths.

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

#### BARK DAMAGE

Wounds:

- Do not attempt to stop sap bleeding.
- Bark: Remove ragged edges using a sharpknife.
- Wood: Remove splintered wood from deep wounds. Size: Keep wounds as small as possible.

Liquid or flux oozing from apparently healthy bark: Give notice.

## 4.1.2 Hedge, shrub, herbaceous and bulb planting

- Planting areas will need to be mulched annually and a general fertilizer applied if required. These areas should be kept weed free, generally by hand-weeding with the minimal use of herbicides. Irrigation should be undertaken during particularly dry periods. Excessive pruning and shaping should be avoided and the plants should be allowed to develop their natural form and structure. Where needed planting areas should be dead headed, thinned and gaps replanted to maintain full cover, good seasonal interest and highlight.

#### SNOW REMOVAL FROM SHRUBS/ TREES Standard: To BS 7370-4.

Plants subject to snow removal: All evergreens. Timing: Within 24 hours of snowfall.

ESTABLISHMENT OF NEW PLANTING Duration: 1 year.

#### Weed control:

- Method: Keep planting beds clear of weeds by hoeing and screefing.
- Area: Maintain a weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.

Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch. Watering: As required to maintain health of planting.

- Throughout the year herbaceous planting areas should be kept weed and pest free using hand tools and clear of fallen leaves and litter. Dead or damaged plants should be pruned regularly and dead flower heads removed as appropriate for each species. Where necessary, plants should be staked or supported in an unobtrusive manner as possible. At the end of the growing season plants should be cut back unless seed heads are to be retained for autumn and winter appeal and plants split when they have become overgrown in size. Areas of bulb planting should be cut back and tidied at the appropriate season after flowering.

#### WEED CONTROL GENERALLY

Weed tolerance: At all times, weed cover less than 5% and no weed to exceed 100 mm high. Adjacent plants, trees and grass: Do not damage.

#### HAND WEEDING

General: Remove weeds entirely, including roots.

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

Completion: Rake area to a neat, clean condition.

Mulch: Reinstate to original depth.

#### **SOIL AERATION**

Compacted soil surfaces:

- Prick up:To aerate the soil of root areas and break surface crust. Size of lumps: Reduce to crumb and level off.
- Damage: Do not damage plants and their roots.

#### SOIL LEVEL ADJUSTMENT

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

- Arisings(ifany):Spread evenly over the bed.

### MAINTENANCE OF LOOSE MULCH Thickness (minimum): 75 mm.

- Topup: Every3months.

Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area. Weeding: Remove weeds growing on or in mulch by hand weeding.

#### WINTER LEAF REMOVAL

Operations: Take down temporary leaf fences. Collect accumulations of drifted leaves from the vicinity and from planting beds. Arisings: Remove to recycling facility.

#### STAKING

- Check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Frequency of checks: 4 weeks.

#### IRRIGATION

Watering: As necessary to ensure establishment and proper development at the discretion of the Contractor.

- Trees/hedges: Spray crown when in leaf during warm weather. Carry out in the late afternoon / evening.

#### PRUNE

Prune at appropriate times, to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape.

Trees: prune to favour a single central leading shoot, unless type and form is of a multi stemmed or pleached nature. Hedges: Prune to 1.1m at time of planting. Once established maintain annually to 1.1m in accordance with the Schedule of Maintenance Activities at section 4.5. Fagus sylvatica (Beech) hedge is to be trimmed late summer to encourage the hedge



to respond and retaining its leaves through the Winter, followed by renovation of old leaves to make way for new growth in late winter, for year-round screening. Prune to a slightly tapered form (base of the hedge is slightly wider than the top), allowing daylight to reach lower parts, maintaining a dense and bushy plant.

#### 4.2 Summary of maintenance operations required to areas of paving and gravel areas

- Every month throughout the year sweep all areas of external paving free of mud, grit, debris etc and remove any weeds or litter.
- · Throughout the winter months collect leaves and dead-head planting
- Herbicide: Apply a suitable foliar acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings.
- · Hard surfaces: Remove litter, leaves and other debris.
- · Surface gutters and channels: Remove mud, silt and debris.
- · Drainage gullies: Empty traps and flush clean.
- · Gravel areas: Rake over. Remove weeds, litter, leaves and debris, and level off.
- Repairs to flexible bituminous pavings: In accordance with the original paving specification or BS 7370-2, clause 4.12.
- Stain removal: In accordance with BS 7370-2, table 4.

#### PAVED AREAS, PATIOS AND PATHS

- Paths and paved areas should be kept clear of litter and weeds by mechanical or hand sweeping and where necessary hosing and pressure washing to remove stubborn residues and any discoloration to the paving. It may be necessary to undertake deep cleansing of heavily trafficked areas on a regular basis;
- Seasonal activities to include salting and clearance of snow& ice, and leaves etc. to footway on snow reaching 5mm depth;
- Throughout the winter months collect leaves and dead-head planting;
- Every month throughout the year, inspect hard surfaces and notify the client of any damaged surfaces or trip hazards; and
- Every month throughout the year to inspect and treat areas where algae and moss have grown, in order to mitigate against the risk of slippery surfaces causing falls.

## STEPS, RAMP AND WALLS

- These areas should be maintained in a similar manner to paved areas with particular attention being given to minimize any trip hazards.

#### DRAINAGE GULLIES AND CHANNELS

- Drainage systems should be regularly maintained ensuring they are in full working order. A regular cycle of maintenance should keep all gullies and channels clear and free of weeds, leaves and rubbish.

#### FENCING

Fences: Inspect and repair to maintain protection against intruders. Gaps to be maintained in existing pallisade fence to allow passage of small mammals.

#### 4.3 Summary of Maintenance Operations Required to Roof Areas

- Annually and during the growing season (April to November) inspect the roof areas for self-seeded woody shrubs and remove by hand.
- Annually, at the end of the growing season (around October / November) strim any meadow areas to approximately 60mm sward, remove arisings, to ensure a regenerating meadow (Semi-intensive green roof only)
- Watering to prevent drying out and to ensure establishment (Semi-intensive and intensive roofs only).
- · Check gutters / gravel margins for weeds, leaf litter, weeds etc and remove.

#### 4.4 Landscape Management Responsibilities

The maintenance operations for all areas of new tree planting, hedge planting, shrub planting and grassed areas are to be undertaken by the Contractor as part of the construction Contract for the required defects liability period.

Following the 24 months defects liability period Brentford Lock West Management Company will continue the maintenance operations for the external spaces at Brentford Lock West Phase 2.

#### 4.5 Schedule of Landscape Maintenance Activities

Please refer to the 'Schedule of Landscape Maintenance Activities'. This table provides a summary of the landscape maintenance activities set out within a standard NBS Specification in a single matrix. It sets out the annual time periods during which specific maintenance activities should be undertaken.



## SCHEDULE OF SEASONAL LANDSCAPE MAINTENANCE ACTIVITIES

Maintenance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Activity:												
Grass, Trees, Hedges & Shrubs:												
Weeding where												
necessary (including												
Intensive green roof and										l		
containers)												
Litter and debris	х	х	x	x	х	x	x	х	x	х	х	х
collection (including												
Intensive green roof and												
containers)												
Tree, hedge and shrub replacements if												
necessary.												
Shrubs:												
Fertiliser application	<u> </u>	1	х									
Watering (sufficient to												
prevent wilt) if necessary				-						<u> </u>		
Trimming and pruning												
(dependant on species) if necessary												
Trees:						1						
		1		+		1					-	
Fertiliser application				х								
Watering (sufficient to												
prevent wilt) if necessary												
Underground guying to												
be inspected and												
maintained if necessary  Pruning if necessary												
<u> </u>												
Inspect for damage and disease												
Hedges:												
Fertiliser application			х									
Watering (sufficient to												
prevent wilt) if necessary												
Cutting (when at							х			х		
sufficient size) specific to												
hedge species												
requirement												
Paving:			<u> </u>	<u> </u>								
Every month through	х	х	x	x	x	x	х	X	x	х	x	х
year sweep all areas of												
external paving free of												
mud, grit, debris etc and												
remove any weeds  Every month throughout	<del>                                     </del>	x	x	x	x	x	x	x	-	x	x	x
the year inspect and	х	*	*	<b>*</b>	, x	*	X	<b>*</b>	x	<b>*</b>	<b>*</b>	<b>*</b>
scarify Self Binding												
Aggregate surfaces as												
necessary to provide												
continuing even and												
permeable surface.												
Removal of leaves, ice	х	х	х	х	1	1		1	х	х	х	х
	I	1	1	1	1	1	1	I	I	I	1	I

	Hatched areas indicate timescale within which activity is to be undertaken if found necessary.
Х	Indicates month activity is to be undertaken.

Note 1: Contract allows for 24 months maintenance and establishment period for all areas of grass and shrubs from date of Practical Completion.

Note 2: Contract allows for 24 months maintenance and establishment period for all new tree and hedge planting from date of Practical Completion.

Note 3: Following the 24 months defects liability period LBC will continue the long-term maintenance of the external spaces.

## **APPENDIX**







