HAVANT RETAIL PARK BEDHAMPTON

SOFT LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN

ACD ENVIRONMENTAL

Ecology
Archaeology
Arboriculture
Landscape Architecture

Linden HOMES

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Date:	04/08/2017
Ref:	LIN19187
Revision:	A – Dec 2018

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1.0 Objectives

1.1. To ensure the successful planting operations, establishment and continued healthy growth through to maturity of the trees, shrubs and grass.

1.2. To achieve a clean, tidy condition and appearance of all external areas.

2.0 Background Information

2.1. ACD Environmental were commissioned in 2014 to prepare the following documentation:

- Soft Landscape Proposals
- Soft Landscape Specification

2.2. The controlling authority are Havant Borough Council, who should be consulted on any matters relating to existing trees and the approved ACD detailed landscape proposals for the project.

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Civic Centre Road
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PO9 2AX

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3.0 Preliminaries

3.1. Failures of Plants (Pre-practical Completion): the Contractor entirely at his own cost shall replace any trees, shrubs or other plants other than those found to be missing or maliciously damaged.

3.2. Malicious Damage or Theft prior to Practical Completion: the Contractor at his own expense shall make all loss or damage arising from theft or malicious damage prior to practical completion of the entire project good.

3.3. Post Practical Completion: the Contractor will carry out the maintenance of trees, shrubs and grasslands after the date of practical completion until the responsibility is transferred to the new owners or by the appointed Management Company.

3.4. Replacement of plants shall take place as many times as is necessary in order to maintain a complete cover of plants and to maintain the scheme as designed by the Architect, and within the correct season for the type of plant, tree, shrub and grassland mix.

4.0 General Maintenance

4.1. Following installation and after transfer the landscape shall be the responsibility of and maintained in perpetuity by:

- Domestic Owners,
- Linden Homes and their appointed Management Companies (should these be contracted out),

The agreement for which shall be set up by the Developer, who shall confirm in writing to the Principal Planning Officer of Havant Borough Council when the maintenance agreement is completed and is operative.

4.2. The Developer shall ensure that any landscape contractor employed by the developer shall carry out the periodic maintenance of all planted areas, other than any areas for which the appointed Management Company becomes responsible during the said Maintenance Period. Inspection checks shall be carried out at monthly intervals and the appropriate work carried out.

4.3. The Developer shall ensure that any landscape contractor employed by the developer shall carry out in all areas any shrub, tree, grass and other plants replacements that may be necessary until transfer of responsibility to the Management Company.

4.4. The Management Company shall be responsible for all periodic maintenance and replacement thereafter for all planted areas to which its management agreement relates, and shall ensure that any landscape contractor employed by it carries out periodic maintenance of all such areas in accordance with the general horticultural schedules below. Either inspection checks shall be carried out by a competent person, a member of British Association of Landscape Industries (BALI) or the Landscape Institute (LI), acting for the Management Company, at minimum monthly intervals and the appropriate work carried out.

4.5. No existing trees, shrubs or grass shall be removed or cut without specific instructions from the Contract Administrator and written agreement of the Local Planning Authority Tree Officer. Existing trees are to be retained, protected and undisturbed throughout the contract.

5.0 Existing Trees and Vegetation

5.1. All works should be undertaken in accordance with the British Standard BS3998:2010 Tree Work Recommendations, by recognised tree contracting companies from the Arboricultural Association's list of registered contractors. Proof of experience and insurance provision will be required. All work shall be undertaken at the appropriate time and with the consent of the Management Company.

5.2. All operations shall be carefully carried out to avoid damage to the trees being treated, or neighbouring trees. No trees to be retained shall be used for anchorage or winching purposes.

5.3. The trees should be checked annually for signs of deterioration or distress and the appropriate actions taken, where a potential safety hazard is identified.

5.4. The under storey should remain undisturbed with little pro-active management required other than the severing of Ivy stems where crown infestation of the larger trees is evident. Where there is a need for surface treatment refer to ACD Landscape Proposal Plan for details.

5.5. All diseased wood, prunings and rubbish should be removed from site and the site left clean and tidy.

5.6. Heavy branches should be removed in sections and undercut to avoid tearing the bark, thereafter to be lowered by slings. No branch stumps should be left and no cuts should be sealed with fungicidal sealant. No cuts should be capable of holding water.

5.7. Heavy Ivy infestation is not recommended in development situations, where wind risk may be a concern. The form of the tree can also be affected and it is therefore proposed to remove any dense infestation of Ivy if evident on site or during the maintenance period.

6.0 Amenity Grass (Turf)

6.1. Areas directly to the front and flat areas of rear gardens to the new properties will be laid to an amenity grade turf. This is due to the potential for heavy use by the new occupants.

6.2. Grass shall be cut during the growing season (generally April-October) using a sharp cutter to leave about 30-35mm of growth and remove arisings from site.

Grass will be cut at intervals of not more than 10-14 days depending on growing conditions. Arisings shall be collected and removed from site. A dressing of prepared fine fishmeal shall be applied at the rate of 60gms/m squared after the second mowing and the arisings of the cut following are to be allowed to fly.

6.3. The sward shall be maintained weed free by an annual application of a selective weed-killer or other equal and approved as necessary. This is to be used by an appropriately trained and qualified individual.

6.4. Grassed edges to planted areas to be trimmed to maintain a clear smooth edge to planted beds; strim edges elsewhere but not against trees; spike annually in October.

6.5. Should bare patches of grass develop, area is to be cultivated to 150mm and then seeded with amenity grass seed. To be cross-sown in two directions at right angles to each other,(half the seed being used in each direction) at the rate of 35 gm per square meter and the ground lightly raked over on a still dry day when the top 25mm of soil is dry. Use ‘A22 Low maintenance’ mix as supplied by Germinal Seeds Ltd, or similar and approved by Local Planning Authority. Germinal Seeds Ltd tel: 01522 868714.

General

6.6. Grassed areas beyond the boundaries of domestic ownership will be maintained in perpetuity by the Management Company.

6.7. This management plan should be made available to the new owners to help outline the principles of the retained habitats and encourage the future management of these areas in perpetuity.

7.0 Shrub and Tree Planting

7.1. The Management Company will maintain all shrubs and trees beyond the boundaries of domestic ownership in perpetuity.

7.2. All tree works are to be undertaken by an Arboricultural Association approved contractor to British Standard BS3998:2010 Tree Work Recommendations.

7.3. Formative tree pruning is to be undertaken until a permanent structurally sound scaffold system of branches typical of the species and appropriate to the site circumstances is produced.

7.4. Post-planting management and maintenance of trees shall be in accordance with BS8545:2014 section 11 Trees: from nursery to independence in the landscape-recommendations.

7.5. A formal assessment of young tree health and development shall be undertaken annually. This assessment shall include foliar appearance, leaf size and leaf canopy density, extension growth and incremental girth development. Trees shall also be assessed continually throughout the year on an ad hoc basis. Wherever practicable the performance of young trees shall be assessed by testing leaf fluorescence and leaf chlorophyll content.

7.6. The density of planting will require that all weeding is carried out by hand, using the appropriate tools. All resultant material should be removed from site.

7.7. The management company is responsible for litter picking in those areas that it manages.

7.8. All plants shall be inspected monthly for wind firmness and firmed as necessary at the same time. Stakes shall likewise be checked for firmness and all tree and plant ties inspected and made good if required.

7.9. All stakes and ties shall be removed as soon as the developing root system is strong enough to support the tree, this is usually after two full growing seasons.

7.10. All grilles, grids, guards and other protective furniture shall be inspected annually and removed as soon as it is no longer needed to protect the tree or where it is causing damage to the tree.

7.11. The soil around newly planted trees shall be regularly inspected for soil capping or compaction and remedial action taken if needed.

7.12. All trees shall be checked regularly for mammal, human or other external damage and remedial action taken where necessary.

7.13. Minor pruning of dead or damaged wood shall be carried out annually. All wounds must not be treated with a sealant as per BS3998:2010 Tree Works Recommendations. On substantial trees, the Local Planning Authorities Tree Officer must be consulted for any necessary approvals.

7.14. All plants shall be watered as may be required to maintain healthy growth following planting, during the maintenance period and subsequently in cases of extreme drought. The Management Company are to provide a bowser for watering.

Trees – 5Ltr's per tree,

Shrubs 1Ltr each,

Grass 5Ltr's/m².

Watering to commence following 10 consecutive days of no rainfall, during the months of June to August. Following Bowser watering a weekly visit should be carried out until the onset of natural rainfall.

Any failures due to drought shall be replaced by the Management Company at their own cost.

7.15. All planted areas shall be given an application of an approved top dressing at the rate of 40g/m² in May. This should be in slow release form e.g. Enmag or similar. This should be worked lightly into the soil, without disturbing the roots, before the bark mulch is re-spread. Unless specific nutritional deficiencies are identified, no fertiliser shall be applied to newly planted trees in the first season. If visual inspection points to nutrient deficiency further investigation of causes will be necessary. Remedial action may include addition fertiliser application, pH testing, assessment of organic content and levels of compaction.

7.16. Shrubs shall be maintained in a balanced shape and shall be annually pruned to allow for this. Any growth which will obscure windows, signs or sight-lines shall be removed. Once established, any support canes shall be removed from the shrubs. Trailing and climbing material shall be assisted in its growth by securing growing leaders where necessary.

7.17. Groundcover planting species have been specified so as not to exceed 600mm in height. However, should planting exceed expectations, this should be carefully cut down to below 600mm in height to avoid interference with visibility.

7.18. The bark mulch should be maintained at an even spread, 75mm deep, of consistent thickness, to ensure that it is effective as a weed suppressant and moisture conserver. Following any maintenance operations and on a bi-annual basis, the mulch shall be supplemented to allow for any material which may have been lost.

7.19. No plant substitutions to be made without the prior written agreement of the Local Authority Landscape Section.

8.0 Hedgerows

8.1. Hedge maintenance operations are to be carried out in line with general principles as outlined in the previous section, including clauses detailing litter removal, weeding, trimming, removal of dead plants and reinstatement of plant materials.

8.2. Around free standing hedges a 3 strand galvanised wire and tanalised softwood timber post fence, to BS1722 Part 3:1986 Fences, specification for strained wire fences, is to be erected to run through the centre of the proposed hedgerow. This is to prevent access through the site by pedestrians until the hedges are fully established. After five years, the hedges have fully established. The temporary fences are to be removed from site.

8.3. Hedges are to have lateral branches moderately trimmed with the hedge allowed to reach planned height as rapidly as possible. Once at the desired height then the tops of the hedge can be trimmed as necessary to maintain a dense formal hedge. Pruning operations are to be undertaken in August or September.

The following inspections should be carried out every year:

8.4. Inspection of the support structures and foundations for rust or rot, take appropriate action when necessary.

8.5. Inspect painted wood components, plywood and metal parts and apply a new finish in line with manufacturer's recommendations and with BS EN1176 Playground Equipment and Surfacing, where necessary.

9.0 Hard Surfaces and Enclosures

9.1 The Management Company/ies will maintain all areas of hard surfacing and street furniture beyond the boundaries of domestic ownership in perpetuity.

9.2 Management objectives will seek to:

- Ensure regular safety checks and maintenance of street furniture including boundary treatments, bin stores, lighting, fences, gulleys, litter bins and gates so that they remain in a safe and useable condition, fit for purpose.
- To achieve a clean, tidy condition and appearance of all external areas

9.3 Inspection and removal of any objects which do not belong in or on the hard surfacing or street furniture is to be undertaken. This is to include cleaning of the surface and removal of objects and weeds, and is to be carried out monthly.

9.4 Inspect for missing, broken parts, joints and wearing parts and if necessary, lubricate, replace components, retighten etc as necessary to bins stores, gates and lighting. Inspections are to be carried out fortnightly.

9.5 Inspection of the support structures and foundations for rust or rot, take appropriate action when necessary annually.

9.6 Inspect painted wood components, plywood and metal parts and apply a new finish in line with manufacturers recommendations where necessary annually.

9.7 Emptying of litter bins/ bin stores and other waste containers within the public realm.

9.8 Stain removal to hard surface is to be in accordance with BS7370-2.

9.9 Fences and enclosures are to be maintained and inspected monthly and any appropriate repairs including application of treatment to timber and/or any painting works to be undertaken as necessary..

9.10 Inspection for any uplifted pavements or cracks to be undertaken and appropriate action taken as necessary.

9.11 Any vandalism (including graffiti) which occurs is to be reported to the Local Planning Authority and remedied or replaced as appropriate by the appointed contractor as soon as possible.

9.12 Permeable paving to be brushed and vacuumed three times a year (at the end of winter, mid-summer and after autumn leaf fall, or additionally if required if it's clogging).

9.13 Permeable paving to be annually assessed for operation, weed growth, silt accumulation and to monitor inspection chambers.

9.14 Maintenance for catchpits and gullies:

- Inspect and identify any areas that are not operating correctly and take remedial action if required. Inspect monthly for first three months then biannually.
- Debris removal from catchment surface (where may cause risks to performance) on monthly basis.
- Remove sediment and oil deposits from all trapped gullies annually or as required.
- Remove sediment from structures upstream of the cellular storage tanks annually or as required
- Annually inspect all inlets, outlets, gratings and overflows to ensure good condition and working and repair as necessary.

10.0 Maintenance Schedules

Weekly

- All plants shall be watered following 10 days without rain. Then weekly until natural rainfall during June – August.

Fortnightly

- Amenity Grass to be cut every 10-14 days
- There should be a minimum fortnightly litter pick over the entire site within areas covered by the Management Company.

Monthly

- Weed control shall be allowed for at monthly intervals. All areas to be weeded by hand.
- All plants shall be inspected monthly for wind firmness and firmed as necessary at the same time. Stakes shall likewise be checked for firmness and tree ties checked.
- Debris removal for catchment surface for catchpits and gulley's.
- Hard surface inspection

Bi-Annual/ Annual

- The bark mulch should be topped up bi-annually
- Hedges to be managed – cut in line with guidance given in section 8.0
- After two years tree stakes and ties are usually ready to be removed.
- Inspection of catchpits, gullies, cellular storage and inflow catchpits.
- Permeable paving to be brushed and vacuumed three times a year (at the end of winter, mid-summer and after autumn leaf fall.

Annual

- Replacement of any failed trees or shrubs will be allowed for annually to ensure that the planting areas are fully stocked at all times.
- Any hollows which appear due to settlement shall be top dressed annually, early in the growing season.
- An application of a residual weed killer shall be allowed for on shrub areas.
- Minor pruning of dead or damaged wood shall be allowed for annually.
- All planted areas and trees shall be given an application of an approved top dressing in May.
- Shrubs shall be maintained in a balanced shape and prevented from obscuring signs, windows and encroaching on paths.
- Check for invasive species as mentioned earlier and remove from site.
- Undertake a formal assessment of young tree health and development.
- Tree grilles, grids and guards shall be inspected and if necessary removed.
- Permeable paving to be annually assessed for operation, weed growth, silt accumulation and to monitor inspection chambers. Remove sediment and oil deposits from all trapped gullies annually or as required.
- Annually inspect all inlets, outlets, gratings and overflows to ensure good condition and working and repair as necessary.

Every 5 Years

- A suitably qualified person employed by the Management Company to undertake a review of the condition, success and long-term maintenance of the planting.

Any amendments to the landscape management plan required to ensure a good planting scheme should be submitted to the LPA for approval. The LPA may draw the managing company's attention to defects in the maintenance or failure to comply with the landscape management plan and require that the Management Company rectify these defects or apply for a variation to the landscape management plan.

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EXPERT WITNESS* LANDSCAPE DESIGN & PLANNING LANDSCAPE MANAGEMENT

Appendix – Conveyance Plan showing Management Area (First Port)

PRELIMINARY

REV. No.	DATE	DESCRIPTION	INITIALS
E	13.10.16	Plot 42 boundary amended.	KT
D	25.11.15	Additional visitor parking spaces added to flats, plot 1 boundary amended	KTG
C	24.02.15	Shared access hatch added to path alongside plots 40 to 42.	KT
B	19.09.14	Additional notes and colouring added	KT
A	08.08.14	Amended in line with client comments.	KT

Client: Linden HOMES

Project: Havant Retail Park Bedhampton

Title: Conveyance Plan

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Date: May 14
Checked: KTG
Drawn: JOK
Drawing No.: 4982:50
Rev: E

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