



For Barratt & DWH NW

Waddow View, Clitheroe

Landscape Management Plan

08/04/2019

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1.0 Introduction

1.1 This document has been prepared by TCL in association with the landscape proposals (drawing numbers 15930 & 16118) to support the planning application by Barratt & DWH for the residential development at Waddow View, Clitheroe. This document provides a comprehensive 5 year management plan for the external environment for the development including the public open space.

1.2 The overall objectives for the Landscape Management Plan are as follows:

- To ensure the successful planting operations, establishment and continued growth through to maturity of the trees, shrubs, and grass for the benefits of the users and wildlife;
- To ensure the continued health and welfare of existing trees and hedgerows across the site;
- To ensure best horticultural and health and safety practices at all times;
- To maintain and progress standards by thorough management procedures;
- To ensure that methods employed respect and encourage wildlife, wherever possible;
- Defects in the landscape are identified early and addressed promptly.

2.0 The Site

- 2.1 The site is located on the north-western perimeter of the town of Clitheroe in Lancashire. It consists of several pastoral fields divided by ditches, hedgerows and fences, with individual trees and groups of trees present in various locations. The maintenance contractor is to visit the site and to fully acquaint themselves with local conditions, the nature of the work, the state of the ground, as they will be required to execute work upon it, the programme and manner of work and all other matters affecting the proposed work. No claim for extra work on the grounds of lack of knowledge will later be entertained.
- 2.2 Care is to be taken to avoid interference with the established levels and contours of the ground, and to avoid damage to footpaths, roads, drains, manholes and existing structures and vegetation. Damage so occasioned is to be made good at the maintenance contractor's expense.
- 2.3 All work shall be carried out by experienced operatives holding relevant horticultural qualifications, training certificates, or under the supervision on site of such a person. All works detailed in the following management plan shall be carried out in accordance with good horticultural practice, using materials, plant and machinery appropriate to the task, undertaken in such a manner that avoids damage and/or nuisance to the site and its surroundings.
- 2.4 The responsibility for maintaining and adhering to the standards of work lies with the maintenance contractor and after the 12 months defect liability period the Management Company. These are to be maintained thoroughly. The maintenance contractor / management company shall deal with any problems arising from dropping standards of maintenance raised by residents, the public or Local Authority promptly.
- 2.5 Contact details for the maintenance contractor will be provided to all residents and signage to be located in visible location within the public open spaces indicating emergency contact points for the general public in case of a problem or emergency.

Should the signage be removed or vandalised this is to be replaced/repared promptly by the maintenance contractor.

3.0 The Use of Pesticides & Other Hazardous Substances

3.1 The maintenance contractor's attention is drawn to the following statutes and regulations:

The Food and Environment Protection Act (1986);

The Control of Pesticides Regulations (1986);

The Control of Substances Hazardous to Health Regulations (1988);

The Environment Protection Act (1990);

3.2 It is the maintenance contractor's responsibility to ensure that they are fully conversant with the requirements of the foregoing legislation and other relevant Codes of Practice, British Standards, rules, guidelines or directives that relate to the use of hazardous materials.

3.3 All manufacturers' recommendations relating to application, storage, mixing and other safety precautions must be strictly adhered to, in the interests of health and safety.

3.4 The maintenance contractor will make such notifications as are required under the terms of **The Food and Environment Protection Act (1986)**.

4.0 Retained Trees and Hedgerows – Refer to TEP Arboricultural Assessment & Tree Protection Plan 6896.001

- 4.1 All existing trees and hedgerows along site boundary to be retained are to be protected in accordance with BS5837 (2012): Trees in relation to construction.
- 4.2 Prior to commencement of works all trees are to be inspected for nesting birds and potential for roosting bats by an approved Ecologist. Works should be undertaken outside the birds nesting season (nesting season – late February to end of August).
- 4.3 A visual inspection of retained individual trees shall be carried out at every visit. Any damaged, diseased or dangerous timber shall be reported to the operations manager, for an application to be made to the Local Planning Authority under the Town & Country Planning (Trees) England Regulations 2012 if it is considered hazardous to public use of the area.

5.0 Amenity Grassland

- 5.1 Prior to cutting all areas shall be cleared of litter and debris.
- 5.2 All operations shall be carried out using machinery appropriate to the task, cylinder, rotary or mulch mowers and when weather and ground conditions are suitable.
- 5.3 Operations shall be suspended where ground conditions prevent the use of machinery without damage to the ground surface. Where operations are suspended due to unsuitable conditions additional maintenance visits may be required in order to maintain the sward within acceptable growth limits.
- 5.4 During each maintenance visit the maintenance contractor shall cut adjacent to fences, walls, kerbs, paths, trees and other boundaries or obstacles using equipment suitable to the task. Strimmer's shall not be used around the base of trees. The frequency of cuts shall remain flexible in order to accommodate growth rates and weather conditions. As a general guide cutting is likely to be required every two weeks on high maintenance areas, ensuring that the sward height does not exceed 75mm and that the presence of flowering weed species is avoided. The height of cut shall be 30mm. The maintenance contractor is required to assess growing conditions and adjust maintenance schedules as necessary, taking into account bulb planting where appropriate.
- 5.5 All cuttings are to be evenly dispersed over the plot.
- 5.6 Following cutting, all grass clippings and other debris shall be swept from adjacent hard standing areas and removed from site to an authorised tip or dispersed over the plot. Where bulbs have been naturalised in grass, the first cut is to be deferred until after their foliage has substantially died down.
- 5.7 It is the contractor's responsibility to maintain and control weed growth within the grass swards. This shall normally be achieved by the regular cutting operation and where necessary the application of appropriate contact or residual herbicides, although it remains the responsibility of the Contractor to adopt other methods where herbicide application is unsuccessful or impractical.

6.0 Bare Rooted, Root-Balled & Containerised Trees

- 6.1 All staked trees shall be inspected on each maintenance visit, and any trees which have died or have suffered physical damage such that they no longer provide any useful landscape function, shall be removed from site, complete with the stake, and the ground reinstated. Replacement tree planting will be undertaken in the next planting season as per the contract documentation.
- 6.2 In the first 3 years newly planted trees are still establishing. Trees should be watered once per week, or as necessary, in dry weather during the growing season, April to October. Apply approximately 50-75 litres/ sq m per tree per week. Once they have become well established, most trees only need to be watered during spells of drought.
- 6.3 All staked trees shall be inspected on each maintenance visit, and any dead, diseased or damaged branches shall be pruned back to the main stem or suitable side shoot, or removed.
- 6.4 Mulched areas around trees shall be maintained weed free, with top up mulch at a depth of 50mm as required.
- 6.5 Any trees which have died as a result of the maintenance contractors operations or omissions shall be replaced by the maintenance contractor at his own expense during the next planting season.
- 6.6 Where the operations manager has agreed that plant deaths have arisen due to circumstances out of the control of the maintenance contractor, replacement planting shall be instructed by the operations manager and paid for at an agreed rate.
- 6.7 Should persistence in failure be evident size of stock and species selection should be discussed and agreed with the operation manager and council's landscape officer.
- 6.8 All new trees will benefit from feeding during the first 2-3 years after planting. Once established they will only require feeding once every 5-10years. Trees grown for their foliage will benefit from a fertiliser rich in nitrogen.
- 6.9 In autumn an organic fertiliser / material such as well rotted manure or compost is to be applied as mulch. Spread the material in layers 5-8cm deep around the tree keeping a clear area immediately around the trunk.
- 6.10 Where trees are located in areas of grass or planting, they are likely to be subject to competition from the grass sward, adjacent plants and from weeds respectively. A circle of mulch 75mm deep and a minimum radius of 500mm should be maintained around each tree.
- 6.11 Tree Ties should be inspected and adjusted at least once per year in April, prior to an increase in the tree girth. This should then be done again in October, after growth has occurred. Damaged ties and stakes should be replaced and when the trees have established and are firm enough to support themselves, the ties should be removed, and the stakes cut down to ground level. This should be after 3 years. Underground guying adjusted only if there is an issue.

7.0 Mature Trees

7.1 The mature trees should be inspected annually to ensure that they are in good health, and are not hazardous to the users of the site. Both the inspection and all works to mature trees should be carried out by a qualified arboriculture personnel to BS 3998:2010 'Tree Works – recommendations'. Routine pruning should include the following operations:

- The removal of dead, diseased and dying branches.
- The removal of vegetation growing onto footpaths, parking areas, POS, roads, signs, sightlines and any other location where it presents a hazard to the users of the site.
- Inspection for and reporting of any incidence of pests and disease.
- Occasionally, the inspection may result in a recommendation for more specialist pruning of which crown thinning and reduction are likely to be the most commonly needed.
- All tree works should be carried out in a safe manner complying with all relevant legislation.

8.0 Hedges

- 8.1 Hedgerows are to be maintained in a weed free condition. Ornamental species hedgerows (aided by bark mulch) should be maintained as follows:
- Following planting, all hedges are to be mulched with a 50mm depth of standard mulch;
 - The depth of mulch should be maintained at a minimum of 50mm until the hedgerows are well established; Mulch layer may need to be topped up every year.
 - Annual trim in October until objective height is achieved; thin back laterals in first 2-3 years to shape. Shape to oblique angle (wider base than top), particularly in formative second year, allowing the apical shoot to grow to the desired height before trimming back.
 - Once the objective height is achieved, the hedges should be trimmed annually in October (to avoid the nesting season) to the various objective heights required. Trimming should achieve flat, uniform sides and a flat, level top to the hedges;
 - To prevent weed growth, fertiliser application should be avoided unless there are localised areas of poor growth. Hand weed throughout where necessary.
 - Watering should be carried out as necessary, particularly from April to October for the first 3 years following planting. A provision of at least 12 watering's per year should be included.
- 8.2 Native Species Hedges should be allowed to grow to nominally 2m. Trim back annual growth as required to maintain this height. Once projecting growth is established and sufficiently dense, trim back to a minimum distance of 50cm from fences/walls. Adjust trimming distance as required to achieve dense hedge growth as viewed from non-planted side of fence/wall. Where space permits trim opposite side of hedge to match in order to maintain balanced growth.

9.0 Ornamental Shrubs & Climbers

- 9.1 During years 1-5 or until canopy closure, planting shall be maintained by monthly visits in the growing season.
- 9.2 Prior to maintenance, all areas shall be cleared of litter and debris.
- 9.3 All plants shall be checked and if necessary firmed up in the ground.
- 9.4 Any damaged shoots or branches shall be pruned off using secateurs.
- 9.5 The maintenance contractor shall ensure that all shrubs are maintained 90% free of weed growth. This shall normally be achieved by the application of appropriate contact or residual herbicides, although it remains the responsibility of the maintenance contractor to adopt other methods where herbicide application is unsuccessful or impractical.
- 9.6 The maintenance contractor shall remove any dead, dying or diseased plants, which are evident during any maintenance visit. The operations manager shall be informed of the location, number and species of all material that has been removed. Any plants that have died as a result of the maintenance contractor's operations or omissions shall be replaced by the contractor at his own expense during the next planting season.
- 9.7 Where the operations manager has agreed that plant deaths have arisen due to circumstances out of the control of the maintenance contractor, replacement planting shall be instructed by the operations manager and paid for at an agreed rate.
- 9.8 All replacement planting shall be with like species unless otherwise agreed with the operations manager.
- 9.9 In any mulched areas where the depth of the layer of mulch has fallen below 50mm extra mulch shall be added to increase its depth to 50mm.

10.0 Meadow/Wet Dry Grassland/Long Grass/Swales

- 10.1 Areas to be established as longer grass edges and meadow areas will be inspected prior to maintenance. The grass areas will be cut twice annually, once in March, after the majority of flowering species have set seed, to a height of 100mm. The second cut will take place in the autumn to reduce competition from grasses, to a height of 100mm.
- 10.2 On both visits all cuttings will be removed from site. Cuts will be carried out using the appropriate machinery; cutting and removal can be acceptably carried out using a forage harvester. Where access restricts the use of large machinery grass will be strimmed and cuttings raked up by hand.

11.0 Landscape Buffer planting. Buffer planting to the North Eastern extents of the site adjacent to plots 29-35, 39 & 43-46 to be planted prior to the occupation of these plots

11.1 Management of the buffer planting will require the following and be adhered to for life:

- The adjustment of tree ties.
- Check that all rabbit guards are in place and undamaged, replacing any that are damaged or loose.
- The removal of any weed growth at base of plant either by hand weeding or spot treatment with an approved translocated herbicide. If treating near to the balancing pond check that any herbicide is suitable for use near water.
- Remove litter from all beds.
- Replace dead plants as required.
- Control pests and diseases by monitoring regularly and treating affected areas swiftly as required.

12.0 SuDS Balancing Pond

The area to the south of the site has been designed as a balancing pond. Depending on seasonal rainfall the water level will fluctuate naturally with the use of a grass species suited to the wet/dry conditions. Management of the suds balancing pond will require the following:

- 12.1 Litter and debris are to be removed from the area regularly. The spread of any self-seeded non-native and invasive plants should be monitored during normal maintenance visits; the emergence of such species may require greater frequency of cutting or dredging operations or in specific cases aggressive control techniques. In such cases seek specialist advice.
- 12.2 Native shrubs along the banks of the balancing pond are to be maintained at a maximum height of 3ms and cut back as required to prevent spread into the base of the balancing pond.
- 12.3 Herbicide applications to remove plants along the bank may be used in certain situations, consult relevant guidance. Check that any herbicide chosen for use suitable for use near water.
- 12.4 Self-seeded trees along the banks of the swale should be removed at the earliest opportunity.
- 12.5 The areas of wet/dry grassland will be inspected prior to maintenance. The grass areas will be cut twice annually, once in March, after the majority of flowering species have set seed, to a height of 100mm. The second cut will take place in the autumn to reduce competition from grasses, to a height of 100mm.
- 12.6 On both visits all cuttings will be removed from site. Cuts will be carried out using the appropriate machinery; cutting and removal can be acceptably carried out using a forage harvester. Where access restricts the use of large machinery grass will be strimmed and cuttings raked up by hand.

13.0 Trim Trail – Refer to Drawing 15950

- 13.1 The play area will have a weekly visual inspection and cleanse by a ROSPA trained operative and maintained in accordance with requirements of BS EN 1176/77. A bi annual inspection by a play inspector which includes risk assessment and levels of risk should be carried out.
- 13.2 Any defects or hazards considered dangerous during the visual assessment are to be dealt with immediately and the play facilities will be closed until appropriate measures have been taken to make the facilities safe and fit for purpose.
- 13.3 Signage which includes the contact details for the maintenance contractor will be displayed in a suitable location at each play facility. The contact information must include a direct telephone number so that any faults can be reported and dealt with in an appropriate timeframe.
- 13.4 Maintenance of equipment and safety surfacing will be undertaken in strict accordance with the manufacturer's recommendations. All replacement parts must be sourced from an accredited manufacturer/supplier and be appropriate for the intended use.
- 13.5 The Contractor is to retain a record of all warranty inspections, maintenance, repairs and modifications carried out to any part of the play apparatus and/or associated safer surfacing.

14.0 Hard Surfaces and Elements

Hard surfaces within this management plan encompass areas of concrete flag paving and bitmac.

Management of these areas should be as follows:

- 14.1 The site should be inspected regularly and any litter removed.
- 14.2 Any graffiti or vandalism should be removed/rectified as soon as possible, since if it is left unattended the problem tends to escalate.
- 14.3 All problems with hard elements should be attended to as a matter of urgency.
- 14.4 Routine maintenance of the hard elements and surfaces should be carried out in accordance with a programme, since this allows budgeting for the work.
- 14.5 Some weed control will be required on hard surfaces, particularly those which are not sealed (such as areas of paving). Weed control should be carried out if the surfaces are hazardous for pedestrians or unsightly, but residual herbicides should not be used.
- 14.6 Elements including all boundary treatments, fences, railings, hard surfaces, street furniture and lighting should all be inspected regularly for defects, damage, trip hazards and vandalism in accordance with manufacturer's recommendations. Repairs and replacements should be carried as a matter of urgency to maintain site safety.
- 14.7 Drainage channels should be kept clear of silt and other debris throughout the year.

15.0 Landscape Maintenance Schedules

Maintenance Plan	YEARS	January	February	March	April	May	June	July	August	September	October	November	December
Grass Cutting													
Long Amenity Grass cut to 100mm	1-25			√							√		
Reseed areas of poor growth/hard wear (As required)	1-25			√									
Hedge													
Check stakes, ties and guards (maintain/remove as required) Any defective stock to be replaced.	1-5	√		√		√		√		√	√		√
Annual trim, thin back laterals until objective height achieved.	1-25										√		
Once height achieved trim to maintain. Water as necessary during growing season first 3 years.	1-3										√		
Thin/remove unwanted growth	5,10,15, 20,25										√		
Trees													
Specimens to be firmed in and checked for damage, secure stakes and ties. Any defective stock to be replaced. Watering to be carried out as necessary during the growing season	1-5				√								
Crown Prune	1-5											√	
Check and maintain underground guying system if required.	1-5	√		√		√		√		√		√	
Refirm (tread around the base following strong winds or hard frost, filling gaps in top soil where required)	1-3	√		√		√		√		√		√	
Clear out unwanted woody growth	5,10,15, 20,25	√	√										√
Check for dangerous trees. Undertake arboricultural work to make the tree safe or remove tree as appropriate (As required)	5-25												
Ornamental Shrubs													
Plants to be firmed in and checked for damage and pruned with any defective stock to be replaced. All planting areas are to be routinely checked for pests and disease, ties, stakes and supports all in good condition, vandalism and litter, mulch to be topped up as required.	1-5				√	√	√	√	√	√	√		
(Replace as required)	1-5												

16.0 Handover Procedure

16.1 All areas should be inspected by both the approved maintenance contractor and developer together on site to determine that the landscaping within all POS areas to be handed over to the designated management company for this development is at the required level before being released to the management company's authority/jurisdiction.