



BRYN Y GROES, GRESFORD

LANDSCAPE AND OPEN SPACES MANAGEMENT PLAN

The management plan is intended to discharge planning conditions for a multi- phased residential development in Gresford. The plan is to be handed to the building owner/ occupants/ management company/ contractor, or whoever is responsible for the grounds maintenance of the site.

The plan has been prepared and coordinated by Above Zero Landscape Architecture on behalf of SG Estates Ltd

Above Zero Reference:	029.01. Bryn Y Groes- Landscape Management Plan-V5.docx
------------------------------	---

Issue Version	Status	Prepared by	Checked	Date
V1	Final	ES	TS	06.02.2019
V2	Final	ES	RG/ RC	07.02.2019
V3	Final	ES	RG/ RC	08.02.2019
V4	Final	ES	RG/ RC/ JB	27.02.2019
V5	Final	ES	BC	08.04.2019

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Above Zero Landscape Architecture's Client, and is subject to and issued in connection with the provisions of the agreement between Above Zero Landscape Architecture and its Client. Above Zero Landscape Architecture accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party

Contents

1.0 Introduction

- Background and Purpose of Management Plan
- Planning Requirements
- Monitoring and Review

2.0 Baseline Information

- Site Location and Description

3.0 Site Management

- Long Term Design Objectives
- Objectives for Specific Landscape Features
- Objectives for General Maintenance

4.0 Implementation of the Management Plan

- Responsibilities

5.0 Maintenance Specification

1.0 Introduction

Background and Purpose of Management Plan

- 1.1 The proposed development is for residential dwellings and is located off the B5445 Chester Road, Gresford.
- 1.2 The development is made up of private residential dwellings and curtilages, access roads, communal areas of open space and a semi-natural area, from which the public is excluded. The open spaces contain a variety of mature and newly created landscape features, such as grassland, hedgerows, trees and shrubs. The site also contains a 'Home zone' shared pedestrian/ vehicular area which will not be adopted by the LPA and therefore falls under this management plan. The areas of open space covered by this plan are shown on the illustration opposite.
- 1.3 The purpose of this document is to provide a plan for the long-term management (5 years) of open spaces and landscape features within the proposed development site. It sets out guiding principles, aims and objectives. This allows those responsible for the management and maintenance of the site (the management company) to understand the

existing landscape, proposed development and implications for ongoing maintenance of the site.

Plan to show areas of open space to be managed under this management plan.



1.4 This Landscape and Open Spaces Management Plan (the plan) should be read in conjunction with the following approved planning drawings:

- Landscaping Layout PH 1-3 07 2015
- Landscaping Schedule ph 1-3 07 2015
- 029.01.05- Bryn Y Goes- Landscape GA- Phase 4- Rev D
- 029.01.11- Bryn Y Goes- Home Zone Detail Layout- Phase 4- Rev D
- 029.01.06- Bryn Y Groes- Planting and Main Schedules- Phase 4- Rev D
- 029.01.15- Bryn Y Groes- landscape GA - Phase 5-
- REV D
- 029.01.16- Bryn Y Groes- landscape schedules - Phase 5- Rev C

1.5 A maintenance specification is provided in section 5. This sets out the detailed landscape maintenance requirements for the site. Maintenance of the site must be carried out as per the requirements set out in the specification. Any discrepancies between this plan, the drawings and specification must be highlighted to site owners and overall management staff.

Planning Requirements

1.6 This management plan supports the full planning application and discharge of conditions for phases 1-5 of the residential development.

1.7 The plan, to cover a five year period after completion, has been requested by Wrexham County Borough Council (WCBC) as part of the planning process to ensure existing and proposed landscapes and open spaces are suitably maintained to ensure existing landscape features continue to develop naturally and proposed landscape features are maintained to ensure good establishment and continued healthy growth.

Monitoring and Review

1.8 Annual monitoring reports against measurable targets such as levels of litter, condition of planting, health of mature trees, complaints from residents and instances of anti-social behaviour. The outcomes of this monitoring will form part of a Site Management Monitoring Report to be submitted by the management company to the site owner annually. The report will include management operations undertaken and

any actions outstanding or required within the following year that fall outside of this plan and maintenance specification.

1.9 This management plan will be reviewed annually by the site owner, management company and other interested parties to ensure that the aims of the plan are being met. The success of the management company shall be reviewed through regular meetings and inspections including:

- Annual Site Meeting following submission of annual report;
- Quarterly site inspections and reports; and
- Other unscheduled inspections made as required.

1.10 After 5 years the management plan will be reviewed and updated. This will review the type and frequency of maintenance operations to ensure the continued high-quality management of the site in accordance with the design philosophy and habitat requirements as the site establishes and matures.

Content

1.11 The structure of this plan has been set out under the following headings:

- Introduction
- Baseline Information
- Site Management
- Implementation of the Management Plan
- Specification for Maintenance

2.0 Baseline Information

Site Location and Description

- 2.1 The site contains over 60 new dwellings and is located on the south western outskirts of Gresford, a village located just to the north of Wrexham. The site is accessed off the A5445 Chester Road.
- 2.2 A modern highway junction has been created from Chester Road to serve as the single and only point of vehicular access to all phases of development. A controlled access is located off Old Wrexham Road to the east side of the development. This serves primarily as a pedestrian access route but can also be used for emergency vehicles to access the site.
- 2.3 The development contains a number of mature trees that have been retained in open spaces throughout the scheme. This provides instant maturity to areas. The overall character of the development is modern with an edge of village and semi-rural green character.

Existing photographs of the site are shown below.
(photographs taken June and September 2018)



3.0 Site Management

Long-term Design Objectives

- 3.1. The residential site has been designed to retain a number of existing mature trees within generous areas of open space. A number of new trees are also proposed as replacements to trees which have been removed as part of the development, whilst also providing a stock of younger trees that will succeed the larger more mature varieties. WCBC have provided advice on trees in relation to development and proposed numbers and varieties of new trees.
- 3.2. Proposed structure planting, including trees, hedges and meadow grass has been chosen to reflect the local landscape context in order to integrate the development into the landscape, whereas the smaller areas of planting around new dwellings is more ornamental.
- 3.3. A semi- natural 'wildlife' area has been created on the southern edge of development. This area is not publicly accessible. The area contains grassland, trees and a thicket of *Rubus fruticosus* (Common Blackberry).
- 3.4. There are 5 strategic design objectives for the scheme:

1. Retain and protect the site's valued landscape features and provide new landscape features that will sympathetically integrate into the wider environment and mature to create an attractive setting for residents and visitors.
2. Maintain and enhance the habitat within the wildlife area for the benefit of intended fauna species.
3. Ensure the landscape is high quality yet robust and complementary to the architectural style of the buildings.
4. Provide a tidy, safe and well-maintained environment for residents and visitors
5. Ensure that landscape proposals are cost effective and not overly onerous or unpractical on owners/ residents to develop and manage.

Objectives for Specific Landscape Features

There are various landscape elements/habitats proposed for the site which have varying management requirements. The landscape features are listed below and can be seen on the following approved landscape layouts for the site. Management

objectives and tasks are described in detail on the following pages.

Existing Landscape Features

1. Mature Trees
2. Hedgerows

Proposed Landscape Features

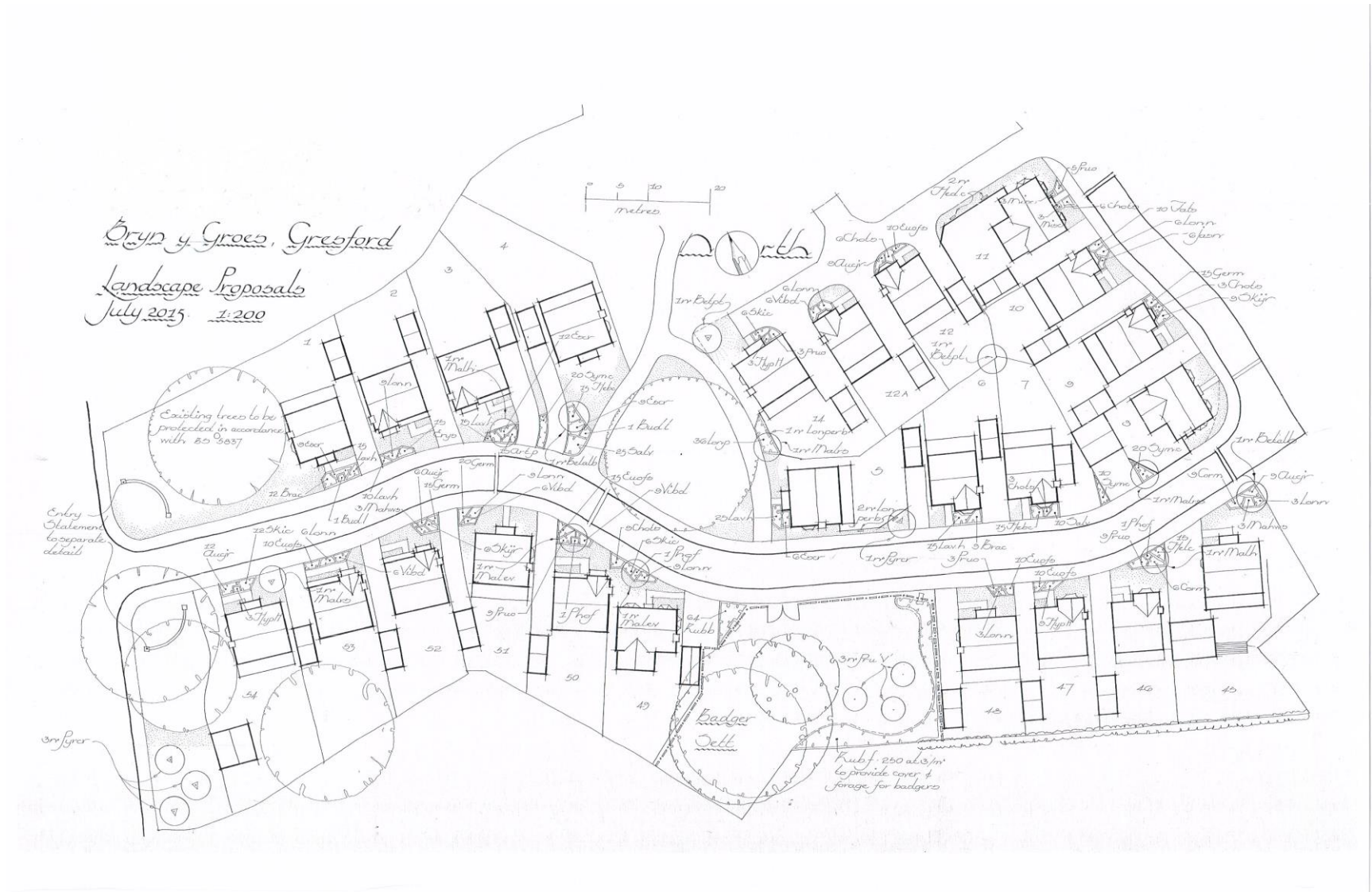
3. Native woodland planting
4. Trees
5. Hedgerow
6. Shrub and herbaceous planting
7. Amenity grass
8. Meadow Grass
9. Bulbs

Approved Landscape Layouts.

3.5. The approved general layout drawings are listed and shown below:

- Landscaping Layout PH 1-3 07 2015
- 029.01.05- Bryn Y Goes- Landscape GA- Phase 4- Rev D
- 029.01.15- Bryn Y Groes- landscape GA - Phase 5-
- REV D

Landscape Layout Phases 1-3



Landscape Layout Phase 4



Landscape Layout Phase 5



Landscape Feature Type 1: Existing Trees

Objective

W1 Allow trees to continue to develop naturally, selectively prune for visual amenity and safety.

W2 Retention of deadwood or brash piles as habitat features

W3 Monitor trees for condition and safety. If trees are thought to be diseased, take action to prevent disease spreading.

*NOTE: Obtain correct permissions from WCBC prior to any work on protected trees or trees with conservation areas.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspection of trees by a trained arboriculturalist for hazards, tree safety and disease (Objective W3)		1,3 and 5												
Carry out selective pruning as required to main visual amenity and remove any crossing, damaged or diseased limbs. Carry out any recommendations contained in tree condition reports. (Objective W1 & W3)	1	1 to 5												
Carry out tree works as required. Leave dead wood within brash piles in appropriate locations to provide habitat (Objectives W2)	As required	1 to 5												
Thin existing woodland groups to remove dead, dying or dangerous trees. (Objective W1 & W3)	1	1												
Annual inspection to ensure tree roots are not causing damage to nearby foundations, pavings or roads. (Objective W3)	1	1 to 5												
Pine tree (T4 as identified within Tree Solutions report 17/AMS/WXM/198) -annually maintain loose mulch ring at 65mm depth. Weed control to be undertaken by hand only.	1	1 to 5												

Landscape Feature Type 2: Established Hedgerow

Objective

H1 Hedgerow to be managed proactively to maintain structure to provide bird nesting habitat.

H2 Manage hedgerow to prevent conflicts with people, built environment and maintain visibility.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Remove litter and detritus from within hedgerows as part of fortnightly site cleanse (Objectives H1 and H2)	26	1 to 5												
Trim/face up hedgerows twice annually to maintain form and encourage bushy growth avoiding bird nesting season (March to August). Trim/ face to maintain clear visibility splays on highway and road junctions and ensure footpaths and roads are not obstructed. (Objectives H2)	2	1 to 5												
Gap up existing hedgerow with new planting stock where there are existing gaps or to replace thick stemmed or 'woody' species such as sycamore. (H1)	1	1 to 5												
Remove any ivy from hedgerows by cutting at the base and carefully removing stems (Objective H2)	2	1 to 5												

Landscape Feature Type 3: Native Woodland Planting

Objective

NW1 To establish new woodland planting as a habitat feature and wildlife feature.

NW2 Monitor trees for signs of disease and take action to prevent the spread through the site.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Check protective guards and spat mats monthly and repair/replace as required. Remove guards at year 5. (Objective NW1)	12	1 to 5												
Weed control achieved through maintaining spat mats (as above), 65mm depth of mulch and by hand-weeding only'. No chemical application permitted. (Objective NW1)	2	1 to 5												
Watering as required during establishment particularly during times of prolonged drought (Objective NW1)	As required	1 to 3												
Re-firming of new planting as required (Objective NW1)	As required	1 to 3												
Fertiliser application in spring and autumn as required (Objective NW1)	2	1 to 5												
Replacement of failed planting in the next available planting season (Objectives NW1 and NW2)	As required	1 to 3												
Inspection of woodland by a trained arboriculturalist/ecologist for signs of disease (Objective NW2)	Annually	1 to 5												
Thin of woodland vegetation (by approximately 25%) as directed and agreed in advance by project arborist, project ecologist and WCBC Arboricultural Officer to ensure long-term establishment of woodland planting whilst retaining nesting habitat and wildlife corridor (Obj NW1)	1	5												

Landscape Feature Type 4: Trees

Objective

T1 To allow trees to successfully establish to provide an attractive setting to the residential area whilst ensuring a safe environment.

T2 Management to provide conditions where a healthy tree root system and canopy will develop.

T3 Monitor trees for signs of disease and take action to prevent the spread through the site.

*NOTE: Obtain correct permissions from WCBC prior to any work on protected trees or trees with conservation areas.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspect guys, stakes and ties regularly for firmness and support. Adjust ties twice annually (*). Straighten leaning trees or refirm trees as required (Objectives T1 and T2)	12	1 to 3												
Maintain loose mulch to a depth of 65mm around base of trees (Objectives T1 and T2)	1	1 to 5												
New trees to be watered as required to ensure successful establishment of trees. Programmed fortnightly during the growing season and more during prolonged periods of drought. Watering not to take place if rootball already looks saturated (Objectives T1 and T2)	As required	1 to 5												
Carry out hand weeding to vegetation within 0.6m of base of tree (Objectives T1 and T2)	Monthly	1 to 5												
Fertilise and aerate trees which are not thriving (Objectives T1 and T2)	2	1 to 3												
Replacement of failed tree planting in the next available planting season (Objective T1)	As required	1 to 3												
Formative pruning to maintain health and vigour. Annual crown lifting, pruning, thinning and shaping of trees as required. (Objective T2)	1	1 to 5 as required												
Where necessary selective thinning works undertake to ensure trees of the highest quality and longevity remain and are provide adequate space and light to grow into a form and shape expected of their individual species. (Objective T1)														

Undertake safety inspections by an arboriculturalist to check for damage and diseases. Carry out remedial works as required. Also check roots are not causing damage to roads, pavements or buildings. (Objective T3)	1	1 to 5																
---	---	--------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Landscape Feature Type 5: Hedgerow

Objective

NH1 Establishment of a boundary hedgerow to maintain a neat appearance to garden boundaries, home zone area and the perimeter of the site and provide a wildlife corridor and nesting habitat

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Check protective fencing/guards and mulch mats monthly and repair/replace as required. Remove guards at year 5. . (Objective Nh1)	12	1 to 5												
Monthly hand weed around hedgerows . (Objective Nh1)	Monthly	1 to 5												
Watering as required during establishment particularly during times of prolonged drought . (Objective Nh1)	As required	1 to 3												
Re-firming of new planting as required . (Objective Nh1)	As required	1 to 3												
Fertiliser application in spring and autumn as required . (Objective Nh1)	2	1 to 5												
Trim/face up hedgerows twice annually to maintain form and encourage bushy growth. (Objective Nh1)	2	1 to 5												
Replacement of failed hedgerow planting in the next available planting season . (Objective Nh1)	As required	1 to 3												

Landscape Feature Type 6: Shrub and Herbaceous Planting

Objective

S1 Maintain a neat and tidy appearance to provide an attractive setting to the development through ensuring successful plant establishment.

S2 To achieve all year interest through appropriate management of ornamental species.

S3. Maintain and enhance the habitat within the wildlife area for the benefit of intended fauna species.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Remove litter from planting beds as part of fortnightly site cleanse. . (Objective S1/S3)	26	1 to 5												
Remove weeds from all planting beds by hand weeding during the growing season. Pull up weeds to aid successful establishment and maintain a tidy appearance. (Objective S1/S3)	7	1 to 5												
Maintain mulch within ornamental planting beds to a depth of 75mm (Objective S1)	Twice annually	1 to 5												
Fertiliser application in spring and autumn (Objectives S1 and S2)	2	1 to 5												
Prune, trim and dead head shrub and herbaceous planting in accordance with species requirements to maintain vigour and growth. Retain seed heads (herbaceous and grasses) over winter to provide interest and food source and cover for wildlife. Cut back herbaceous plants and grasses in Spring. (Objective S2)	As required	1 to 5												
Remove any failed or diseased planting as soon as possible, replace in the next available planting season. (Objective S1/S3)	As required	1 to 5												

Landscape Feature Type 7: Amenity Grassland

Objective

G1 To maintain a tidy appearance and ensure safe public usage

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
First cut of grass to be to 50mm height. Arisings removed from site (Objective G1)	1	1												
Fortnightly cut during the growing season to maintain a height of 40mm. Spread arising evenly over grass areas. (Objective G1)	18	1 to 5												
Cultivate and re-seed as required (Objective G1)	As required	1 to 5												
Spring and autumn slow release fertiliser application (Objective G1)	2	1 to 5												
Weed control achieved by hand removal only. (Objective G1)	As required	1 to 5												

Landscape Feature Type 8: Meadow Grass

Objective

NG1 Management of meadow grassland to encourage diverse plant communities but discourage perennial and annual weeds and amenity grasses.

NG2 Manage scrub and ruderal vegetation to prevent it becoming established.

NG3 Provide a wildlife corridor and habitat to provide a food source for pollinators and habitat for small mammals.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Cut meadow grassland to a height of 40-60cm during the first year to discourage annual weeds. Remove arisings from site. (Objectives NG2)	3	1												
Annual cut to a height to 60cm in height between late July to mid-August (for wildlife benefit carry out a late cut in September every 3 rd year) to allow a diverse sward to develop. Remove arisings from site. (Objectives NG1, NG2, and NG3)	1	2 to 5												
Weed control achieved by hand removal only. (Objective NG3)	As required	1 to 5												
Remove any invading scrub annually. (Objectives NG3)	As required	1 to 5												

Habitat Type 9: Native Bulbs within Amenity Grassland

Objective

B1 Establish and maintain spring bulb planting to provide seasonal interest within areas of amenity grassland.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Fortnightly cut to 40mm height during the growing season 6 to 8 weeks after bulbs have flowered. (Objective B1)														

General Maintenance Operations

Objective

GM1 Maintain a clean, safe and tidy appearance to the overall development.

GM2 Ensure the Home zone Area is safe and surfacing is in good order

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Undertake a maintenance inspection quarterly to ensure site is being maintained as per this document. Report to site owners with any queries or issues.	4	1 to 5												
Fortnightly cleansing to all areas of the site to maintain a high quality environment. Litter disposed of in an authorised manner. Provide a general maintenance report detailing operations carried out	26	1 to 5												
Any graffiti removed as soon as possible	As required	1 to 5												
Any fly-tipping removed as soon as possible. If it cannot be removed then area to be secured whilst arrangements for its removal are made	As required	1 to 5												
Weed clearance to all pathways and car parking areas to prevent potential slip hazards. Gathered plant material removed from site. Avoid damage to surfaces whilst carrying out works	Monthly	1 to 5												
Brush/ wash all public footpaths/ vehicle area to maintain in a safe condition	1	1 to 5												
Carry out repairs to vehicle/ footpath surfacing as required.	1	1 to 5												

4.0 Implementation of the Management Plan

Responsibilities

- 4.1. The management responsibility of landscape features and habitats across the site will fall to the developer and owner/ occupiers and/or their appointed third party management company responsible for management and maintenance on shared open spaces. The management plan sets a standard for this maintenance to ensure establish of landscape features.
- 4.2. It is the developers responsibility to ensure the management plan is passed to the relevant management organisations throughout the plan period.
- 4.3. The developer or owner/ occupiers may employ other organisations to carry out landscape maintenance operations on their behalf. The developer or owner/ occupiers must ensure the third parties have the relevant experience and certificates of competence to carry out the management operations.

- 4.4. Appointed management companies will be responsible for ensuring that maintenance operations are in accordance with this report. The site will be managed to comply with all relevant health and safety legislation, approved codes of practice (ACOP's) and Health and Safety Executive guidance.
- 4.5. The Local Authority/ third parties will be responsible for preparing risk assessments for all elements of work as required under the Management of Health and Safety at Work Regulations 1999 and for carrying out monitoring and review. The Health and Safety Procedures for the site will follow the guidelines within the HSE publications including HSG65 'Managing for Health and Safety' and HSG268 'How to Control Risks at Work'. The managing company will need to comply with the relevant legislation including:
- Health and Safety: Health and Safety and Work Act (1974);
 - Equality Act 2010 (Superseding the Disability and Discrimination Act (2005));
 - The Wildlife and Countryside Act 1985 as amended;
 - Environmental Protection Act 1990;
 - Control of Pollution Act (1974) / Pesticides Act (1998);
 - Building Regulations Approved Documents;
 - BS3936:1989 Part 1 Nursery Stock, Trees & Shrubs;

- BS5837:2012 Trees in Relation to Construction;
- BS3998:2010 Recommendations for Tree Work;
- BS7370-4:1993 Grounds Maintenance. Recommendations for Maintenance of Soft Landscape;
- The Control of Pesticides Regulations 1986;
- The Code of Practice for the Use of Approved Pesticides in Amenity Areas 1988;
- The Code of Practice of Plant Handling 1980;
- National Plant Specification Section 10.2 'Handling & Establishing Landscape Plants'; and
- CPSE Recommended Form of Tender for the Supply & Delivery of Plants.

5.0 MAINTENANCE SPECIFICATION

General

- 5.1. Trees and shrubs planted shall comply with BS.3936 (Specification of Nursery Stock) and shall be planted in accordance with BS.4428 (General Landscape Operations) and BS8545:2014 'Trees from nursery to dependence in the Landscape'. Planting also to be in accordance with accompanying NBS specification.
- 5.2. Any damage or disturbance to the soil structure, planting area, grass, fencing, hard landscaping, structures or buildings during planting operations should be restored to their original condition.
- 5.3. Watering should be carried out as necessary to ensure the continued thriving of all planting. Water using potable mains water and wet the full depth of topsoil. Care should be taken to avoid damage or loosening of plants. Any compacted soil should be loosened by lightly forking.
- 5.4. Unless specified otherwise, dispose of all arisings to a licensed tip
- 5.5. Any chipping operations undertaken on site should be chipped into a pile and removed from site.
- 5.6. All rubbish on site should be collected and removed from site to a licensed tip.
- 5.7. Care should be taken to protect all areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly onto grassed areas.
- 5.8. Soil and arisings: should be removed from hard surfaces, car parking and footpaths around the building. Works should be left in a clean and tidy condition at completion and after any maintenance operations.
- 5.9. Graffiti should be removed using a suitable detergent and subsequent treatment using a transparent, two part anti-graffiti coating with a matt finish.

Grassed Areas

- 5.10. Standard: To BS 7370-3. Carry out maintenance appropriate to each category of turf, as follows:
 - Objectives: To BS 7370-3, table 6.

- Programme: To BS 7370-3, clause 11.
- Mowing methods: To BS 7370-3, table 3.

should be removed fortnightly to maintain a neat appearance.

- 5.11. Prior to grass cutting, remove all litter and debris from grassed areas.
- 5.12. Amenity grassed areas should be cut 12-14 times per season, between mid-March and late September, on a fortnightly basis to maintain the grass at a height of 40mm. An initial cut should be made at 75mm height in mid-March prior to fortnightly cutting commencing.
- 5.13. Grass should be maintained as a healthy vigorous sward, free from disease, fungal growth, discolouration, scorch or wilt. Prevent compaction from maintenance operations and maintain reasonably free from moss, excessive thatch, noxious weeds, frost heave, worm casts and mole hills.
- 5.14. Any damage such as trampling, abrasion or scalping caused by mowing should be repaired immediately. Edges should be neat and well defined, in clean straight lines or smooth flowing curves. Litter and fallen leaves

- 5.15. After cutting the grass should be neat and even, without surface rutting, compaction or damage to grass and edges should be neat and well defined. Neatly trim around obstructions. Arisings should be removed and all footpaths and hard surfacing kept free from grass cuttings.
- 5.16. Do not use mowing machinery closer than 100mm to tree stems. Use nylon filament rotary cutters and other hand held mechanical tools carefully to avoid damage to bark.
- 5.17. The area of bulbs within grassland should not be cut until 6 to 8 weeks after the plants have finished flowering. There after cutting should be as paragraph 8.13..
- 5.18. Collect fallen leaves as part of the fortnightly cleansing operations by hand raking and remove from site or shred and use as mulch around the base of trees.
- 5.19. Spring, autumn and winter fertiliser application to use organic products and the application rate to be as per

manufacturers instructions. Submit proposals before using.

Maintaining grassed areas with perennial wild flowers:

- 5.20. Before each cut remove litter and debris.
- 5.21. In the first year wildflower grassed areas should be cut every 6-8 weeks until autumn. Maintain the grass at a height of 50mm. Grass not to exceed 100mm in height. Arises to be removed from site.
- 5.22. In second and subsequent years, wildflower grassed areas to be cut annually in late July to mid-August to a height of 50mm. Arisings to be removed from site.

Reinstatement of damaged or failed grass

- 5.23. Worn or damaged areas: Make good by returfing or reseeding:
- Returfing standard: To BS 7370-3, Clause 12.2.
 - Reseeding standard: To BS 7370-3, Clause 12.6.
- 5.24. Remove to a depth of 40mm and cultivate the ground to a fine tilth. Contractors choice for reinstatement via

seeding or re-turfing but quality and appearance must match existing amenity grass areas.

- 5.25. If reseeding fill with a fine topsoil to BS3882 and reseed with a seed mix to match the existing grass sward. Provide necessary watering and protection to ensure successful germination and establishment.
- 5.26. Reseeding to be carried out between April and mid October.

Maintaining Herbaceous Plants/ Shrubs/ Trees/ Hedges

- 5.27. Planting beds should be kept free from weeds by handweeding. A minimum diameter of 1m around each tree and all of each ornamental planting bed should be maintained weed free. Weed cover to be less than 5% across planting areas and no weed to be greater than 100mm in height.
- 5.28. Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch. Mulch should be maintained to 65mm depth.

- 5.29. Fertiliser should be applied to areas of new planting annually in March or April using an organic product. It should be spread evenly after carefully lifting mulch. Mulch to be replaced on completion of the operation.
- 5.30. Soil aeration to be carried out to all compacted surfaces to aerate the soil of roots areas and break surface crust. Reduce soil to crumbs and level off. Adjacent planted are not to be damaged during operations.
- 5.31. Tree stakes and ties should be inspected monthly and adjusted twice annually. Loose, broken or decayed stakes should be replaced to original specification. If the stake is longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.
- 5.32. Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing at each inspection as required. If chafing has occurred, reposition or replace ties to prevent further chafing.
- 5.33. All trees and shrubs should be refirmed after strong winds, frost heave and other disturbances. Tread around the base until plant is firmly bedded.
- 5.34. Any collars in soil at base of tree stems, created by tree movement should be broken up by fork, avoiding damage to roots. Backfill with topsoil and refirm.
- 5.35. Pruning shall be carried out annually in accordance with good horticultural and arboricultural practice to BS3998:2010 - Tree work: Recommendations'
- 5.36. When removing branches do not damage or tear the stem.
- 5.37. 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.
- 5.38. Larger branches prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.

- 5.39. Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance. Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
- 5.40. At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems from site. Retain seed heads on herbaceous perennials during the winter Cut back herbaceous perennials in January or February and dispose of plant material off site.
- 5.41. Do not use growth retardants, fungicide or pruning sealant unless instructed.
- 5.42. Watering to be carried out as required during prolonged drought in the growing season to ensure the healthy establishment and growth of plants.. Watering points to be confirmed on site, if none available water supply to be via bauser. If water supply is likely to be restricted by emergency legislation, submit proposals and await instructions before carrying out operations.

Pruning trees, shrubs and hedges

- 5.43. Prune trees and shrubs to BS 7370-4.
- 5.44. All tree pruning to be undertaken in accordance with BS3998:2010 - Tree work: Recommendations and undertaken by qualified arboricultural contractors.
- 5.45. Do not prune whips or feathered trees.
- 5.46. Extensive pruning of young trees and any surgery to larger trees must be carried out by an approved member of the Arboricultural Association or other approved specialist. Permission from the LPA must be obtained prior to any works on protected trees or trees in conservation areas.
- 5.47. Prune ornamental shrubs and herbaceous plants according to species to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, autumn colour, stem colour.
- 5.48. Remove suckers on shrubs by cutting back level with the source stem or root.

- 5.49. Trim hedgerows twice annually in June and September to encourage bushy growth down to ground level. This should be undertaken after the plants have been established for one full growing season. All hedgerow to reach desired dimensions only by gradual degrees, depending on the growth rate and habit of each species. Trim annually once hedge has reached desired height.

Weeding

- 5.50. Hand weeding should be carried out monthly between April and September.
- 5.51. Remove weeds entirely, including roots and ensure that the minimum quantity of soil is removed to minimise disturbance to plant, bulb and mulched surfaces. On completion of hand weeding rake planting area to a neat, clean condition and reinstate mulch to original depth.

Reinstatement of planting

- 5.52. Remove dead or diseased plants as soon as possible and replace in the next available planting season.
- Deciduous trees and shrubs: Late October to late March.
 - Conifers and evergreens: September/ October or April/ May.

- Herbaceous plants (including marginal): September/ October or March/ April.
- Container grown plants: At any time if ground and weather conditions are favourable.
- Dried bulbs, corms and tubers: September/ October.

- 5.53. Carefully move mulch to one side and dig over the soil leaving it fit for replanting. Do not disturb the roots of adjacent plants. Use plants to the original specification or to match the size of adjacent plants. Include a slow release fertiliser in each planting pit as per manufacturers recommendations.

- 5.54. Thinning by removal of surplus plants is to be carried out the BS7370-4 when foliage of adjacent plants has begun to touch and overlap. Minimise disturbance to other plants and refill holes with topsoil to leave an even graded surface. Maintain mulch to 75mm depth. Select plants with a strong healthy habit for retention.