

Landscape Management Plan

THE VARNE, GREATSTONE

Prepared on behalf of: Folkestone & Hythe District Council
Report No: MHS204.18-D01
Date: 11.01.2019
Revision: B

Revision History:

Date	Rev	Description
11.01.2019	A	Planning Issue
24.05.2019	B	Layout changes

**MARK
HANTON
STUDIO.**

Landscape Architecture/
Urban Design
www.markhantonstudio.co.uk

markhantonstudio

Unit 16 Park Barn
Evegate Business Park
Smeeth
Ashford
Kent
TN25 6SX

Tel: 01233 812444
e-mail: info@markhantonstudio.co.uk
www.markhantonstudio.co.uk

Contents:

		Page no.	
Figures			
	Figure 1.0	Site Location Plan	
	Figure 2.0	Landscape Proposals Drawing 1 of 2	
	Figure 3.0	Landscape Proposals Drawing 2 of 2	
	Figure 4.0	Management Key Plan	
1.0	Introduction	1	
2.0	General Aims and Objectives of the Landscape Management Plan	2	
3.0	Management Plan		
	3.1	Trees	3
	3.2	Formal Evergreen Hedging	4
	3.3	Native Hedge	5
	3.4	Amenity Shrub Planting	6
	3.5	Grass Verges	7
	3.6	Naturalistic Grass & Herbaceous Planting	8
	3.7	Hard Landscaping	9



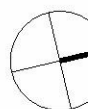
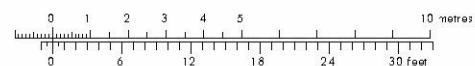
Site



Figure 1.0 Site Location Plan

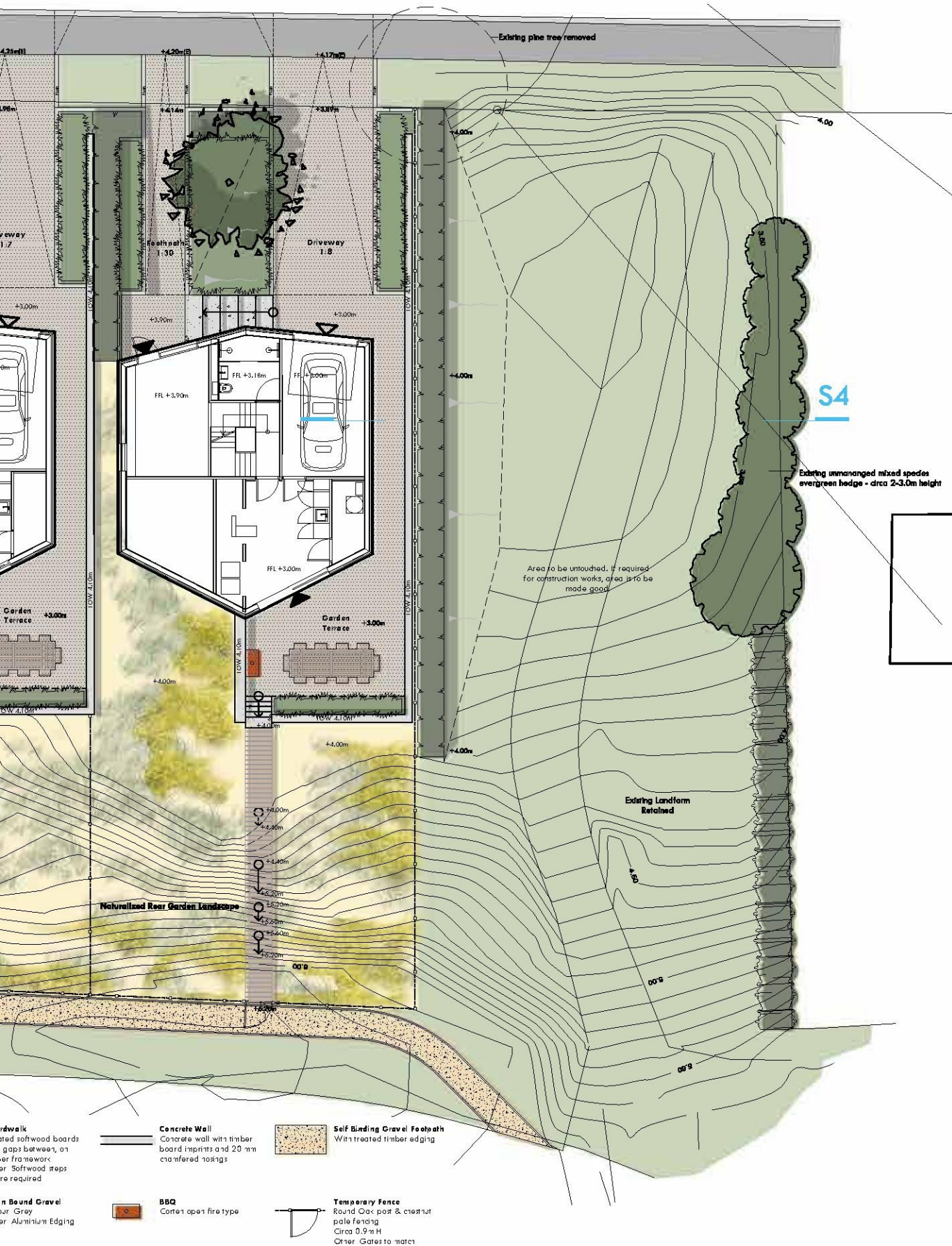


THE VARNE, GREATSTONE



DO NOT SCALE this drawing. Figure dimensions only are to be used.
© This drawing is the sole copyright of markantonstudios.
Any discrepancies between this drawing and other information

Figure 2.0 Landscape Proposals 1 of 2



REVISION

NO.	DESCRIPTION	DATE	BY	CHECK
A	First issue	16.11.2018	MAH	MAH
B	Planning issue	11.01.2019	MAH	MAH
C	Architectural amendments: Footpath to rear. Species amendments to KCC comments.	24.05.2019	MAH	MAH

PROJECT	THE VARNE, GREATSTONE
CLIENT	FOLKESTONE & HYTHE DISTRICT COUNCIL
DRG NO.	MHS204-18-001
TITLE	LANDSCAPE PROPOSALS 1 of 2
SCALE	1:100 @ A1
REV	C
DRAWN BY	MAH
CHECKED	MAH
DATE	16.11.2018

MARK HANTON STUDIO.

Landscape Architecture / Urban Design

Unit 16 Park Barn
Evagale Business Park
Station Road, Smooch
Ashford
Kent, TN25 6SR

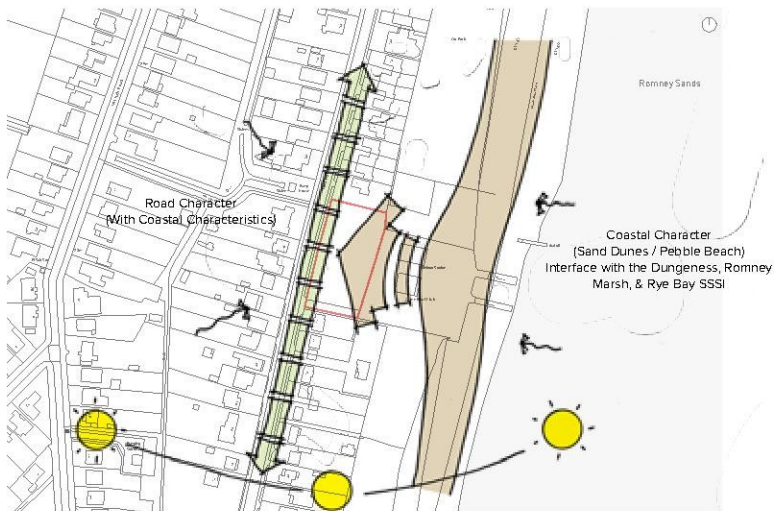
Tel: 01233 612444
E-mail: info@markhantonstudio.co.uk
Website: www.markhantonstudio.co.uk

LOCAL VERNACULAR

(Image taken within a 200m radius of the site)



DESIGN CONCEPT



HARD / FURNITURE MATERIALS PALETTE



Resin Bound Gravel (porous)
Colour: Grey
Size: 6mm
Product: 'Stirling' by Sureset UK Ltd



Self Binding Gravel
Colour: Buff
Size: 0-6mm
Product: 'CEDEC® Gold Footpath Gravel' by CED Stone Ltd



White rendered walls



Ornamental Gravel
Type: Beach Pebbles
Size: 14-8mm
Colour: Grey-blue-buff
Product: 'Scottish Beach Pebbles' by CED Stone Ltd



Temporary Fencing
Product: '0.9m Style B (3 Wire) Cleft Chestnut Fencing 75mm Spacing - 9.1m Roll' by Jacksons Fencing Ltd
Posts: 75-100mm Butt Mixed Cleft And Round Peeled Fencing Stake by Jacksons Fencing Ltd



Boardwalk
Type: Treat Softwood Boardwalk
Product: 'Heavy Duty Decking Support Posts; 'Decking Fencing Ltd

SOFT MATERIALS PALETTE

Structural Trees / Hedges



Native Hedge



Front Garden Beds



Patio Beds



Naturalized Planting



THE VARNE, GREATSTONE

DO NOT SCALE this drawing. If used dimensions only are to be used.
© This drawing is the sole copyright of markhambratudo.
Any discrepancies between this drawing and other information should be reported to markhambratudo for clarification.

PLANTING SCHEDULE

Proposed Trees

Species selection is based on the coastal environment and street character:

Species	Supply Size
Pinus sylvestris 'Watereri'	Rootballed 300-350cm height

Proposed Hedging

Species selection is based on the coastal environment and street character. Plants are to be planted in a single row at 600mm ctrs

Species	Supply Size
Griselinia littoralis	60-80cm 10L

Proposed Native (Mixed Species) Hedges

Species selection is based on Ecologists mitigation strategy. Planted at 450mm centres in a double staggered row

% Mix	Species	Supply Size
50%	Crataegus monogyna	600-800mm H1 OG
30%	Acer campestre	600-800mm H1 OG
10%	Carpinus betulus	600-800mm H1 OG
3%	Viburnum opulus	600-800mm H1 OG
3%	Cornus sanguinea	600-800mm H2 OG
2%	Rosa canina (Dog Rose)	600-800mm H1 OG
2%	Euonymus europaeus (Spindle)	600-800mm H1 OG

Grass Verges (relaxed maintenance regime)

Seeded with a Germinal Seeds A21 (Saline Coastal and Road Verges) seed mix sown at a rate of 40g/sqm.

Species Mix: 40.0% Aberchrm Slender Creeping Red Fescue (Festuca Rubra Litoralis), 30.0% Pillar Perennial Ryegrass (Lolium Perenne), 15.0% Essential Tall Fescue (Festuca Arundinacea), 10.0% Joanna Chewings Fescue (Festuca Rubra Commutata), 5.0% Tye Creeping Bentgrass (Agrostis Stolonifera)

Proposed Front Garden Beds

Species selection is based on the coastal environment (within protected zone behind buildings) and street character. Planted in swathes of 3-7no of the same species in a prairie style:

Species	Supply Size	Density
Deschampsia cespitosa	Full pot 2L	400mm ctrs / 6.25 per m2
Erigeron karvinskianus	Full pot 2L	400mm ctrs / 6.25 per m2
Eryngium maritimum	Full pot 2L	400mm ctrs / 6.25 per m2
Hebe rakalensis	20-30cm 3L	400mm ctrs / 6.25 per m2
Lavandula angustifolia 'Hidcote'	20-30cm 3L	400mm ctrs / 6.25 per m2
Lavandula stoechas	20-30cm 3L	400mm ctrs / 6.25 per m2
Perovskia atriplicifolia 'Blue Spire'	30-40cm 3L	400mm ctrs / 6.25 per m2
Verbena bonariensis	Full pot 2L	400mm ctrs / 6.25 per m2

Proposed Side and Patio Beds

Species selection is based on the coastal environment (within protected zone sheltered by retaining walls), and shading. Planted in swathes of 3-7no of the same species in a prairie style:

Species	Supply Size	Density
Anemanthele lessoniana	Full pot 2L	400mm ctrs / 6.25 per m2
Deschampsia cespitosa	Full pot 2L	400mm ctrs / 6.25 per m2
Liriope muscari	Full pot 2L	400mm ctrs / 6.25 per m2
Verbena bonariensis	Full pot 2L	400mm ctrs / 6.25 per m2
Vinca minor 'Alba'	Full pot 2L	400mm ctrs / 6.25 per m2

Proposed Naturalised Planting

Species selection is based on the coastal environment (within semi-protected zone sheltered by semi-permeable chestnut fence barrier). Planted in swathes of 5-7no of the same species on a .3m grid (note only circa 30-50% coverage to be achieved in order to provide a natural sand-dune appearance:

% Mix	Species	Supply Size	Density
50%	Ammophila arenaria	9cm plug	300mm ctrs / 6.25 per m2
25%	Cytisus scoparius	40-60cm 3L	500mm ctrs / 4 per m2
5%	Oenothera biennis	9cm plug	300mm ctrs / 6.25 per m2
5%	Crambe maritima	9cm plug	300mm ctrs / 6.25 per m2
5%	Echium vulgare	9cm plug	300mm ctrs / 6.25 per m2
5%	Rumex acetosa	9cm plug	300mm ctrs / 6.25 per m2
5%	Daucus carota	9cm plug	300mm ctrs / 6.25 per m2

*Native plug planting to be contract grown through www.wildflowerlawnsandmeadows.com

TECHNICAL NOTE: NATURALISTIC PLANTING IN JUTE MATTING

Installing jute matting upon the existing moulded landform will suppress weed growth, retain moisture and protect the top soil from erosion. Heavy Jute Matting is used for sand dunes and requires 300mm pins on soft and steep ground.

Jute matting is biodegradable and will allow time for grasses/shrubs/ herbaceous plants to establish, furthermore it will allow further self-colonisation of valuable local flora by capturing seeds blown in from the sand dune / beach environments.

Planting will be as small pots or plugs and planted through the matting in swathes (circa 30-50% coverage) on a 0.3m grid (Figure 1.0). As the plants establish they will create a natural sand dune type character (Figure 2.0).

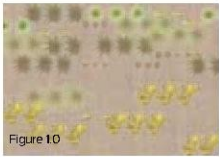
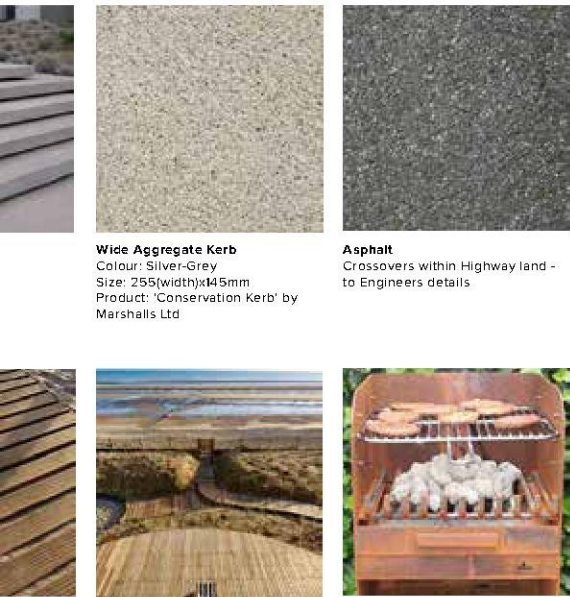


Figure 1.0



Figure 2.0



Wide Aggregate Kerb
Colour: Silver-Grey
Size: 255(width)x145mm
Product: 'Conservation Kerb' by Marshalls Ltd

Asphalt
Crossovers within Highway land - to Engineers details

BBQ
Material: Corten steel
Product: 'Skip SKST' by www.adezz.com

ards
ecking Board (32mm X 150mm) , with 'Decking Joists', and 'Stair Stringers', all by Jacksons



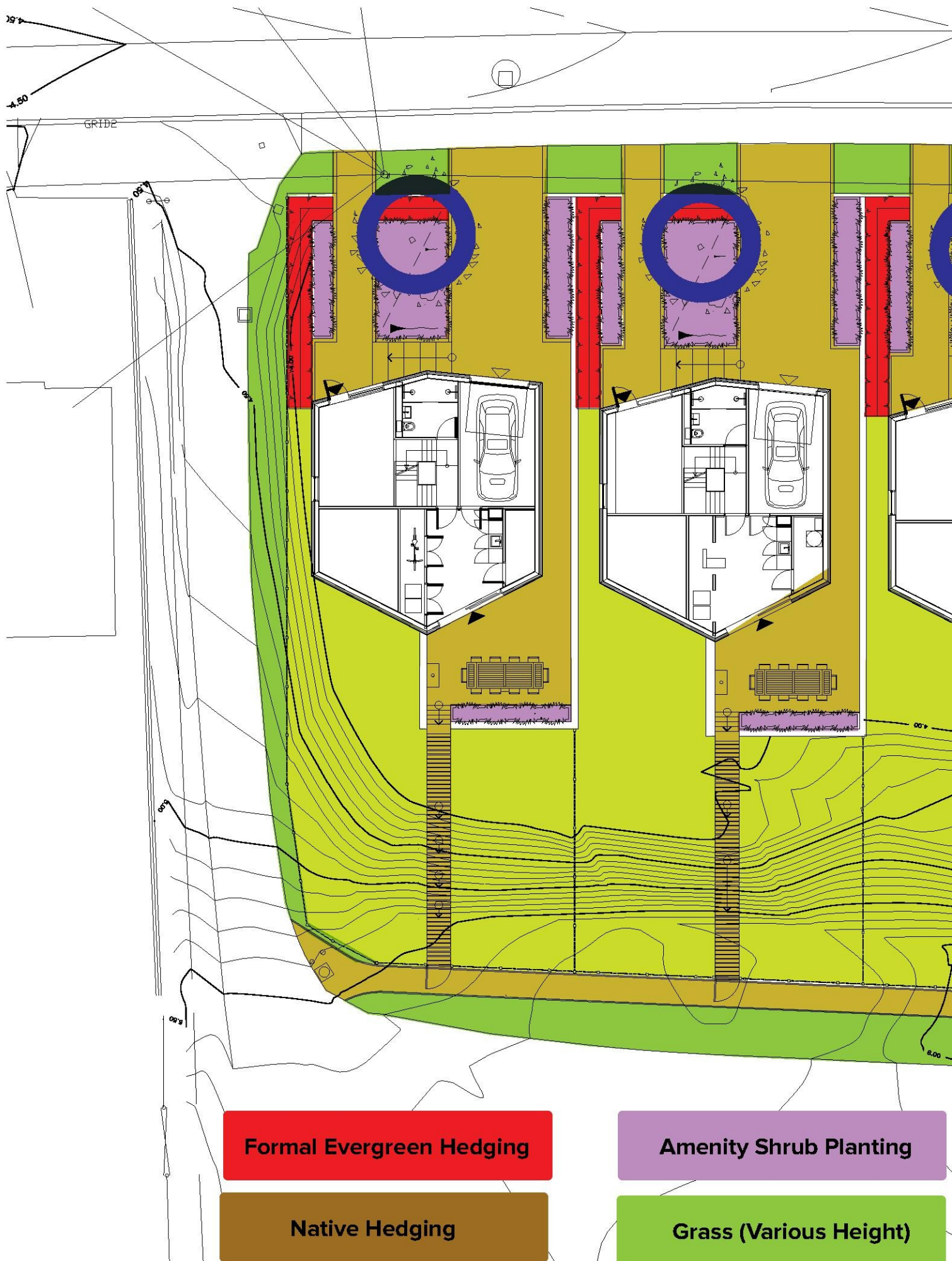
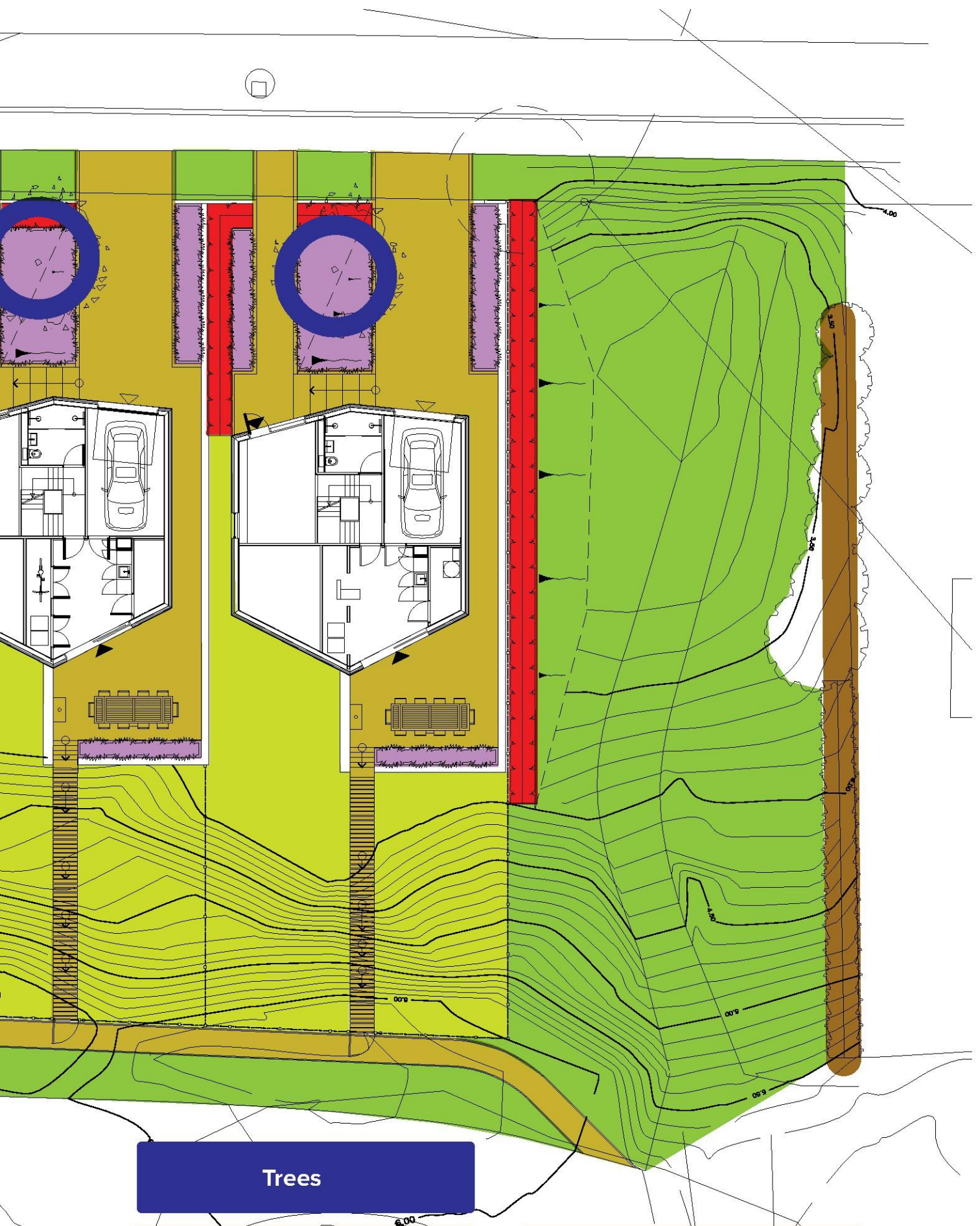


Figure 4.0 Management Key Plan



Trees

Naturalistic Grass &
Herbaceous Planting

Hard Landscape

1.0 Introduction

This document outlines the management of the proposed landscape works within the 'development area' (see Figure 1.0) over a 5 year period, and forms part of the supporting planning information for the proposed residential development at The Varne, Greatstone, Kent.

The whole of the proposed landscape will, for the initial 1 year after Practical Completion, be maintained by the Landscape Contractor responsible for implementation of the works. The contract will include a defects liability clause to ensure replacement planting is carried out and successful establishment achieved. Thereafter maintenance contracts will be maintained by a management company set up by the developer.

The broad aims and objectives of this document are set out in Section 2.0, with more detailed objectives, specifications, and schedules of maintenance operations set out in Section 3.0 . These operations should be reviewed at regular intervals (at least annually) to respond to natural or man made changes in the environment which affect the landscape types (e.g. tree disease), with a major assessment after the fourth year to allow revision to the existing maintenance and management regime to reflect findings.

In accordance with the planning approval notice, dead, dying, diseased plants will, within a 5 year period, be replaced with stock as originally specified on the approved 'Landscape Proposals' drawings MHS204.18-001 & 002.

2.0 General Aims and Objectives of the Landscape Management Plan

The establishment and future success of the external landscape is largely dependent on the standard and frequency of the subsequent maintenance and management it receives. A maintenance and management regime will therefore be adopted throughout the development period and thereafter.

The general aims and objectives of the landscape maintenance and management will be:

- To ensure the successful establishment and continued growth through to maturity of the trees, shrubs and grass areas identified on the Detailed Landscape Proposals drawings no. MHS204.18-001 & 002.
- To ensure that the landscape at this site develops in a manner commensurate with the original design intentions.
- To secure a long term future for the new trees and shrub planting with particular emphasis upon achieving enhancement of ecological potential, conservation and visual amenity.
- To achieve rapid establishment of the plant material with resultant total ground cover, thereby suppressing weed growth and reducing maintenance requirements.
- To retain the natural growth form and maximise the seasonal potential of individual species by the pruning methods adopted.
- To manage the landscape in a manner convivial with the safety of site users, such as maintaining visibility splays and the removal of dead, dying or diseased tree branches.

The above approach will ensure that the quality of the landscape created in the early years can be maintained for the benefit of occupiers and visitors to the development as well as providing a benefit to persons who pass by the boundaries.

3.0 Management Plan

3.1 Trees

Description:

Trees consist of newly planted specimens only. Species selection is based on the coastal character and environmental conditions.

Long Term Design Objectives of Trees:

- To ensure the rapid and successful establishment and continued growth through to maturity and full stature of the trees.;
- To retain the natural growth form and maximise the seasonal potential of individual species by the pruning methods adopted;
- To manage the landscape in a manner convivial with the safety of site users, through the removal of dead, dying or diseased tree branches.

Maintenance Specification:

The trees are to be assessed on an annual basis and the maintenance operations below are to be carried out as necessary:

Pruning shall be limited to the minimum necessary to maintain good form and vigour and to remove dead, diseased or dying branches. This work will conform to BS3998 and be carried out outside the bird nesting season i.e. March-August inclusive. All cuttings will be stacked on site as cordwood piles.

Tree supports are to be regularly inspected and adjusted or replaced if necessary. Tree supports shall be removed selectively from trees which establish and flourish. This will normally take place in year 4 or 5.

In dry periods and during establishment, trees should be watered regularly to maintain healthy growth.

Maintenance Work Schedule:

Operation	Frequency	Timing
Proposed Trees Stakes and ties will be checked and adjusted/replaced. Stakes will be removed after approximately 4 years	Bimonthly	Year round
Remedial tree surgery pruning to remove any dead, dying or diseased branches and to allow the tree to achieve full stature.	Annually	November
Water in dry periods	As necessary	Daily

3.2 Structural Hedging

Description:

Structural hedging is used throughout the development as a boundary treatment to define front garden and development side boundaries. Hedges provide continuous edges and create enclosure that enhances the streetscene by minimising the impact of parked cars, provides shelter for users and establishing plants. Proposed evergreen hedging consists of a single species, *Griselinia littoralis*, being a recognised first line defence coastal species.

Long Term Design Objectives of Hedges:

- Structural hedges within the site will be clipped to maintain a semi-formal appearance and develop a dense leaf structure.

Maintenance Specification:

Pruning shall be carried out as required to maintain good form and vigour, to encourage bushiness and to remove dead, diseased or dying branches.

Trimming of native species hedging should be carried out in late spring / early summer. The hedge should be inspected for nesting birds prior to pruning.

Hedgerows shall be pruned to maximum heights as follows:

- Range between 1.0-1.3m as required to give an overall level top height across all four units to the site frontage.
- To the rear boundaries, the hedge is to be pruned to circa 1.35m and follow the rising landform.

Maintenance Work Schedule:

Operation	Frequency	Timing
Keep hedge areas clear of weed growth by hand weeding or selective herbicide treatment.	As necessary	March-November
Check that the plant material is firmly planted and firm in where required.	As necessary	Years 1-3
Prune evergreen hedges adjacent footways and vehicular routes to ensure a semi-formal appearance, and to prevent overhanging.	Once	May-June
Fertilizer application to ensure establishment of planting	Annually	Years 1-3 March-April
Shrub replacements	Annually	November-March

3.3 Native Hedging

Description:

Native hedging is located along the northern boundary of the site as a continuation of the existing mixed evergreen shrubs located there. This hedge will provide a buffer to the adjacent property and create enclosure and an enhanced appearance for to the green open space. Proposed native hedging consists of a mixed species in accordance with the Ecologist site enhancement strategy.

Long Term Design Objectives of Hedges:

- To maintain the existing hedge as a significant landscape feature within the site and to maximise ecological value;
- To ensure the rapid and successful establishment and continued growth through to maturity of proposed hedges;
- To manage the landscape in a manner convivial with the safety of site users, such as regular hedge clipping in order to maintaining clear footways and vehicular routes.

Maintenance Specification:

Pruning shall be carried out as required to maintain good form and vigour, to encourage bushiness and to remove dead, diseased or dying branches.

Trimming should be carried out in autumn whether it be an annual prune or on a 2-3 year cycle. The annual prune is for hedges in or close to high use areas such as footways and road sides.

Hedgerows shall be pruned to a height of circa 2.0m and allowed to grow to a maximum of circa when pruning on a 2-3 year cycle.

Maintenance Work Schedule:

Operation	Frequency	Timing
Keep hedge areas clear of weed growth by hand weeding or selective herbicide treatment.	As necessary	March-November
Check that the plant material is firmly planted and firm in where required.	As necessary	Years 1-3
Prune hedges on a 2-3 year cycle	Once	Autumn
Fertilizer application to ensure establishment of planting	Annually	Years 1-3 March-April
Shrub replacements	Annually	November-March

3.4 Amenity Shrub Planting

Description:

Amenity shrub planting consist of mixed ornamental shrub / herbaceous planting to plot frontages, side footways, and rear patios. All shrubs have been selected for their suitability to the coastal environment (and level of protection offered), ecological or amenity value, and will provide enhanced biodiversity to the site.

Long Term Design Objectives of Amenity Shrubs:

- To ensure the rapid and successful establishment and continued growth through to maturity of the shrubs, with resultant total ground cover, thereby suppressing weed growth and reducing maintenance requirements;
- To retain the natural growth form and maximise the seasonal potential of individual species by the pruning methods adopted;

Maintenance Specification:

Pruning shall be carried out in accordance with good horticultural practice and as required to maintain good form and vigour, to encourage bushiness and to remove dead, diseased or dying branches. Some shrubs need to be cut back hard to encourage growth from the base. Cyclical pruning shall be carried out to maintain an attractive shrub bed where necessary. All cuttings shall be removed from site.

With the exception to spring flowering shrubs that flower on the current seasons growth, and grasses and other species that provide winter interest, works should be carried out in the late winter when disturbance to wildlife and removal of flowering or fruiting material providing valuable forage will be minimal. Winter interest species should be pruned in early spring.

Shrubs shall be cut back where they encroach on pedestrian walkways or carriageways. Generally pruning should, in this situation be by cutting back longer growths rather than a uniform 'trim' at the edge junction.

A pruning schedule taking account of the above requirements shall be agreed periodically with the site supervising officer with specific consideration given to individual beds/species.

Maintenance Work Schedule:

Operation	Frequency	Timing
Keep shrub areas clear of weed growth by hand weeding or selective herbicide treatment.	As necessary	March-November
Check that the plant material is firmly planted and firm in where required.	As necessary	Year round
Prune shrubs to prevent invasive species smothering less aggressive species and to prevent shrubs overhanging footpaths and other areas of hard paving	Annually	As necessary to allow flowering/ fruiting of individual species
Fertilizer application to ensure establishment of planting	Annually	Years 1-3 March-April
Shrub replacements	Annually	March-November

3.5 Grass

Description:

Grass areas include road verges and the parcel of land (green open space) to the north of the units.

Long Term Design Objectives of Mown Grass Areas:

- To maintain a hard wearing thick grass sward.
- Maintain a mown footway 2m wide through the green open space for informal access, and a mown verge alongside the road
- The green open space and all ancillary areas are to have a relaxed mowing regime in order to develop in to a more naturalistic sand and grass/wildflower thicket. This will create a more diverse and species rich environment over time as natural colonisation occurs.

Maintenance Specification:

During establishment, grass areas are to be watered to full depth of topsoil, and as necessary thereafter.

Before cutting: grass is to be reasonably dry, and all litter, stones and foreign material larger than 25mm is to be removed.

For the 2m mown path through the green open space, and road verges - cutting is required when grass reaches 75mm height, down to a height of 50mm. Thereafter the height will not exceed 75mm at any time. It will be cut as and when is necessary to a height of approximately 35mm.

For the green open space generally and ancillary areas - cutting is required when grass reaches 75mm height, down to a height of 50mm. Thereafter an annual cut should be carried out in late September.

At each grass cut, excessive arisings shall be removed from site.

Broad leaved weeds are to be treated with a suitable selective herbicide as required.

Reinstatement of bare patches by top dressing and new seeding.

Grass edges will be kept clean and well formed.

Maintenance Work Schedule:

Operation	Frequency	Timing
First cut when grass reaches 50mm down to 25mm, with edge trim	Once only	Year round
(Except open space) Cutting when grass reaches 50-75mm high, down to 35mm	As required	Year round
For green open space and ancillary areas, carry out an annual cut to a height of 4cm and remove all arisings	Once only As necessary	Late Sept
(Except green open space) Application selective weedkiller as appropriate	As necessary	Year round
Re-seeding of worn areas	As necessary	April-October
(Except open space) Grass edges to be kept clean and well formed	As necessary	Year round

3.6 Naturalistic Grass and Herbaceous Planting

Description:

The proposed native grass/herbaceous areas provide an important ecological habitat intended to replicate the natural sand dunes and beach environment adjacent the site. The existing interesting landform is to be retained, sprayed off, and covered in a natural jute matting, and pinned on a 300mm grid. The planting of indigenous grass and herbaceous species within the jute matting is to be set out in natural swathes on a 300mm grid. This plants are to be contract grown and planted as small plugs to allow them to acclimatize to the harsh environmental conditions. A temporary cleft chestnut fence and the planting of Tamerix to the eastern site boundary will provide additional shelter to allow establishment.

All species have been selected for their suitability to the coastal environment, ecological value, and will provide enhanced biodiversity to the site.

Long Term Design Objectives:

- To ensure the rapid and successful establishment and continued growth through to maturity of the shrubs to create a 30-50% coverage and natural swathe appearance;
- Create an aesthetically species rich naturalistic sand-dune type environment of known wildlife value;
- Develop a landscape buffer between the urban settlement and the beach landscape character, whilst allowing the self colonisation of further indigenous plant species and removal of non-desirable alien species.

Maintenance Specification:

Pruning is not envisaged to the grass/herbaceous planting as natural processes will take place.

The Tamarix should be pruned on an annual basis in summer (after flowering) but allowed to develop a wild appearance. Some of the Tamarix can be allowed to develop as tree forms by cutting off lower branches.

Weeding should take place to remove non-desirable weeds (nettles, brambles etc). Indigenous species should be allowed to colonise the matting.

The jute matting should be checked with pins replaced and tears mended where necessary.

A review in year 3 and 5 should take place to ensure the design objectives are being achieved through the specification employed.

Maintenance Work Schedule:

Operation	Frequency	Timing
Keep areas clear of non-desirable weed growth by hand weeding.	As necessary	March-November
Check that the plant material is firmly planted and firm in where required.	As necessary	Year round
Prune Tamarix to create a wild appearance and allow some (maximum 20%) to become tree forms	Annually	June/July after flowering
Shrub replacements	Annually	March-November Year 1 only
Repair jute matting and repin as required	As necessary	Years 1-3

3.7 Hard Landscaping

Description:

Hard landscape areas consist of footways, drives, patios, walls, boardwalks, and site furniture.

The main surface materials are described on drawings MHS204.18-001 & 002 and include resin bound gravel, timber decking, and concrete walling. Furniture is timber and corten steel.

Long Term Design Objectives:

- All surfacing materials may, during service, experience some degree of surface staining and therefore require occasional maintenance and good cleaning practice to maintain the overall appearance of the paving and site furniture.

Maintenance Specification:

Routine cleaning should be carried out using a stiff broom whilst applying a water hose at the same time. Power washers and detergents may be used in some circumstances but consult suppliers for specialist advice on deep cleaning and repairs of specific paving and furniture products.

Remove all weeds, moss, chewing gum, and graffiti.

Winter Maintenance - Apply deicer as required, with care to minimise spill onto soft landscaped areas which may be damaged from excess salt material.

Maintenance Work Schedule:

Operation	Frequency	Timing
Routine cleaning of paving areas	As necessary	Year round
Clean furniture	As necessary	Year round
Apply deicer as required	As necessary	Winter