



Would you like to create a mini forest in your community?

The Hampshire Forest Partnership would like to support the creation of mini forests in suitable places across Hampshire. Also called a Miyawaki forest, they are created using a planting technique that can quickly establish an entire forest ecosystem, just at the mini scale, usually about the size of a tennis court. This technique is particularly suited to urban or semi-urban settings where there is a lack of space for larger woodlands.

**HAMPSHIRE
FOREST
PARTNERSHIP**
a legacy in leaves

What is a Miyawaki Forest?

Miyawaki forests are fascinating complex ecosystems. Named after the inventor of the technique Japanese botanist Dr Akira Miyawaki. Dr Miyawaki received the 2006 Blue Planet Prize for this work, which is the equivalent of a Nobel Prize in ecology.

The method involves careful soil preparation and enrichment with densely planted (up to 5 trees per square metre) native woodland plants that are beneficial to wildlife, on an area usually around the size of a tennis court.

Using the Miyawaki methodology, native urban forest ecosystems can be created much quicker than traditional woodland creation methods – the trees grow up to ten times faster (up to one metre growth per year). The method takes its inspiration directly from processes and diversity in nature: 15 to 30 different species of trees and shrubs are planted together. This plant community works very well together, perfectly adapted to local weather conditions. The habitat thus created will get more complex over time and attract much biodiversity. In fact surveys have shown higher biodiversity in Miyawaki forests than in conventionally grown woodlands.

The vegetation is denser and it has the structure of a mature natural forest. It is a multi-storey structure, where different levels of vegetation appear. The forest thus structured delivers many benefits in the form of ecosystem services. It will also absorb more carbon than conventional woodland planting schemes over the same area.

It would take about 200 years to let a forest recover on its own. With the Miyawaki method a similar result is achieved in 20 years.

Why plant a Miyawaki Forest?

- improved biodiversity in urban or suburban locations
- improved residents' wellbeing and health
- engagement with wider environmental projects and issues
- reduced flooding and improved air quality
- Mitigates heat island effect from climate change by cooling the air
- carbon sequestration and storage from the atmosphere
- creates a more beautiful urban landscape
- a fantastic learning opportunity about wildlife, trees and biodiversity

Find out more

Contact us at treeplanting@hants.gov.uk

Would you like to plant a Miyawaki Forest in your local area?

We want to support the creation of these fantastic fast growing ecosystems across the county. We are looking for community groups and organisations to partner with us to achieve this, and have launched the Community Miyawaki Forest project. For this project, the Hampshire Forest Partnership will provide:

- Funding for preparation and installation of a Miyawaki Forest including:
- Ground preparation and addition of soil improvers
- Mix of suitable native tree whips
- Fencing and gate installation
- Interpretation panel
- Support with Forest design and organisation of installation, including liaison with contractors

We would like the partner groups to provide:

- Site suitability assessment based on the criteria below
- Survey of tree and hedge species in the local area around site
- Ongoing communication with the local community about the project
- Ongoing maintenance of the site (via Landowner agreement)
- Community volunteers to help plant tree whips
- Removal of the gate and fencing once trees have established (2-3 years)

We can't just plant the Miyawaki Forests anywhere, so we have outlined this set of criteria to help you identify a suitable site:

Essential

- Needs to be in Hampshire County Council local authority area.
- Needs to be located in an urban or semi-urban area. I.e. town, village setting or an area that can be proved to have a social benefit and provide ecosystem services.
- Needs to cover an area no less than approximately 264m² (roughly the size of a tennis court 11m x 24m) for the actual Miyawaki Forest. This area can be of any shape/orientation, but the forest must not be narrower than 4m across at any given point. Paths can also be created through the forest, or an inner glade area.
- Needs to be accessible for large machinery: mini digger needed for soil preparation, plus truck delivery of mulch and other soil supplements
- No underground infrastructure: soil needs to be excavated to 1m depth.
- Need to ensure that no water pipes or gas mains etc. are near to the planting area.
- No overhead infrastructure: trees will grow to 20m+. Needs to be away from overhead power cables, phone lines or large trees (however, trees on the edge of the site can be incorporated into the design).
- Proof of land ownership or permission of the landowner to plant the Forest.

Desirable

- Possible water access point: trees may need watering during first 2 years of establishment, so either a water access point located nearby, or access for a vehicle and water bowser to the site.
- Need a site that is not causing obstruction to people's right of way (the forest becomes very dense and impassable unless a specific pathway is incorporated into the design)

- Site should not be designated as sensitive in any way: SSSI, SIN, Ramsar etc.
- Site should be on an open area (we don't want trees to be removed to plant new ones!), some scrub or low vegetation is fine, as are trees on the edge of the proposed site
- The forest should be as compact as possible and is not suitable for using as hedging. Paths and an open classroom/area can be included into the design. The forest is fenced at least for the first 3 years with access through an open gate.

To apply, please complete and return the application form to treeplanting@hants.gov.uk

Terms and Conditions

We are initially looking to support 5 Miyawaki Forests as the first pilot projects. We hope to then open the scheme out to further applications subsequently. Applications will be judged by their ability to meet the criteria, and the Council's decision is final. The Council reserves the right to cancel any proposed project if it is felt the group or site cannot meet the criteria set.

Sponsoring a Miyawaki Forest

If you are a business, group or individual and would like to sponsor a Miyawaki Forest creation project, please get in touch as this will enable us to support more of these fantastic mini forests in Hampshire. It may be possible to sponsor a Miyawaki forest locally to your business or group if there is a suitable site identified. We can supply a plaque or add your business logo to our interpretation panel to show your sponsorship support. We will also list our funding partners on our website when we launch this. Please contact treeplanting@hants.gov.uk for further information.

For more information please contact treeplanting@hants.gov.uk

Miyawaki Forests

Proposed Locations New Milton

1. Christchurch Road – Glen Close
2. Studley Court / Glen Close
3. Rear of Vectis
4. Fawcetts Field
5. Rear of Eaglewood
6. Queensway jct to Chatsworth Jct
7. Antler Drive / Doe Copse
8. Ballard Meadow, Lake, and Copse
9. Recreation Ground
10. Brook Avenue
11. Hollandswood Drive
12. Lower Field Ashley
13. Ashtree Close Ashley
14. Caird Ave opp Inglewood
15. Barton Common

Carrick Wood Alternative Natural Recreational Green Space
Planting Proposals
V2



DRAFT

Carrick Wood

New Planting Proposals and Plans



1.0 INTRODUCTION

1.1 Background

Carrick Wood Public Open Space is subject to enhancement works as part of:

- NFDC (New Forest District Council) Mitigation Strategy – creating new and enhancing existing walking routes and open spaces to encourage residents to undertake daily dog walks close to home and so avoiding the sensitive parts of the National Park. Find out more at: [Mitigation for Recreational Impacts On New Forest European Sites - New Forest District Council](#)
- NMTC Neighbourhood Plan Green Loop – encouraging walking and cycling as alternative modes of transport. Find out more at: [Neighbourhood Plan 2016-36 - New Milton](#)

New Milton Town Council have agreed to implement proposed new planting to complete the enhancement works as set out below, aiming to undertake the planting works in the first planting season after the main contract is completed. (Autumn/winter 2024/25)

1.2 Purpose and Scope of Document

This documentation describes new planting: its purpose and form, species, and locations.

It does not describe planting methods or establishment operations, as New Milton Town Council will use its own tried and tested methods that align with current best practise for new planting and establishment.

1.3 Proposed Planting

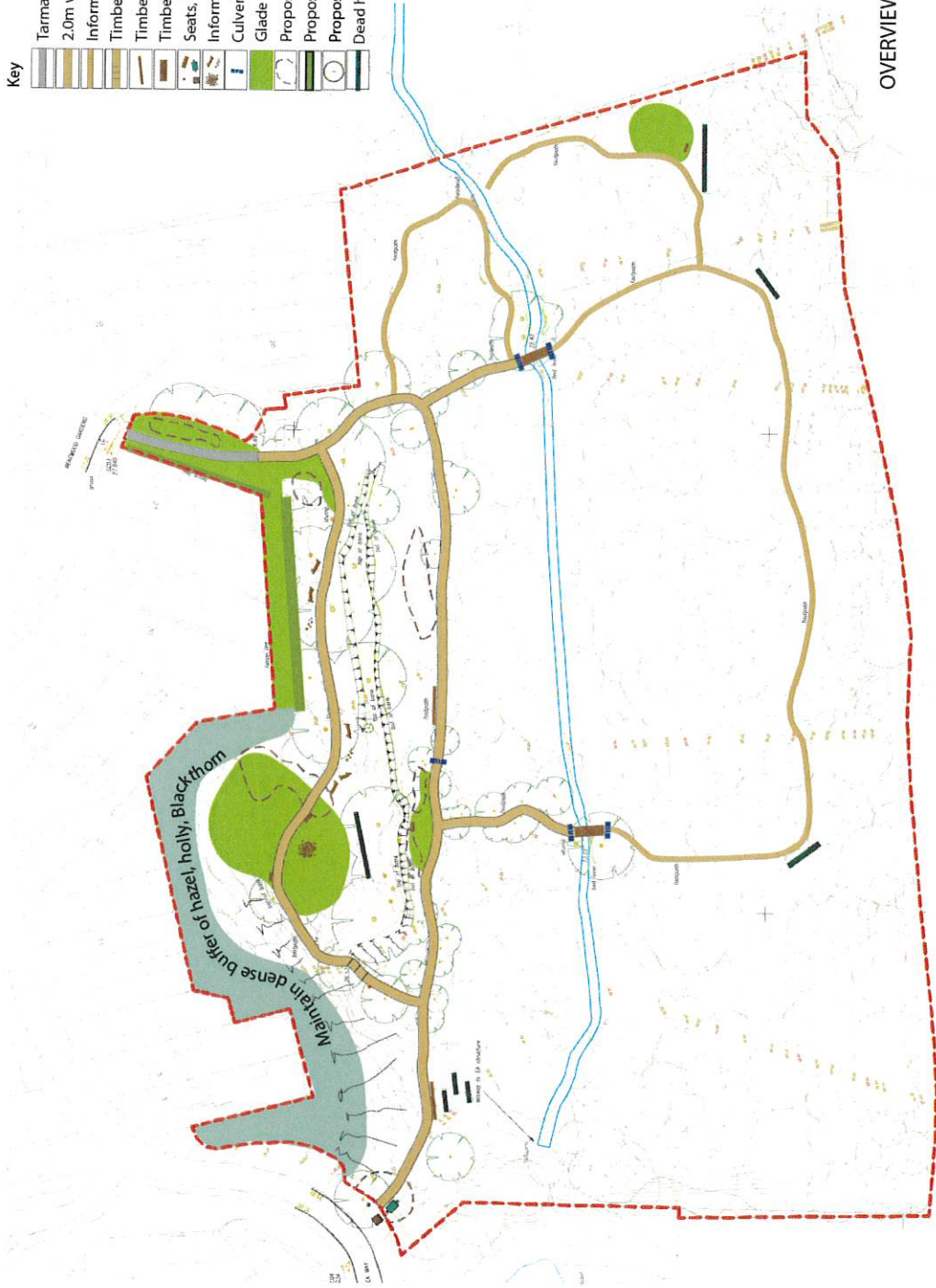
New planting is proposed for specific purposes:

- To visually enhance the new walking routes – primarily through new bulb planting adjacent to glades, entrances and footpaths
- To provide a new boundary feature for the woodland edge at the rear of residential boundaries, that also enhances the ecological value and diminishes garden fly tipping
- To enhance the site entrance at Wentworth Gardens by creating a sense of entrance and transition from the residential street to the woodland. The final vision is to provide a rich grass sward (under existing mature oaks) with bulb planting on the eastern side, and new native hedge to the west and new standard tree planting to create a distinct entrance and connect new habitat (grassland and hedge)
- To maintain a screen to the rear of residential properties by retaining existing understory cover and supplementing with new native shrubs such as blackthorn and holly.
- To deflect access to the brick cistern at the western end of the site. (Planting undertaken by main contractor)

Carrick Wood Alternative Natural Recreational Green Space
Planting Proposals
 V2

Key

	Tarmac path
	2.0m wide hoggan path
	Informal unsurfaced paths
	Timber edged steps
	Timber revetment
	Timber bridge and handrails
	Seats, Signs, Bins
	Informal play trail
	Culvert
	Glade
	Proposed Bulb planting
	Proposed Mixed native hedge
	Proposed Trees
	Dead hedge



OVERVIEW PLAN



Not to Scale

1.4 New Glades

Four new glades have been created by clearing understory, removing bramble roots, and lightly cultivating existing and imported soil.

They have been seeded with Emorsgate EH1, a mix of grasses and wildflowers that are tolerant of semi shade conditions.

The same seed mix has been used to repair disturbed soil adjacent to new paths.

Overseed if required using the same or similar seed mix.

1.5 Bulb Planting

Species	Number	Detail
Bluebells <i>Hyacinthoides non-scripta</i>	1500	Only native <i>Hyacinthoides non-scripta</i> are to be sourced not Spanish bluebells <i>Hyacinthoides hispanica</i> .
Snowdrops <i>Galanthus nivalis</i>	1500	These will provide some of the earliest flowers in the woodland and are ideal at the site entrance and alongside the path.
Tenby daffodils <i>Narcissus obvallaris</i>	500	This is the main daffodil species native to Britain, known as the "Tenby Daffodil". This particular species is also suited to growing on rocky ground, grasslands and in woods where shade is common.
Wild daffodils <i>Narcissus pseudonarcissus lobularis</i>	1000	The Wild Daffodil (<i>Narcissus pseudonarcissus</i>) is a more delicate and graceful plant than its cultivated counterparts, known as "Lent Lily".
Wood anemone <i>Anemone nemorosa</i>	500	These white petalled flowers are suitable underneath trees and are one of the earliest flowers.
To prevent alien species becoming invasive, only source bulbs from reputable suppliers, do not accept donated bulbs from unknown sources		

Bulbs should be planted in groups of 20-30 single species clumps or drifts to maximise impact.



1.6 Hedge Planting

2 new mixed native hedges are proposed: adjacent to the residential fence along the Wentworth Gardens access point, and to provide a new woodland boundary to the rear of 27-30 Wentworth Gardens, approximately 3m from the fence line. The hedges measure 30m and 45m respectively.

The hedge should contain the following mix as a minimum:

25% Hawthorn *Crateagus monogyna*

15% Blackthorn *Prunus spinosa*

15% Holly *Ilex aquifolium*

10% Hazel *Corylus avellana*

35% mixed flowering and fruiting species, such as *Malus sylvestris*, dog rose, field maple

Plant in a double staggered row at a rate of 5 plants per linear meter and protect with 60cm spiral rabbit guard and cane.

Carrick Wood Alternative Natural Recreational Green Space
Planting Proposals
 V2



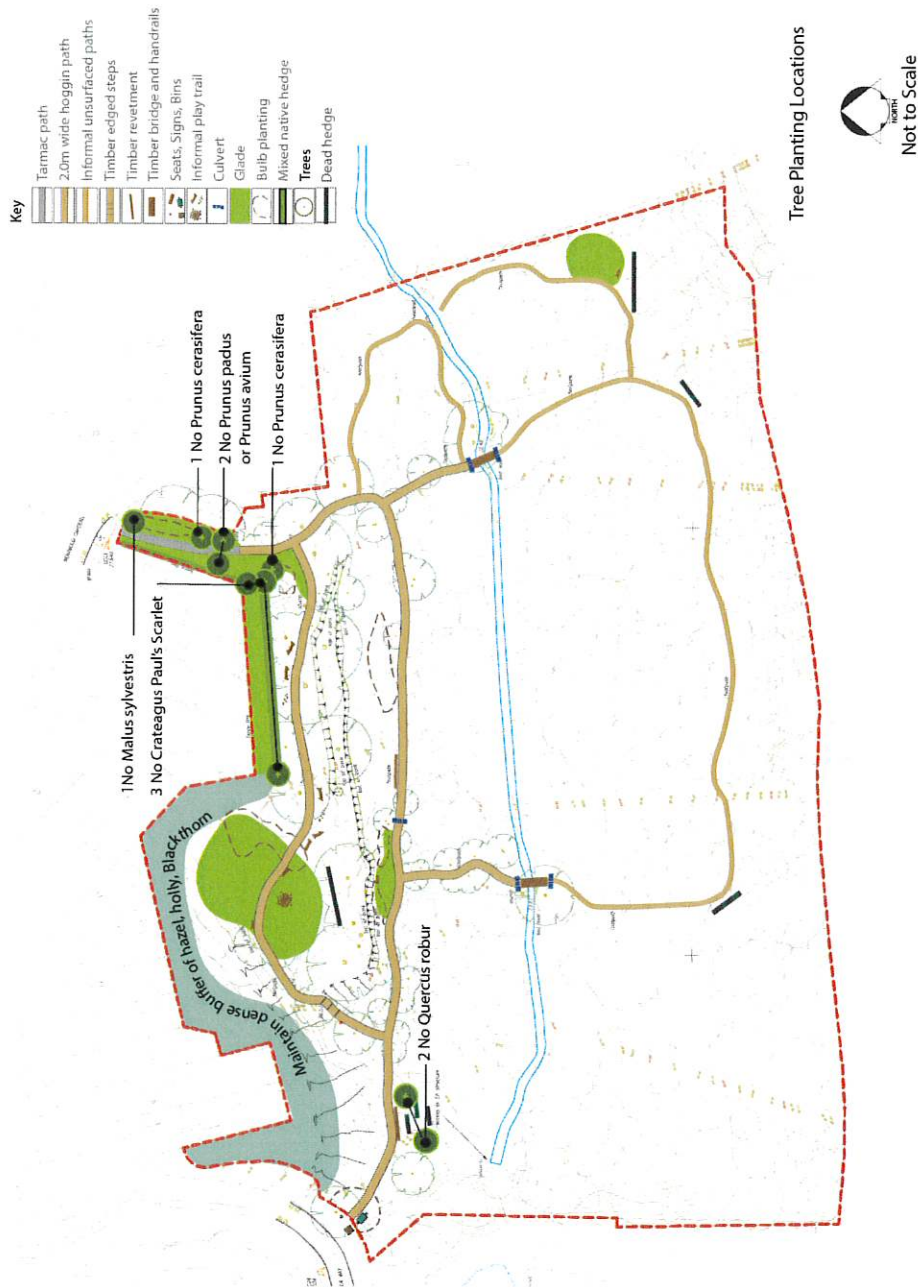
1.7 Tree Planting

Up to eight new trees are proposed to enhance the access point at Wentworth Gardens.

New trees should be native or near native and offer fruit and foliage colour, and range in stature from small and medium trees, taking account of existing mature oaks.

The plan below suggests locations for specific species, that are planted within or adjacent to the proposed hedges on the western side, and to create a 'gateway' feature into the woodland.

2 new oaks are also proposed to supplement new planting at the western access.



Carrick Wood Alternative Natural Recreational Green Space
Planting Proposals
V2

Originated By	JC	Date	29/04/2024	First issue V2 – Draft for comment
Checked By		Date		
Reviewed By	Keith Baker	Date	29/04/2024	
Approved By	Paul Relton	Date	01/05/2024	

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan
V1.0



Carrick Wood

WOODLAND AND SITE MANAGEMENT PLAN



NEW MILTON
TOWN COUNCIL

1.0 INTRODUCTION

1.1 Background

Carrick Wood Public Open Space is subject to enhancement works as part of:

- NFDC (New Forest District Council) Mitigation Strategy – creating new and enhancing existing walking routes and open spaces to encourage residents to undertake daily dog walks close to home and so avoiding the sensitive parts of the National Park. Find out more at: [Mitigation for Recreational Impacts On New Forest European Sites - New Forest District Council](#)
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1.2 Purpose and Scope of Document

This documentation contains quantitative and qualitative information about the various components of the site that will be useful to those responsible for managing and maintaining them.

The Management Plan sets out the management aims and objectives for the site along with the specific management objectives for each component of the site, and the associated maintenance works required on an annual and occasional basis.

This Woodland and Site Management Plan document covers years 1-20, post implementation of the project and will be reviewed at year 5 and every 5 years thereafter.

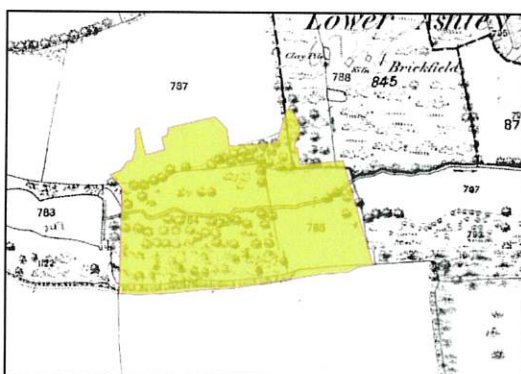
1.3 The Site

Carrick Wood is a small parcel of informal open space delivered as part of the adjacent residential development, circa 1990's, and sits to the southeast of New Milton town centre. The site measures approximately 3.05ha.

The site consists of a mixed deciduous woodland block with 1A Site of interest for nature conservation (Sinc.) status sitting on the urban edge of New Milton to the. Open agricultural countryside lays to the east that has a unique, small scale landscape character assessed as part of the Coastal Plain Estates- small parliamentary enclosures character type on the Barton and Milton Coastal Plain.¹

To the south of the site is an active aggregate processing plant, having had its own gravel previously extracted.

¹ New Forest District Council Landscape Character Assessment 2000



1867-1893



1924-1947

The site itself sits on the shallow valley sides of the Danes Stream (a critical main water course) the site slopes down from the north, rising on the southern edge to meet a large, wooded bank on part of the southern and western boundaries. A more recent bund completes the southern boundary. The two maps above show that most of the site has been under woodland cover for at least 150 years, the biodiversity records indicate younger plantation wood on the eastern and northern sides, reflecting this historic mapping.

Residential development to the north, c.1990's, provided a narrow footpath on the northern side and brought the woodland into public ownership as informal open space.

Today, the site is well-used by the local community who have extended the footpath network to create an informal circular network of paths. Dog walkers have been observed using the site and young adults have constructed a series of earth ramps and jumps for BMX'ing beyond the stream. In the past this activity had become organised, but unauthorised, leading to substantial damage to individual trees and understories. However, more recently its use appears diminished, with much less associated litter and ongoing self-building.

Some woodland clearance has been undertaken in the past to the rear of residential gardens and there is ongoing fly tipping of garden waste.

The enhancement works have resurfaced the existing footpath, and extended a surfaced informal route around the site, including two new river crossings, opened up glades alongside the footpath to create seating spaces and longer vistas, improve visibility for pedestrians and to diversify ground flora. Site-won timber has been used creatively to provide constructed seats, informal sitting logs, and an informal balancing and stepping trail. The accesses at Carrick Way and Wentworth Gardens have been enhanced by ensuring visibility and linking positively to the existing highway infrastructure, defining the woodland boundary with a new planting, and providing waste bins and information.

1.4 Recitals

The site is owned leasehold by New Milton Town Council.

The developer of this project is New Forest District Council.

New Milton Town Council will manage the site on a day-to-day basis, employing specialist contractors to undertake particular tasks when required, and possibly harnessing the enthusiasm of a local 'Friends of' group to help manage the woodland, undertaking tasks such as understory clearance and hand removal of invasive species.

New Forest District Council are the funding body for the enhancement, via the Community Infrastructure Levy.

This document is the control document for determining:

- The woodland management, including the Danes Stream
- Engineered features management.
- Reviewing cycle

This document includes:

- The Woodland Management Compartments Plans and management descriptions.
- The Woodland Maintenance Operations Schedule
- The Engineered Features Plan
- The Engineered Features Operations Schedule
- Tree condition reports (most up to date)
- Biodiversity records

2.0 AIMS AND OBJECTIVES OF THE WOODLAND AND SITE MANAGEMENT PLAN

2.1 Aims

The principal aims of this Woodland and Site Management Plan are to secure a coordinated and high standard of woodland management for the site, to enhance its biodiversity as part of the green infrastructure of New Milton, with an aim to improve the condition of the SINC status woodland, and ensure enhanced public access is valuable and safe. This will include the appropriate maintenance of existing, retained, and new landscape components.

2.2 Objectives

- To maintain an appropriate balance between access for informal recreation, walking connectivity, and the nature conservation interest.
- The sustainable management of existing, retained, and new vegetation to achieve a complex mosaic of suitable habitat to support a range of species and enhance the visual enjoyment of the woodland setting.
- To maintain key characteristics of local landscape character, and as a valuable component of green infrastructure in New Milton
- To achieve a high standard of appropriate maintenance for both hard and soft elements of the site
- To ensure a hazard free environment
- To provide a mechanism for monitoring and review

These objectives may be reviewed at appropriate intervals to ensure the site remains a valuable asset for people and wildlife.

3.0 SPECIFIC ELEMENTS REQUIRING MANAGEMENT AND MAINTENANCE

This section sets out the ultimate vision for the vegetative components and hard or engineered features of the site and will be subject to periodic review to ensure that:

- The objectives for the site are being met.
- A diverse range of habitats, through creation and management, which are in good or improving condition.

The site is split into various components, guided by the required management outcomes, and achieved through appropriate maintenance operations. In this document, the soft components are referred to as the 'Woodland Management Plan', and, those engineered features (such as footpaths, furniture, bridges) that enable the site to function for its informal recreational purposes as the 'Engineered Features Management Plan', which will be managed to ensure these features are clean, repaired when required and safe to use by the public, and will be inspected at suitable periodic intervals for continued safety.

The woodland management focuses on achieving a well-structured woodland that maximizes biodiversity and reflects local landscape character, recognising its value as part of the green infrastructure that supports this part of New Milton. Some, or all of the woodland management operations may be carried out by volunteer groups with the guidance of this plan and under the direction of NMTC, together with enabling some operations to be carried out by outdoor educators teaching forest craft or Forest School, for example.

4.0 IMPLEMENTATION, MONITORING AND REVIEW

4.1 Implementation

New Forest District Council will deliver the capital enhancement works via a standard form of contract.

The site will be 'handed back' to New Milton Town Council using a joint approach to determine that:

- Practical Completion has been reached.
- Outstanding defects are identified and are programmed within the 'defects period.'

4.2 Process for Monitoring and Review

There are 2 elements of monitoring and reviewing:

The Woodland Management – monitoring and reviewing to understand the changing site ecology as the vegetation diversifies via positive management following the initial capital works. It is anticipated that reviews will be carried out on a biennial basis by an ecologist, recording biodiversity uplift from the post- enhancement project. This review may require management prescriptions to be changed or adjusted to favour or promote both particular habitats and species.

The Engineered Features Management – To enable planned maintenance to be programmed on an annual basis. Weekly visual and annual structural inspections will inform this work and will be undertaken by New Milton Town Council as part of the general management and maintenance of the site.

4.3 Reports

To facilitate management of the site as part of its monitoring and review cycles, it is anticipated that a number of technical and specialist reports will be generated at appropriate intervals, according to subject. These reports will include (but not be limited to):

- Specialist reports - advising on particular aspects such as recording species, and Tree Surveys (as part of NMTC's Tree Works Framework with NFDC) – NFDC and Hampshire Biodiversity Information Centre (HBic)
- Risk Assessments - NMTC

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan
V1.0

- Annual Health and Safety Inspections -NMTC
- Records or attendance sheets demonstrating the maintenance work undertaken - NMTC.

5.0 WOODLAND MANAGEMENT PLAN

The tables below describe each vegetative habitat on site, both existing and proposed. They explain the management objective and the type of operation required to achieve the objective. A plan showing the locations of each habitat is provided at appendix A and the required operations to achieve the objective for each habitat are carried through to an annual maintenance schedule. (Woodland Maintenance Operations Schedule).

The woodland management component of the site consists of actions to restore the oak/ash woodland to coppice with standards, reflecting management practices for other, similar small, neglected woodland blocks in and around New Milton, where positive management practices have produced a recordable uplift in biodiversity.

The current condition of the woodland is one of decline, where the density of primarily oak is too high, preventing sufficient light onto the woodland floor to promote vascular plants and hazel or sapling regeneration. This has enabled bramble to dominate the shrub layer, outcompeting a diverse range of species.

Current management consists of maintaining those high canopy trees in a safe condition where they overhang the existing footpath route, and close to boundaries. The tree report at Appendix F clearly demonstrates this approach where significant areas of the woodland are unrecorded. However, this report provides some useful data that can be extrapolated to apply to the whole woodland block.

To achieve the aim of restoring this small woodland to a favourable condition, management techniques will include gradual felling of high canopy trees to provide a total of 60-75 trees (site size =3.06ha, recommended tree cover rate of 20-25 trees per hectare), retaining the oak on the boundaries. Reduction and removal of bramble through pulling or localised digging or regular strimming/brush cutting to ground level and identifying saplings for retention; aiming to have an uneven age range of standards to ensure continuity by primarily reducing the number of mature trees to enable the shrub layer and ground flora to thrive and diversify, restocking with a native shrub layer and removing non-native invasive species.

A number of 'dead hedges' have been constructed using site won material. They consist of a double row of hazel stakes set approximately 300-500mm apart and the space filled with branches and brash, secured to the stakes. The top of the stakes have been reinforced with woven hazel to strengthen the structure and create a unique decorative effect.

The dead hedges provide deflection of people onto paths and provide a frame or backdrop to the glade areas and provide additional habitat for biodiversity.



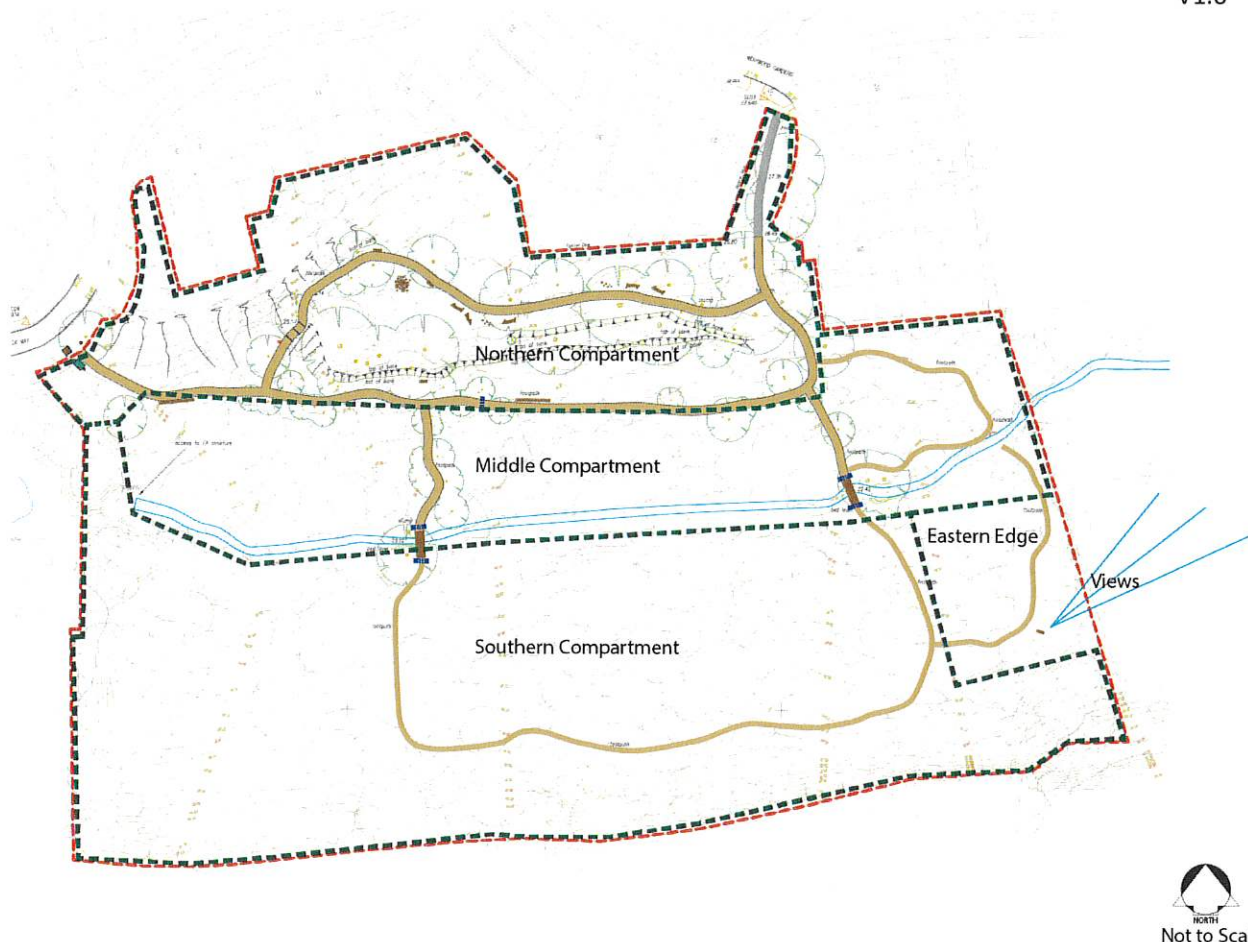
For management purposes the site is split into four compartments, each with its own objectives:

- **The Southern Compartment:** the southern part of the site (beyond the Danes Stream) is the oldest area of the woodland and the most diverse, although its ground flora and shrub layer are poor through unauthorised activity.
The management objective is to reverse the decline in quality through diverting activity to the northern side of the site, prevent further disturbance of the ground and soils, and enabling the flora and fauna to re-diversify.

- **The Middle Compartment:** This area includes the Danes Stream and its floodplain to the north, extending between the east and west boundaries: This part of the woodland is the flattest and wettest, and is the replanted area. (c.1980). Much of the shrub layer failed due to soil conditions, resulting in an area with a very high canopy of densely planted oaks.
The management aim for this compartment is to improve the quality of the woodland by thinning the high canopy removing bramble and encouraging regeneration of a more diverse shrub layer.

- **The Northern Compartment:** This area is the most active, it abuts residential boundaries and contains the circular and linked footpath routes. It has the remains of old banks from its use as a clay pit that provide structure to the setting for seating and an informal trail, constructed from site-won material.
In the past residents have cleared trees and undergrowth, creating a new boundary to the woodland edge with a wide grass edge. New planting will respect that by providing a mixed native hedge 3m from the fence line, connecting woodland and grassland habitats and a strong boundary feature. Elsewhere, residential boundaries are still screened by new and retained planting. New glades have been created alongside the surfaced footpath routes to provide resting and viewing points across to the southern compartment.
Former access routes have been diverted where required with soft measures; a combination of 'dead hedges' and new planting.
The management objectives for this area are to maintain an appropriate screen to residential boundaries, provide an enriched ecology at Wentworth Gardens and enhance the visual interest of the walking route with new planting.

- **The Eastern Edge:** Located at the southeastern edge of the site, this area is more open and offers a long vista across the adjacent meadow. The tree cover is lighter, enabling a unique grassland and fern collection to thrive.
The management aim here is to maintain an open glade with views to the east and maintaining the existing flora.



Please note that the suggested operations and timings are subject to a number of changing factors:

- Timing restrictions – to avoid bird nesting seasons which will change year on year, but generally between mid-late February and late July.
- Review of previous years' work – if regeneration is less than expected, for example, the suggested annual operations may be adjusted to alternate years.
- Machinery/contractors/volunteers unavailable at optimum time.

5.1 Use of Chemicals

The use of chemicals as herbicides, insecticides, fertilizer, or growth inhibitors is prohibited.



There will be no requirement to provide any chemical inputs.

On occasion, and where mechanical operations are not possible, spot herbicides may be used, strictly in accordance with manufacturer's instructions, and taking care not to contaminate surrounding vegetation or allowing residue to enter the watercourse.

Arisings



Woodland Management operations: agree suitable location for log piles for ecology.

All top growth and brash to be removed from site, unless a burning site can be agreed on site, or for repairing dead hedges.

The Woodland Management	
The Southern Compartment	
	
	
Description	Woodland
Management Objectives	To provide a suitably structured mosaic of oak standards with hazel coppice woodland for maximising biodiversity and maintaining woodland in perpetuity.
Annual Works Initial works (year 1)	Remove bramble and other non-native invasive species, select suitable saplings for retention, select two mature oaks for felling, retaining standing stumps 2-3m high.
Year 2-5	Review ground flora, continue to remove bramble and other non-native invasive species. Restock with hazel if required
Year 6-15	Select one oak for felling every 3 years. Review ground flora, continue to remove bramble and other non-native invasive species. Coppice hazel every 6 years, rotating each compartment
Year 16-20	Review previous work, continue hazel coppicing, monitor mature tree numbers to achieve objective.
Occasional Works	Reactive works to vegetation to ensure safety of users

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan

V1.0

Every 2 years	Inspect mature trees for species failure, disease, and structural integrity over footpath routes
Description	Dead Hedges
Management Objectives	To deter access to previously damaged areas to enable woodland floor recovery
Annual Works Initial works (year 1)	Inspect for stability
Year 2-5	Replenish material between stakes if required, securing with twine
Year 6-15	If required for deflection purpose, continue to inspect, and repair. If the structure is no longer required, break out structure and remove to log piles OR leave in situ to decay naturally
The Middle Compartment	
	
	
Description	Woodland
Management Objectives	To provide a suitably structured mosaic of oak/alder standard with hazel coppice woodland for maximising biodiversity and maintaining woodland in perpetuity.

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan

V1.0

Annual Works Initial works (year 1)	Remove bramble and other non-native invasive species, select suitable saplings for retention, restock with hazel
Year 2-5	Review ground flora, continue to remove bramble and other non-native invasive species. Restock with hazel if required
Year 6-15	Review ground flora, continue to remove bramble and other non-native invasive species. Coppice hazel every 6 years, rotating each compartment
Year 16-20	Review previous work, continue hazel coppicing, monitor mature tree numbers to achieve objective.
Occasional Works	Reactive works to vegetation to ensure safety of users
Every 2 years	Inspect mature trees for species failure, disease, and structural integrity over footpath routes
Description	Dead Hedges
Management Objectives	To deter access to brick cistern and grid
Annual Works Initial works (year 1)	Inspect for stability
Year 2-5	Replenish material between stakes if required, securing with twine
Year 6-15	If required for deflection purpose, continue to inspect, and repair. If the structure is no longer required, break out structure and remove to log piles OR leave in situ to decay naturally
Description	Stream and ditches
Management Objectives	To maintain a flow of water to prevent flooding upstream and provide suitable habitat for native flora and fauna within the stream bed and its banks
Initial Works	Remove, by hand or digging, non-native invasive species, including, but not limited to: Square Leek, Hemlock water dropwort, Giant Hogweed.
Annual Works	Undertake sufficient maintenance to ensure a free flow of water

The Northern Compartment



Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan


V1.0



Description	Woodland
Management Objectives	To provide a suitably structured mosaic of standards with hazel coppice woodland for maximising biodiversity and maintaining woodland in perpetuity. To provide a vegetated buffer to residential boundaries.
Annual Works	Remove bramble and other non-native invasive species, select suitable saplings for retention, coppice hazel.
Initial works (year 1)	
Year 2-5	Review ground flora, continue to remove bramble and other non-native invasive species. Restock with hazel if required
Year 6-15	Review ground flora, continue to remove bramble and other non-native invasive species. Coppice hazel every 6 years, rotating each compartment
Year 16-20	Review previous work, continue hazel coppicing, monitor mature tree numbers to achieve objective.
Occasional Works	Reactive works to vegetation to ensure safety of users
Every 2 years	Inspect mature trees for species failure, disease, and structural integrity over footpath routes.
Description	New glades
Location	Adjacent to newly surfaced routes and from Wentworth Gardens
Management Objectives	To provide a woodland meadow sward of grasses and flowers, maintaining visibility along the footpath route and provide an open sitting space.
Annual Works	Undertake sufficient maintenance to ensure establishment and a thriving ground flora by strimming
Occasional Works	Remove encroaching bramble, reseed if necessary
Description	New native mixed hedge
Location	From Wentworth Gardens
Management Objectives	To provide a mixed native hedge with dense foliage to ground level of approximately 1.2-1.5m high, creating a boundary definition that reflects the local landscape and provides habitat connections.
Year 1-2	Undertake sufficient maintenance to establish the hedge
Year 3	Remove protection tubes, undertake formative pruning
Year 4 -	Prune annually when at desired height to encourage a dense, vegetated hedge.

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan

V1.0

Description	Dead Hedges
Management Objectives	To provide definition to edge of glade
Annual Works	Inspect for stability
Initial works (year 1)	
Year 2-5	Replenish material between stakes if required, securing with twine
Year 6-15	If the structure is no longer required, break out structure and remove to log piles OR leave in situ to decay naturally
Description	New Tree Planting
Location	From Wentworth Gardens
Management Objectives	To undertake sufficient maintenance to enable establishment of individual trees as specimens
Annual Works (yrs. 1-5)	See establishment maintenance schedule. Yrs. 5- include into existing tree survey regime
Occasional Works	Inspect annually, undertake pruning to ensure a good structural form
Description	New Bulb Planting
Location	Along footpaths and glades
Management Objectives	To provide native spring colour adjacent to active areas
Annual Works	Allow to die back naturally
Occasional Works	Restock
The Eastern Edge	
	
Description	Woodland
Management Objectives	To provide a suitably structured mosaic of standards with hazel coppice woodland for maximising biodiversity and maintaining woodland in perpetuity.
Annual Works	Remove bramble and other non-native invasive species, select suitable saplings for retention, coppice hazel.
Initial works (year 1)	
Year 2-5	Review ground flora, continue to remove bramble and other non-native invasive species. Restock with hazel if required, maintain open canopy levels to support ground flora
Year 6-15	Review ground flora, continue to remove bramble and other non-native invasive species. Coppice hazel every 6 years, rotating each compartment
Year 16-20	Review previous work, continue hazel coppicing, monitor mature tree numbers to achieve objective.

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan
V1.0

Occasional Works	Reactive works to vegetation to ensure safety of users
Every 2 years	Inspect mature trees for species failure, disease, and structural integrity over footpath routes
Description	New glades
Location	Adjacent to Eastern boundary
Management Objectives	To provide a woodland meadow sward of grasses and flowers, provide an open sitting space with longer views over adjacent meadow
Annual Works	Undertake sufficient maintenance to ensure establishment and a thriving ground flora by strimming
Occasional Works	Remove encroaching bramble, reseed if necessary

6.0 ENGINEERED FEATURES MANAGEMENT PLAN

The table below describes each engineered feature on site to enable the site to function as a publicly accessible informal recreational space and walking route. It explains the management objective and the type of operation required to achieve the objective. A plan showing the locations of each feature is provided and the required operations to achieve the objective for each feature are carried through to an annual maintenance schedule. (Engineered Features Operations Schedule). Approximate quantities of each feature are shown for monitoring purposes and pricing of operations.

Please note that the suggested operations are intended as a guide for planning maintenance operations and pricing purposes and represent a minimum requirement to maintain the features in a clean and safe condition. There will be occasions when reactive repairs are required to maintain a safe site, and a planned repair/replacement program of these features is required to provide the site features in perpetuity.

Planned repair/ replacement is dependent on each feature: its construction, materials, and levels of use. It is expected that each feature will be replaced at least once during the lifetime of the project, and these intervals provides an opportunity to review each features' value, and if changes are required.

HARD LANDSCAPE	
Existing tarmac link from Wentworth Drive	
Description	Tarmac footpath
Quantity	35m
Management Objectives	Maintain a clean surface with no holes
Annual Works	Inspect for failures in surface, sweep off leaf litter
Occasional Works	Clean moss, repair holes
Timber edged and non-edged rolled hoggin surfaced footpath	
Description	1.8m wide hoggin footpaths
Quantity	200m with edging 210 without edging
Management Objectives	Maintain a clean surface with no holes
Annual Works	Inspect for failures in surface, sweep off leaf litter
Occasional Works	Repair if required matching aggregate
Informal unsurfaced footpaths	
Description	Informal routes created by use
Quantity	Varies
Management Objectives	Maintain a connected route
Annual Works	Clear shrub layer vegetation on either side
Occasional Works	Re-route if required
Timber edged steps	
Description	Timber edged steps surfaced with hoggin on northern western side of site
Quantity	3
Management Objectives	Maintain a clean, even surface

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan
V1.0

	Annual Works	Inspect for failures in surface and riser
	Occasional Works	Repair if required with matching wearing course
Bridges		
	Description	Timber decked bridges with handrails
	Quantity	2
	Management Objectives	To maintain a safe structure
	Annual Works	Inspect for failures in surface and timber, including handrail
	Occasional Works	Repair/replace as required
Brick cistern		
	Description	Existing flow control structure at site boundary, including trash screen and safety grid
	Quantity	1
	Management Objectives	To maintain a safe structure, limiting public access
	Annual Works	Inspect for failures in all parts of structure
	Occasional Works	Repair/replace as required
Timber revetments		
	Description	Timber revetments retaining soil or paths
	Quantity	2 locations and bridges
	Management Objectives	Maintain in a safe and functioning condition
	Annual Works	Inspect, repair where necessary
	Occasional Works	Replacement
Seating		
	Description	Site won timber seats and manufactured seats
	Quantity	4
	Management Objectives	Ensure seating is clean and safe
	Annual Works	Clean
	Occasional Works	Inspect, repair/replace as required
Informal trail of timber structures		
	Description	Low, site-won timber features: Logs, stepping posts and balance beams
	Quantity	5
	Management Objectives	To focus use of the site in the less sensitive part of the woodland. These items are not intended specifically for children's play, alternative uses may include dogs' activities, sitting opportunities
	Annual Works	Inspect for stability, damage, and rot
	Occasional Works	Repair or replace, if required
Signage		
	Description	All signage: interpretation and waymarker posts,
	Quantity	2 Interpretation Board 1 Waymarker Posts
	Management Objectives	To ensure that the information is still relevant, and the structures are maintained in a clean safe condition
	Annual Works	Inspect for safety, clean

Carrick Wood Alternative Natural Recreational Green Space
Woodland and Site Management Plan

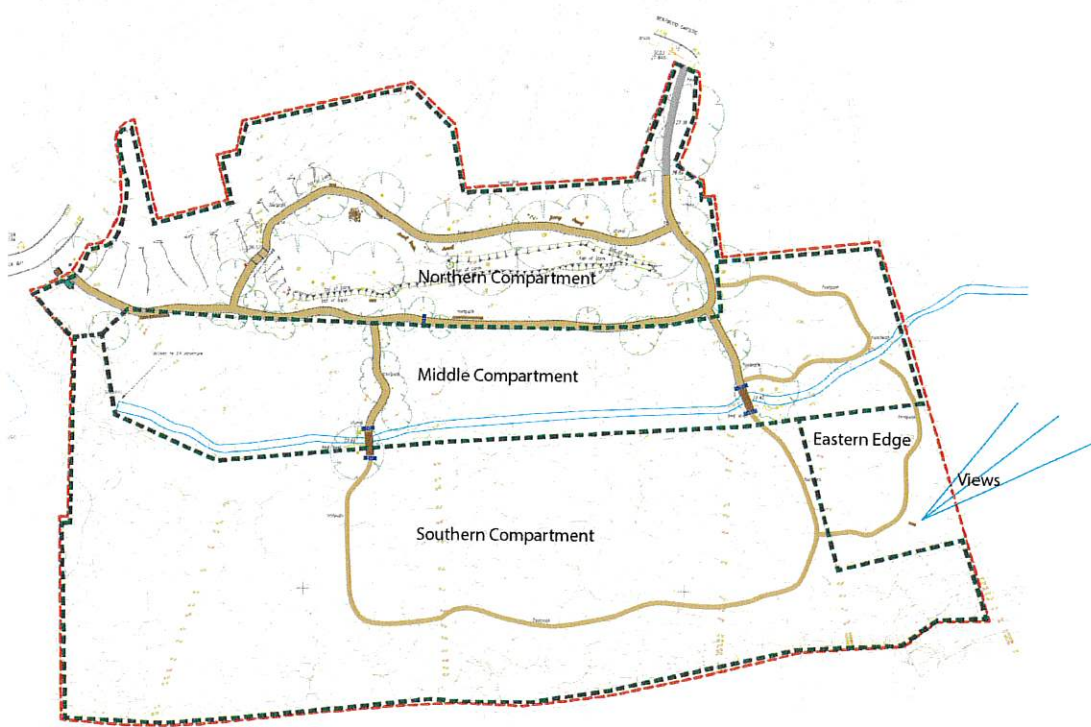
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Occasional Works	Replacement
Combined litter bins	
Description	Combined litter bins
Quantity	2
Management Objectives	To provide convenient waste disposal including dog waste
Annual Works	Emptying, cleaning as required
Occasional Works	Replacement
Culverts	
Description	Drainage pipes under paths and bridge ramps
Quantity	8
Management Objectives	To maintain free flow of excess surface water to prevent path flooding
Annual Works	Inspection, clearing blockages
Occasional Works	Replacement

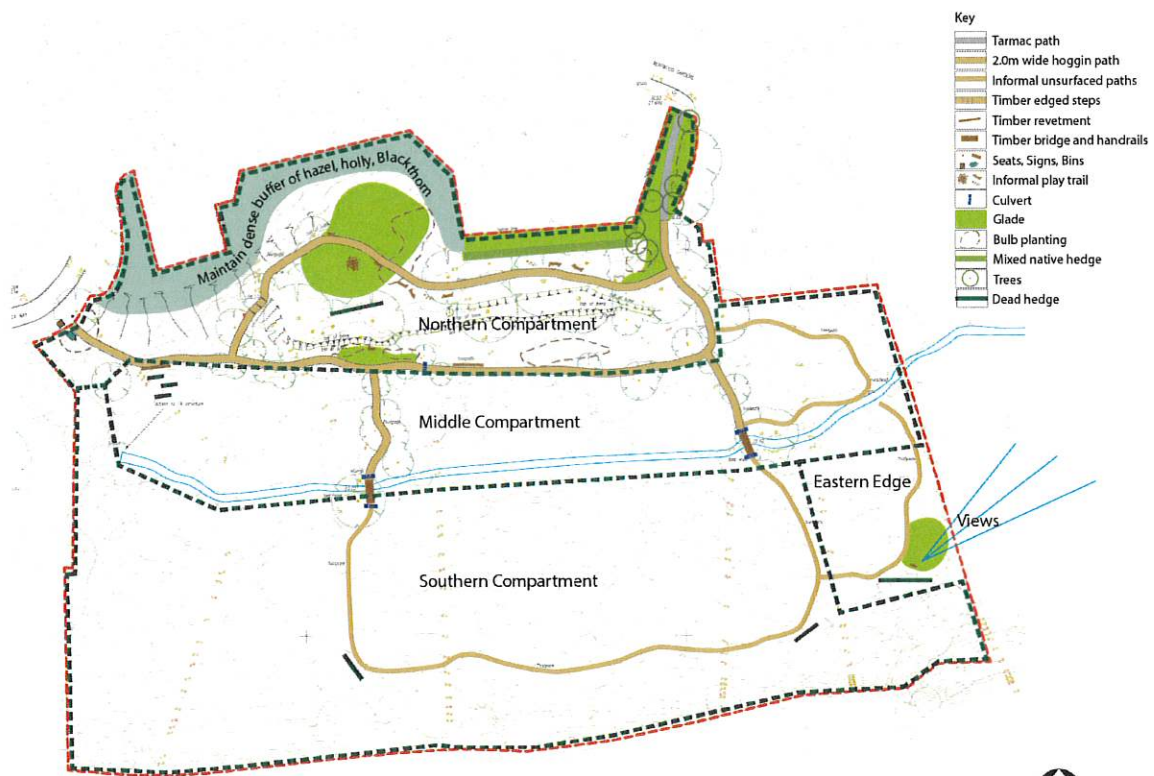
7.0 APPENDICES

- A Woodland Management Compartment Plan**
- B Woodland Management Plan**
- C Woodland Maintenance Operations Schedule**
- D Engineered Features Plan**
- E Engineered Features Maintenance Operations Schedule**
- F Tree Condition Report**
- G Biodiversity Records**

Carrick Wood Alternative Natural Recreational Green Space
Appendix A Woodland Management Compartment Plan



Carrick Wood Alternative Natural Recreational Green Space
Appendix B Woodland Management Plan



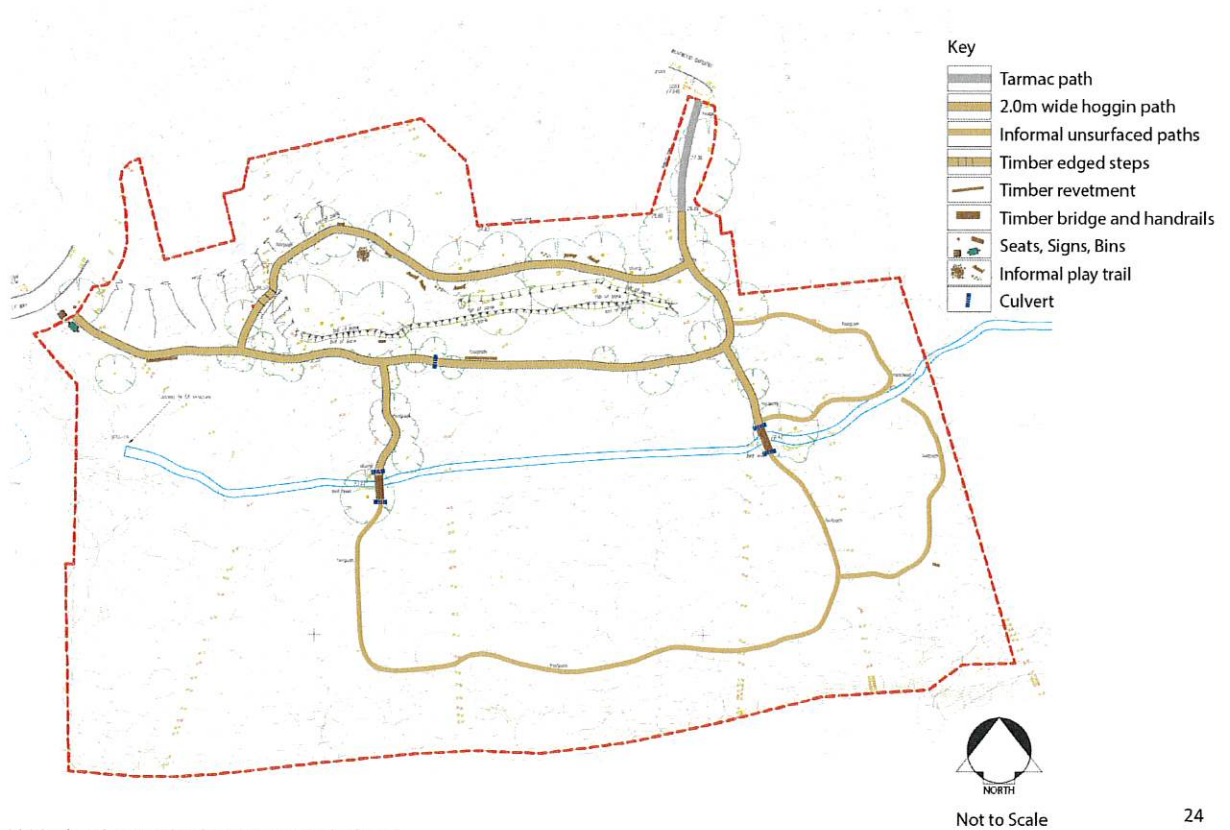
Carrick Wood Alternative Natural Recreational Green Space
Appendix C Woodland Maintenance Operations Schedule

Annual Quantity	Maintenance Operation	Number of Visits (* usually dependant on seasonal requirements, where not, indicative timings are shown)					Total visits per annum	Comments
		Jan-March (13 weeks)	April-June (13 weeks)	July-August (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
Existing woodland								Approx 3.0ha
	Coppicing	1					1	On 5-year rotation between compartments, review at year 5
	Removal of non-native species and excess bramble, including glades	1					1	
	Tree felling							Schedule with reactive tree works
	Footpath clearance		1		1		2	Ensure footpaths are passable
Stream and ditches								
	Stream clearance				1		1	Remove any blockages
	Removal of non-native species		1				1	Adjust timing to suit
	Culverts		1				1	Remove any blockages
Individual mature trees overhanging footpaths								Approx. 75 trees
	Biennial inspection							In accordance with existing regime
	Remedial surgery							As and when required
New Hedgerows: Mixed native Year 1								
80m	Hedge cutting *							Do not cut between March and July (to avoid bird nesting season) Adjust timing to suit annual weather conditions
New Hedgerows: Mixed native Year 2-5								
80m	Hedge cutting *	1					1	Trim lightly to encourage bushy growth until desired height of 1.2-1.5m is achieved. Do not cut between March and July (to avoid bird nesting season)

Carrick Wood Alternative Natural Recreational Green Space
Appendix C Woodland Maintenance Operations Schedule

Annual Quantity	Maintenance Operation	Number of Visits (* usually dependant on seasonal requirements, where not, indicative timings are shown)					Total visits per annum	Comments
		Jan-March (13 weeks)	April-June (13 weeks)	July-August (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
								Adjust timing to suit annual weather conditions
New Hedgerows: Mixed native Year 3								
80m	Remove and recycle? protection tubes	1					1	
Glades and verge, newly seeded meadow grassland – Year 1								200m2
830m2	Mowing or strimming		1	1	1 (first cut)		3	To establish new grassland
Glades and verge, newly seeded meadow grassland – Year 2+								
830m2	Flail Cut or trim	1		1			2	Maintain to provide a sward of grasses and flowers

Carrick Woods Alternative Natural Recreational Green Space
Appendix D Engineered Features Plan



Carrick Woods Alternative Natural Recreational Green Space
Appendix E Engineered Features Maintenance Operations Schedule

Maintenance Operation	Item	Quantity	Number of Visits					Total visits per annum	Comments
			Jan-March (13 weeks)	April-June (13 weeks)	July-August (9 weeks)	Sept – Oct (9 weeks)	Nov – Dec (8 weeks)		
Annual inspection	Footpaths	450m						1	Inspect for structural failures, update risk assessment, plan maintenance and/or replacement (other than reactive work)
	Timber Bridge	2							
	Brick cistern	1							
	Timber revetments	4							
	Seats	4							
	Signage (all)	4							
	Timber features (informal trail)	As shown							
	Culverts	2							
Bin empty	Bins	1	13	13	9	9	8	52	
Cleaning	Seats and bins	4	1		1			2	Wash
	Signage (all)	4	1		1			2	Wash
	Footpaths	450m	1					1	Sweep off debris
	Culverts	2	1					1	Clear blockages