

Bells Field, Lords Hill, Coleford

LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN

Prepared for:

Coleford Town Council

No. 2 The Town House, Lords Hill Walk, Coleford, GL16 8BD

October 2018

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Landscape and Ecological Management Plan

Bells Field Recreation Area Lords Hill, Coleford, Gloucestershire

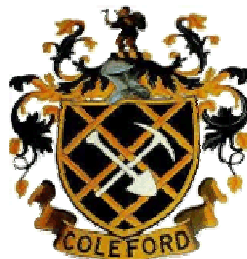
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01.14/101 General arrangement drawing

01.14/103 Indicative cross sections

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01.18/201 Keyplan: Soft landscape

01.18/202 Keyplan: Hard landscape

01.18/203 Keyplan: Constraints

Appendix 3 – Ecological Appraisal, November 2016 (Richard Tofts Ecology)

Appendix 4 – Tree survey report (Jerry Ross Arboricultural Consultancy July 2016)

1. INTRODUCTION

1.1 Description

Bellinger Design (BD) was commissioned by Coleford Town Council (CTC) in July 2018 to prepare a Landscape and Ecological Management Plan (LEMP) for the recreation area at Bells Field, Lords Hill, Coleford.

Bells Field is currently undergoing development to create the following new facilities:

- a) Improved, attractive and inviting entrances for pedestrians and vehicles;
- b) Facilities building (loos/store/office) and car park providing 20 car parking spaces;
- c) Surfaced footpaths to provide improved access around the field;
- d) Activity area including a skate facility, multi-use games area and bike pump track;
- e) Open, green space for informal recreation such as picnicking, kick-about, dog walking and natural play;
- f) Planting of trees, hedgerows, shrubs, bulbs, reeds and meadow areas to establish a landscape structure that creates attractive spaces and enhanced biodiversity;
- g) Wildlife garden with pond to provide opportunities for community involvement and to enhance biodiversity;
- h) Memorial garden planted to offer sensory appeal & year-round interest;
- i) Amphitheatre as a space for informal performances, organised events and an attractive gathering space for meeting/relaxing;
- j) Sustainable drainage scheme to address all surface water run-off generated from the recreation area and provide opportunities to enhance biodiversity.

The construction phase of the development is due for completion in November 2018.



Bells Field Recreation Area in context - Construction phase: May 2018

The LEMP concerns itself with the management of all landscape, ecological and drainage aspects of Bells Field recreation area for the period of 5 years following completion of the construction phase in November 2018. It aims to create a framework to guide CTC in the successful establishment and development of the features of the site to help achieve the design objectives for the scheme.

1.2 General information

Designations:	Protected Outdoor Recreation Space Coleford Landscape Protection
Site Area:	3.6 hectares
Local Planning Authority:	Forest of Dean District Council
Site status:	Full Permission reference: P1715/16/FUL 11 May 2017 Planning approval granted to Coleford Town Council to develop Bells Field as a multi-use recreation ground and amenity area.
Site Owner & Manager:	Coleford Town Council No.2 The Town House Lords Hill Walk Coleford GL16 8BD
Contact:	Annie Lapington, Town Clerk Telephone: 01594 832103 Email: ctoffice@colefordtowncouncil.gov.uk

1.3 Location

Bells Field Recreation Area is located on the eastern edge of Coleford. It is bounded by Lords Hill / Coalway Road and associated residential properties to the south; Bells Place and associated residential area to the west; agricultural land to the north and Sevenoaks care home and grounds and agricultural land to the east.

The location and extent of the site is illustrated on the Site Location Plan included in Appendix 1.

1.4 Land tenure

This is not a legal document. Please refer to the original tenure documents before taking any decision or any action which may have legal implications. The legal documents relating to tenures are held by Coleford Town Council.

The site is owned by Coleford Town Council who retain a freehold interest in all land contained within the site boundary.

1.5 Site background: Landscape and recreation

Historically Bells Field was an area of agricultural land. Subsequently, the lower part of the site (western side) was used by Bells Grammar School as their rugby field and the steeper top section of the field utilised by members of the adjacent Forest of Dean Golf Club to practice golf.

Further to the purchase of the site by Coleford Town Council (CTC) and prior to the commencement of the design and construction of the new recreation facilities in 2018, Bells Field comprised amenity grassland with hedges/hedge remnants, fences and some existing trees to the boundaries. There was a gated entrance off Lords Hill for pedestrians and vehicles with an informal access off Bells Place used by pedestrians. A clear desire line was visible between the two entry points (see photograph below). A further informal pedestrian link was a stile in the boundary fence in the north-west corner of the site providing a route to the public footpath located in the adjacent agricultural field. The field was managed by CTC for informal recreation and used predominantly for dog walking.



Bells Field prior to construction © Google 2015

In November 2016 a detailed assessment of the landscape character of Bells Field was undertaken by Gloucestershire Rural Community Council (GRCC) in partnership with Localism Network 2013 to inform the Coleford Neighbourhood Development Plan (NDP). The proposals for developing Bells Field recreation area were informed by this assessment.

The overall impression section of the landscape character assessment includes the following description:

"This significantly situated field has been bought by the Town Council for community and leisure use. It has been included in the Coleford Local Green Space Strategy. That will maintain its green status. Desired by Coleford residents. In the 1980's it was noted by a Planning Inspector as an important area to conserve the separation from Coalway. In NDP consultation the desire to maintain the separation of Coleford Town from surrounding settlements like Coalway was affirmed.

The views are superb, giving a real feel for the way the town sits in its bowl. The old established boundaries show a typical forest style: part hedge, some shrub, single trees in the whole length. They also form part a wildlife corridor crossing the valley.

Although Lords' Hill/Coalway Road is busy ... the road noise diminishes swiftly as you walk over the field. The dominant wind direction from the south-west will cross the field as its widest extent. Here you can catch the wind with a kite and run free. The appropriate design will serve all ages and allow access for all (a gold thread running through the NDP. This will be a community space all year round, also with potential for outdoor events to be created. It must conserve the viewpoint aspect to allow children to learn about the surrounding settlements and the green essence of Coleford in the Forest.

As playing fields for the old-established Bells Grammar School and subsequently as a practice area for the Golf Club ... the history here is about leisure learning and green space. Coleford town Council's design, which has been consulted upon in 2015 supports those themes."

The extensive re-shaping of Bells Field carried out during 2018 has been implemented following extensive public consultation. The intention of the development is to provide new leisure and recreation opportunities for the whole community. The aim is to meet the needs of the town by filling gaps in recreation provision whilst also enhancing the natural environment and highlighting the heritage of the area.

1.6 Site background: Ecology

A Phase 1 survey (JNCC, 2003) was undertaken on 2 November 2016 by Dr Richard Tofts, an experienced ecologist and full member of CIEEM. The survey was extended to include an assessment of protected species potential. The entire site was carefully examined and note was taken of the surrounding land and features that were publicly accessible. A desk study was undertaken involving a request for records of protected/noteworthy species and statutory/non-statutory designated sites within a 2km radius of the site from the Gloucestershire Centre for Environmental Records.

The Ecological Appraisal, November 2016 prepared by Richard Tofts Ecology confirms that Bells Field consists mainly of grassland derived from a former sports field. The grass was classed as semi-improved grassland, with much of the area species-poor with a tendency to be more diverse in the eastern swathe of the site. The site was recorded to have no significant tree cover, with hawthorn scrub, holly, elder and bramble present along parts of the site boundaries which were largely formed by wire fencing. Please refer to Appendix 3 for the Ecological Appraisal, November 2016.

The results of the desk study advise that the site is not subject to any ecological or biodiversity designations and no protected species records relate to Bells Field.

1.7 Existing documentation

Detailed design drawings, planting plans and cross sections were prepared on behalf of Coleford Town Council (CTC) by Bellinger Design to inform the development of Bells Field recreation area. A selection of relevant drawings are included in Appendix 1 and listed below:

01.14/100	Site location plan
01.14/101	General arrangement drawing
01.14/103	Indicative cross sections
01.14/114	Planting plan

In addition, a series of four key plans have been prepared to illustrate the landscape, ecological and drainage elements described in further detail in the LEMP along with the associated constraints. These key plans are included in Appendix 2 and are listed below:

01.18/200	Key plan: SuDS Elements
01.18/201	Key plan: Soft Landscape
01.18/202	Key plan: Hard Landscape
01.18/203	Key plan: Constraints

The following reports were prepared in 2016 prior to the construction phase of the scheme and are included in Appendix 3 and Appendix 4:

- Ecological Appraisal Report prepared in November 2016 by Richard Tofts Ecology.
- Tree Survey prepared in July 2016 by Jerry Ross Arboricultural consultancy.

The Health and Safety File relating to Bells Field landscape contract will be prepared and available at CTC offices following completion of construction in November 2018.

2. PLANNING

2.1 Full planning permission ref: P1715/16/FUL

In May 2017 Coleford Town Council was granted full planning permission ref: P1715/16/FUL by Forest of Dean District Council to develop Bells Field as a multi-use recreation ground and amenity area. The permission was subject to a number of Conditions including a requirement for the submission, approval and implementation of a sustainable drainage scheme (SuDS) maintenance plan and a Landscape and Ecological Management Plan (LEMP).

2.2 Conditions 04 and 05 of permission ref: P1715/16/FUL

This LEMP has been developed in part to discharge Conditions 04 and 05 of P1715/16/FUL which state:

Condition 04:

No development shall be put in to use until a SuDS maintenance plan for all SuDS/attenuation features and associated pipework has been submitted to and approved in writing by the Local Planning Authority. The approved SuDS maintenance plan shall be implemented in full in accordance with the agreed terms and conditions.

Condition 05:

A Landscape and Ecological Management Plan (LEMP) shall be submitted to, and approved in writing by, the local planning authority prior to the site coming into use. The content of the LEMP shall include the following.

- a) Description and evaluation of features to be managed.*
- b) Ecological trends and constraints on site that might influence management.*
- c) Aims and objectives of management including those in relation to dormice or bats.*
- d) Appropriate management options for achieving aims and objectives including appropriate enhancement measures.*
- e) Prescriptions for management actions;*
- f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a 5 year period).*
- g) Details of the body or organization responsible for implementation of the plan;*
- h) Ongoing monitoring and remedial measures.*

The LEMP shall also identify the legal funding mechanism(s) by which the long term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

3. ROLES AND RESPONSIBILITIES

3.1 Coleford Town Council

As the site owner and developer of the recreation area, Coleford Town Council (CTC) will be responsible for the implementation of the LEMP and will facilitate the maintenance and management of the Bells Field recreation area. The site includes a Facilities Building which comprises public conveniences, a small office and a store also owned and managed by CTC but not detailed as part of the LEMP.

The maintenance of the landscape, ecological and drainage features will be carried out by a landscape contractor(s) appointed by CTC.

Inspections and monitoring will be carried out by suitably trained, qualified and experienced personnel to be appointed by CTC.

In addition, it is anticipated that CTC will promote community 'ownership' of the scheme by establishing links with local groups / volunteers to encourage involvement in the maintenance and management and enjoyment of the facilities provided at Bells Field.

CTC will be responsible for making the necessary funds available to implement the management, maintenance and monitoring of Bells Field in accordance with the LEMP.

3.2 The Orchard Trust

At the end of the first year of implementation of the LEMP the ownership and responsibility for the acoustic fence to the boundary with Sevenoaks will be transferred to The Orchard Trust who are the Independent Registered Charity that operate the care home.

4. ECOLOGICAL TRENDS AND CONSTRAINTS

4.1 Trends in the local ecology

There are seven sites of European, national and local designations within the 2km search area of the site along with eleven sites of potential Key Wildlife Site quality. The site is a greenfield site bounding Coleford town and the countryside and as such the existing trees, hedgerow remnants and grass sward (although mainly short mown grass) support a variety of local flora and fauna.

The Ecological Appraisal, November 2016 prepared by Richard Tofts Ecology advises that the site is not subject to any ecological or biodiversity designations and that no protected species records relate to Bells Field.

The stone wall previously forming the southern site boundary of Bells Field on the Lords Hill frontage was identified as a potential reptile refuge however no reptiles were recorded during the ecological inspection prior to demolition of sections of the wall during the construction phase of the scheme.

Given that most of the new habitats and features of the site will be newly created, the main ecological trend in the early stages is likely to be establishment of sown and planted vegetation and some self-establishment of vegetation and fauna – particularly of species which have effective dispersal mechanisms. Once the vegetation begins to mature and a more varied range of habitats is present including scrub, wetland and tussocky grassland, the trend is likely to involve further establishment of fauna into areas of suitable habitat. This might include bats, reptiles and stag beetles, the latter having recently been recorded from the locality.

Feral wild boar may potentially use the site for foraging and are a local pest. Their access onto Bells Field is to be managed with gates and a cattlegrid in order to prevent damage to the site.

4.2 Summary of wildlife enhancements

The following opportunities were recommended in the Ecological Appraisal, November 2016 as suitable simple enhancements for local wildlife and all have been integrated into the approved scheme design:

- Improve structural diversity by planting of locally native trees and shrubs particularly in the western part of the site and site perimeter;
- Retain and protect the more diverse grass sward in the eastern part of the site;
- Create a suitable egg laying area for grass snake and other wildlife by managing the eastern grass sward by mowing and then by composting the arisings on site;
- Benefit wildlife by providing bat and bird boxes on the few established trees to the site boundary;
- Encourage the stag beetle by provision of stag beetle loggery;

In addition the scheme includes proposals for a large wildlife 'garden' in the south-west corner of the site and includes a pond/wetland, tree, hedge and fruit tree planting. This garden is enclosed by post and rail fencing with stock netting to prevent access by dogs but will be available for use by members of the public. It is intended that a local group and/or other interested parties will establish a group of volunteers to lead the development of the wildlife garden.

4.3 Dormice and bats

Dormice have populations in the forest of Dean which are scattered through the Gloucestershire Wildlife Trust nature reserves in the Wye Valley. Gloucestershire Wildlife Trust (GWT) has a 'Dormouse in Danger' appeal to help reverse the current decline in Dormouse numbers. GWT recommendations for increasing Dormice populations are included in the recommendations below.

Although usually found in broadleaf woodland, dormice can also inhabit hedgerows and woodland edge coppice. Habitat provision for dormice may include nest boxes, broadleaf tree cover, tree cavities, hedgerow, hazel coppice, honeysuckle, bramble thickets and areas of long grass. All of these can help boost and conserve dormouse populations. As many of these elements are provided in the scheme their appropriate management is essential if dormice are to be encouraged to use the site.

A desk study undertaken as part of the Ecological Appraisal, November 2016 advises the presence of Natterer's, Daubenton's, whiskered, common pipistrelle, noctule and lesser horseshoe bats from a 5km radius around Bells Field. Any of these species might forage over or amongst the habitats of the site, particularly once the new habitats have matured. The bat boxes also provide potential roost sites for some of these species.

Some additional specific habitat enhancements for bats and dormice are to be included in the period of this LEMP as follows:

- Provision of dormouse nest boxes (2019)
- Retention of dead wood on site when this can be done safely

As the new site planting establishes the presence of protected flora and fauna will need to be reviewed and this may affect the management practices employed on the site. In the longer term, coppicing of hazel shrubs within the native shrub belts will be carried out – anticipated to be implemented on a 10 year cycle.

Further useful reference material can be found on the Gloucestershire Wildlife Trust website and Forest of Dean website under biodiversity.

<https://www.gloucestershirewildlifetrust.co.uk>

<https://www.fdean.gov.uk>

4.4 Constraints

Although Bells Field is being developed primarily as a recreational resource for the community it will remain a predominantly green space with great potential for ecological enhancements to be developed alongside the recreation facilities. Parts of the site will be subject to a higher levels of disturbance than other areas which are to be managed predominately for wildlife.

5. DESCRIPTION & EVALUATION OF FEATURES

5.1 Summary of features

For the purposes of the LEMP Bells Field recreation area has been divided into the following features:

SOFT LANDSCAPE

- Established vegetation
- Planting
- Seeding

HARD LANDSCAPE

- Fencing and walls
- Paving
- Furniture and features
- Electrical systems

PLAY AND SPORTS FACILITIES

- Trim trail
- Activity trail
- Skate facility
- Multi-use games area (MUGA)
- Bike pump track

DRAINAGE: SUSTAINABLE DRAINAGE SCHEME

- Swales
- Pond
- Inspection chambers and manholes
- Permeable tarmac to MUGA
- Permeable paving blocks to car park and plaza
- Inlets/outlets and overflows
- Cattlegrid

The location and extent of these features are illustrated on the key plan drawings included in Appendix 2 and are evaluated in the following pages of this report.

5.2 Soft landscape

5.2.1 Established vegetation

5.2.1.1 Mature trees

The Ecological Appraisal, November 2016 records that Bells Field has no significant tree cover.

The Tree Condition Survey, July 2016 carried out by Jerry Ross Arboricultural Consultancy records 18 early-mature and mature trees located to the perimeter of Bells Field. Subsequent to the survey, 4 of the early-mature ash trees (T1, T2, T4 and T5) have been removed to address the recommendations made in the 2013 survey report prepared following the RICS inspection of the stone wall on Lords Hill site frontage. The trees were located very close to the wall and were causing it to bulge outwards. The removal of the trees was considered essential. In addition 1 elder recorded as a small tree in poor condition has been removed to facilitate the construction of an accessible pedestrian entrance to Bells Field from Bells Place.

The 13 remaining, established trees have been retained and comprise the following:

- 4no. ash, *Fraxinus excelsior*
- 1no. beech, *Fagus sylvatica*
- 5no. hawthorn, *Crataegus monogyna*
- 2no. holly, *Ilex aquifolium*
- 1no. sycamore *Acer pseudoplatanus*

All are in good condition with the exception of 2no. hawthorn (T3 and T14) which are recorded to have minor issues where overwhelmed by old man's beard or ivy – removal of which is recommended. Please refer to Appendix 4 for further details

The mature trees currently offer some limited amenity value and potential habitat for local flora and fauna.

5.2.1.2 Mature hedgerows / vegetation

The Ecological Appraisal, November 2016 records that Bells Field has hawthorn scrub, holly, elder and bramble present along parts of the site boundaries. These are hedgerows / remnants of mature hedgerows / vegetation to the north, east and west site boundaries.

The Tree Condition Survey, July 2016 records 8 young, early-mature and mature groups/areas of trees all located to the perimeter of Bells Field. For the purpose of the LEMP, these have been categorised as mature hedgerows / vegetation and are listed as follows:

- G1 Leyland cypress/*Thuja* (line), x *Cuprocyparis leylandii*, *Thuja* spp.
- G2 hawthorn (6no.), *Crataegus monogyna*
- G3 hawthorn (overgrown hedge), *Crataegus monogyna*
- G4 holly & hawthorn (small group), *Ilex aquifolium* and *Crataegus monogyna*
- G5 hawthorn (small group), *Crataegus monogyna*
- G6 beech (overgrown hedge), *Fagus sylvatica*
- G7 cherry (4no. plus suckers), *Prunus avium*
- G8 plum (suckers), *Prunus* spp.

All mature hedgerows/vegetation have been retained and are in good condition with the exception of G7 and G8 which are recorded to have minor issues where some management to control the spread of suckers and tidying collapsed material are recommended for consideration. This management has been completed as part of the development of Bells Field in 2018.

Please refer to Appendix 4 for further details.

With the exception of G1 the hedge remnants are un-managed and currently offer little amenity value with limited potential habitat for local flora and fauna.

5.2.1.3 Meadow grass

Prior to the development of enhanced recreation facilities at Bells Field in 2018, the site consisted of a grass field used by local people for informal recreation that was formerly used as a sports ground. A significant area of the grass field has been retained with the meadow grass creating an attractive space that offers flexible opportunities for outdoor recreation.

Bells Field is considered to provide an important contribution to the local landscape character as a key local green space. During the extensive public consultation carried out by Coleford Town Council when developing proposals for the recreation area, the amenity value of the openness and green quality of the field was noted to be of significant value to the community.

The Ecological Appraisal, November 2016 describes the majority of established meadow grass as semi-improved, neutral grassland. The sward to the eastern section of the field was found to be slightly more varied and the fungus *Entoloma porphyrophaeum* was recorded. Please refer to Appendix 3 for further details.

The majority of the existing meadow grass consists of a species-poor sward of low wildlife value. The longer grass sward along the eastern side of the field is regarded as being of moderate interest in the context of the locality.

5.2.2 Planting

5.2.2.1 Planting generally

Planting of native and ornamental trees, shrubs, perennial plants, bulbs and reeds will be completed in November 2018. It is intended that new planting will provide a green, landscape infrastructure; create attractive and appealing spaces for informal recreation and offer improved structure and connectivity for wildlife.

A new wildlife garden will be established to be maintained and developed with community involvement with the intention it will continue to develop and enhance the biodiversity of the area.

The planting design detailing the proposed plants, their specification, spacing and distribution across the site is included in Appendix 1.

5.2.2.2 Trees

123 trees will be planted using both native and ornamental species. Oak, ash, beech, birch and chestnut are locally native and where appropriate these species are to be planted. Trees include standard, heavy standard and extra heavy standard nursery stock of the following species:

Field maple, *Acer campestre*
Common alder, *Alnus glutinosa*
Silver birch, *Betula pendula*
Himalayan birch, *Betula utilis* 'Jacquemontii'
Sweet chestnut, *Castanea sativa*
Hawthorn, *Crataegus laevigata* 'Pauls Scarlet'
Crab apple, *Malus* 'John Downie'
Crab apple, *Malus hupehensis*
Crab apple, *Malus sylvestris*
Gloucestershire orchard plum, *Prunus* 'Dymock Red'
Gloucestershire orchard plum, *Prunus* 'Rodley Black Jack'
Gloucestershire orchard plum, *Prunus* 'Shit Smock'
Wild cherry, *Prunus avium*
Bird cherry, *Prunus padus* 'Albertii'
Bird cherry, *Prunus padus* 'Watereri'
Sessile oak, *Quercus petraea*
English oak, *Quercus robur*
White willow, *Salix alba*
Rowan, *Sorbus aucuparia*
Weeping willow, *Salix babylonica* 'Pendula'
Small-leaved lime, *Tilia cordata*

For dormice, the planting of species such as hawthorn and oak will provide an early flower and pollen source and insects during summer, and species such as apple and hawthorn will provide source of nuts and fruits in the autumn.

Tree planting is focused to the perimeter of the site and the wildlife garden to ensure that the overarching quality of Bells Field is of an open, green space.

5.2.2.3 Hedgerows

400 metres of hedgerow will be planted in Bells Field comprising mixed native hedgerows or single species hedgerows.

Mixed native hedgerows will comprise transplants planted at 5 plants per metre in a double staggered row using the following species:

70% hawthorn, *Crataegus monogyna*
10% dog rose, *Rosa canina*
10% holly, *Ilex aquifolium*
10% privet, *Ligustrum vulgare*

Single species hedgerows will comprise either container grown shrubs or transplants planted at 5 plants per metre in a double staggered row of one of the following species:

Box, *buxus sempervirens*
Hornbeam, *Carpinus betulus*

The existing hedgerow remnants in the northern boundary to the field will be gapped up and further reinforced with native shrub planting. The wildlife garden will be enclosed by a mixed native hedge. The semi-circular hedge adjacent to the Facilities Building and car park will create partial enclosure, providing shelter and a backdrop to the feature bench and ornamental planting in the Memorial Garden. The hedge to be planted parallel with the tramway route divides the activities occurring in the multi-use games area, skate facility and bike pump track from the informal recreation provided in the rest of the field.

5.2.2.4 Native shrubs

2700 square metres of native shrubs will be planted in Bells Field. The native shrubs will comprise transplants planted at 1 plant per square metre of the following species mix:

- 15% hawthorn, *Crataegus monogyna*
- 15% dogwood, *Cornus sanguinea*
- 15% hazel, *Corylus avellana*
- 15% dog rose, *Rosa canina*
- 10% holly, *Ilex aquifolium*
- 15% privet, *Ligustrum vulgare*
- 15% spindle, *Eunonymus europaeus*

For dormice, the planting of species such as hawthorn will provide an early flower and pollen source and insects during summer, and species such as hazel and hawthorn will provide source of nuts and fruits in the autumn.

Native shrubs will be planted in broad swathes to the south and west boundaries of the field with a further block along the northern site boundary.

5.2.2.5 Ornamental shrubs and ground cover

500 square metres of ornamental shrubs and ground cover will be planted in Bells Field focused to the main entrance and car park and to create the Memorial Garden. 32 varieties of shrubs, ground cover and perennial plants have been selected to offer year-round interest in colour, texture and scent.

5.2.2.6 Bulbs

In excess of 4000 bulbs will be planted in Bells Field and comprise a mixture of native and ornamental varieties as follows:

- Crocus, *Crocus tommasinianus* 'Ruby Giant'
- Crocus, *Crocus tommasinianus albus*
- Snowdrop, *Galanthus nivalis*
- Daffodil, *Narcissus* 'Flower Drift'
- Daffodil, *Narcissus pseudonarcissus*

Bulbs will be randomly planted, irregularly interspersed in groups.

5.2.2.7 Reeds

80 square metres of native marginal plants, common reed, *Phragmites australis* will be planted in the pond in the wildlife garden.

Once planted the reeds will offer structural diversity whilst also visually softening the headwalls and inlet / outfall to the pond.

5.2.3 Seeding

5.2.3.1 Amenity grass

Approximately 2 hectares of amenity grass have been seeded as part of the re-shaping of Bells Field carried out in 2018. An adaptable, attractive fine turf structure and wear-tolerant turf grass mixture from Emorsgate Seeds: EG22 Strong Lawn Grass Mixture or equivalent was specified for use for amenity grass areas. The seed mix comprises 50% slender creeping red fescue, 25% amenity perennial rye grass, 20% smooth stalked meadow grass and 5% highland bent.

The amenity grass areas will combine with the meadow grass areas to ensure that Bells Field continues to have the characteristics of an open, green space that have been identified to be of great importance to the local community.

5.2.3.2 Meadow grass

Approximately 3750 square metres of meadow grass have been seeded as part of the re-shaping of Bells Field carried out in 2018.

2500 square metres of the meadow grass have been sown in broad swathes to the perimeter of Bells Field directly associated with the boundary hedgerows, wildlife garden and tree groups. To enable flexibility of management if required in the longer term, the same adaptable seed mixture used for the amenity grass areas was specified for use however the sward will be permitted to grow tall, flower and set seed.

1250 square metres of meadow grass in the swales and pond were specified to be seeded with a meadow mixture from Emorsgate Seeds: EM8 Meadow Mixture for Wetlands or equivalent. The seed mix contains species suitable for seasonally wet soils and is based on the vegetation of traditional floodplain and water meadows. The mix comprises 20% native wild flowers and 80% slow growing grasses.

The meadow grass areas will combine with the amenity grass areas to ensure that Bells Field continues to have the characteristics of an open, green space and will create a diversity of habitat within the grassland that is directly associated with the boundary hedgerows, wildlife garden and tree groups. For bats, the creation of structurally-varied grassland with scrub and trees and the wetland created by the swales and pond will encourage a varied range of invertebrates that will provide a potential food source.

5.3 Hard landscape

5.3.1 Fencing and walling

5.3.1.1 Steel vertical bar railings and gates

60 metres of 1.8 metre high vertical bar railings have been installed along the site frontage with Lords Hill and at the Bells Place entrance of Bells Field. A pair of matching vehicle gates will control vehicle access to the car park at the Lords Hill entrance. A matching pedestrian gate is to be provided at each of the Lords Hill and Bells Place entrances.

Steel vertical bar railings have been selected for use to create a clear, secure and durable site boundary and to achieve a high quality frontage to Bells Field whilst allowing views into and from the recreation area.

The vehicle gates will be locked at night however the pedestrian gates will be open to provide access at all times.

The pedestrian gates are outward opening and self-closing to discourage access by wild boar to prevent any damage to the recreation area resulting from foraging. The vehicle gate is associated with a cattle grid across the road - again to discourage access into Bells Field by wild boar when the gate is open.

5.3.1.2 Timber post and rail fencing with stock netting and gates

335 metres of 1.2 metre high timber post and rail fence with stock netting have been installed to define the wildlife garden and discourage access by dogs and also to divide the activity area (MUGA/skate facility/bike pump track) from the open, green space for informal recreation. 4 timber field gates and 1 timber pedestrian gate will provide maintenance access and the entrance into the wildlife garden respectively.

Timber post and rail fence and gates have been selected to create enclosure/division whilst offering a more natural, rural quality to the space indicating a change of use through design.

5.3.1.3 Timber acoustic fence

68 metres of 1.8 metre high timber acoustic fence have been installed along a section of the site boundary with Sevenoaks care home. Sevenoaks is a housing complex managed by the Orchard Trust for those with learning disabilities, sensory issues and autism spectrum conditions.

During the consultation phase of the project, it was agreed that a timber acoustic fence would be installed along a section of this boundary to ensure that any anticipated noise levels associated with use of the adjacent bike pump track would be managed to an acceptable level. Accordingly, a timber acoustic fence has been selected which will also create a clear, secure and durable site boundary.

5.3.1.4 Chainlink fence and pedestrian gate

40 metres of 1.8 metre high chainlink fence and a matching pedestrian gate have been installed along a section of the boundary with Sevenoaks care home.

Chainlink fence has been selected for use to create a clear, secure and durable site boundary to replace the previous chainlink fence that had fallen into a state of disrepair. A locked pedestrian gate (managed by The Orchard Trust) has been provided to offer direct access into Bells Field from Sevenoaks care home. It became apparent during the consultation phase for the project that a pedestrian gate associated with an accessible path would enable residents to visit the recreation area without requiring the use of a mini-bus.

5.3.1.5 Timber knee rail

20 metres of timber knee rail have been installed at selected locations where planting in the car park may be vulnerable to pedestrians walking across the shrub beds resulting in plants being trampled.

Timber knee rail has been selected to create a low-key barrier sufficient to discourage pedestrians from creating desire lines and permitting the successful establishment of the shrubs and ground cover.

5.3.1.6 Pedestrian guard rails

2 pedestrian guard rails have been installed associated with the cattlegrid at the Lords Hill entrance to Bells Field. Pedestrian guard rails are included to discourage pedestrian access from the cattlegrid.

3 pedestrian guard rails have been installed at the Bells Place entrance. Pedestrian guard rails are included to control the speed of pedestrians and potentially cyclists leaving Bells Field directly onto the highway in Bells Place.

5.3.1.7 Natural stone walls and stone piers

35 metres of natural stone walls have been constructed on the Lords Hill frontage to Bells Field including 6 stone piers. The original stone wall approximately 1.8 metres in height that formed the boundary with Lords Hill was in a state of disrepair. The majority of the wall has been taken down to achieve open views into and from the recreation area. The stone arising from the demolition has been recycled to construct two curved entrance walls and associated stone piers at the main entrance to Bells Field. The remaining length of original stone wall has been repaired.

Natural stone walls have been selected for use on the Lords Hill frontage to Bells Field to create a clear, secure and durable site boundary and to achieve a high quality appearance to the entrance using materials recycled from site.

5.3.2 Paving

The following hard surfaced areas have been constructed as part of the re-shaping of Bells Field carried out in 2018:

- Vehicle and pedestrian access points – 4 access points: Lords Hill (main entrance: vehicle and pedestrian access); Bells Place (pedestrian access); pedestrian link to the adjacent public right of way to/from the north west corner of Bells Field and a direct access (private) from Sevenoaks care home. The main entrance will be the access point for maintenance and service vehicles with a suitable turning area provided;
- Car park and plaza – 20 car parking spaces including 2 spaces designated for disabled users. The car park and plaza are located at the main entrance to Bells Field in close proximity to the Facilities Building;
- Surfaced paths - 400 metres (approximately); located to the perimeter of the field and linking all facilities. A hierarchy of path widths has been provided between 3 metres and 1.2 metres in width and achieving gradients not exceeding 1:21 wherever possible – the main perimeter path is 1.8 metres wide to allow two people to comfortably pass;
- Amphitheatre – circle of 250 square metres (approximately) to provide a flexible space for the performing arts.

An important design objective for Bells Field was to ensure that new recreation facilities are inclusive with elements that appeal and are accessible to all members of the community. To achieve this, hard surfaced entrances; car park; amphitheatre and paths of appropriate materials, widths and gradients have been constructed to be suitable for use by everyone. Clear entrances, spaces and routes have been created without obstacles and minimal visual clutter and located so that in most instances facilities can be accessed by a surfaced path.

Hard surfacing materials selected include tarmac, concrete block paving and crushed limestone to achieve accessible, durable surfaces appropriate for their intended use.

The drainage of the vehicle access and car park is addressed as part of the sustainable drainage scheme and is detailed further in Section 4.5 of this report. Footpaths and all other areas of hard surface drain into adjacent soft landscape areas.

5.3.3 Furniture and features

5.3.3.1 Seating

The following seating has been provided as part of the re-shaping of Bells Field carried out in 2018:

- Victoria Cross memorial bench – a bespoke, locally made oak bench in the shape of the Victoria Cross has been installed as the focal point in the Memorial Garden;
- Seats – 5 seats are provided at rest points along the route of the perimeter path. Seats have painted steel ends with hardwood timber slats for seats and backs;
- Amphitheatre benches – 10 hardwood benches secured to the top of stone gabion baskets provide seating for spectators in the area designed for informal performances;
- Multi-use games area seating – 2 steel benches and 2 steel lean-back seats (both polyester powder coated) are provided overlooking the ballcourt.

Seating has been selected to provide attractive, durable features suitable for use to stop and rest, spectate, socialise or simply enjoy the view. The majority of seats have been provided with arm rests and seat backs for ease of use by people of all abilities.

5.3.3.2 Cycle stands

8 stainless steel cycle hoops have been provided as part of the re-shaping of Bells Field carried out in 2018.

Cycle stands have been selected that are durable and specifically designed to be fit for purpose. A group of four cycle hoops are located in the plaza at the main entrance to Bells Field, close to the Facilities Building and car park. A further group of four cycle hoops are located in the activity area adjacent to the multi-use games area.

5.3.3.3 Kissing gate

A steel kissing gate has been installed in the boundary to Bells Field at its north-west corner. The kissing gate replaces an 'informal' timber stile previously sited in the field corner giving access onto the public footpath that runs to the north of the northern boundary to the recreation area. Following approval from the owner of the adjacent agricultural field, the kissing gate now creates a permitted pedestrian link from Bells Field onto the public right of way leading into the centre of Coleford and also out into the adjacent countryside.

5.3.3.4 Signage

3 timber-framed entrance signs and 1 timber lectern interpretation board are to be installed as part of the enhancements to the recreation facilities in Bells Field.

The entrance signs will be located at the Lords Hill, Bells Place and the kissing gate entrances to Bells Field to welcome visitors with information about the recreation area. The interpretation board will be positioned at 'the Lookout' and will provide visitors with a description of the features that can be seen from this excellent viewpoint.

5.3.3.5 Bins

4 steel recycling bins and 4 steel dog bins (both polyester powder coated) have been provided as part of the re-shaping of Bells Field carried out in 2018.

The bins have been located around the perimeter path to Bells Field and in proximity to the activity area. They are positioned to encourage visitors to Bells Field to dispose of their waste in the receptacles provided to help maintain a clean and tidy appearance to the recreation area.

5.3.3.6 Bells Place archway

A bespoke, steel archway (polyester powder coated frame with stainless steel lettering) has been installed at the Bells Place entrance to Bells Field. The archway will be a durable feature that clearly defines the point of entry and in association with the vertical bar railings and gate, creates a high quality, attractive and inviting entrance to the recreation area.

5.3.3.7 Flagpole

A flagpole has been installed at the Lords Hill entrance to Bells Field. The flagpole creates a focal point at the entrance to the recreation area where it is located in the Memorial Garden. The flag pole provides an opportunity for marking events or promoting activities.

5.3.3.8 Concrete steps and handrails

2 flights of concrete steps with stainless steel handrails to both sides have been constructed in 2018 as part of the hierarchy of surfaced routes provided in Bells Field.

An important design objective for Bells Field was to ensure that new recreation facilities are inclusive and accessible to all members of the community. Wherever possible, pedestrian routes have been designed to ensure a maximum gradient of 1:21. One flight of concrete steps has been constructed in the north-west corner of Bells Field to give access down to a kissing gate that will provide a link onto the adjacent public footpath. A second flight of concrete steps has been constructed on a link path to the multi-use games area following the route of an anticipated desire line. An alternative access without steps is provided to the multi-use games area. The levels in these two areas meant that the construction of steps was necessary. The steps include hand rails to both sides to assist with ease of access and advance warning of their presence is given using tactile paving.

5.3.3.9 Habitat features

The following habitat features will be provided as part of the re-shaping of Bells Field carried out in 2018:

- 2 bird boxes (woodcrete bird boxes with 32mm hole)
- 2 bat boxes (crevice)
- 2 stag beetle loggeries

In addition, it is intended to provide nest boxes for dormice in 2019.

These habitat features are new to Bells Field and are provided further to recommendations advised in the Ecological Appraisal, November 2016. The boxes will provide nesting and roosting opportunities for cavity-nesting bird species and suitable places of shelter for dormice and bats.

Further opportunities for ecological enhancements are proposed as described within Section 5.2.2 Planting and Section 5.2.3 Seeding and detailed in Section 4 Ecological Trends and Constraints.

5.3.3.10 CCTV

4 CCTV cameras located on the floodlight columns illuminating the multi-use games area and skate facility provide coverage of the activity area, car park and Facilities Building in Bells Field. The cameras are wireless and are linked back to Coleford Town Council's CCTV system for the town. CCTV is provided as a deterrent to crime in Bells Field and to improve public safety.

5.3.3.11 Lighting

6 columns have been installed in the activity area at Bells Field to support floodlights that are angled to illuminate the multi-use games area and skate facility to an appropriate level when in use.

3 street lamp columns and lumieres provide lighting levels appropriate to light the pathways between the Lords Hill entrance and the activity area.

Bells Field lighting will not operate before 0800hrs or after 2100hrs. Lighting will be controlled by linked PIR sensors over-ridden by a timer managed by Coleford Town Council.

5.4 Play and sports facilities

5.4.1 Trim trail

A series of five pieces of timber exercise equipment are located adjacent to the perimeter path to form a 'trim trail'. These items are spaced out along the route to provide an opportunity for joggers or walkers of any age to take part in a variety of exercises. There are hurdles, sit up bars, chin up bars, parallel bars and a ladder walk sited on grass safety matting to give additional wear-tolerance to the grass.

5.4.2 Activity trail

An activity trail is located adjacent to the perimeter path to the south of the area of open, green space providing an opportunity for younger children to play. The activity trail is sited on grass safety matting to ensure safe use and give additional wear-tolerance to the grass.

5.4.3 Skate facility

Prior to the project to develop recreation facilities at Bells Field, a gap in provision had been identified in Coleford for youth and young adult recreation. An exciting, medium-sized concrete skate facility has been included as a feature at Bells Field to help meet this need.

The drainage of the skate facility is addressed within Bells Field via the sustainable drainage system detailed further in Section 5.5 of LEMP.

5.4.4 Multi-use games area

Prior to the project to develop recreation facilities at Bells Field, a gap in provision had been identified in Coleford for youth and young adult recreation. The inclusion of a multi-use games area (MUGA) at Bells Field has been included to help meet this need.

The MUGA is 28m x 16m and surfaced with porous tarmac. It has goals and basketball hoops with line marking for football, basketball and tennis. Fencing panels are 3m high at the ends to discourage stray balls from leaving the court and hitting people/cars at the main entrance and car park or Facilities Building. Fencing panels are 1m high on the sides to avoid the enclosure of the ball court being too visually dominant and feeling oppressive. Access is provided for people of all abilities.

The drainage of the MUGA is addressed within Bells Field via the sustainable drainage system detailed further in Section 5.5 of LEMP.

5.4.5 Bike pump track

Prior to the project to develop recreation facilities at Bells Field, a gap in provision had been identified in Coleford for youth and young adult recreation. The inclusion of a bike pump track at Bells Field has been included to help meet this need.

The bike pump track is formed with earth mounds dusted with crushed limestone arranged to create an exciting and challenging circuit of jumps, berms and turns for off-road bikes.

The drainage of the bike pump track is into the adjacent soft landscape.

5.5 Drainage: Sustainable drainage system (SuDS)

5.5.1 Drainage generally

A sustainable water management system has been designed and constructed as part of the development of the recreation area. Features include permeable hard surfaces to the car park, plaza and MUGA; 4 swales; a pond and a hydrobrake; linking pipes; inspection chambers and manholes and a cattlegrid. The features of the drainage scheme are illustrated on drawing 01.18/200 Key plan: SuDS Elements included in Appendix 2.

The SuDS will be managed to address all surface water run-off from Bells Field within the site whilst also establishing and maintaining water features and planting to enhance biodiversity and provide amenity value. The creation of the pond and swales will provide new wetland habitats incorporating a variety of gradients and aspects to increase the microhabitat diversity and facilitate colonisation by semi-aquatic species including amphibians.

5.5.2 Swales and pond

The swales are shallow, flat bottomed, vegetated open-channels designed to convey, treat and attenuate surface water run-off. The swales are located to the western edge of the field with the pond the central feature of the wildlife garden. The swales and pond are linked by a series of overflows inlets and outlets which are pipe-end structures linking underground and above ground drainage features.

The pond has a permanent water area (maximum depth of 1.2 metres) that will hold water for most or all of the year however the upper slopes of the pond and the swales are anticipated to be seasonally-wet features sown with a wetland meadow mix. Marginal planting of common reed will be established in the pond to provide further small scale diversity and cover.

5.5.3 Inspection chambers and manholes

Inspection chambers and manholes have been installed as structures giving access to the underground drainage system for inspection and maintenance purpose. The hydro-brake is located between the outfall from the pond and the adjacent swale as a proprietary flow control device installed in a manhole.

5.5.4 Permeable tarmac to MUGA and permeable paving blocks to car park and plaza

The permeable tarmac surface to the MUGA is open-textured and allows rain to percolate through gaps in the aggregate into an open textured granular subbase. The permeable subbase also accepts direct connection from rainwater pipes, and run-off from the adjacent hard surfaces.

The permeable paving blocks to the car park and plaza allows rain to percolate through joints between the blocks into an open textured granular subbase.

Surface water run-off from the permeable surfaces will flow by pipe to the swales and pond via a series of overflows inlets and outlets.

5.5.5 Cattlegrid

The cattle-grid intercepts drainage falling directly on it and from the tarmac bellmouth to the main access and discharges it to the underground system via an outlet on the low side (road side). There should be very little run-off into it from the permeable surfacing. Some water may discharge through a filter membrane and subbase surrounding the grid.

6. AIMS AND OBJECTIVES OF MANAGEMENT

6.1 Overview

Bells Field will initially focused towards successful establishment and management of features to achieve the design objectives for the recreation area as follows:

- Provide an attractive and appealing outdoor recreation space;
- Provide activities to engage young people;
- Encourage healthy living and promote fitness;
- Enhance biodiversity;
- Create green spaces for rest and quiet reflection;
- Include art features to reflect local heritage;
- Provide a flexible events space for the performing arts.

6.2 Soft landscape features

6.2.1 Established vegetation

- Mature trees, hedgerows / vegetation to be retained and managed in a health, safe condition to contribute towards enhanced amenity value, structure and habitats for wildlife.
- Meadow grass to be retained and managed to permit flowering and setting seed to achieve diversity in sward heights; strengthen boundaries; and improve structure and connectivity for wildlife.

6.2.2 Planting

- Planting generally to be established and maintained as the green infrastructure to the recreation facilities provided at Bells Field to contribute towards enhanced amenity value, structure and habitats for wildlife;
- Trees to be managed in a healthy and safe condition to increase the number, age range and variety of trees in Bells Field with an emphasis on boundary planting;
- Hedgerows and native shrubs to be managed to strengthen boundaries whilst softening views to/from Bells Field and to improve connectivity for wildlife;
- Ornamental shrubs and ground cover to be managed to create an attractive and inviting entrance to Bells Field; a division between the car park and activity area and a Memorial Garden with an emphasis on sensory plants as a place for quiet reflection;
- Bulbs to be managed to provide a splash of winter/spring colour at focal points, entrances and along surfaced pedestrian routes;
- Reeds to be managed to visually soften the inlet and outfall to the pond and to contribute to the creation of a diverse range of habitats associated with the drainage scheme and wildlife garden.

6.2.3 Seeding

- Seeding generally to be established and managed to maintain the characteristics of an open, green space whilst creating a structurally varied grassland to improve structure and connectivity for wildlife;
- Amenity grass to be established and maintained as a short sward with wear-tolerance to offer flexibility for different uses for informal recreation.
- Meadow grass to be established and maintained as a tall sward, permitting flowering and setting seed to strengthen boundaries; and improve structure and connectivity for wildlife.

6.3 Hard landscape features

6.3.1 Fencing and walls

- Fencing and walls generally to be established and maintained to be fit for purpose and to retain a clean, neat and tidy appearance at all times;
- Railings to be managed to ensure a secure site boundary and attractive and inviting entrances to Bells Field; gates to be maintained operational and in a safe condition; vehicle gates to be locked open during the daytime and locked closed at night in accordance with CTC's procedure;
- Timber post and rail fence to be maintained to create enclosure for the wildlife garden and to divide the activity area from the open, green space for informal recreation; gates to be maintained operational and in a safe condition;
- Timber acoustic fence to be managed to maintain a noise attenuating, secure site boundary between Sevenoaks care home and Bells Field;
- Chainlink fence to be managed to maintain a secure site boundary between Sevenoaks care home and Bells Field. Gate will be maintained operational and in safe condition and locked with private access managed by The Orchard Trust.
- Timber knee rail to be maintained as a low barrier between footpaths and planting to discourage pedestrians / cyclists short-cutting across the planting beds;
- Pedestrian guard rails to be managed to maintain safe pedestrian / cycle access and egress at the entrances to Bells Field;
- Natural stone walls to be managed to ensure a secure site boundary and attractive and inviting entrances to Bells Field;

6.3.2 Paving

- Paving generally to be established and maintained to be fit for purpose and to retain a clean, neat and tidy appearance at all times;
- Permeable paving to be maintained and managed to ensure correct operation as an integral part of the drainage scheme.

6.3.3 Furniture and features

- Furniture and features generally to be established and maintained to be fit for purpose and to retain a clean, neat and tidy appearance at all times;
- Habitat features to be established and managed to contribute to the creation of a diverse range of habitats as part of the recreation area. The main aim for both dormice and bats is to retain the limited amount of suitable habitat that currently exists around the site boundaries; to introduce new habitat through sowing/planting and wetland creation and to manage the site in a way that ensures establishment of those features and the development of a suitable habitat structure.

6.3.4 Electrical systems

- Electrical systems generally to be established and maintained to be operational and fit for purpose and to retain a clean, neat and tidy appearance at all times;
- CCTV to be managed to provide a deterrent to reduce crime and improve public safety;
- Lighting to be managed to provide appropriate lighting levels for use of the multi-use games area and skate facility whilst safeguarding the amenities of nearby residents and the rural character from increased light pollution and maintaining existing value of biodiversity on and adjacent Bells Field.

6.4 Play and sports facilities

- Play and sports facilities generally to be established and maintained to be fit for purpose; to provide activities to engage young people and to retain a clean, neat and tidy appearance at all times.

6.5 Drainage: Sustainable drainage system (SuDS)

- SuDS generally to be established and maintained to operate correctly as the surface water drainage for Bells Field recreation area; to be fit for purpose and to retain a neat and tidy appearance at all times;
- Pond and swales to be established and managed to contribute to the creation of a diverse range of habitats as part of the recreation area.

7. MANAGEMENT OPTIONS FOR ACHIEVING AIMS AND OBJECTIVES

7.1 Maintenance generally

The formulation of the maintenance schedules for the landscape, ecological and drainage elements within the site provide an overview of the key management operations required. These operations will ensure the successful establishment and development of the landscape, ecology and drainage to achieve the desired objectives.

All landscape areas will be inspected annually in September/October each year to monitor the success of the scheme and to record any significant changes in its composition and structure. Any remedial works required will be identified and completed.

Any plants that are found to be missing, dead, dying or diseased during the 5 year period of the LEMP will be replaced. After this time plants that are found to be dead or not thriving will be recorded and an assessment made to determine whether replacement planting is required to achieve the management objectives for the scheme.

7.2 Landscape maintenance schedule

Please refer to the maintenance schedule included on the following pages for detailed management options for achieving aims and objectives:

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford											Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23					
SOFT LANDSCAPE - Reference: Key Plan drawing number 01.18/201															
Established vegetation:															
1	Mature trees	5no.	Inspection once every 5 years - To monitor the condition and safety of mature trees.	Trees to receive visual inspection by an arboricultural consultant as part of the whole Parish Tree Audit to identify any works required on health and safety grounds. Any recommended works to be carried out outside bird nesting season. All arisings to be collected and removed.	ANNUAL Sept inspection	1	1	1	1	1					
2	Mature hedgerows / vegetation	180m	Annual inspection - To monitor condition and identify any weed control or cutting required.	Mature hedges to be visually inspected; clearance of weeds to be implemented as necessary. Any overhanging brambles/other weed growth to be cut back to centre of hedgeline to prevent conflict with intended recreational use. All arisings to be collected and removed.	ANNUAL Sept	1	1	1	1	1					
			Cutting - Mature hedgerows allowed to grow freely with cutting carried out every 3 years or as identified to be required as part of the annual inspection.	If required, hedgerows to be cut in February to allow fruiting as a food source to wildlife over the winter. Height and shape for cutting hedgerows to be determined as appropriate to species/location. All arisings to be collected and removed.	ANNUAL Feb	1	0	0	1	0					
3	Meadow grass	3000m2	Cutting - to encourage flowering and setting seed.	To be cut twice each year. All arisings shall be left in situ for two days to allow seed to drop before being collected and removed.	BI-ANNUAL June & August	2	2	2	2	2					
			Weed control - remove invasive weeds (docks/nettles) to reduce competition.	Patches of invasive weeds to be spot treated with a non-residual herbicide. Developing seedlings not removed by mowing should be removed by hand. All arisings to be collected and removed.	ANNUAL April-Sept	1	1	1	1	1					
Planting:															
4	Trees	123no.	Weed control - Maintain weed free 1m dia circle to each tree planting station to reduce competition for water/nutrients, promote successful establishment of trees & maintain a tidy appearance.	Top up bark mulch if required to maintain a minimum thickness of 50mm. Hand weeding and/or application of glyphosate herbicide every other month during the growing season. Collect and remove weeds once they have died down.	ANNUAL March TRI-ANNUAL April, June & August	1 3	1 3	1 3	1 3	1 3					
			Removal of leaf litter - Maintain tidy appearance and prevent build up of leaf mulch.	Leaf litter is to be collected up and removed from all accessible areas in autumn/early winter.	BI-ANNUAL Oct & Nov	2	2	2	2	2					
			Checking stakes, crossbars and ties - To prevent damage to the tree and to ensure stakes provide continued stability until no longer required to support the trees.	Check and adjust stakes, cross bars and tree ties on a quarterly basis in June and September. Adjust as necessary to prevent damage to the tree stem. Remove stakes and accessories once trees have established sufficiently to provide their own support.	BI-ANNUAL June & Sept As required	2 0	2 0	2 0	2 ✓	0 ✓					
			Formative pruning undertaken as necessary to establish healthy, well structured and shaped trees; prevent any conflict to intended recreational use.	Formative pruning undertaken as necessary to; maintain a clean stem and goblet-shaped trees; remove dead/damaged/diseased wood; prevent any conflict with intended recreational use. Pruning works to be carried out in winter in accordance with good arboricultural practice. Pruning stone fruit (plum/cherry) to be implemented in spring/summer. All arisings to be collected and removed.	ANNUAL Nov-Mar / May as required	1	1	1	1	1					
5	Hedgerows	400m	Weed control - Maintain 1m wide swathe (with hedge at centre) weed free to promote successful establishment.	Top up bark mulch if required to maintain a minimum thickness of 50mm. Hand weeding and/or application of glyphosate herbicide every other month during the growing season. Collect and remove weeds once they have died down.	ANNUAL March TRI-ANNUAL April - Sept	1 3	1 3	1 3	1 3	1 3					
			Formative pruning - To achieve successful establishment and healthy, bushy growth; prevent any conflict to neighbouring properties and/or intended recreational use.	Pruning as appropriate for each species and as necessary to achieve bushy growth & remove dead/damaged/diseased wood. Box hedgerow to be cut bi-annually in June and late August/early September. All arisings to be collected and removed. If required, mixed native hedgerows to be cut annually in February to allow fruiting as a food source to wildlife over the winter. All arisings to be collected and removed.	BI-ANNUAL June & Aug/Sep ANNUAL Feb	2 1	2 1	2 1	2 1	2 1					
6	Native shrubs	2700m2	Weed control - Maintain entire planting bed weed free to promote successful establishment.	Hand weeding and/or application of glyphosate herbicide on a monthly basis throughout the growing season. Collect and remove weeds once they have died down.	MONTHLY April - Sept	6	6	6	0	0					
			Formative pruning - To achieve successful establishment and healthy, bushy growth; prevent any conflict to neighbouring properties and/or intended recreational use.	Pruning as necessary to achieve bushy growth & remove dead/damaged/diseased wood. All arisings to be collected and removed. If required, native shrubs to be cut in February to allow fruiting as a food source to wildlife over the winter. All arisings to be collected and removed.	ANNUAL Oct ANNUAL April - Sept	✓ 0	✓ 0	✓ 0	✓ 1	✓ 1					

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford										Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23				
SOFT LANDSCAPE - Reference: Key Plan drawing number 01.18/201 - continued from previous page														
Planting: (continued from previous page):														
7	Ornamental shrubs, groundcover	500m2	Watering - To ensure continued thriving of all plant stock.	Water if necessary. Water to full depth of topsoil. Potable mains water to be used unless water supplies are restricted when an alternative source will be investigated for use.	AS NECESSARY June - Aug	✓	✓	✓	✓	✓				
			Weed control - Keep in a weed free condition at all times to ensure successful establishment and healthy growth.	Top up bark mulch if required to maintain a minimum thickness of 50mm. Hand weeding and/or application of glyphosate herbicide every other month during the growing season. Collect and remove weeds once they have died down.	ANNUAL March TRI-ANNUAL April, June & August	1 3	1 3	1 3	1 3	1 3				
			Pruning - undertaken as necessary to achieve healthy plants, promote active growth and prevent conflict with adjacent use.	Pruning works as appropriate to each species. Shrubs/groundcover to be cut back annually to retain them behind kerb lines/path edges and to prevent them smothering adjacent shrubs. All arisings to be collected and removed.	ANNUAL Sept and as appropriate to each species	1	1	1	1	1				
			Fertilising - To promote successful establishment and healthy growth.	All ornamental shrub/groundcover planting beds to receive annual application of slow release fertiliser applied in accordance with the manufacturer's recommendations.	ANNUAL April	1	1	1	1	1				
8	Bulbs	400m2	Cutting - to allow maximum flowering time and die back.	Bulbs shall be allowed to die back fully in spring prior to cutting and incorporating area into grass cutting regime. Arisings to be collected and removed.	ANNUAL June	1	1	1	1	1				
9	Reeds	80m2	Weed control to marginal planting - Keep in a weed free condition to ensure successful establishment and growth.	Patches of invasive weeds to be hand-weeded. All weeds and any self-set seedlings to be removed by hand. All arisings to be collected and removed.	ANNUAL April- Sept	1	1	1	1	1				
Seeding:														
10	Amenity grass	2ha (approx.) - mown grass path 140m	Cutting - To maintain a short, close-knit and healthy sward.	Anticipated to be on a fortnightly basis throughout growing season, arisings to be left in-situ. Maximum sward height to be 50mm at any time.	FORTNIGHTLY March - Oct	26	26	26	26	26				
			Weed control - Keep in a weed-free condition at all times to ensure fit for purpose and successful establishment.	Patches of invasive weeds to be spot treated with a non-residual herbicide. Developing seedlings not removed by mowing should be removed by hand.	ANNUAL April- Sept	1	1	1	1	1				
			Fertilising - To promote development of a healthy sward.	All amenity grass to be fertilised twice annually in spring and autumn.	BI-ANNUAL April/Sept	2	2	2	2	2				
11	Meadow grass	2500m2 generally + 1250m2 pond & swales	Cutting - to encourage flowering and setting seed.	Initially cut as necessary to encourage successful establishment then cut once each year. All arisings shall be left in situ for two days to allow seed to drop before being collected up and composted on site.	ANNUAL August	1	1	1	1	1				
			Weed control - remove invasive weeds (docks/nettles/bracken) to reduce competition.	Patches of invasive weeds to be spot treated with a non-residual herbicide. Developing seedlings not removed by mowing should be removed by hand.	ANNUAL April- Sept	1	1	1	1	1				

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford											Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23					
HARD LANDSCAPE - Reference: Key Plan drawing number 01.18/202															
Fencing and walling:															
12	Steel vertical bar railings & gates	60m +1no. pair of vehicle gates; 2no. self-closing pedestrian gates.	Visual inspection of steel vertical bar railings & gates to ensure operating correctly; are fit for purpose and maintain a tidy appearance.	Visual inspection in accordance with manufacturer's recommendations to identify any defects and repairs necessary or cleaning/painting due and implement as required.	QUARTERLY Jan-Dec	4	4	4	4	4					
			Locking/unlocking vehicle gates at Lords Hill entrance.	Vehicle gates to be opened at 7.30am and closed at 9pm on a daily basis throughout the year <u>except on Christmas day when they will remain closed.</u>	DAILY Jan- Dec	✓	✓	✓	✓	✓					
13	Timber post & rail fence, stock netting & gates	335m; 4no. field gates; 1no. self-closing pedestrian gate.	Visual inspection of timber post & rail fence, stock netting & gates to ensure operating correctly and fit for purpose.	Visual inspection once each quarter to identify any defects and repairs necessary and implement as required.	QUARTERLY Jan-Dec	4	4	4	4	4					
14	Timber acoustic fence	68m	Visual inspection of timber acoustic fence to ensure operating correctly and fit for purpose.	Visual inspection in accordance with manufacturer's recommendations to identify any defects and repairs necessary and implement as required.	QUARTERLY Jan-Dec	4	4	4	4	4					
15	Chainlink fence and chainlink pedestrian gate	40m +1no. gate (Sevenoaks) + 7m (Bells Place)	Visual inspection of chainlink fence & gate to ensure operating correctly and fit for purpose.	Visual inspection in accordance with manufacturer's recommendations to identify any defects and repairs necessary and implement as required.	QUARTERLY Jan-Dec	4	4	4	4	4					
16	Timber knee rail	20m	Visual inspection of timber knee rail to ensure operating correctly and fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
17	Pedestrian guardrails	4no.(Bells Place); 2no. (Lords Hill - either side of the cattlegrid).	Inspection of guardrails - To ensure fit for purpose.	Visual inspection in accordance with manufacturer's recommendations to identify any defects and repairs necessary or cleaning/painting due and implement as required.	QUARTERLY Jan-Dec	4	4	4	4	4					
18	Natural stone walls and stone piers	35m and 6no. Piers	Inspection of stone walls/stone piers - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
19	Paving gnerally		See Ref No. 20-25, 46, 47 and 49 for further details												
			Cleaning	Brushing and vacuuming (standard cosmetic sweep over whole surface) at least once each year after autumn leaf-fall. Increase frequency as required. Jet-wash the surface each year.	ANNUAL Jan-Dec	1	1	1	1	1					
			Weed control to keep in a weed free condition.	Spot treat any weeds present by applying non-residual herbicide by applicator (not by spraying) as required. Annually remove any moss using an appropriate herbicide or by physical means.	MONTHLY April-Sept	6	6	6	6	6					
			Litter/rubbish collection - To ensure the paving surface is clean and retains a neat and tidy appearance at all times.	Litter/rubbish and any other debris is to be collected up on a daily basis.	DAILY April-Sept	✓	✓	✓	✓	✓					
			Removal of leaf litter - Maintain tidy appearance and prevent build up of leaf mulch.	Leaf litter is to be collected up and removed from all paving areas in autumn/early winter.	BI-ANNUAL Oct & Nov	2	2	2	2	2					
			Visual inspection following extreme weather - To ensure paving is fit for purpose.	Daily inspection as required following extreme weather to identify whether conditions are suitable for public access. Temporarily close access to Bells Field as assessed to be appropriate.	DAILY Jan-Dec	✓	✓	✓	✓	✓					

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford											Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23					
HARD LANDSCAPE - Reference: Key Plan drawing number 01.18/202 (continued from previous page)															
Paving:															
20	Tarmac (with tactile paving)	720m2 (120m with pinkerbs for vehicle over-run)	Inspect tarmac paving and tactile paving - To ensure fit for purpose	Visual inspection of tarmac once each year to identify any defects and repairs required and implement. Any depressions or rutting to the surface or cracked or broken edgings considered detrimental to the structural performance or hazardous to users to be repaired.	ANNUAL May	1	1	1	1	1					
21	Permeable tarmac	600m2	See Ref No. 46 for further details												
22	Conventional block paving	45m2	Inspect block paving - To ensure fit for purpose	Visual inspection of permeable paving blocks once each year to identify any defects and repairs required and implement. Any depressions, rutting and cracked or broken bricks considered detrimental to the structural performance or hazardous to users to be repaired and any lost jointing material replaced as required.	ANNUAL May	1	1	1	1	1					
23	Permeable block paving	1000m2	See Ref No. 47 for further details												
24	Redgra	530m2	Inspect paving - To ensure fit for purpose	Visual inspection once each quarter to identify any repairs required and implement. Re-compact and fill any areas showing ponding or heavy wear.	QUARTERLY Jan-Dec	4	4	4	4	4					
25	Surface reinforcement mat/mesh to grass	247m2	Inspect mesh - To ensure fit for purpose	Visual inspection in accordance with manufacturer's recommendations to identify any repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
26	Cattlegrid	1no.	See Ref No. 49 for further details												
			Litter removal - To ensure the cattle grid is clean and retains a neat and tidy appearance at all times.	Collect up and remove any leaves, rubbish or debris in the area on a monthly basis.	MONTHLY Jan-Dec	12	12	12	12	12					
			Hedgehog ramp - To ensure the ramp is maintained in position and fit for purpose.	Visual inspection to identify any carry out any repairs/replacement required to maintain the ramp in position and accessible for use by hedgehogs to escape from the cattlegrid.	MONTHLY Jan-Dec	12	12	12	12	12					
Furniture and features:															
27	Seating - gabion seats; perimeter path seats; memorial bench (Victoria Cross); MUGA benches/lean back seating.	20no.	Inspect seating - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs or cleaning/painting necessary and implemented as required. All seats to be cleaned at least once each quarter to address any bird droppings and/graffitti. Cleaning frequency to be increased if required.	QUARTERLY Jan-Dec	4	4	4	4	4					
28	Cycle stands	6no.	Inspection of cycle stands - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
29	Kissing gate	1no.	Inspection of kissing gate - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
30	Signage	3no. entrance signs; 1no.	Inspection of signage - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement. All signs to be cleaned at least once each quarter to address any bird droppings and/graffitti. Cleaning frequency to be increased if required.	QUARTERLY Jan-Dec	4	4	4	4	4					
31	Bins	4no. Recycling bins; 4no. Dog bins	Inspetion of bins - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
			Emptying of bins - To ensure safe disposal of litter and dog waste.	Dual recycling litter bin and dog waste bin to be emptied in accordance with Coleford Town Council's schedule. Level of use to be reviewed and bins emptyied more regularly if required. On the morning of the weekly refuse collection service, wheelie bin(s) to be wheeled out from site to the allocated bin collection area to the east of the vehicle entrance on Lords Hill. Following collection wheelie bin(s) to be returned to site storage area to the west of the Facilities Building.	WEEKLY Jan-Dec	52	52	52	52	52					
32	Bells Place Archway	1no.	Inspect archway - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford											Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23					
HARD LANDSCAPE - Reference: Key Plan drawing number 01.18/202 (continued from previous page)															
Furniture and features: (continued from previous page):															
33	Flagpole	1 no.	Inspect flagpole - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
34	Concrete steps (and tactile paving) and stainless steel handrails	2 flights (6 steps/9 steps) with handrails on both sides	Inspection of steps and handrails - To ensure fit for purpose.	Visual inspection once each quarter to identify any defects and repairs required and implement.	QUARTERLY Jan-Dec	4	4	4	4	4					
35	Habitat features	2no.bird boxes; 2no. bat boxes	Inspection of bird boxes bat boxes and stag beetle loggeries.	Visual inspection once each quarter to identify any repairs required and implement. Wildlife group may also monitor use and advise of any required cleaning/emptying is required.	QUARTERLY Jan-Dec	4	4	4	4	4					
Electrical systems:															
36	CCTV	4no. cameras and 2no. receivers	Inspection and monitoring of CCTV system - To ensure operating correctly and fit for purpose.	Inspections to be carried out in accordance with the manufacturer's recommendations and include daily inspection and monitoring. Maintenance contract implemented by a specialist CCTV provider and remotely repaired as required. Annual service of CCTV system to be implemented.	DAILY Jan- Dec	✓	✓	✓	✓	✓					
37	Lighting	3no. street lights and 6no. floodlight columns with lumieres	Inspection of street lighting and flood lighting - To ensure operating correctly and fit for purpose.	Inspections in accordance with manufacturer's recommendations to identify any defects and repairs; replacement of bulbs required and implement. Lighting shall not operate before 0800hrs or after 2100hrs on any day.	QUARTERLY Jan-Dec	4	4	4	4	4					

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford											Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23					
PLAY AND SPORTS FACILITIES - Reference: Key Plan drawing number 01.18/202															
38	Trim trail equipment and signs and grass mat safety surface	5no. Trim trail items /signs + entrance sign	Inspection of trim trail equipment and signs and grass mat safety surface - To ensure fit for purpose.	Inspections to be carried out in accordance with the manufacturer's recommendations. If parts are discovered to be unsafe during inspection and cannot be replaced of corrected immediately the equipment (or parts) and/or surfacing should be secured against further use. Inspections will include daily routine visual inspection; operational inspections at monthly intervals and a detailed annual main inspection by an appropriate specialist with the results entered into a permanent record. Identify any defects and repairs required and implement.	DAILY, MONTHLY AND ANNUAL Jan - Dec	✓	✓	✓	✓	✓					
39	Activity Trail	1no.	Inspection of activity trail equipment and grass mat safety surface - To ensure fit for purpose.	Inspections to be carried out in accordance with the manufacturer's recommendations. If parts are discovered to be unsafe during inspection and cannot be replaced of corrected immediately the equipment (or parts) and/or surfacing should be secured against further use. Inspections will include daily routine visual inspection; operational inspections at monthly intervals and a detailed annual main inspection by an appropriate specialist with the results entered into a permanent record. Identify any defects and repairs required and implement.	DAILY, MONTHLY AND ANNUAL Jan - Dec	✓	✓	✓	✓	✓					
40	Skate Facility	330m2	Inspection of skate facility and sign - To ensure fit for purpose.	Inspections to be carried out in accordance with the manufacturer's recommendations. If parts are discovered to be unsafe during inspection and cannot be replaced of corrected immediately the facility (or parts) should be secured against further use. Inspections will include daily routine visual inspection; operational inspections at monthly intervals and a detailed annual main inspection by an appropriate specialist with the results entered into a permanent record. Identify any defects and repairs required and implement.	DAILY, MONTHLY AND ANNUAL Jan - Dec	✓	✓	✓	✓	✓					
			Leaf/litter/rubbish collection and removal of graffiti - To ensure the skate facility is clean and retains a neat and tidy appearance at all times.	Remove any leaves, rubbish or debris in the area. Clean any graffiti.	DAILY Jan - Dec	✓	✓	✓	✓	✓					
41	Multi-use Games Area (MUGA). For maintenance of the surface see Item 44: permeable tarmac)	600m2	Inspection of MUGA and sign - To ensure fit for purpose.	Inspections to be carried out in accordance with the manufacturer's INSPECTION AND MAINTENANCE SCHEDULE for Arena Sports System. The frequency of inspection will vary depending on the level of use, vandalism etc however if parts are discovered to be unsafe during inspection and cannot be replaced of corrected immediately the equipment (or parts) should be secured against further use. Inspections will include daily routine visual inspection; operational inspection at 1-3 monthly intervals and a detailed annual main inspection by an appropriate specialist with the results entered into a permanent record. Identify any defects and repairs required and implement.	DAILY, MONTHLY AND ANNUAL Jan - Dec	✓	✓	✓	✓	✓					
			Leaf/litter/rubbish collection and removal of graffiti - To ensure the MUGA is clean and retains a neat and tidy appearance at all times.	Remove any leaves, rubbish or debris in the area. Clean any graffiti.	DAILY Jan - Dec	✓	✓	✓	✓	✓					
42	Bike Pump Track	370m2	Inspection of bike pump track and sign - To ensure fit for purpose.	Inspections to be carried out in accordance with current standards for wheeled sports areas. The frequency of inspection will vary depending on the level of use, vandalism etc however if areas are discovered to be unsafe during inspection and cannot be corrected immediately the track (or parts) should be secured against further use. Inspections will include daily routine visual inspection; operational inspection at 1-3 monthly intervals and a detailed annual main inspection by an appropriate specialist with the results entered into a permanent record. Any defects and repairs required to be implemented as necessary.	DAILY, MONTHLY AND ANNUAL Jan - Dec	✓	✓	✓	✓	✓					
			Leaf/litter/rubbish collection and removal of graffiti - To ensure the bike pump track is clean and retains a neat and tidy appearance at all times.	Remove any leaves, rubbish or debris in the area. Clean any graffiti.	DAILY Jan - Dec	✓	✓	✓	✓	✓					

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford											Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23					
DRAINAGE: Sustainable drainage system (SuDS) - Reference: Key Plan drawing number 01.18/203:															
43	Swales	800m2	Inspect swales - To ensure fit for purpose. See Ref No. 48 for further details of maintenance of inlets, outlets and overflow. See Ref No. 11 for further details of maintenance for meadow grass.	Monthly inspection - inspect inlets and outlets for blockages and clear if required - see Item 47.	MONTHLY Jan-Dec	12	12	12	12	12					
				Monthly inspection - inspect infiltration surfaces for ponding, compaction, silt accumulation, record areas where water is ponding for more than 48 hours.	MONTHLY Jan-Dec	12	12	12	12	12					
				Twice-yearly inspection - inspect inlets and facility surfaces for silt accumulation, establish appropriate silt removal frequencies and implement.	BI-ANNUAL Jan-Dec	2	2	2	2	2					
				Remedial action - as required. Repair erosion or other damage by re-seeding/turfing. Re-level uneven surfaces and reinstate design levels. Scarify and spike topsoil layer to improve infiltration performance, break up silt deposits and prevent compaction of the soil surface. Remove build-up of sediment on upstream gravel trench, flow spreader or at top of filter strip.	AS REQUIRED Jan-Dec	✓	✓	✓	✓	✓					
44	Pond	450m2	Inspect pond - To ensure fit for purpose. See Ref No. 48 for further details of maintenance of inlets, outlets and overflow. See Ref No. 11 for further details of maintenance for meadow grass. See Ref No. 9 for maintenance of reeds.	Quarterly inspection - inspect inlets and outlets for blockages and clear if required - see Item 47.	QUARTERLY Jan-Dec	4	4	4	4	4					
				Daily inspection - inspect buoyancy aid, signage and reposition/repair/replace as required.	DAILY Jan-Dec	12	12	12	12	12					
				Remedial action - as required. Repair erosion or other damage by re-seeding/turfing. Re-level uneven surfaces and reinstate design levels. Remove build-up of sediment on flow spreader.	AS REQUIRED Jan-Dec	✓	✓	✓	✓	✓					
45	Inspection chambers and manholes	18no.	Inspect inspection chambers and manholes - To ensure fit for purpose	Annual inspection of inspection chambers and manholes to identify any defects and repairs required and implement. Any loss of support or undermining, cracking etc. considered detrimental to the structural performance or hazardous to users to be repaired.	ANNUAL May	✓	✓	✓	✓	✓					
				Visual inspection of catchpits - monthly for first three months, then six-monthly and clear if required.	MONTHLY/ BI-ANNUAL Jan-Dec	4	2	2	2	2					
				Visual inspection of hydrobrake chamber and clear blockages and hose down as required - monthly for first three months, then six-monthly. NB. Hydrobrake flow controls are fitted with a pivoting bypass door which allows the manhole chamber to be drained down should blockages occur. Following installation of the hydrobrake flow control, it is vitally important that all extraneous materials are removed from the unit and chamber.	MONTHLY/ BI-ANNUAL Jan-Dec	4	2	2	2	2					
			Monitoring	Inspect chambers and manholes and establish appropriate silt removal frequency.	MONTHLY/ BI-ANNUAL Jan-Dec	4	2	2	2	2					

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford						Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23
DRAINAGE: Sustainable drainage system (SuDS) - Reference: Key Plan drawing number 01.18/203: (continued from previous page):										
46	Permeable tarmac to multi-use games area (MUGA)	600m2	Inspect permeable tarmac - To ensure fit for purpose.	Visual inspection of permeable tarmac and thermplastic line markings once each year to identify any defects and repairs required and implement. Any worn line markings, surface depressions, rutting or cracks considered detrimental to the structural performance or hazardous to users to be repaired.	ANNUAL May	1	1	1	1	1
			Cleaning	Brushing and vacuuming (standard cosmetic sweep over whole surface) at least once each year after autumn leaf-fall. Increase frequency as required based on site-observations of clogging, or manufacturer's recommendations. Pay particular attention to areas where water runs onto pervious surfaces from adjacent impervious areas as this is likely to collect the most sediment. Jet-wash the surface each year.	ANNUAL Jan - Dec	1	1	1	1	1
			Catchpits	Inspect and clean out monthly for the first three months (Nov/Dec 2018 and Jan 2019) then every six months.	MONTHLY/ BI-ANNUAL Jan-Dec	4	2	2	2	2
			Weed control to keep in a weed free condition.	Spot treat any weeds present by applying non-residual herbicide by applicator (not by spraying) as required. Annually remove moss using an appropriate herbicide or by physical means.	MONTHLY April-Sept	6	6	6	6	6
			Leaf/litter/rubbish collection - To ensure the permeable tarmac surface is clean and retains a neat and tidy appearance at all times.	Leaf/litter/rubbish is to be collected up and removed from all accessible areas in autumn/early winter.	BI-ANNUAL Oct & Nov	2	2	2	2	2
			Monitoring	Initial inspection - monthly for first three months after installation - Nov, Dec 2018 and Jan 2019 and 48 hours after large storms*.	MONTHLY Nov, Dec 2018 Jan 2019	3*	0*	0*	0*	0*
				First six months - inspect quarterly for evidence of poor operation and/or weed growth - if required take remedial action.	QUARTERLY Nov - April	2	0	0	0	0
				Annual inspection - inspect silt accumulation rates and establish appropriate brushing frequencies.	ANNUAL May	1	1	1	1	1
				Annual inspection - monitor inspection chambers and clean silt traps as necessary.	ANNUAL May	1	1	1	1	1
47	Permeable paving blocks to car park & plaza	1000m2	Inspect permeable paving blocks - To ensure fit for purpose.	Visual inspection of permeable paving blocks once each year to identify any defects and repairs required and implement. Any depressions, rutting and cracked or broken bricks considered	ANNUAL May	1	1	1	1	1
			Cleaning	Brushing (standard cosmetic sweep over whole surface) at least once each year after autumn leaf-fall. Increase frequency as required based on site-observations of clogging, or manufacturer's recommendations. Pay particular attention to areas where water runs onto pervious surfaces from adjacent impervious areas as this is likely to collect the most sediment.	ANNUAL Jan - Dec	1	1	1	1	1
			Catchpits	Inspect and clean out monthly for the first three months (Nov/Dec 2018 and Jan 2019) then every six months.	MONTHLY/ BI-ANNUAL Jan-Dec	4	2	2	2	2
			Weed control to keep in a weed free condition.	Spot treat any weeds present by applying non-residual herbicide by applicator (not by spraying) as required.	MONTHLY April-Sept	6	6	6	6	6
			Leaf/litter/rubbish collection - To ensure the permeable paving block surface is clean and retains a neat and tidy appearance at all times.	Leaf/litter/rubbish is to be collected up and removed from all accessible areas in autumn/early winter.	BI-ANNUAL Oct & Nov	2	2	2	2	2
			Monitoring	Initial inspection - monthly for first three months after installation - Nov, Dec 2018 and Jan 2019 and 48 hours after large storms*.	MONTHLY Nov, Dec 2018 Jan 2019	3*	0	0	0	0
				First six months - inspect quarterly for evidence of poor operation and/or weed growth - if required take remedial action.	QUARTERLY Nov - April	2	0	0	0	0
				Annual inspection - inspect silt accumulation rates and establish appropriate brushing frequencies.	ANNUAL May	1	1	1	1	1
				Annual inspection - monitor inspection chambers and clean silt traps as necessary.	ANNUAL May	1	1	1	1	1

Figure 1: Landscape Maintenance Schedule - Bells Field, Coleford											Number of operations/year ✓= as required				
Ref no.	Landscape feature		Maintenance description	Maintenance operation	FREQUENCY /Timing	2018/19	2019/20	2020/21	2021/22	2022/23					
DRAINAGE: Sustainable drainage system (SuDS) - Reference: Key Plan drawing number 01.18/203: (continued from previous page):															
48	Inlets, outlets and overflows (refer also to item 40: Swales)	4no. swales, 1 no. pond & 1 no.linear drain (highway boundary Lords Hill); 2no. slot drains and french drain (skate facility).	Inspections of inlets, outlets and overflows - To ensure fit for purpose.	Visual inspection for blockages monthly for swales and quarterly for the pond, linear drain, slot drains and french drain and clear if required.	MONTHLY/ QUARTERLY Jan-Dec	12	12	12	12	12					
				Annual inspection to identify any loss of support or undermining, cracking, loss of stone pitching etc. considered detrimental to the structural performance or hazardous to users and carry out repair.	ANNUAL May	1	1	1	1	1					
			Monitoring	Annual inspection of inlets and facility surface for silt accumulation, establish appropriate silt removal frequencies.	ANNUAL May	1	1	1	1	1					
49	Cattlegrid	1 no.	Inspection of cattlegrid - To ensure fit for purpose	Visual inspection of outlet for blockages - monthly for first three months, then quarterly as appropriate and clear if required.	MONTHLY/ QUARTERLY Jan-Dec	6	4	4	4	4					
				Annual inspection of cattlegrid and during autumn leaf-fall for general accumulation of debris and clear out as necessary. Do not power-wash significant accumulations of soil and debris into the system.	ANNUAL Oct	1	1	1	1	1					
			Monitoring	Annual inspection - inspect rate of accumulation of silt and debris.	ANNUAL May	1	1	1	1	1					
				Confirm drainage of cattle grid after a heavy storm.	AS REQUIRED Jan-Dec	✓	✓	✓	✓	✓					

8. MONITORING AND REVIEW

8.1 Looking to the future

Initially the maintenance operations will be focused towards promoting the successful establishment of the new scheme for amenity use and the management of the mature hedgerows and trees and grass sward as habitat. Once established the landscape areas will continue to be managed for amenity and ecology in accordance with the LEMP. The LEMP will be reviewed on an annual basis to ensure any issues and remedial actions are put in place.

The management prescriptions laid out in Figure 1: Landscape Maintenance Schedule cover the first five years after the work is completed on site. After five years to plan will need to be reviewed and updated to ensure it remains relevant to the aims of the site.

8.2 Monitoring

All landscape, ecological and sustainable drainage features will be inspected as detailed in Figure 1: Landscape Maintenance Schedule to inform the success of the features and to evaluate the maintenance/management operations. These inspections will provide records of the status of all areas; the need for remedial works and any requirement for revised or additional operations.

Annual inspections will be used as an opportunity to assess any health and safety issues; the need for future works and to programme any actions. After 5 years of implementing the LEMP these inspections should be used to review the status of the features to assess whether any changes are required to achieve the intended objectives.

During the first five years, the ecological monitoring will focus on the establishment of the grassland and the monitoring approach will be based upon Natural England's 'rapid assessment' for grasslands. Monitoring will be carried out in July of each year to collect data on the species present in the grassland carried out as follows:

- A random walk across grassland areas;
- Stop in 20 places (eg. every 10 paces) and record presence of species within an estimated 'quadrat' of 1 square metre (by eye) using the simple monitoring sheet overleaf).

Some of the plant species are positive indicators (plants in the seed mix utilised) and others are negative potential problem plants. Repeating the process over time will be used to provide a reasonable idea of how well establishment is proceeding.

Fixed point photography will be undertaken during August/September and March of each year to further inform the assessment of the establishment of the grassland.

Additionally, the condition of the bat, bird and dormouse boxes will be monitored and they will be repaired/replaced as necessary.

Figure 2: Monitoring Sheet for Grassland Establishment

The approach is to involve both fixed-point photography and a 'structured walk' following Natural England's rapid assessment method (see Natural England report 315, available at <http://publications.naturalengland.org.uk/publication/64033>) during which a record of positive and negative indicators is made at a number of stopping points.

Species	Stopping point																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
POSITIVE INDICATORS																				
Yarrow																				
Sneezewort																				
Betony																				
Black knapweed																				
Meadowsweet																				
Lady's bedstraw																				
Water avens																				
Oxeye daisy																				
Greater bird's-foot trefoil																				
Cowslip																				
Selfheal																				
Meadow buttercup																				
Common sorrel																				
Yellow rattle																				
Greater burnet																				
Pepper saxifrage																				
Ragged robin																				
Devil's bit scabious																				
NEGATIVE INDICATORS																				
Docks																				
Stinging nettle																				
Bracken																				
Cow parsley																				
Thistles																				
Coarse grasses																				

8.3 Review

All monitoring, management activities, significant events and surveys will be recorded to demonstrate effective and appropriate site management and highlight failings and inappropriate management.

The management of the site will be reviewed by Coleford Town Council (CTC) on an annual basis to make an objective appraisal of the year's work and to reach agreement on the next annual work plan. This review will enable the success of the scheme to be evaluated. This may lead to a need to reassess priorities or to redefine operational objectives. Any additional resources required will form part of the process of reassessing priorities.

Every 5 years the management of the site will be reviewed by CTC to ensure that the objectives stated in LEMP are still pertinent and that the maintenance scheduled has been and will continue to be effective in achieving the desired objectives. The LEMP will be updated as appropriate with any additional relevant information included.