

BURYMEAD SPRINGS & CADWELL LANE PLAYING FIELD

GREENSPACE ACTION PLAN 2024 – 2029





OVERVIEW

Greenspace Action Plans

Greenspace Actions Plans (GAPs) are map-based management plans which specify activities that should take place on a site over a stated period of time; these activities will help to deliver the agreed aspirations which the site managers and stakeholders have identified for that site.

Public Engagement

Engagement with stakeholders is at the centre of effective management planning on any site. An initial engagement period was held in August and September 2023, to establish core aims and objectives for the site; these are reflected in Section 3. This second stage of engagement on this draft GAP is intended to enable stakeholders to comment on the proposed management actions for the site. An associated engagement response document, published online as an appendix to this plan, will summarise comments received and any amendments made to the plan as a result.

Version Control

Version	Issue Date	Details	Author	Reviewed	Approved
v0	22/01/2023	Draft GAP	AT	LT	AM
v1		Final GAP	AT		

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1.0 SUMMARY

1.1 Site Summary

1.1.1 Burymead Springs

Site Address: Cadwell Lane

Hitchin

Nearest postcode SG4 0SL

Grid Reference: TL187310

Size: 2.4ha

Designations: Metropolitan Green Belt

Local Wildlife Site (11/023)

Owner: North Hertfordshire District Council

1.1.2 Cadwell Lane Playing Field

Site Address: Cadwell Lane

Hitchin

Nearest postcode SG4 0AE

Grid Reference: TL191307

Size: 2.3ha

Owner: North Hertfordshire District Council

1.2 Vision Statement

The aim of the Burymead Springs and Cadwell Lane Playing Field Greenspace Action Plan is to maintain and enhance the habitats across both sites as a valuable link in the wider chain of sites along the river valley, with a focus on maintaining the habitats to a high standard and improving local engagement.

2.0 SITE DESCRIPTION

2.1 Introduction

Originally under two separate management plans, Burymead Springs and Cadwell Lane Playing Field are now being brought under one plan due to their proximity to one another and connectivity through the river which flows north from Cadwell to Burymead. This new single action plan will cover all management and ambitions for both sites. Both are located in north Hitchin, owned by North Hertfordshire Council (NHC), and managed in partnership with Countryside Management Service (CMS).

Cadwell Lane Playing Field is a 2.3ha open space bordered by an industrial area to the north, residential area to the south, River Hiz and railway line to the west and Cadwell Lane to the east. A former landfill site, much of the space is now a full-sized football pitch which underwent resurfacing with topsoil and turf from Wembley Stadium in 2013. This and the grassland immediately surrounding it are managed as an amenity cut, with a wide conservation grassland border along the perimeter of scrub and hedgerow.

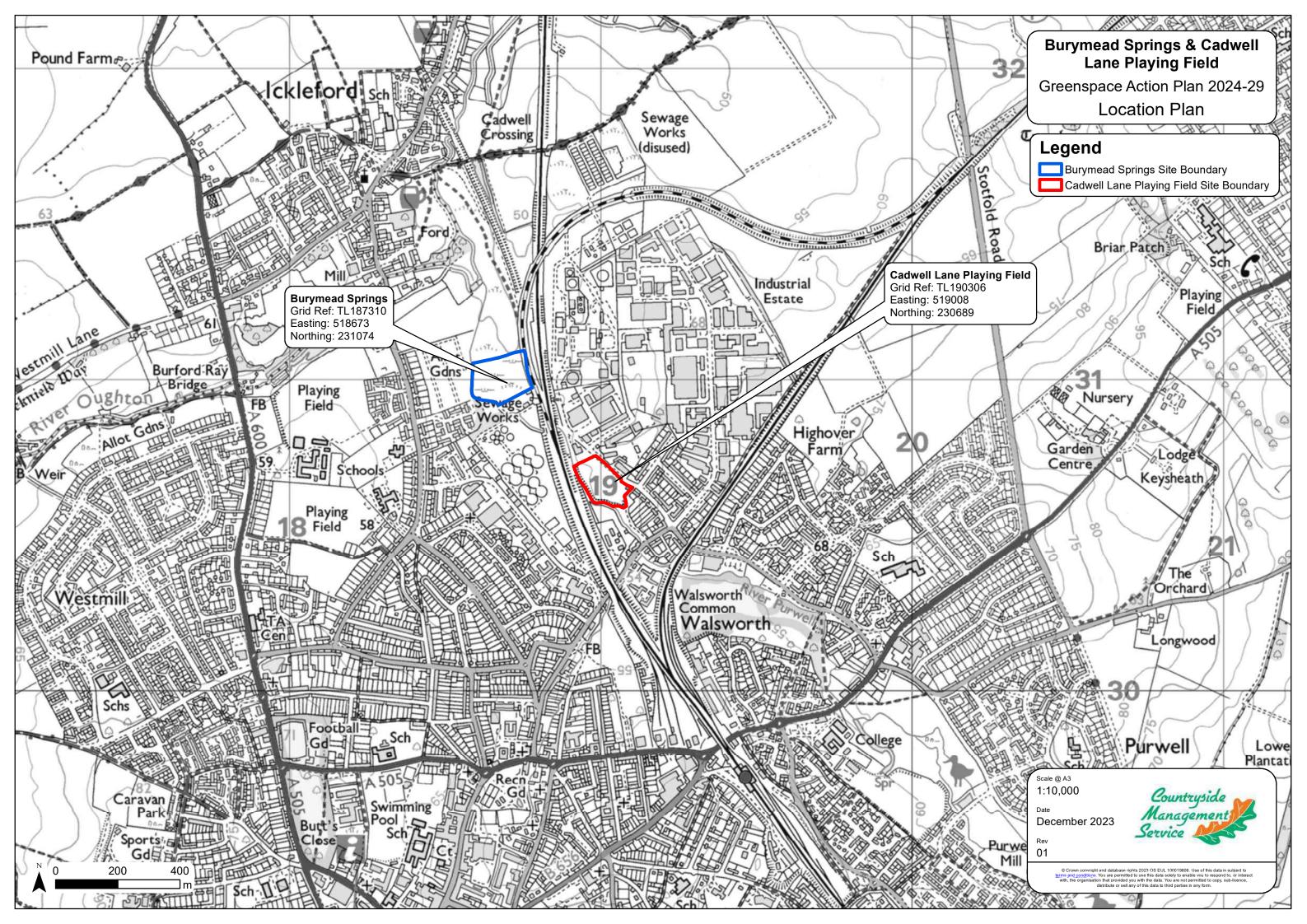
The bank top on the western side of the site has a small number of tall poplars which were retained when work to improve light levels into the River Hiz was carried out in the previous plan. This wooded bank runs to the west of the site along the river and stretches south to meet Grove Road. The river itself is a chalk stream, an important and rare wetland habitat in the UK.

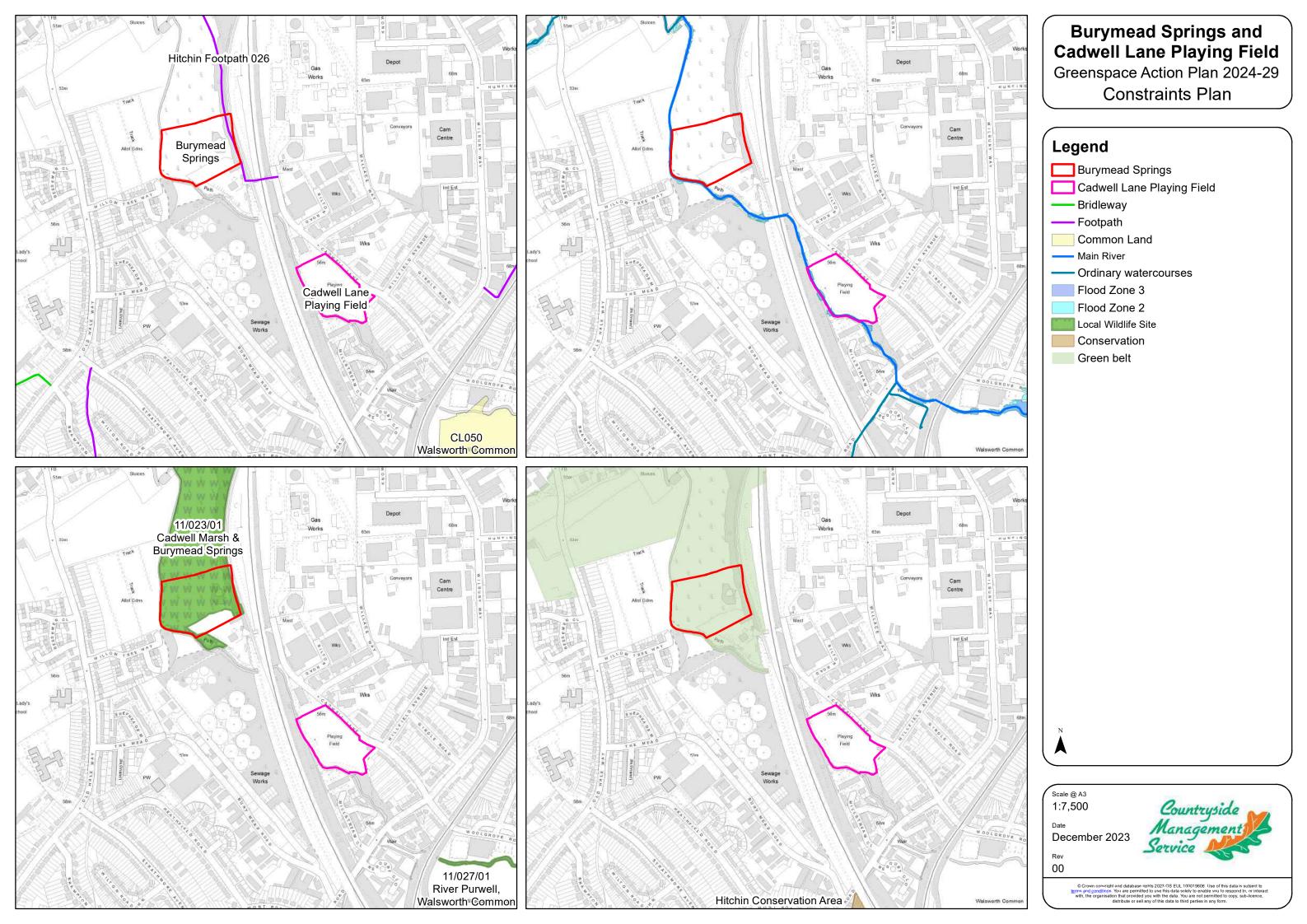
Burymead Springs is a 2.4ha site to the north of Cadwell Lane Playing Field at the end of Cadwell Lane. The two sites are separated by industrial units. To the east of Burymead Springs is the Hitchin railway flyover and East Coast Main Line and to the south a metal scrap yard. To the west across the River Hiz, there are allotments and a residential area, and to the north there is a cricket bat willow plantation, providing a link to open countryside. Access is available via a public footpath from Cadwell Lane to Ickleford, and a path leads from the footpath to the river and through the site. A viewing platform provides an opportunity to view the lagoon and reedbed. It is designated as Green Belt land, and lies within a larger Local Wildlife Site, Cadwell Marsh and Burymead Springs.

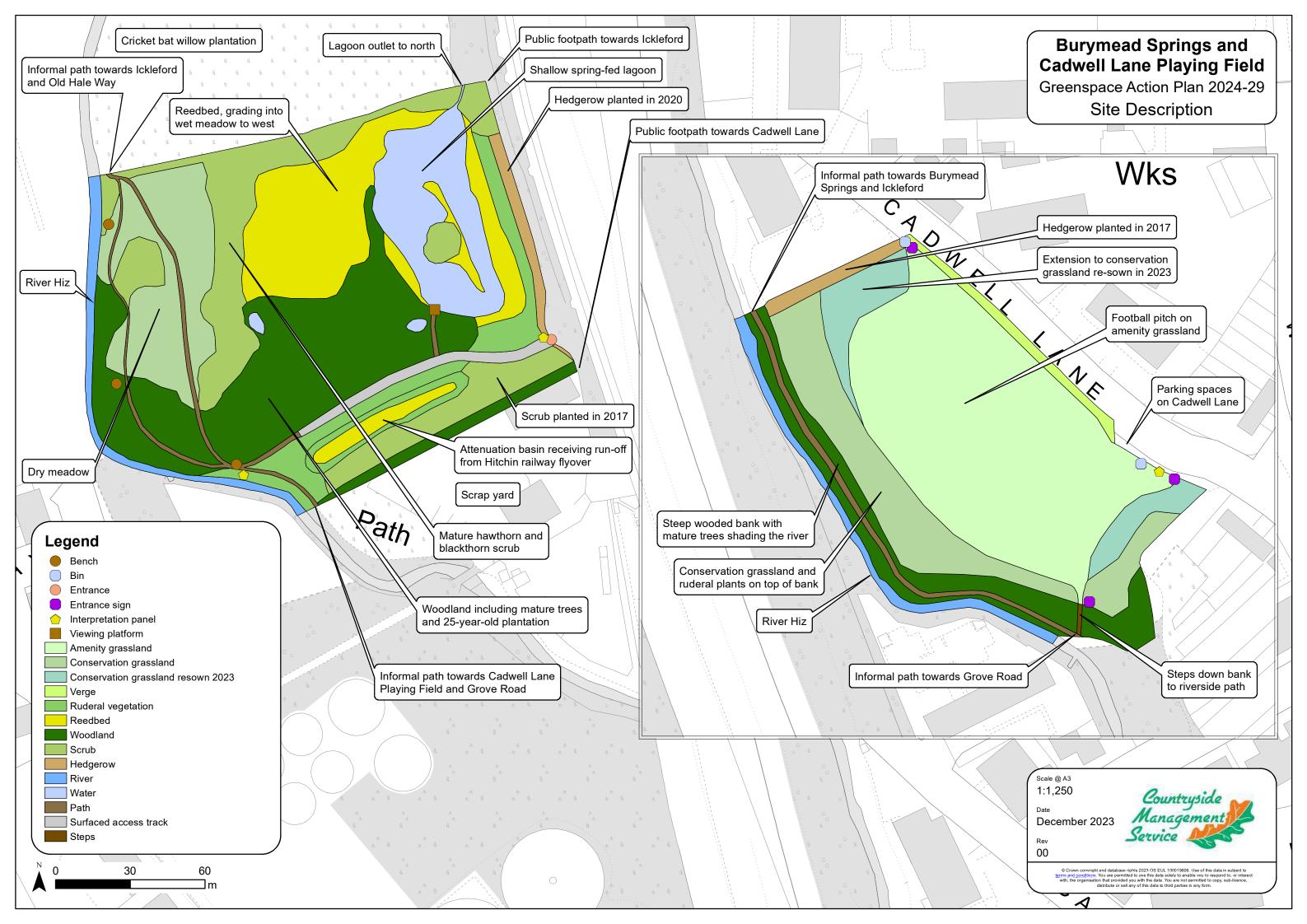
Burymead Springs is part of an ancient riverside meadow which stretches along the rivers Purwell and Hiz through Hitchin and encompasses three other NHC sites: Purwell Meadows, Walsworth Common and Cadwell Lane Playing Field. Throughout the site and in the surrounding landscape springs rise to the surface and the wet nature of the site is reflected in its habitats today.

Priority habitats within the site include the river Hiz, a chalk stream, and an area of reedbed with an open lagoon. There is also an area of meadow, small areas of woodland including mature willow, alder and poplar, a significant amount of scrub and hedgerows, three small seasonal ponds and a new drainage ditch including an

attenuation pond installed by Network Rail. The local wildlife site status of the larger area of which Burymead Springs is a part reflects its fen and swamp indicator plant species and records of water vole and harvest mouse from the 1990s; otter was recorded in 2008 with further sightings in the wider catchment in recent years.







2.2 Geology and Hydrology

Both sites are on a chalk bedrock. The Soilscapes map shows Burymead Springs to be on loamy and clayey flood plain soils with naturally high groundwater, and it is therefore naturally wet, whereas the majority of Cadwell Lane Playing Fields has freely-draining lime-rich loamy soils.

Burymead Springs is not considered to be at risk of river flooding, and can expect significant surface water flooding only in an event with a frequency of 1 in 1000. Large parts of the site do remain wet for much of the year, and the lagoon is fed by springs in its SE and NW corners. Similarly, Cadwell Lane is not at risk of flooding, and other than the channel of the river Hiz is a dry site, raised above the flood plain.

2.3 Landscape Character

The sites are within the River Oughton and Purwell Valleys Landscape Character Area. The area's key characteristic is meandering watercourse with associated ponds and water bodies and linear woodland belts following the watercourse. The river Hiz is typical of this character area with its wooded banks of poplar, willow and ash, with mature hawthorns dotted along the banks, as is Burymead Springs with its unimproved wet grassland and spring-fed pools.

Burymead Springs is on flat valley bottom land, and is largely surrounded by industrial and residential areas of Hitchin. To the east are the new Hitchin railway flyover and the East Coast Main Line and to the south a metal scrap yard. To the west across the river Hiz, there are allotments and a residential area, and to the north there is a cricket bat willow plantation, part of the same local wildlife site and providing a link to open countryside. The biggest impact of the urban setting on the character of the site is through noise pollution, from the scrap yard and the railway.

Cadwell Lane Playing Field is similarly surrounded by an industrial area to the north, residential area to the south, river Hiz and railway line to the east and Cadwell Lane to the west.

2.4 History and Archaeology

Burymead Springs was part of an ancient riverside meadow, affected by springs. River valleys and springs can be favoured areas for historic human activity and therefore for archaeological remains. An early Roman cremation cemetery was found in 1877 during drainage for the sewage works close to Burymead Springs, and Roman coins dating from the 3rd and 4th centuries were found in the same area. These coins are not contemporary with the cemetery and therefore indicate an extended period of occupation. It is possible that further archaeological remains could be found at Burymead Springs.

Construction of the railway lines immediately east of the site between 1846 and 1850 would have been the first impact of modern development, followed by the

establishment of the sewage works in the 1870s. After 1900, Hitchin expanded to enclose Burymead Springs on three sides. The site has been owned by NHC and its predecessor since around 1900, when land was purchased for the construction of sewage works, which only occupy land on the west side of the River Hiz. It has been managed for wildlife since the early 1990s, when management by volunteers as a nature reserve began with the support of NHC.

Cadwell Lane Playing Field was formerly used for landfill but there are no records of what has been buried in the area. When the site was turned into a green space, the grass struggled to grow, causing problems for the football teams using the pitch. In 2013 topsoil and turfs were brought in from Wembley Stadium when it was having its pitch relayed to improve the condition of Cadwell Lane Playing Field. This resulted in a big improvement in the condition of the site's amenity grassland.

2.5 Habitats and Wildlife

2.5.1 Burymead Springs Habitats

Burymead Springs contains a wide variety of wildlife habitats, most of which are associated with the spring-fed character of the site. It is part of a larger Local Wildlife Site, as a result of its fen and swamp habitats, with indicator species including wild angelica, marsh thistle, hemp agrimony and meadowsweet. It is also a valuable part of a wildlife corridor along the river Hiz, which incorporates three other NHC sites and provides a link from open countryside into the centre of Hitchin.

The reedbed is a high priority habitat and one of the largest in North Hertfordshire. It is dominated by common reed (*Phragmites australis*) with species such as reed canary grass (*Phalaris arundinacea*) and purple loosestrife (Lythru*m salicaria*) around the margins. It surrounds a lagoon which was originally excavated in the winter of 1995/96 to create an area of permanent open water. This involved the removal of 6000 tonnes of peat. Excavation of silt from the lagoon took place in 2020 to reduce encroachment of reeds. The lagoon and wet reedbed are fed by springs – there is a spring fed ditch inside the east boundary and another spring to the west of the lagoon.

Heading west, the reedbed becomes drier and grades into a wet meadow. A wide hedgerow separates this from a dry meadow next to the river Hiz, and there is another wide hedgerow along the northern boundary of the site. These hedgerows are mainly common hawthorn (*Crataegus monogyna*). The meadows support wild angelica (Angelica sylvestris), hemp agrimony (*Eupatorium cannabinum*) and meadowsweet (*Filipendula ulmaria*) in the wetter areas and some common knapweed (*Centaurea nigra*) where drier.

The river Hiz is a chalk river, which is a globally rare habitat. This is therefore another high priority for positive management. Some sections are open and sunny, and support abundant and characteristic marginal and in-channel vegetation

including water crowfoot (*Ranunculus aquatilis*) and watercress (*Nasturtium officinale*). Other parts are more heavily shaded and less well-vegetated as a result.





Images 1 and 2: reedbed and the river Hiz at Burymead Springs.

There is also woodland of a variety of ages, both following the river and in a band south of the reedbed. Some of this was planted by volunteers in the 1990s and some is more mature. The woodlands contain species including alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), elder (*Sambucus nigra*), field maple (*Acer campestris*), hazel (*Corylus avellana*), osier (*Salix viminalis*), goat willow (*S. caprea*) and native black poplar (*Populus nigra subsp. betulifolia*). Within the woodland and the meadows are at least three small seasonal ponds.

The site has been significantly affected in recent years by the new railway flyover. This necessitated some encroachment on the eastern boundary, including the loss of a boundary hedgerow. A former area of rough grassland on the southern side of the site now accommodates an attenuation basin built to manage drainage from the flyover while also providing ecological benefits. This contains common reed and reedmace (*Typha sp.*) at its base with some open water. Ruderal species have colonised the tops of the banks, including hemlock (*Conium maculatum*), teasel (*Dipsacus fullonum*) and goat's rue (*Gallega officinalis*), which has the potential to be invasive. Shrubs have been planted to the south of this basin and around the entrance to provide a visual shield from the adjacent scrap yard.

2.5.2 Burymead Springs Species

Birds are particularly well-recorded, as Burymead Springs was used as a Constant Effort Site for bird ringing between 1995 and 2003. This is a standardised scheme operated across Britain and Ireland by the British Trust for Ornithology. It provides information on trends in abundance, productivity and adult survival of 24 species of common songbird. Breeding birds include those associated with both reedbed and

scrub or woodland: reed warbler, sedge warbler, reed bunting, garden warbler, chiffchaff and blackcap. There is also a winter roost of reed buntings.

For mammals, there are records of water vole and harvest mouse from the 1990s; otter was recorded in 2008. It is thought to be unlikely that water voles are currently present, but it is not known if there is still a population of harvest mouse, necessitating a precautionary approach in relation to this species. Harvest mice are best provided for by cutting grass and reed in October, after the peak of their breeding season, on a 3-5 year rotation. Bats, in particular common pipistrelle, use the site for foraging and may roost in mature trees. An artificial otter holt was constructed by Network Rail, along with a reptile and amphibian hibernaculum – common frog and common toad are known to be present on the site, and common lizard is present on adjacent land.

Great crested newt has been recorded from within 1km, but not from Burymead Springs itself. The different habitats found will also support a wide range of invertebrates. Invasive signal crayfish are present in the river Hiz.

2.5.3 Cadwell Lane Playing Field Habitats

The central area of grassland is amenity cut for the majority of the year as it is used as a football pitch. Areas of grass away from the pitch have been re-seeded with a wildflower seed mix over two phases and have developed a more diverse mix of flower species including common knapweed (*Centaurea nigra*), lady's bedstraw (*Galium verum*) and wild carrot (*Daucus carota*). Behind the wildflower meadow, vegetation turns to nettles and scrub.

There are small scrubby bushes around the edge of the grassland, which are dwarfed by the mature poplars on top of the bank creating a backdrop to the football pitch. The steeply sloped banks down to the river have pockets of hawthorn and elder growing up from them along with larger mature trees. A hedgerow has been planted at the northern boundary of the site and is developing well.

Woodland has developed along the river corridor, shielding the steep bank, although some mature trees have been felled in recent years to allow more light to reach the river and promote the establishment of marginal and in-channel vegetation, and there are now gaps in the canopy as viewed from the playing field.

The river Hiz is a chalk river. Chalk rivers are very rare wetland habitats globally. The river flows along the bottom of the steep sided channel, with partly tree lined banks. It is heavily shaded along most of its length from Grove Road in the south, to the railway bridge in the north. As a result of previous tree works, the length running past Cadwell Lane Playing Field now has a mixture of shade and sun with patches of common reed (Phragmites australis) and plants characteristic of chalk streams such as water crowfoot (*Ranunculus aquatilis*), watercress (*Nasturtium officinale*) and starwort (*Callitriche stagnalis*). In these areas flow conditions are more diverse, but other areas remain sluggish and silty.



Images 4 and 5: the river Hiz and wildflower meadow at Cadwell Lane Playing Field.

2.5.4 Cadwell Lane Playing Field Species

Although it is small in size, the variety of habitats around Cadwell Lane Playing Field and the river Hiz can support a variety of species. Pipistrelle and noctule bats have been recorded in the nearby area and would use the margins, trees and hedgerows to forage over. There have been no records from the site but nearby foxes, muntjac deer and small mammals have been recorded.

The different habitats found on site will support a wide range of moth and butterfly species including speckled wood, comma and brimstone. Dragonflies and damselflies are likely to be seen hawking over the grassland or along the more open stretches of river looking for food.

Invasive signal crayfish are present in the river.

2.6 Access, Facilities and Infrastructure

2.6.1 Burymead Springs

Formal public access is only available via public footpath Hitchin 026 from Cadwell Lane to Ickleford, which passes the entrance at the SE corner of the site. The route from Cadwell Lane also provides the main vehicular access for management, and an unbound aggregate track leads as far as the western end of the attenuation basin. All remaining paths are unsurfaced.

There are also informal access points along the river Hiz to both the north and the south. These are not public rights of way and the path to the south has a number of obstacles, including pipes, a low bridge and sections which are frequently flooded, but it does connect Burymead Springs to Grove Road via Cadwell Lane Playing Field. The informal path to the north links to a bridge which provides access to the site from residential areas to the west.

From the main entrance, a path leads to the River Hiz. From there, a loop runs along the river and through the meadow. There is no regular maintenance of these paths, but vegetation is managed irregularly by volunteers.

A viewing platform close to the entrance provides an opportunity to view the lagoon and reedbed and can be accessed by a short detour from the main path. There is an interpretation panel at the entrance, and three benches along the river. In September 2017, as part of a wider project, an additional interpretation panel was installed by the river, promoting the links between Burymead Springs and other NHC sites in Hitchin along the river.



Images 5 and 6: Burymead Springs interpretation and viewing platform.

2.6.2 Cadwell Lane Playing Field

Cadwell Lane Playing Field can be accessed by pedestrians from Cadwell Lane, from Grove Road walking north along the riverside path and from Burymead Springs south along the riverside path. There is access for maintenance vehicles from Cadwell Lane via a locked barrier. Informal parking is possible for a small number of vehicles in laybys next to the site.

There are no hard surfaced paths on the site. There is a set of infilled steps with wooden risers at the southwestern corner of the playing field leading down to the riverside path. Downstream of Cadwell Lane Playing Field and out of North Herts Council ownership is a second set of infilled steps leading from the riverside path up onto Cadwell Lane.

Site entrance signs at each end of the playing field identify the name and ownership of the site. There are three dog waste bins and two litter bins on site, spread along the Cadwell Lane side of the playing field. They are emptied as required by NHC grounds maintenance contractors, who are also required to remove litter and fly tipping from the site.



Images 7 and 8: Cadwell Lane Playing Field entrance sign and Hitchin's River Valley interpretation.

2.7 Community and Events

Burymead Springs has a long history of community involvement in its management. Management as a nature reserve under the guidance of a voluntary warden and with the help of a team of volunteers began in 1992, supported by NHC and CMS, and continued until 2004. Local CMS volunteers continued to be regularly involved in the site until management responsibility was passed to Network Rail for the duration of the construction of the Hitchin railway flyover. CMS volunteers are now again regularly involved in site management here and at Cadwell Lane Playing Field.

2.8 Site Management

Responsibility for the management of Burymead Springs and Cadwell Lane Playing Field lies with its owners NHC. Regular maintenance works are carried out by the current grounds maintenance contractors for NHC, John O'Conner (JOC). Management is based on five-year Greenspace Action Plans (GAPs) for the site, which are produced by CMS in consultation with relevant partners and stakeholders.

The land ownership of NHC reaches the mid-point of the river Hiz. For the river to fully benefit from any restoration works, the works will have to extend outside the boundaries of NHC ownership. NHC are committed to working with local landowners to achieve this.

Network Rail have retained responsibility for maintenance of the attenuation basin within Burymead Springs, which manages run-off from the railway flyover.

Management of this area is therefore not within the scope of this plan.

3.0 ANALYSIS & EVALUATION

3.1 A Welcoming Place

Cadwell Lane Playing Field is easily accessed from Cadwell Lane, with entrances at both ends, and Grove Road, along the informal riverside path. Access to Burymead Springs from Hitchin is much less welcoming. It is necessary to walk along a section of Cadwell Lane, then turn left under a railway bridge towards a scrap yard. A small public footpath sign here is the only evidence that there is anything of interest under the bridge. Finally, a further right turn through a gap next to a metal fence takes you towards the entrance to Burymead Springs. Public footpath signs on Cadwell Lane and at the metal gate should be upgraded to signpost Burymead Springs.





Images 9 and 10: signage and public footpath route to Burymead Springs.

The informal footpath along the river Hiz which links Cadwell Lane Playing Field with Burymead Springs involves a number of hazards and is unsuitable for formalisation.

A hedgerow has been planted along the eastern boundary of Burymead Springs to better define this boundary and replace a hedge that was lost during the construction of the railway flyover. As this matures, it should managed to establish low sections which define and attract the eye to views across Burymead Springs from the footpath.

The two sites are well-interpreted with an interpretation panel at Burymead Springs and a 'Hitchin's River Valley' panel at each site which highlights links between the sites and onwards to Walsworth Common and Purwell Meadows. All signage should be updated to follow new NHC branding when it requires replacement.

3.2 Healthy, Safe and Secure

The safety of users is of primary importance to NHDC. Formal tree safety surveys are undertaken every three years. Any works are prioritised according to a risk assessment.

Motorbikes can currently access the site and the public footpath to Ickleford from Cadwell Lane. There is no solution in this location which would not also seriously inconvenience legitimate users. However, any increase in the number of legitimate users which can be encouraged by making Burymead Springs more welcoming and increasing promotion should reduce illegitimate use.

The first section of the informal riverside path which leads south from Burymead Springs, alongside the scrap yard, is leased to the scrap yard by NHC. It is therefore not part of the site. There is a concern about materials escaping the scrap yard into this parcel of land, which is accessible to the public and not clearly demarcated from Burymead Springs. NHC will continue to work with the scrap yard to ensure that any scrap metal which does fall out of the yard is quickly removed.



Image 11: example of waste escaping scrap yard.

During the period of management by Network Rail, an area of contaminated land was identified in the south east corner of the site, around the current location of the attenuation basin. As a result, the area was covered with a geotextile indicator layer and capped with imported material to a minimum depth of 300mm south of the attenuation basin and 500mm elsewhere. These two areas are shown on the constraints map in 2.3. There should be no digging in these areas.

3.3 Well Maintained and Clean

Grounds maintenance at Burymead Springs is currently limited. A mown path from the entrance alongside the attenuation basin and through the dry meadow, and controlling vegetation growth around benches, should both be added to regular grounds maintenance. The dry meadow is cut once annually by contractors with arisings removed. At Cadwell Lane Playing Field the football pitch is managed as an amenity cut and the marginal wildflower areas are cut once annually with arisings removed. The riverside path should be strimmed regularly to keep it usable and safe.

Grounds maintenance should also include emptying litter bins at Cadwell Lane Playing Field, occasional litter picking and any small scale vegetation management necessary to keep paths open and maintain a route by which vehicles can access the dry and wet meadows at Burymead Springs. Any graffiti or fly tipping on the site will be removed.

Access for maintenance vehicles to Cadwell Lane Playing Field is currently difficult due to a double kerb arrangement. This should be investigated with a view to improving if possible.

The river Hiz carries and deposits a significant amount of rubbish, particularly when flow levels are high. At both sites and along the riverside path between them, litter in the river is an issue. The river should be litter picked annually by volunteers to keep it clean and maintain an attractive appearance.

3.4 Environmental Management and Sustainability

Slight changes to the grounds maintenance contract included in this plan, for example adjusting the areas of amenity and conservation grassland at Cadwell Lane Playing Field, will not have a significant effect on the cost of maintaining the site.

Larger scale projects require external funding to be secured to ensure these can be delivered. In the current plan this may include habitat improvements along the river Hiz, where these are of a scale that cannot be delivered by volunteers. There should be no additional maintenance costs as a result of this work, and any capital projects should also aim to make future management more achievable by volunteers.

Using FSC-certified timber for any new signs or furniture, using herbicides only when necessary and ensuring that all materials removed from the site are disposed of appropriately will all contribute to a sustainably managed site.

3.5 Biodiversity, Landscape and Heritage

3.5.1 Burymead Springs

The majority of work required at Burymead Springs involves maintaining its valuable habitats. The dry meadow (in the western third of the site) should continue to be cut annually with arisings removed. One third of the wet meadow and the drier part of

the reedbed (in the central part of the site) should be cut annually by volunteers, with arisings stacked and removed by an NHC contractor.



Images 12 and 13. Dry meadow and wet meadow after partial cut.

The wetter areas of reedbed around the lagoon should be cut on a longer five-year rotation, where access is possible. Cutting a 1m margin of reed around the edges of the lagoon on an annual basis would add habitat diversity and slow the rate of encroachment of reed into the lagoon. Where vehicle access is not possible, arisings from the reedbed should be stacked under scrub to create habitat for invertebrates, using the same sites each year. Any establishing willow scrub within the reedbed should be coppiced.

The lagoon had been encroached by reeds and by 2018 was close to being lost. A desilting project was undertaken in 2020 and the aerial photos below show the impact of this project. The lagoon remains silty, with exposed silt showing when water levels are low, but there is no requirement for further desilting in the next five years.





Images 14, 15 and 16: Aerial photos of Burymead Springs from 2000 (top left), 2015 (top right) and 2021 (bottom left) showing the reduction in size of the lagoon and subsequent restoration of the lagoon following desilting.

In autumn 2023 water levels in the lagoon noticeably dropped, exposing additional silt at a time of year when water levels would normally be rising. This may have been related to drainage works and vegetation clearance carried out by the adjacent landowner close to the edge of the lagoon, but levels did rise again in the later part of the winter. Water levels in the lagoon will be kept under review during 2024. If levels remain low compared to levels seen in previous years, works may be undertaken in collaboration with the neighbouring landowner to address this and ensure the reedbed habitat is not negatively impacted.

The seasonal ponds at Burymead Springs were deepened in 2020 but continue to hold water only irregularly as the soil is too free-draining. A better location for pond creation would be within the wet meadow, on the edge of the reedbed, and a new pond should be created in this area.



Image 17: seasonal pond.

The hedgerows around Burymead Springs are mature and becoming overstood. Management by coppicing and replanting gaps now will maintain their hedgerow character. To avoid an excessive impact on the site, over the next five years this work should be limited to the western third of the northern boundary hedgerow. Scrub and hedgerows around the site should be managed to prevent any further

encroachment into the meadows. As part of this work, log piles should be created to provide additional habitat for reptiles and amphibians.

The newly planted hedgerow along the eastern boundary requires management of competing vegetation, in particular common reed, to aid its establishment. The recently planted trees and shrubs along the southern and south-eastern boundaries are now becoming established, although in 2023 they were swamped by hemlock. Some plants should continue to be coppiced by volunteers to promote more substantial regrowth.

The attenuation basin is managed up to its rim by Network Rail. It is important that this is properly maintained, as there is otherwise a risk of drainage from the railway flyover running directly into the river Hiz. The area between the attenuation basin and the path has been colonised by ruderal plants, notably the invasive goat's rue. Soil disturbance elsewhere on the site should be avoided, as this could allow the goat's rue to spread.

3.5.2 The River Hiz

The river Hiz connects the two sites and appropriate management is similar along its length. At Burymead Springs, the quality of the chalk stream habitat is variable – some sections are well-vegetated with natural pools and riffles, while others are shaded, with much less vegetation and a slower flow. Coppicing and pollarding selected trees along the river would reduce shade and encourage aquatic and marginal plants. As part of this work some larger limbs should be cut, hinged and pinned into the channel, and smaller limbs cut, placed in the channel and pinned. This would increase diversity of flow conditions and encourage local scour.





Images 18 and 19: Shaded section of river Hiz at Burymead Springs lacking marginal vegetation, and regrowth on pollarded willow at Cadwell Lane Playing Field once again shading the channel.

At Cadwell Lane Playing Field some tree works have already been undertaken to reduce shade, and in places aquatic vegetation has developed. However the river is still overwide and silty in places. Re-pollarding or coppicing willows along the channel will help maintain light levels, and as above, some larger limbs should be cut, hinged and pinned into the channel. Smaller brash can be used to create low-

level brushwood berms, reducing the width of the river in places and reducing siltation.

Any improvements to this section of the Hiz will contribute more widely to work carried out by NHC at its sites along the river valley, and to the enhancement of a valuable ecological corridor running through Hitchin.

3.5.3 Cadwell Lane Playing Field

Wildflower planting was undertaken around the fringes of Cadwell Lane Playing Field in 2016. This was successful and the wildflowers are now well-established, requiring management by annual cut and collect. The wildflower meadow area was expanded by further seeding in 2023. This expanded area should be managed as part of the amenity cut in 2024 and brought into wildflower meadow management from 2025.

At a similar time, a hedgerow was planted along the northern boundary of the site to screen it from adjacent industrial units. This has developed well and is now suitable for laying, to thicken the base of the hedgerow. At the time of laying, the protective fence around the hedge can be removed.

3.5.4 Biodiversity Net Gain

A formal habitat and condition assessment survey has not been undertaken as part of the development of this Greenspace Action Plan. Most of the actions set out in this plan are focused on maintaining the quality of existing habitats rather than changing habitat type or condition, and so it is not expected that any significant biodiversity net gain will be delivered through the plan. In addition, the small size of the two sites means that it is unlikely that either Burymead Springs or Cadwell Lane Playing Field would be suitable to be put forward as offsetting sites for biodiversity net gain.

3.6 Community and Events

Burymead Springs has a long history of community involvement, and there is still significant interest in the site from the local community. It is well suited to management by volunteers, with a variety of interesting habitats all on a manageable scale, and volunteer tasks can include work at both Burymead Springs and Cadwell Lane Playing Field. The local CMS volunteer group will continue to be engaged to carry out tasks such as cutting the wet meadow and reedbed at Burymead Springs, managing hedgerows and maintaining marginal and in-channel habitats along the river Hiz.

Community involvement could also include survey work by local naturalists. Burymead Springs is already a well-recorded site, so new biological information adds to an established dataset and provides an opportunity to understand the way the site has changed over time.

The area falls into the Upper and Bedford Ouse Catchment Partnership (http://www.ubocp.org.uk). This provides an opportunity to connect with wider community-based activities within the river catchment.

3.7 Marketing and Communication

Promotion of Burymead Springs and Cadwell Lane Playing Field has improved in recent years through the 'Hitchin's River Valley' interpretation boards located at the two sites as well as Walsworth Common and Purwell Meadows, which have strengthened connections between the four sites.

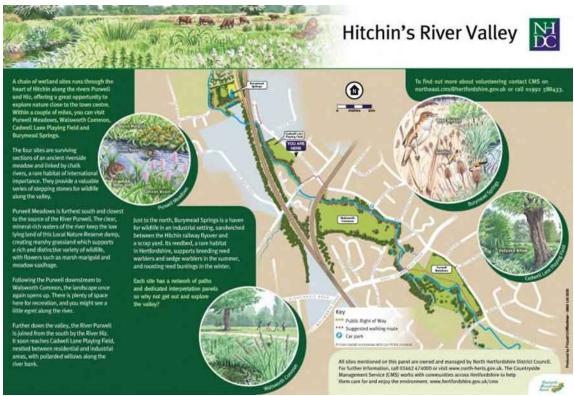


Image 20: Hitchin's River Valley interpretation design

The sites should be promoted when appropriate through local e-newsletters and social media, for example when practical conservation volunteering takes place.

4.0 AIM & OBJECTIVES

The aim and objectives of the GAP are as follows:

Aim

To maintain and enhance the habitats across both sites as a valuable link in the wider chain of sites along the river valley, with a focus on maintaining the habitats to a high standard and improving local engagement.

Objectives

A. A Welcoming Place

To enhance the experience of using Burymead Springs and Cadwell Lane Playing Field for regular users and visitors

- A1 Look to further improve signage to Burymead Springs
- A2 Ensure access into and around the sites is clear and suitable for all users

B. Healthy, Safe and Secure

To ensure that visitors to Burymead Springs and Cadwell Lane Playing Field feel safe and able to enjoy the sites at all times

- B1 Proactive response to misuse of the site
- B2 Carrying out reactive tree works to address safety issues
- B3 Ensure access routes and structures are fit for purpose
- B4 Work with the adjacent scrap yard to prevent material from falling into land adjacent to the river Hiz
- B5 Maintain a 'no digging' area around the attenuation basin

C. Clean and Well Maintained

To ensure the standard of maintenance is upheld and relevant

- C1 Deliver and monitor the scheduled grounds maintenance regime
- C2 Keep paths clear and well maintained with vegetation cut back alongside paths and around structures
- C3 Removal of litter, graffiti and fly tipping across the sites
- C4 Carry out litter picks along the river Hiz for smaller objects and address any larger dumping that may occur

D. Sustainability

To ensure sustainability of all management operations on site

- D1 Ensure ongoing maintenance costs are financially viable
- D2 Secure external funding to ensure capital works are viable
- D3 Ensure all management is carried out according to environmental best practice, including on herbicide use, plant biosecurity to minimise tree disease, and look to retain woody material on site where possible

E. Conservation and Heritage

To conserve and enhance the key habitats of Burymead Springs and Cadwell Lane Playing Field

- E1 Carry out regular conservation cuts of the dry and wet meadows at Burymead Springs
- E2 Maintain and enhance the conservation grassland area at Cadwell Lane Playing Field
- E3 Cut a portion of the reedbed on a 5-year rotation
- E4 Coppice encroaching scrub from within the reedbed and meadows
- E5 Restore mature hedgerows and maintain hedge and shrub planting
- E6 Deliver river restoration work as part of a wider river catchment project
- E7 Enhance pond and lagoon habitats at Burymead Springs

F. Community Involvement

To develop and maintain an informed, involved and enthusiastic local community

- Encourage further involvement from the local community in the management of the site alongside supporting volunteer activities to achieve the aims of the GAP.
- F2 Ensure all involved in the site operate towards achievement of the objectives of the GAP.

G. Marketing

To promote awareness and interest in Burymead Springs and Cadwell Lane Playing Field

- G1 Promote the wider links throughout the Hiz valley and the rivers Oughton and Purwell with regular updates on essential work through local groups.
- G2 Promote any volunteer events or community activities in through social media and e-news.

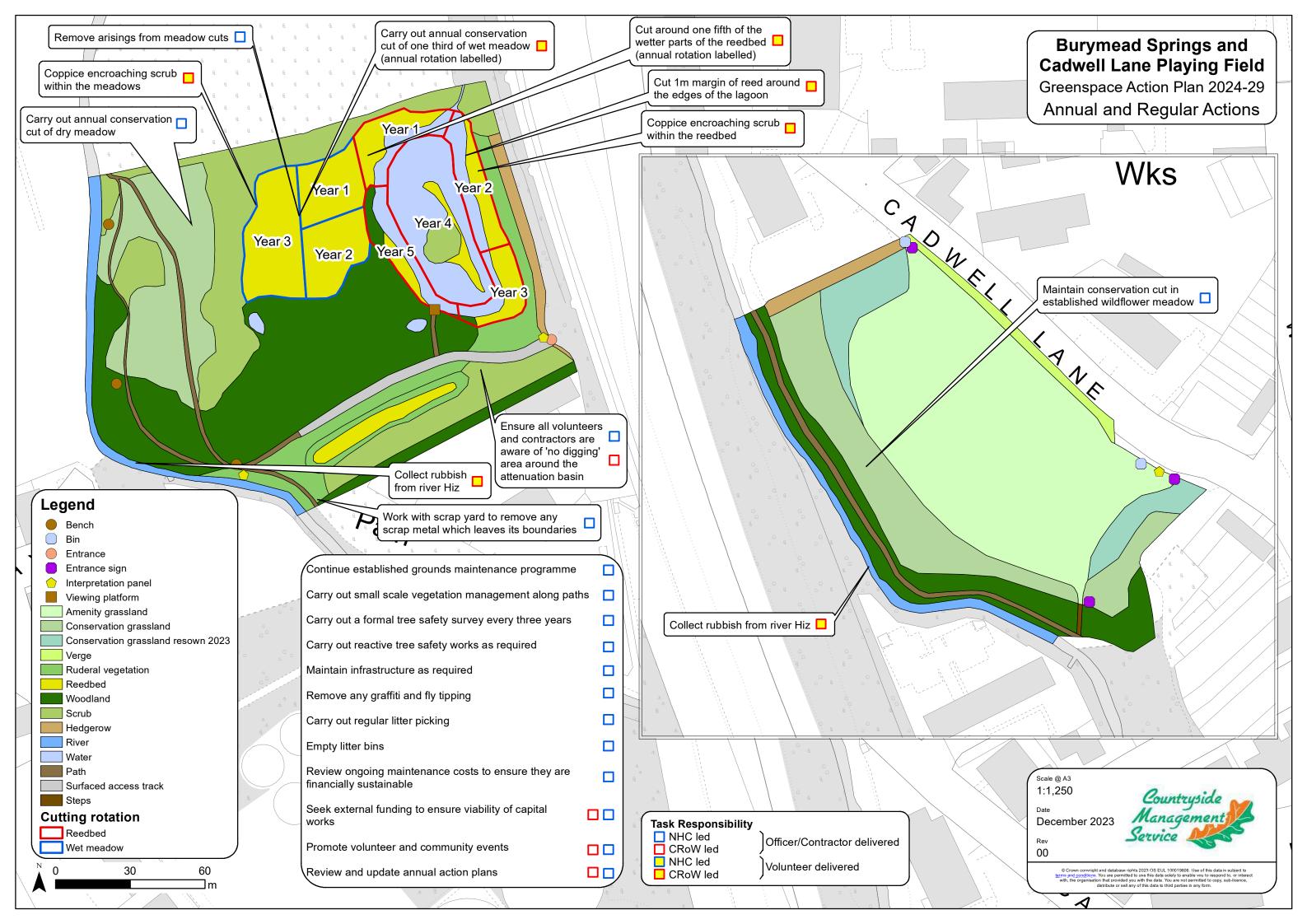
5.0 ACTION PLANS AND MAPS

5.1 ANNUAL AND REGULAR ACTIONS

Ref no.	Action	Obj. Ref.	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
0.1	Continue the established grounds maintenance programme	A2, C1	Ongoing	NHC	JOC	NHC GM budget	GM contract		
0.2	Carry out small scale vegetation management along paths	A2, C2	Ongoing	NHC	JOC	NHC GM budget	GM contract		
0.3	Carry out a formal tree safety survey every three years	B2	Ongoing	NHC	NHC	NHC tree budget	Staff time		
0.4	Carry out reactive tree safety works as required	B2	Ongoing	NHC	NHC	NHC tree budget	TBC		
0.5	Maintain infrastructure as required	В3	Ongoing	NHC	JOC	NHC GM budget	GM contract		
0.6	Work with scrap yard to remove any scrap metal which leaves its boundaries	B4	Ongoing	NHC	NHC	NHC budget	Staff time		
0.7	Ensure all volunteers and contractors working on the site are aware of the 'no digging' area around the attenuation basin	B5	Ongoing	NHC/ CMS	NHC/ CMS	NHC budget	Staff time		
0.8	Remove any graffiti and fly tipping on the sites	С3	Ongoing	NHC	JOC	NHC GM budget	GM contract		
0.9	Carry out regular litter picking	C3	Ongoing	NHC	JOC	NHC GM budget	GM contract		
0.10	Empty litter bins	С3	Ongoing	NHC	JOC	NHC GM budget	GM contract		
0.11	Collect rubbish from River Hiz	C4	Sep	CMS	Vols	NHC budget	Staff time		
0.12	Review ongoing maintenance costs to ensure they are financially sustainable	D1	Annual	NHC	NHC	NHC budget	Staff time		

Ref no.	Action	Obj. Ref.	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
0.13	Seek external funding to ensure viability of capital works	D2	Ongoing	NHC/ CMS	NHC/CMS	NHC Budget	Staff time		
0.14	Carry out an annual conservation cut of the dry meadow (Burymead Springs)	E1	Aug- Sep	NHC	Contractor	NHC GM budget	GM contract		
0.15	Carry out an annual conservation cut of one third of the wet meadow (Burymead Springs)	E1	Sep	CMS	Vols	NHC budget	Staff time		
0.16	Remove arisings from meadow and reed cuts	E1, E3	Sep/Nov	NHC	JOC	NHC GM budget	GM contract		
0.17	Maintain conservation cut in established wildflower meadow area (Cadwell Lane Playing Field)	E2	Aug- Sep	NHC	JOC	NHC GM budget	GM contract		
0.18	Cut around one fifth of the reedbed	E3	Nov	CMS	Vols	NHC budget	Staff time		
0.19	Cut 1m margin of reed around the edges of the lagoon	E3	Nov	CMS	Vols	NHC budget	Staff time		
0.20	Coppice encroaching scrub within the meadows	E4	Sep	CMS	Vols	NHC budget	Staff time		
0.21	Coppice encroaching scrub within the reedbed	E4	Nov	CMS	Vols	NHC budget	Staff time		
0.22	Promote volunteer and community events	G1, G2	All year	NHC/ CMS	CMS	NHC Budget	Staff time		
0.23	Review and update annual action plans		Annual	NHC/ CMS	ALL	NHC Budget	Staff time		

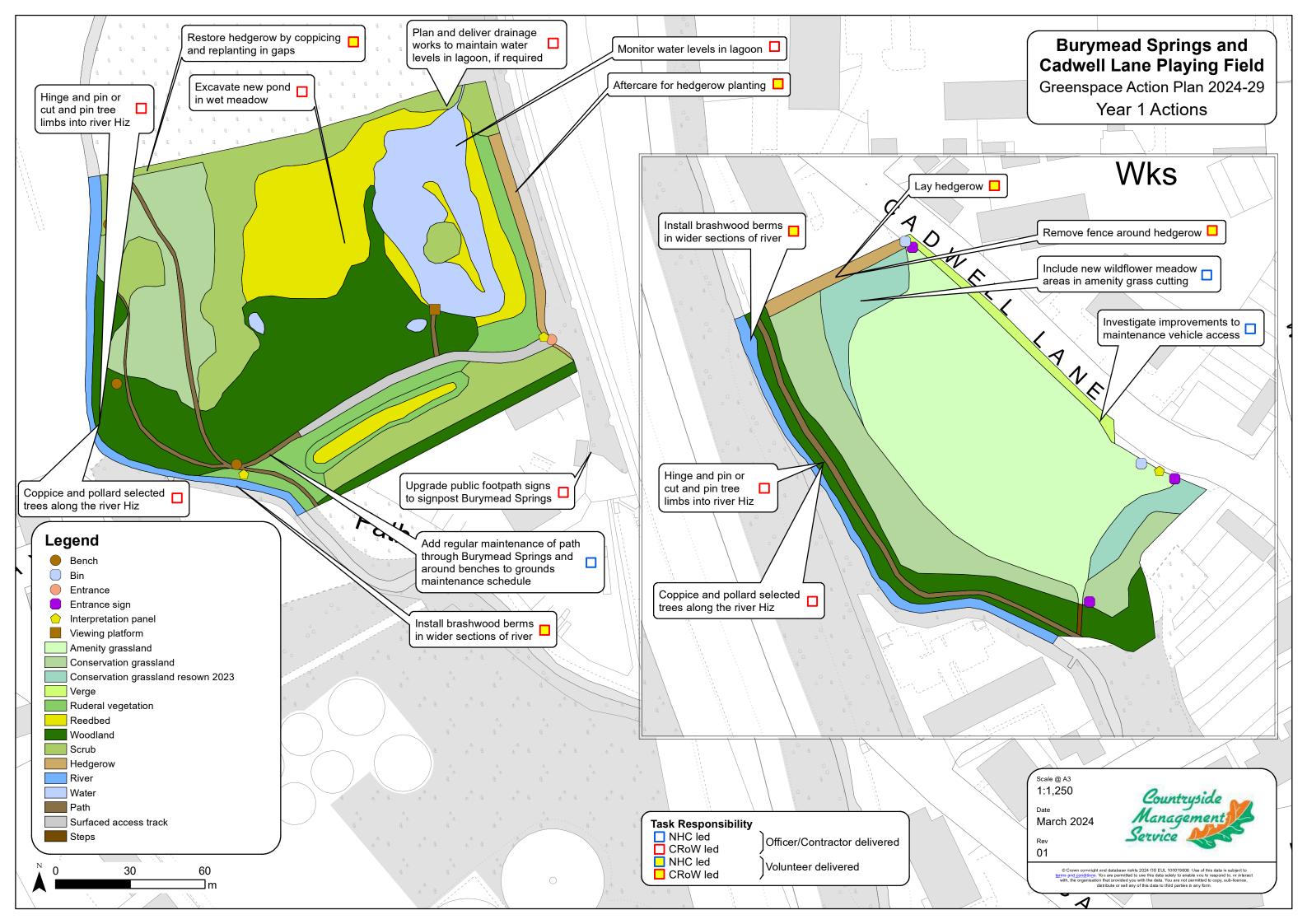
Abbreviations: CMS – Countryside Management Service; GM – Grounds Maintenance; NHC – North Herts Council; Vols – Volunteers; JOC – John O'Conner Grounds Maintenance; HCC – Hertfordshire County Council; RoW – Rights of Way.



5.2 YEAR 1 2024-25

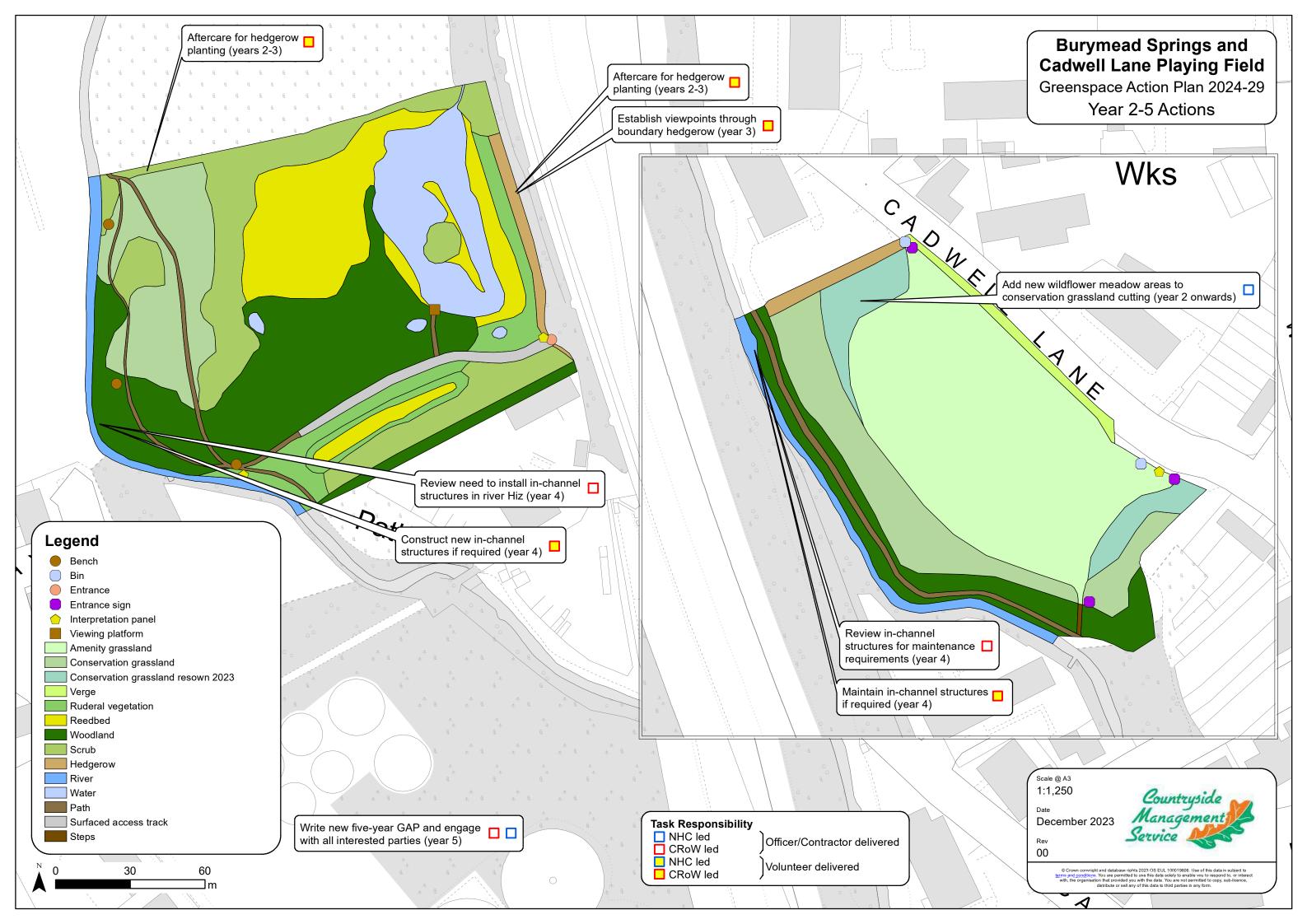
Ref no.	Action	Obj. Ref.	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
1.1	Upgrade public footpath signs to signpost Burymead Springs	A1	Apr	CMS	CMS	HCC RoW budget	£200		
1.2	Investigate improvements to maintenance vehicle access to Cadwell Lane Playing Field	C1	Apr	NHC	NHC	NHC budget	Staff time		
1.3	Add regular maintenance of path through Burymead Springs and around benches to grounds maintenance schedule	C2	Apr-Oct	NHC	JOC	NHC GM budget	GM contract		
1.4	Include new wildflower meadow areas in amenity grass cutting (Cadwell Lane Playing Field)	E2	Apr-Oct	NHC	JOC	NHC GM budget	GM contract		
1.5	Aftercare for hedgerow planting on eastern boundary (Burymead Springs)	E5	Jun/Sep	CMS	Vols	NHC budget	Staff time		
1.6	Restore hedgerow at western end of northern boundary by coppicing and replanting in gaps (Burymead Springs)	E5	Dec- Feb	CMS	Vols	NHC budget	Staff time/£300		
1.7	Lay hedgerow on northern boundary and remove fence (Cadwell Lane Playing Field)	E5	Dec- Feb	CMS	Vols	NHC budget	Staff time		
1.8	Coppice and pollard trees along the river Hiz (Burymead Springs and Cadwell Lane Playing Field)	E6	Sep- Feb	CMS	Contractor	External	£5000		
1.9	Hinge and pin or cut and pin tree limbs in river Hiz (Burymead Springs and Cadwell Lane Playing Field)	E6	Sep- Feb	CMS	Contractor	External	2000	6.1/ 6.2	
1.10	Install low-level brushwood berms in wider sections of river (Cadwell Lane Playing Field)	E6	Jul-Aug	CMS	Vols	NHC budget/ external	Staff time/ materials	6.3	

Ref no.	Action	Obj. Ref.	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
1.11	Excavate new pond in wet meadow (Burymead Springs)	E7	Sep	CMS	Contractor	External	£2000	6.4	
1.12	Monitor water levels in lagoon	E7	Apr-Sep	CMS	CMS	NHC budget	Officer time		
1.13	Plan and deliver drainage works to maintain water levels in lagoon, if required	E7	Oct	CMS	Contractor/ private landowner	TBC	TBC		



5.3 YEAR 2-5 2025-29

Ref no.	Action	Obj. Ref	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
2.1	Add new wildflower meadow areas to conservation grassland cutting (Cadwell Lane Playing Field)	E2	Year 2 onwards, Aug-Sep	NHC	JOC	NHC GM budget	GM contract		
2.2	Aftercare for hedgerow planting on eastern boundary (Burymead Springs)	E5	Year 2, Sep	CMS	Vols	NHC budget	Staff time		
2.3	Aftercare for hedgerow planting on northern boundary (Burymead Springs)	E5	Years 2- 3, Sep	CMS	Vols	NHC budget	Staff time		
2.4	Establish viewpoints through the eastern boundary hedgerow (Burymead Springs)	E5	Year 3 Sep	CMS	Vols	NHC budget	Staff time		
2.5	Review in-channel structures for maintenance requirements (Cadwell Lane Playing Field)	E6	Year 4 Jul	CMS	CMS	NHC budget	Staff time		
2.6	Review need to install woody berms or flow deflectors in wider sections of river (Burymead Springs)	E6	Year 4, Jul	CMS	CMS	NHC budget	Staff time		
2.7	Maintain existing in-channel structures and/or construct new in-channel structures	E6	Year 4, Sep	CMS	Vols	NHC budget/ external	Staff time/ materials		
2.8	Write new five-year GAP and engage with all interested parties		Year 5, Apr	NHC	NHC/ CMS	NHC budget	Staff time		



6.0 SPECIFICATIONS

6.1 Tree hinging

- 6.1.1 See map below for proposed locations.
- 6.1.2 Cut stem to two thirds of diameter, cutting at hip height towards the back of the trunk, opposite to the proposed hinging direction.
- 6.1.3 Hinged material should be able to rise and fall with changes in flow. Chestnut stakes should be used to prevent lateral movement.
- 6.1.4 Chestnut stakes should be untreated, 2.5m long, 75mm diameter, secured into bed at minimum depth 1.2m, driven to the point of resistance, excess post length above tree limbs to be removed.
- 6.1.5 Woody material must be appropriately secured to bank edges to avoid washout in high flow events and mitigate downstream flood risk.

6.2 In-channel flow deflector

- 6.2.1 See map below for proposed locations.
- 6.2.2 Flow deflector to be comprised of single or multiple stacked pieces of woody material, staked in channel to deflect flows.
- 6.2.3 Chestnut stakes should be untreated, 2.5m long, 75mm diameter, secured into bed at minimum depth 1.2m, excess post length above tree limbs to be removed.
- 6.2.4 Deflector should be secured embedded into the bank, by 0.5m where possible around tree roots.
- 6.2.5 High tensile galvanised wire wrapped over deflector and secured to chestnut stakes with staples, stakes driven to the point of resistance.
- 6.2.6 Woody material must be appropriately secured to bank edges to avoid washout in high flow events and mitigate downstream flood risk.

6.3 Brushwood berm

- 6.3.1 See map below for proposed locations.
- 6.3.2 Secure chestnut stakes around berm at 0.5m spacing.
- 6.3.3 Chestnut stakes should be untreated, 2m long, 75mm diameter, secured into bed at minimum depth 1.2m, excess post length above berm to be removed.

- 6.3.4 Site-won brash to be used for berm foundations between stakes and bank. This should be comprised of native species, e.g. hawthorn, hazel or willow, noting that willow is likely to regrow in-channel, requiring further management.
- 6.3.5 If bank regrading is planned, spoil from bank regrading can be used within berms, increasing speed of succession.

6.4 Pond creation

- 6.4.1 Excavate a pond to a maximum depth of approximately 1.5m and area of approximately 75m2. Pond to comprise an asymmetric and uneven profile. Majority of pond slopes are to be shallow, less than 1:5 (12°), and preferably less than 1:20 (3°), in order to create areas which are between 1 and 10 cm deep.
- 6.4.2 The edge of the pond is to have a wavy, asymmetrical edge.
- 6.4.3 The base of the pond is to have a rough finish (not smooth) with bars, lumps and bumps, in order to allow colonisation by plants. Use of a tooth bucket may help to achieve the rough finish.
- 6.4.4 Spoil to be spread thinly in adjacent woodland edge.
- 6.4.5 No planting is required as the pond is to be left to natural colonisation.

