

# Smestow Valley Local Nature Reserve



## Supplementary

## Management Plan

January 2020 – January 2025



Produced by

**The Wildlife Trust for Birmingham and the Black Country**

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On behalf of

**Wolverhampton City Council**

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# **Smestow Valley Local Nature Reserve**

**Supplementary  
Management Plan  
January 2020 – January 2025**

**Produced by The Wildlife Trust for Birmingham & the Black Country,  
on behalf of City of Wolverhampton Council, 2019**

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Glossary

## **Introduction**

- The Smestow Valley is a large area of public open space which stretches across much of western Wolverhampton. The site is owned by City of Wolverhampton Council and was declared a Local Nature Reserve (LNR) in 1998.
- In December 2012 the Wildlife Trust for Birmingham & Black Country produced the Conservation & Access Management Plan December 2012 – December 2017 in partnership with City of Wolverhampton Council and with the support of EcoRecord<sup>1</sup>.
- The above management plan described the current state of the reserve, highlighted and evaluated its most important features, and prescribed a series of actions which were designed to maximise these assets and ensure the future protection and enhancement of the ecological, social and educational value of the reserve.
- As the five-year period in which the Conservation & Access Management Plan covered has now ended, the City of Wolverhampton Council has commissioned the Wildlife Trust for Birmingham and the Black Country to produce a supplementary management plan, which can be read in conjunction with the previous management plan, and which details any revisions to the reserve since the production of the previous 2012-17 plan, while also redefining the management practices to be undertaken on the Local Nature Reserve (LNR) for the next five years.
- In addition to the previously included compartments, much of the area formerly known as the Wolverhampton Environment Centre (WEC), currently designated as a Site of Importance for Nature Conservation (SINC), will be included within the supplementary plan. This area is now publicly accessible and there are future proposals to extend the Smestow Valley LNR to include this.
- The Smestow Valley Supplementary Management plan has been produced in accordance with Tettenhall Neighbourhood Plan 2014 – 2016.

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<sup>1</sup>EcoRecord is the Local Environmental Records Centre for Birmingham & the Black Country.

## **Vision Statement**

### **Conserve & Enhance Biodiversity**

The wildlife of Smestow Valley is what makes it special; its long-standing biodiversity will be conserved and steps will be taken to actively enhance its ecological value.

### **Access & Recreation**

Smestow Valley is an important open space for local people; every reasonable step will be taken to allow people of all physical abilities to access and experience the site.

### **Conserve the Archaeology & the Historic Landscape**

The archaeological and historical assets of Smestow Valley will be recognised, protected and celebrated.

### **Forge Partnerships**

The management plan will be taken forward with local partners, groups and individuals so as to maximise the benefits that Smestow Valley brings to local residents and the wider community of Wolverhampton.

### **Spread the Word**

Awareness and understanding of all the valuable aspects of Smestow Valley are vital and will be promoted to a wide audience.

## **General Information** (See **Map 1**)

<b>Grid reference (central)</b>	SO890997
<b>Planning authority</b>	City of Wolverhampton Council
<b>Wards</b>	Park, Tettenhall Regis & Tettenhall Wightwick
<b>EcoRecord site code</b>	WV003
<b>Enquiries Contact number</b>	(01902) 551155
<b>Enquiries Contact E-mail</b>	<a href="mailto:countrysideservice@wolverhampton.gov.uk">countrysideservice@wolverhampton.gov.uk</a>
<b>Website</b>	<a href="https://www.wolverhampton.gov.uk/visiting/parks-green-spaces-and-nature-reserves/nature-reserves">https://www.wolverhampton.gov.uk/visiting/parks-green-spaces-and-nature-reserves/nature-reserves</a>
<b>Facebook Page</b>	<a href="http://www.facebook.com/SmestowValley/">www.facebook.com/SmestowValley/</a>

Any concerns / issues found on site should be reported directly to [customerservices@wolverhampton.gov.uk](mailto:customerservices@wolverhampton.gov.uk) unless it is anti-social behaviour. This should be reported by calling 101.

## **An overview of Smestow Valley**

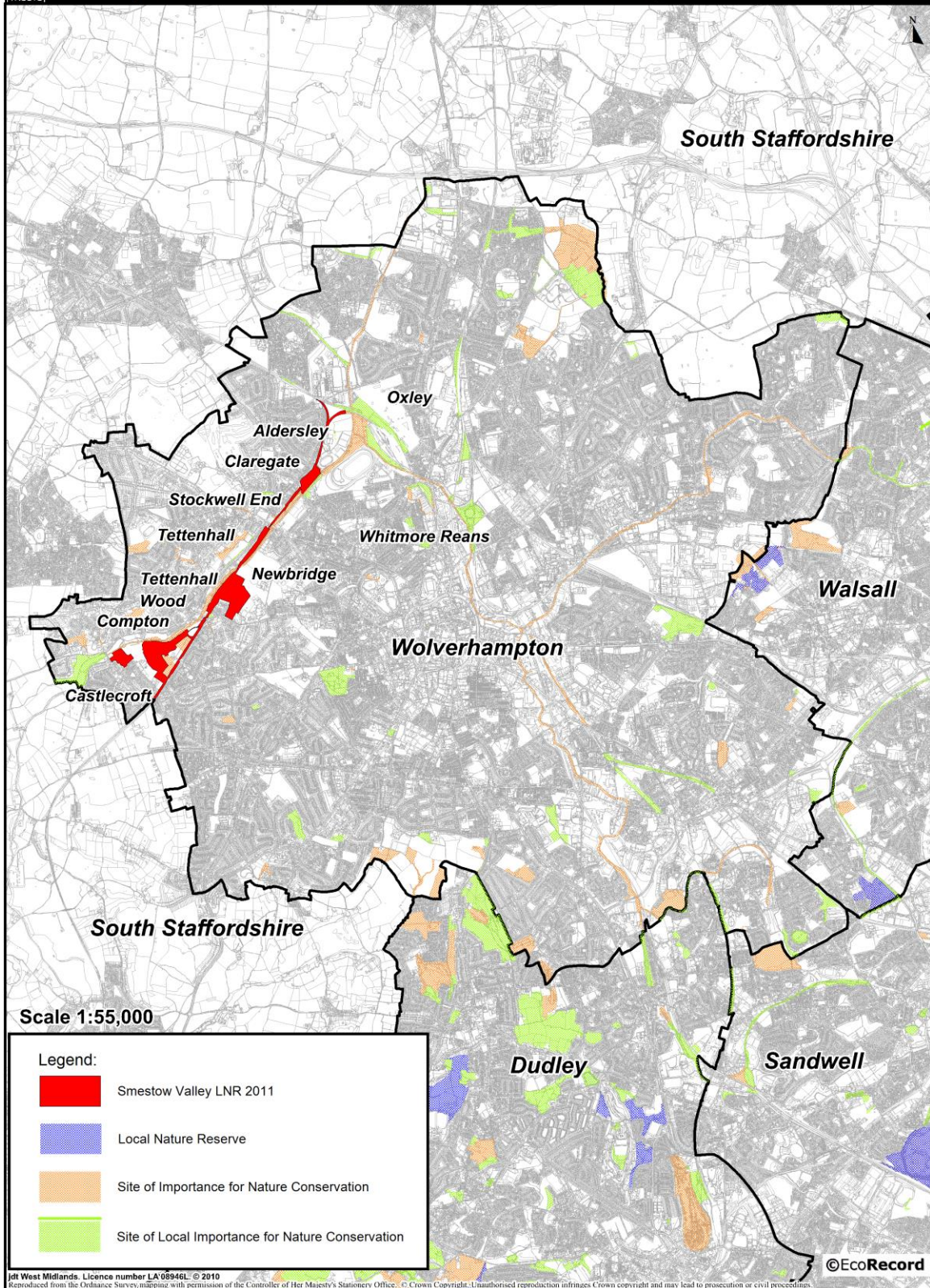
Smestow Valley Local Nature Reserve is a large and diverse site which cuts a fairly straight course across western Wolverhampton from Aldersley in the north to Castlecroft in the south. It comprises a stretch of the dismantled Wolverhampton & Kingswinford Railway and adjoining areas of former agricultural fields. The reserve follows the natural valley of the Smestow Brook which it shares with the Staffordshire & Worcestershire Canal. The reserve forms a green corridor nearly 4.5 kilometres long and covers an area of approximately 51 hectares (126 acres).

Since the previous management plan the area covered by the retained Local Nature Reserve has remained the same. However, further areas such as areas of the WEC have been designated as a Site of Importance for Nature Conservation (see Map 2).

Since 2012 management has been undertaken throughout Smestow Valley, however, the majority of works have occurred within Compartment 2: Aldersley Stadium Pathway – Hordern Road, compartment 5: Meccano Bridge – Bridgnorth Road and compartment 6: Bridgnorth Road – Windmill Lane & Castlecroft Road. This has focused on improvements to species diversity and habitat structure of the broadleaved woodland, neutral grassland meadows and Smestow Brook. This has included sensitive meadow management and enhancement, woodland thinning, planting of native local flora and bankside works along the Finchfield brook. In addition to habitat works regular maintenance, including litter picking and clearance works, have occurred across the LNR.

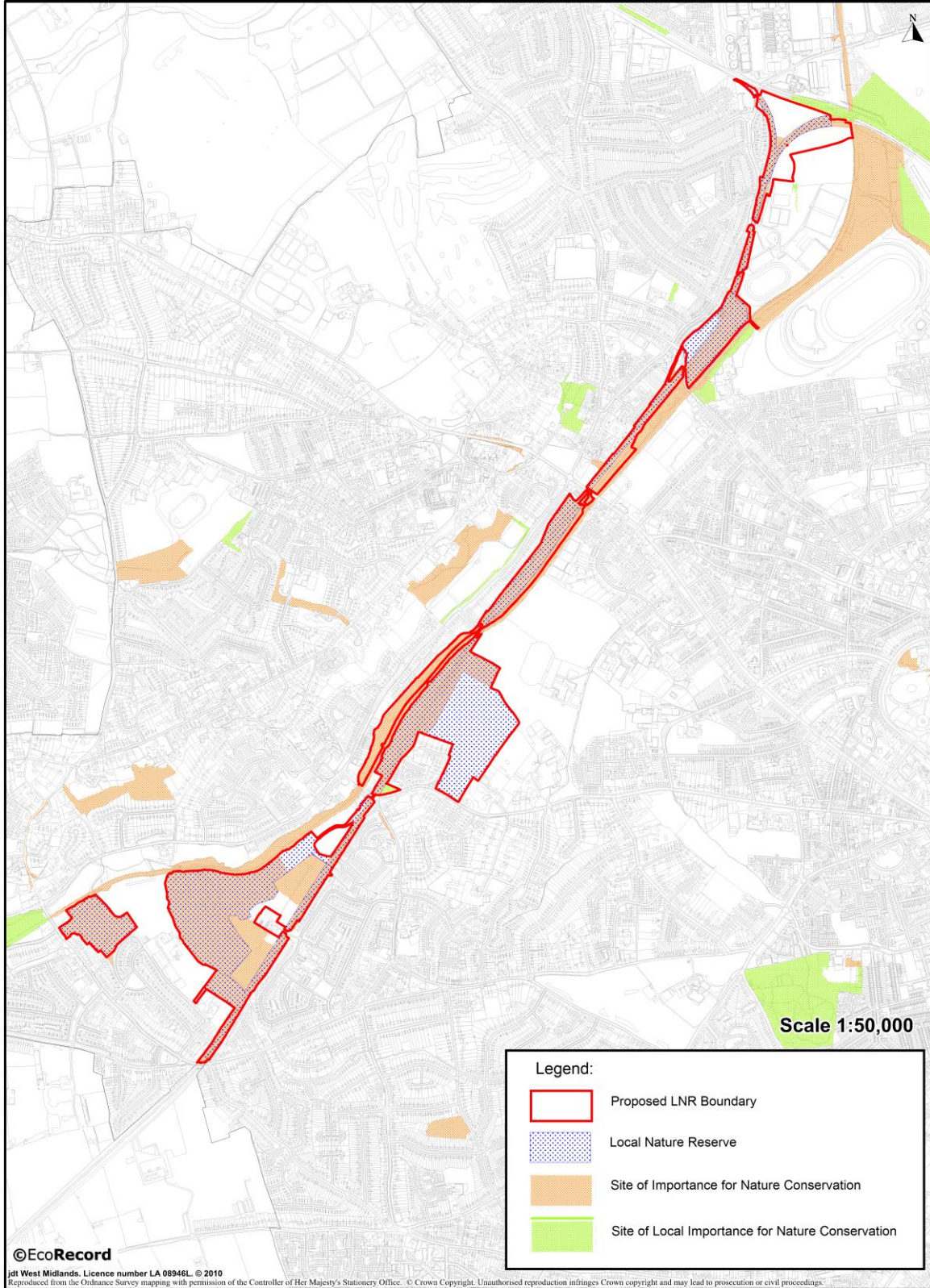


# Map 1: Smestow Valley LNR - Site location & ecological context





## Map 2: Smestow Valley - Current Nature Conservation Designations



## Management & Responsibilities

Smestow Valley Local Nature Reserve is owned by City of Wolverhampton Council with the council's Countryside Service responsible for the day-to-day management of the site.

The Countryside Service historically met regularly with Smestow Valley Advisory group up until 2017. The advisory group was comprised of a number of local residents, members of Birmingham & Black Country Wildlife Trust, Smestow Valley Bird Group, Tettenhall & District Community Council, Wolverhampton City Council, Wildside Activity Centre, Canal & Rivers Trust and Waterside Care. Since 2017, a Liaison Group made up of these organisations has met several times at the request of locally elected councillors and community groups.

There is opportunity for a community led Friends' of Smestow Valley Group to be established who would come together to carry out work needed to achieve the goals, aims and visions of the management plan and the group.

Adjoining the Local Nature Reserve boundary there are a number of additional parcels of land which are designated as part of the Smestow Valley Local Wildlife Site (SINC or SLINC – see Nature Conservation Designations) (See **Map 1 and 2**). These are thought to be in the ownership of Wolverhampton City Council, the Environment Agency, Canal and Rivers Trust or private individuals.

Description of the Nature Conservation designations can be read in detail within the 2012 - 2017 plan.

## Current Access & Infrastructure

The details provided within the 2012-17 plan are still relevant to the site and can be read from Pages 14 – 15 of this.

The former WEC area lies adjacent to Compartment 6 Bridgnorth Road – Windmill Lane and Castlecroft road. As such the WEC can be accessed along the main path similar to the other compartments. In addition, the WEC site contains numerous formal and informal paths throughout the site to allow public access through the site from the main path.

## Community & Educational Use

The City Council's Countryside and Ranger Services has and continued to work on the reserve with the following educational institutions:

- Aldersley High School
- Castlecroft Primary School
- Christ Church (Church of England) Junior School
- Claregate Primary School
- Goldthorn Park Primary School
- S. Peter's Collegiate School
- Smestow School
- St Michael's C of E (Aided) Primary School
- St. Edmunds Catholic School
- The King's Church of England School
- University of Wolverhampton

The Ranger Service have also undertaken activities/walks etc. with the following groups:

- 1<sup>st</sup> Pendeford Rainbows and Brownies

- FACTAR / Finchfield and Castlecroft Community Association (FCCA)
- Penn Friendship Club
- Springdale Wives Group
- Tettenhall Rotary Club
- WatersideCare
- Wildside Activity Centre
- Wolverhampton Historical and Civic Society
- Woodcraft Folk
- WREN
- Young Rangers at Holy Rosary

In addition, Wildside Activity Centre runs regular environmental activities for members of the public, schools and groups. While the Wildlife Trust for Birmingham & Black Country, Canal & Rivers Trust and WREN runs regularly work party days, inviting members of the public to take part in habitat works on the Smestow Valley LNR.

## Following Focused Consultation

Unlike the 2012-17 management plan no formalised consultation has been undertaken for the production of the supplementary management plan. However, external meetings were held with City of Wolverhampton Council and with the Advisory Group. These meetings discussed the future management and maintenance of Smestow Valley, along with any changes to the site have occurred since 2012.

A wider public consultation is to be undertaken in January 2020.

## Local Planning Context

The Neighbourhood Plan for the Tettenhall Wards 2014 - 2026 was formally 'adopted' in September 2014, after a community referendum the same year. The Neighbourhood Plan covers two Wolverhampton wards, Tettenhall Regis and Tettenhall Wightwick, which includes Smestow Valley LNR, and aims to encourage economic growth by providing new homes, protecting local employment and enhancing its attractiveness to visitors, whilst equally ensuring its heritage, character and environment are protected.

The following are the main policies included within the Neighbourhood Plan which give reference to the Smestow Valley LNR:

- Policy TNP6 the WEC site;
- Policy TNP13 Nature conservation areas;
- Policy TNP17 Light pollution;
- Policy TNP23 Walkability: site specific elements; and
- Policy TNP24 safe cycling.

## Principles of the Management Plan

The principles of the management plan remain as stated within the Smestow Valley Conservation and Access Management Plan 2012 – 2017. Please refer to the pages 24 and 25 of the management plan document for full details. The section below covers any additional items.

### Management for People

There is a future opportunity for a newsletter or e-newsletter to be produced every two or three months detailing events, habitat works and highlighting areas of the site. The newsletter should be designed to provide additional communication to users of the Smestow Valley to ensure that up to date information is provided on any works on site and ensure that any issues or comments are dealt with openly.

The newsletter should include and provide:

- Potential engagement opportunities to engage with the public which should include; conservation work days provided by Birmingham and Black County Wildlife Trust, Waterside Care and Wildside Activity Centre;
- Publicity for walks and talks run within Smestow Valley LNR;
- Publicity for Health and Wellbeing activities and articles to encourage public use of the LNR, for all ages, genders and those with limited mobility; and
- Up to date contact information for reporting anti-social behaviour and repair/maintenance needs, where required.

## Nature Conservation Designation

A proposed Local Nature Reserve boundary is shown on **Map 2**.

Currently the wider Smestow Valley is variously designated as Local Wildlife Site (either SINC or SLINC, see Map 1). There have been changes to the designated boundaries since the previous management plan due to some areas being resurveyed and assessed against the Birmingham and Black Country Local Site selection criteria.

As previously noted, it is recommended that a Local Sites assessment is undertaken for the whole Smestow Valley, using the data and information in this plan, and that this is submitted to the Birmingham & Black Country Local Sites Partnership for consideration. Once this has been endorsed the recommendations can be formally submitted to the City of Wolverhampton Council for adoption.

## Recording & Management Compartments (see Map 3)

The reserve has been divided into the following recording and management compartments and sub-compartments. Wherever possible these were based on clear physical features which are likely to remain identifiable for a significant number of years. All subsequent recording of habitats, species, management etc. should follow this system. These compartments have been retained in full from the previous Plan, with the addition of a new compartment (8) which comprises the WEC area.

In 2015 the Smestow Valley SINC was extended to include the area known as the WEC. There are now proposals to extend the LNR to include this area.

It was therefore deemed appropriate to add the WEC area to the Smestow Valley Supplementary Management Plan. The WEC area is referred to within the plan as Compartment 8, with full details of the site provided below accordingly.

### Compartment 1: Railway Junction – Aldersley Stadium Pathway

- **1A** Disused Railway, Railway Junction – Aldersley Stadium Pathway
- **1B** Aldersley Field 1
- **1C** Aldersley Field 2

- 1D Aldersley Field 3
- 1E Aldersley Field Hedgerows

### **Compartment 2: Aldersley Stadium Pathway – Hordern Road**

- 2A Disused Railway, Aldersley Stadium Pathway - Hordern Road
- 2B Smestow Brook, Aldersley Stadium Pathway - Hordern Road
- 2C Hordern Road Meadow
- 2D Hawthorn Wood

### **Compartment 3: Hordern Road – Tettenhall Road**

- 3A Disused Railway, Hordern Road - Tettenhall Road
- 3B Smestow Brook, Hordern Road - Tettenhall Road
- 3C Woodland Between Smestow Brook & Canal, Hordern Road - Tettenhall Road

### **Compartment 4: Tettenhall Road – Meccano Bridge**

- 4A Disused Railway, Tettenhall Road - Meccano Bridge
- 4B Meadow Between Tettenhall Road and Meccano Bridge
- 4C Smestow Brook, Tettenhall Road – Meccano Bridge
- 4D Woodland between Smestow Brook and Canal
- 4E Tettenhall Station & Surrounds

### **Compartment 5: Meccano Bridge - Bridgnorth Road**

- 5A Disused Railway, Meccano Bridge - Bridgnorth Road
- 5B The Barley Field (formally Meadows E of Railway)
  - 5B1 Barley Field Hedgerow 1 (formally Hedgerow E of Railway)
  - 5B2 Barley Field Hedgerow 2 (formally Hedgerow E of Railway)
  - 5B3 Barley Field Hedgerow 3
  - 5B4 Barley Field Hedgerow 4
  - 5B5 Barley Field Meadow
  - 5B6 Barley Field Scrub
  - 5B7 Barley Field Plantation
- 5C Woodland West of Railway
- 5D Compton Lock Meadow
- 5E Plantation West of Railway
- 5F Woodland between Smestow Brook and Canal
- 5G Smestow Brook, Meccano Bridge - Bridgnorth Road

### **Compartment 6: Bridgnorth Road - Windmill Lane & Castlecroft Road**

- 6A Disused Railway, Bridgnorth Road. - Castlecroft Road
- 6B Old Lane (including hedgerows)
- 6C Reed Field
  - 6C1 Reed Field Hedgerow
  - 6C2 Reed Field Grassland
- 6D Quarry Field
  - 6D1 Quarry Field Hedgerow
  - 6D2 Quarry Field Grassland
- 6E Quarry Wood
- 6F The Pines
- 6G Turner's Field (North)
  - 6G1 Turner's Field Hedgerow 1
  - 6G2 Turner's Field Hedgerow 2
  - 6G3 Turner's Field Hedgerow 3
  - 6G4 Turner's Field (North) Grassland

- **6G5** Turner's Field Plantation
- **6H** Turner's Pond
- **6I** Turner's Field (South)
  - **6I1** Turner's Field Hedgerow 4
  - **6I2** Turner's Field (South) Grassland
- **6J** Castlecroft Field
- **6K** Finchfield Brook
- **6L** Windmill Wood
- **6M** Windmill Wood Meadow
- **6N** Meadow Between Brook & Canal
- **6O** Smestow Brook, Bridgnorth Road – Windmill Lane

### **Compartment 7: Windmill Lane – City Boundary**

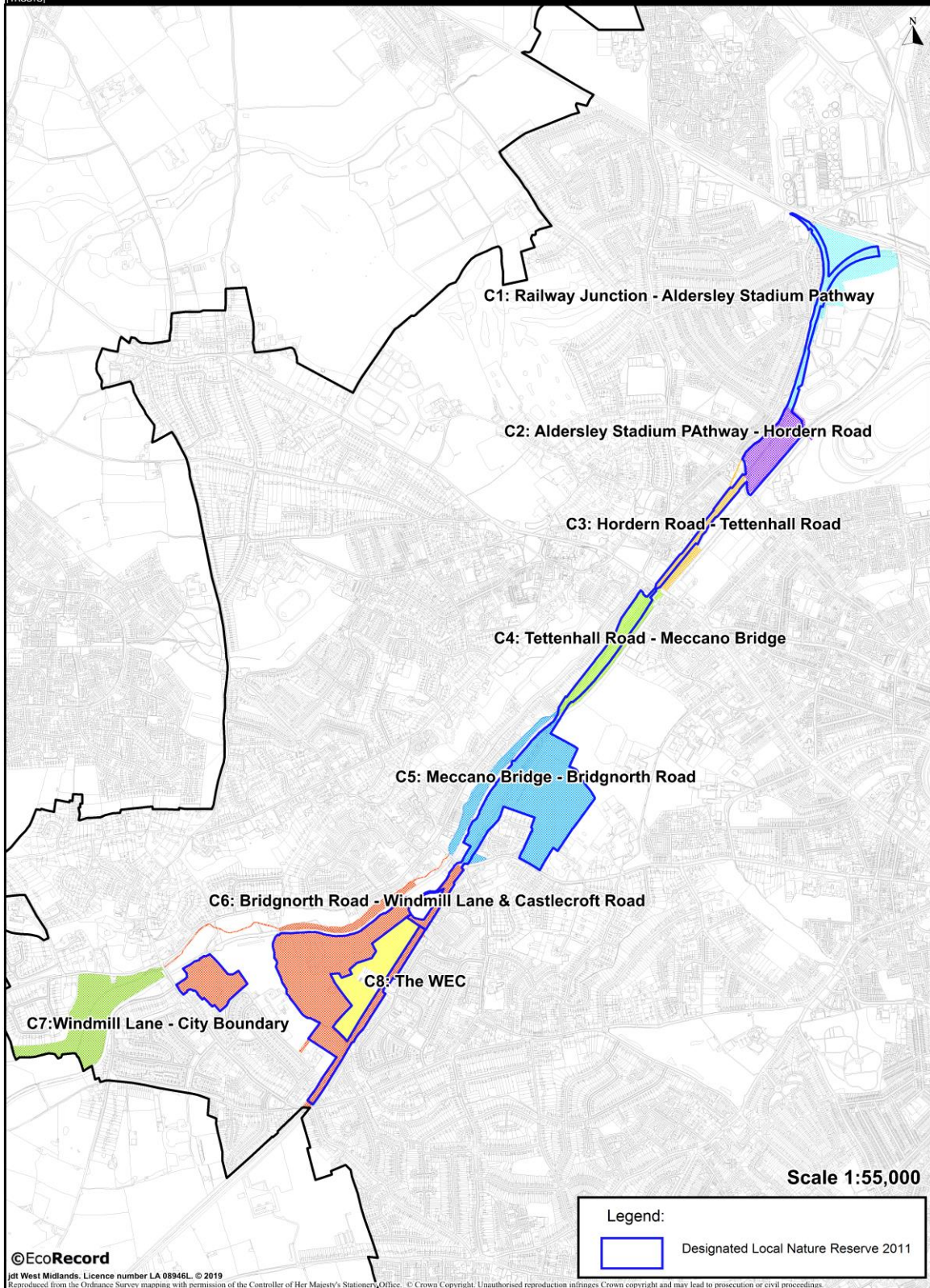
Compartment 7 lies within the designated Local Wildlife Site of Smestow Valley (SLINC), but is not under the ownership or management of City of Wolverhampton Council. This area is included within the plan as a compartment, however, as ecological records (for example for birds) are likely to be collected for the area, and it is important that they are considered in the context of the wider Smestow Valley.

### **Compartment 8: The WEC**

- **8N** WEC (North)
- **8S** WEC (South)



### Map 3: Smestow Valley - Recording & Management Compartments



## **Compartment Descriptions, Maps & Management Actions**

For each site compartment 1- 8 the section below will cover all amendments and revisions due to changes in habitats or management practices, while describing habitat works that have been undertaken since the production of the 2012-17 plan. Also included are newly proposed habitat improvement works Full compartment habitat descriptions are included within the previous management plan which should be read in conjunction with the supplementary plan.

The revised management prescriptions provided within this document will supersede those given within the previous plan.

In 2015 the Smestow Valley SINC was extended to include parts of the area known as the WEC. Due to the potential future opportunity for the WEC to be included within the LNR designation it was deemed appropriate to add this area to the supplementary plan. This area is referred to as Compartment 8, with full details provided below.

## **Compartment 1. Railway Junction – Aldersley Stadium Footpath**

### **Compartment Description Amendments**

Upon review of the Smestow Valley Management Plan compartment description, consultations and the undertaking of site visits, it is assessed that the previous provided description is still valid to cover compartment 1 Railway Junction – Aldersley Stadium Footpath. No amendments are required to the description provided in the former management plan.

### **Works Proposed / Undertaken as per the 2012-17 plan**

As per management actions detailed within the 2012-2017 plan, the City of Wolverhampton Council have removed the historic bridge present with the Local Nature Reserve, due to its unsafe condition.

At the time of publication of the Smestow Valley Supplementary Management Plan, Wildside Activity Centre have secured £13,997 of funding as part of 'The Outdoors on your Doorstep' project, from The Postcode Local Trust. This funding is to enable Wildside Activity Centre to work with local residents to improve habitats and provide and install three interpretation boards to make the reserve more user friendly. The three interpretation boards will be placed, following consultation and agreement with the Wolverhampton City Council. The project will run until 31<sup>st</sup> July 2020 and will include works and activity within Compartments 1, 2 and 3.

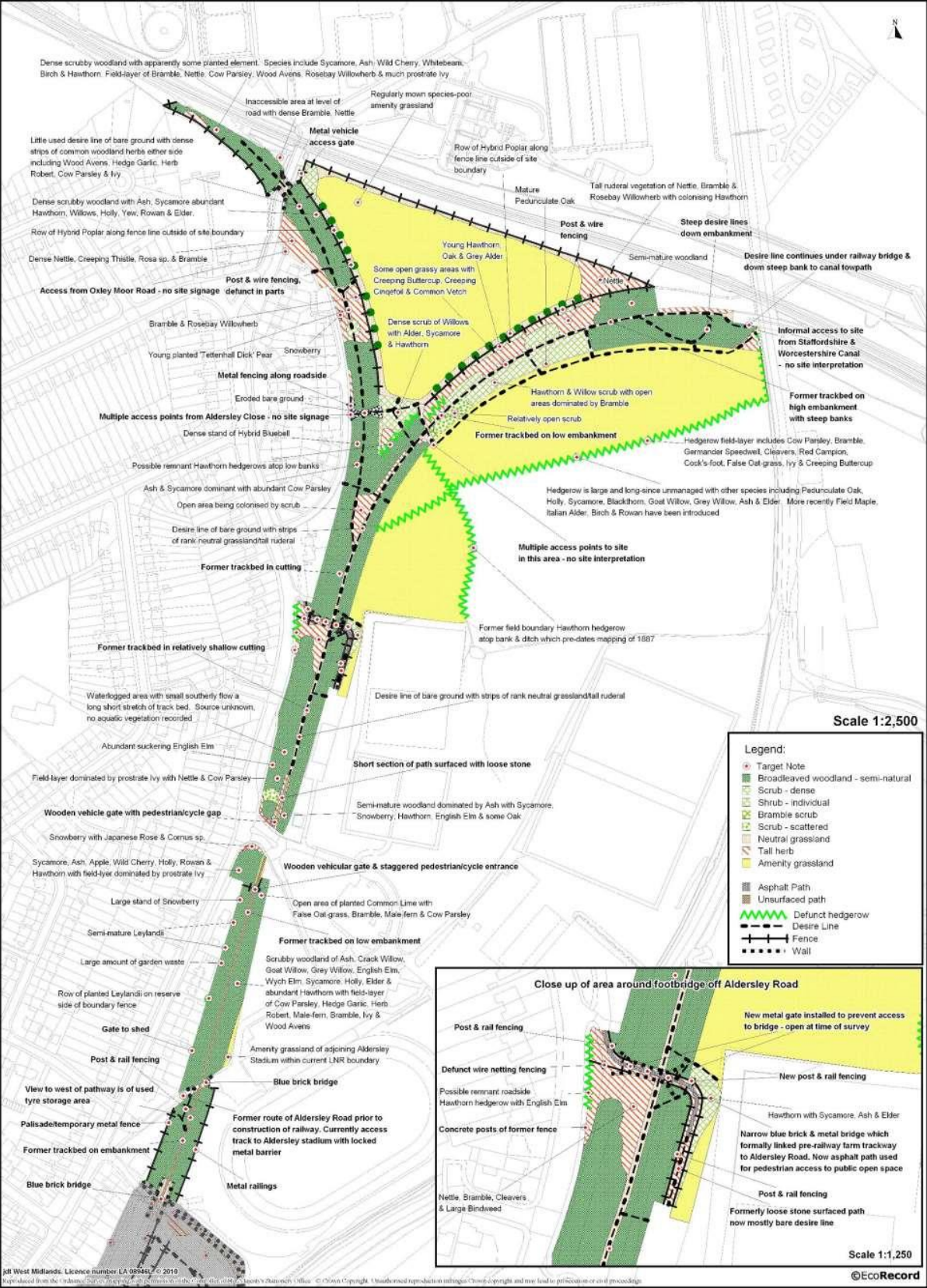


### Map 4: Compartment 1 - sub-compartments





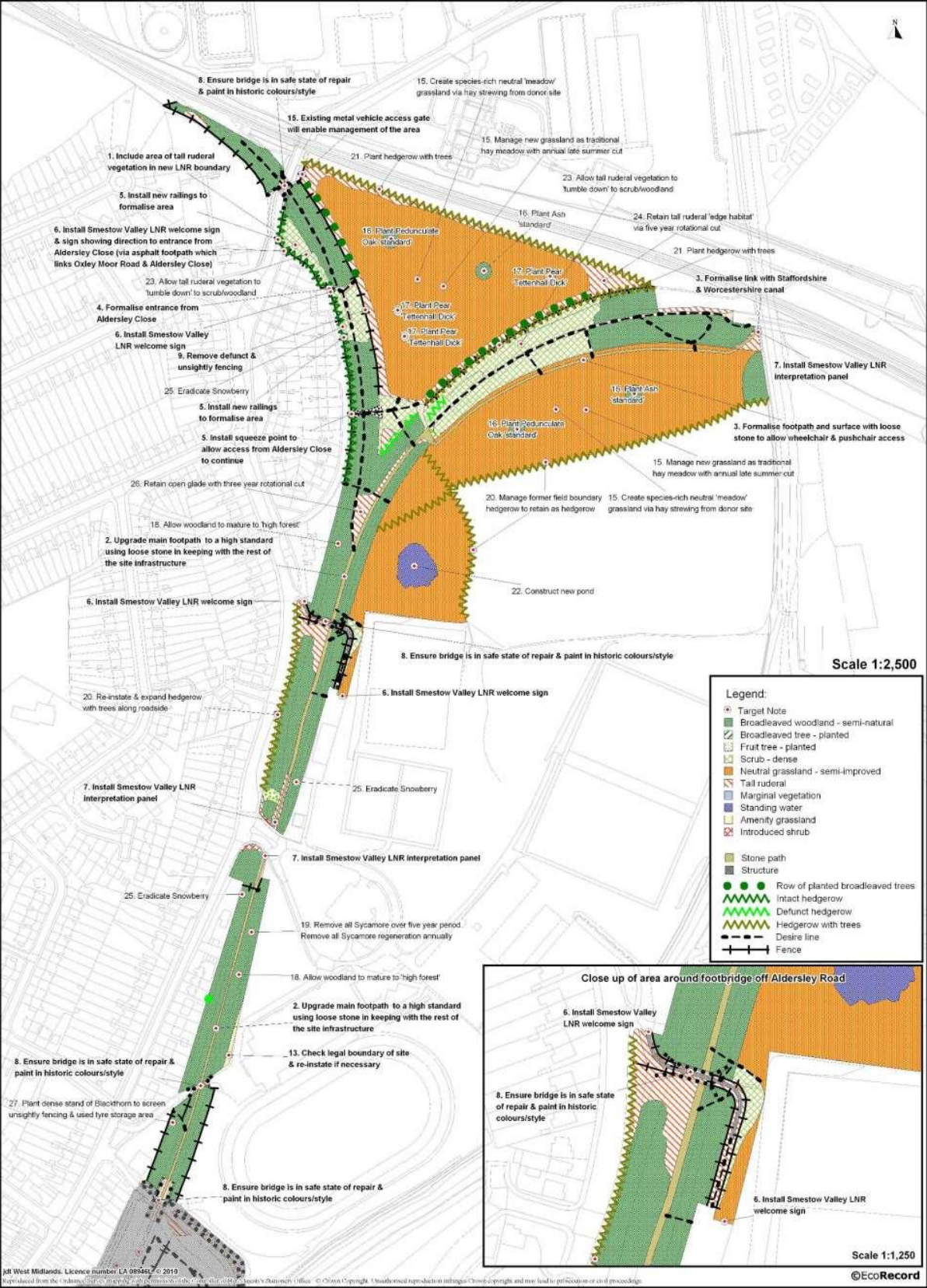
# Map 5 Compartment 1A - E CURRENT STATE



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# Map 6 Compartment 1A - E DESIRED STATE



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## Updated Management Actions – Compartment 1

Access & Infrastructure				
Action	Objective & Rationale	Method	Timings	
1	<b>Amend boundary of Smestow Valley Local Nature Reserve</b>	Adjoining the current boundary of Smestow Valley LNR lies an area of open space holding remnants of former agricultural fields which are currently managed as regularly mown amenity grassland (known as Aldersley Fields). These are apparently underutilised as open space and are of very low ecological quality. It is recommended that habitat creation is undertaken on these areas (see <b>Action 15</b> ). So as to afford these areas the same protection as the existing LNR it is recommended that these areas are added to the designated area. However, due to the removal of the historic bridge connecting these two areas. Connectivity to the LNR needs to be evaluated and assessed.	Future opportunity to formally add the former fields (now amenity grassland dominated public open space) and the small area between Oxley Moor Road and Aldersley Close to the designated LNR, once assessment of the current connectivity has been undertaken. Also make additional minor improvements to accuracy of digitised site boundary as shown on <b>maps 2 &amp; 3</b> . Local Nature Reserve status is afforded to sites by Natural England and there is a formal process that must be followed to amend the schedule.	Future Opportunity
2	<b>Upgrade primary footpath</b>	The primary footpath which follows the trackbed of the former railway is in a poor state of repair and is difficult for many people, particularly those with limited mobility, to use. This is therefore a major barrier to accessing this part of the site for many people.	Contractor to upgrade footpath to a high standard using loose stone in keeping with the rest of the site infrastructure. The footpath should be upgraded between the southern end of the compartment & the point where this links with the footpath which links to the Staffordshire & Worcestershire Canal (see <b>Action 3</b> ).	Opportunity - When resources available.
3	<b>Upgrade desire line which links canal towpath with primary footpath</b>	The desire line which runs from the primary footpath through Compartment 1B to the towpath of the Staffordshire & Worcestershire Canal is a major pedestrian route & an important link with the canal network. This is unsurfaced and therefore inaccessible to those with limited mobility, particularly when waterlogged. This should therefore be upgraded.	Contractor to construct high quality loose stone footpath in keeping with the rest of the site infrastructure.	Opportunity - When resources available.
4	<b>Formalise and improve entrance from Aldersley Close &amp; Oxley Moor Road</b>	The site entrances from Aldersley Close & Oxley Moor Road are unattractive, unwelcoming and it is not clear that you are entering Smestow Valley LNR.	See <b>Actions 5, 6 &amp; 7</b> .	Opportunity - When resources available.
5	<b>Install metal railings</b>	So as to formalise new site boundary between Oxley Moor Road & Aldersley Close.	Contractor to install.	Opportunity - When resources available.
6	<b>Install Welcome to Smestow Valley LNR signs</b>	At many of the reserve entrances and within the site there are small 'Welcome to Smestow Valley Local Nature Reserve' signs. These are a recognisable and effective way of making people	Produce to same design as current welcome signs. Contractor to produce & install.	Opportunity - When resources available.

Action	Objective & Rationale	Method	Timings	
	aware that they are entering an area of public open space. There are many points around the reserve where these are absent, however, and here it is frequently not clear to new visitors that they are entering Smestow Valley LNR (or even an area of public open space).			
7	<b>Install Smestow Valley LNR interpretation panel</b>	There is very little interpretation around Smestow Valley LNR that describes the significance and value of the site, or that informs people as to where they are and what they can see. A series of map based interpretation panels should therefore be produced that are tailored to each of the compartments.	To be designed in conjunction with local residents. Contractor to produce & install.	Opportunity - When resources available.
8	<b>Remove defunct post &amp; wire fencing</b>	The fencing forming the boundary between the former railway corridor & Compartment 1B serves no real purpose, is unattractive & its poor state of repair detracts from the attractiveness of the reserve. This should therefore be removed.	Remove fencing.	2020.
9	<b>Regularly litter pick/clean-up site</b>	Smestow Valley suffers from large amounts of littering and dumping of larger objects. This is unattractive, is a barrier to people using the site and is potentially damaging to the wildlife.	Regular clean-ups were previously undertaken by the site rangers up until 2017. However, this activity was lost when the site rangers were moved to other projects / schemes. These regular clean-ups should be re-instated with additional volunteer help sought. Other local authority staff called upon to deal with larger objects or other fly-tipped material.	Weekly.
10	<b>Carry out tree safety inspection</b>	It is a legal requirement that tree safety inspections are undertaken on areas of public open space.	In line with Wolverhampton City Council policy.	As method.
11	<b>Check legal boundary of LNR &amp; reinstate/adjust boundary accordingly</b>	A section of the designated Local Nature Reserve is currently managed as part of the amenity grassland of the adjoining Aldersley Leisure Village.	The legal boundary of the reserve should be checked in conjunction with Wolverhampton City Council Planning Department &, as appropriate, either legal advice sought on reclaiming these areas or the LNR boundary redrawn to reflect ownership.	Opportunity – When resources available.
12	<b>Remove garden waste</b>	The tipping of garden waste into sites of ecological value can introduce both unwanted nutrients and non-native species. Garden waste has been introduced into Smestow Valley LNR at points throughout the reserve.	Remove garden waste from site. Send a letter to local residents which describes the negative impacts that the introduction of garden waste has on wildlife sites and outlines the actions that can be taken by the local authority against offenders.	Ongoing.

## Habitats & Species

Action	Objective & Rationale	Method	Timings
<b>13 Create flower-rich 'meadow' type grasslands</b>	<p>The areas of amenity grassland in the north of the compartment (former fields which are outside of the current LNR boundary) are currently managed as intensively mown amenity grassland. This habitat is ecologically very poor and very few invertebrates, birds or other fauna species were observed utilising these areas during site visits. The area are also apparently underutilised by local residents (e.g. for ball games etc.).</p> <p>It is therefore recommended that traditional 'hay meadow' type grassland is created on these areas. The creation of a flower-rich and colourful grassland will not only make the site more attractive for site users, but will also attract a range of insects and in turn the birds etc. that feed upon them.</p> <p>West Midland Bird Club recommended: <i>'Increasing the floristic diversity of the grasslands and managing parts as meadows will also raise invertebrate diversity, providing increased food resources for birds'</i>.</p>	<p>The following method is outline only and expert advise should be sought prior to undertaking:</p> <ol style="list-style-type: none"> <li>I. Apply herbicide to existing vegetation in mid-summer.</li> <li>II. Spread arisings (hay) from local species-rich 'hay meadow' onto prepared area immediately following harvest (to introduce seed).</li> <li>III. Growth of the vegetation should be slow with much bare earth visible, but by autumn some meadow species should have become established (probably along with a number of ruderal annuals/biennials). If there is an extensive problem with non-target perennial species such as Broad-leaved Dock or Nettle, then localised herbicide may be applied during the following autumn or spring growing season.</li> </ol> <p>The following management should then be implemented from the next summer. This method is designed to mimic the traditional hay meadow management method:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol>	<p>As method, when resources available.</p>
<b>14 Plant 'standard' trees</b>	<p>'Standard' trees are trees which grow in the open away from the shading effects of other trees and which when mature take on the familiar spreading form. These are of both significant ecological and landscape value. Standards are lacking in much of Smestow Valley.</p>	<p>Individual Pedunculate Oak &amp; Ash trees of local provenance should be planted as depicted in the desired state map in newly created meadows. Ensure continued weeding of basal vegetation until trees are well established.</p>	<p>Autumn 2020.</p>
<b>15 Plant fruit trees</b>	<p>Pear 'Tettenhall Dick'. This local historic variety has been planted in an area of the former trackbed which is rapidly being colonised by trees &amp; shrubs, and where it is recommended that woodland is allowed to develop. It is therefore recommended that additional examples of the variety are introduced to the reserve in areas where surrounding grassland will be maintained.</p>	<p>Pear trees of the 'Tettenhall Dick' variety should be sourced &amp; planted as depicted on the desired state map in newly created meadows. Ensure continued weeding of basal vegetation until trees are well established.</p>	<p>Autumn 2020.</p>
<b>16 Allow woodland to mature</b>	<p>Much of the woodland within the compartment is developing as relatively diverse woodland comprised predominantly of native species. The mature dense scrub is also maturing towards woodland. This should be allowed to continue with minimal management.</p>	<p>Minimal intervention wherever appropriate (though see invasive species).</p>	<p>Ongoing.</p>
<b>17 Reduce Sycamore</b>	<p>The non-native tree species Sycamore is present throughout the site and dominates parts of the woodland canopy. Sycamore can be detrimental to the ecological value of woodlands through the shading out of native flora. The amount of Sycamore in the woodland canopy should therefore be reduced.</p>	<p>Divide the woodland &amp; scrub in each sub-compartment into five areas. Select one area in each of the five years of the management plan &amp; selectively remove (killing stumps with stump grinders or with herbicide) as many individuals (of all ages) as is reasonable (i.e. retain a full canopy &amp; retain</p>	<p>Autumn-winter 2020-2024 (to aid identification it may be necessary to mark the trees earlier in the growing season).</p>

Action	Objective & Rationale	Method	Timings	
		aesthetic quality). Remove all regeneration & young trees in each sub-compartment annually.	Regeneration & young trees can be removed all year.	
18	<b>'Gap-up' hedgerows &amp; re-instate traditional hedgerow management</b>	The existing hedgerows within the compartment have not been managed for many years and have become gappy or outgrown. This has diminished their value as a habitat and as landscape features. Gaps in the hedgerows should therefore be filled and traditional hedgerow management instated where feasible.	'Gap-up' hedgerows by planting locally sourced Hawthorn. Where hedgerows are low and 'leggy' it may be possible to lay or coppice the hedgerows prior to gapping-up. Once these have established they should be managed using the traditional technique of hedge laying. It is not appropriate to coppice large outgrown hedgerows, these should be managed by gapping-up, facing-up & topping so as to retain as large & entire feature hedgerows.	Autumn-winter 2020-2024.
19	<b>Plant new hedgerows</b>	The creation of additional hedgerows with standard trees within the compartment will provide additional habitat for a variety of fauna and flora whilst being of significant landscape value (As shown on <b>Map 6</b> Compartment 1A – E).	Plant Hawthorn dominated hedgerows with mix of other locally native tree and shrub species. Where appropriate plant trees within hedgerow that will be allowed to mature as standards. Species particularly appropriate for standards include Pedunculate Oak and Ash. Following establishment the hedgerows should be managed using the traditional technique of hedge laying.	Autumn 2020.
20	<b>Create new pond</b>	There is very little open water in Smestow Valley & none in compartment 1. A pond is depicted close to this area on the 1887 map. Ponds support many species of plant and animal that will not currently be able to survive in this part of the site. (As shown on <b>Map 6</b> Compartment 1A – E).	The most suitable method for creating a new pond in this section of the site should be investigated prior to creation (e.g. the level of the local water-table will determine the need for/type of liner etc.). The pond should be constructed with a variety of depth and angle of bank.	2020/21
21	<b>Allow areas of tall ruderal vegetation &amp; Bramble to 'tumble down' to woodland</b>	The scrub and tall ruderal habitats are succeeding to secondary woodland comprised of mostly native species. To retain the current extent of these habitats would require labour intensive management. It is therefore recommended that most of these areas are left to develop towards woodland naturally.	No thinning, removal (other than of invasive species, see other actions) or planting etc. is currently required in these areas (parts of embankment & area between Oxley Moor Road and Aldersley Close). This should be reviewed in 2023.	Ongoing.
22	<b>Retain tall ruderal 'edge habitat'</b>	Areas of tall ruderal vegetation around edge of northern triangle of grassland.	Cut 20% of area annually.	Autumn-winter 2020-2024.
23	<b>Remove Snowberry</b>	There are stands of the introduced Snowberry within the site. This species can become invasive and shades out field-layer vegetation.	Remove Snowberry through cutting followed by treatment of the stumps.	Autumn-winter 2020-2024.
24	<b>Retain open glade</b>	Woodland glades are valuable habitats that support a variety of species that would not otherwise survive within the compartment. It is therefore recommended that glades are retained.	Cut approximately 30% of the area annually.	Autumn-winter 2020-2024.
25	<b>Plant Blackthorn</b>	To screen unsightly fencing & used tyre storage area.	Plant Blackthorn whips (young trees) densely along top part of the embankment.	Autumn 2020.
26	<b>Enhancement of grassland for ground</b>	Ground nesting birds require a variation of short and tall grass to nest in and for shelter. At the current time the amenity grassland	As per <b>Management Action 13</b> .	Annually as method.

Action	Objective & Rationale	Method	Timings
<p><b>nesting and overwintering bird species.</b></p>	<p>present within the site provides limited foraging resources and no sheltering habitat.</p> <p>To improve habitats for ground nesting and overwintering bird species it is important to undertake management on the onsite grassland to allow the grassland species to flower. In addition, leaving uncut margins and corners within the onsite grassland would extend the availability of seeds into the winter period where food can be more scarce.</p>	<p>The following method is outline only and expert advice should be sought prior to undertaking:</p> <p><b>IV.</b> Apply herbicide to existing vegetation in mid-summer.</p> <p><b>V.</b> Spread arisings (hay) from local species-rich 'hay meadow' onto prepared area immediately following harvest (to introduce seed).</p> <p><b>VI.</b> Growth of the vegetation should be slow with much bare earth visible, but by autumn some meadow species should have become established (probably along with a number of ruderal annuals/biennials). If there is an extensive problem with non-target perennial species such as Broad-leaved Dock or Nettle, then localised herbicide may be applied during the following autumn or spring growing season.</p> <p>The following management should then be implemented from the next summer. This method is designed to mimic the traditional hay meadow management method:</p> <p><b>I.</b> Leave area uncut from November – August.</p> <p><b>II.</b> Cut &amp; remove arisings in first week of August.</p> <p><b>III.</b> Gang mow &amp; remove arisings August – October.</p> <p>A field margin should be left uncut each August to provide additional food for bird species through winter. This should be undertaken on a rotational basis.</p>	
<p><b>27 Enhancement of foraging and nesting opportunities on site for local bird and bat species</b></p>	<p>The scrub, hedgerow and woodland habitat on site provide suitable habitat for local bat and bird populations.</p> <p>To further increase the opportunity for these species on site management practices should aim to increase structural and floristic diversity of broadleaved woodland, scrub and hedgerow to provide optimal nesting material and foraging habitat (berries, nuts and invertebrates).</p>	<p>Management practices to promote varying age structure and floral diversity within onsite habitats to increase foraging and nesting resources.</p> <p>Follow the relevant management practices (<b>16, 17, 18, 19 and 21</b>) as described within the table above.</p>	<p>As shown above</p>
<p><b>28 Enhancement of grassland and woodland for Invertebrates</b></p>	<p>The physical structure of the grassland sward in addition to high floristic diversity within the habitat is important for a wide variety of invertebrates. This will not only ensure an abundance of the necessary food plant but varied topography such as areas of short and tall grass and bare soil on site.</p> <p>To improve the semi-improved neutral grassland within the compartment a traditional hay meadow management regime will assist in achieving a good floristic diversity. In addition, by retaining an area of grassland on a rotational basis uncut and</p>	<p>The following management method has been designed to mimic traditional hay meadow management:</p> <p><b>I.</b> Leave area uncut from November – August.</p> <p><b>II.</b> Cut &amp; remove arisings in first week of August.</p> <p><b>III.</b> Gang mow &amp; remove arisings August – October.</p> <p>A field margin should be left uncut each August to provide additional food for bird species through winter. This should be undertaken on a rota to ensure that no margins remain uncut</p>	<p>Annually as method.</p>

Action	Objective & Rationale	Method	Timings
	<p>retaining any areas of bare earth will ensure a varied structure which will benefit invertebrates.</p> <p>The broadleaved woodland present on site provides suitable habitat for numerous invertebrates that thrive in this habitat.</p> <p>Similar to nesting birds and bats they thrive on a structural variation within woodland to the bespoke habitat that its species and sub species requires.</p> <p>The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p>	<p>for a period of two years. This would ensure that successional growth does not extend into the grassland.</p> <p>Any bare earth areas within the grassland or along embankments on site should be retained in situ for ground nesting bees.</p> <p>Management practices to promote varying age structure and floral diversity within onsite habitats to increase resources on site.</p> <p>Follow the relevant management actions (<b>actions 16, 17, 18, 19 and 21</b>) as described within the table above.</p> <p>A log piles should be placed / dead wood to left in situ within areas of the broadleaved woodland.</p>	<p>Autumn / winter 2020</p>
<p><b>29</b>    <b>Monitoring of management action and action results</b></p>	<p>As management actions are undertaken, it is important to monitoring the completion of those actions and the results of the management to ensure the desired impact / outcome has occurred.</p>	<p>All local authority and community groups should report completion of management actions and future proposals at regular liaison group meetings to ensure there are no duplications and opportunities are not missed. In addition, to any issues caused by habitat works.</p> <p>At end of the period covered by the management plan, an assessment should be carried out to confirm all actions undertaken within the period inform a review and an update of the Smestow Valley Management Plan.</p>	<p>Ongoing as management activity are undertaken.</p> <p>A completed assessment undertaken at the completion of the management period late 2024.</p>

## **Compartment 2. Aldersley Stadium Footpath – Hordern Road**

### **Compartment Description Amendments**

Upon review of the Smestow Valley Management Plan compartment description, consultations and the undertaking of site visits, it is assessed that the previous provided description is still valid to cover compartment 2 Aldersley Stadium Footpath – Hordern Road. No amendments are required to the description provided in the former management plan.

### **Works Proposed / Undertaken as per the 2012-17 plan**

As per management actions detailed within the 2012-2017 plan, Wildside Activity Centre have been undertaking improvement works within the mature hawthorn scrub / woodland area known as 'Hawthorn Wood' which includes coppicing, pruning, planting and hedge laying, and while also undertaking widespread Himalayan balsam control along the river corridor.

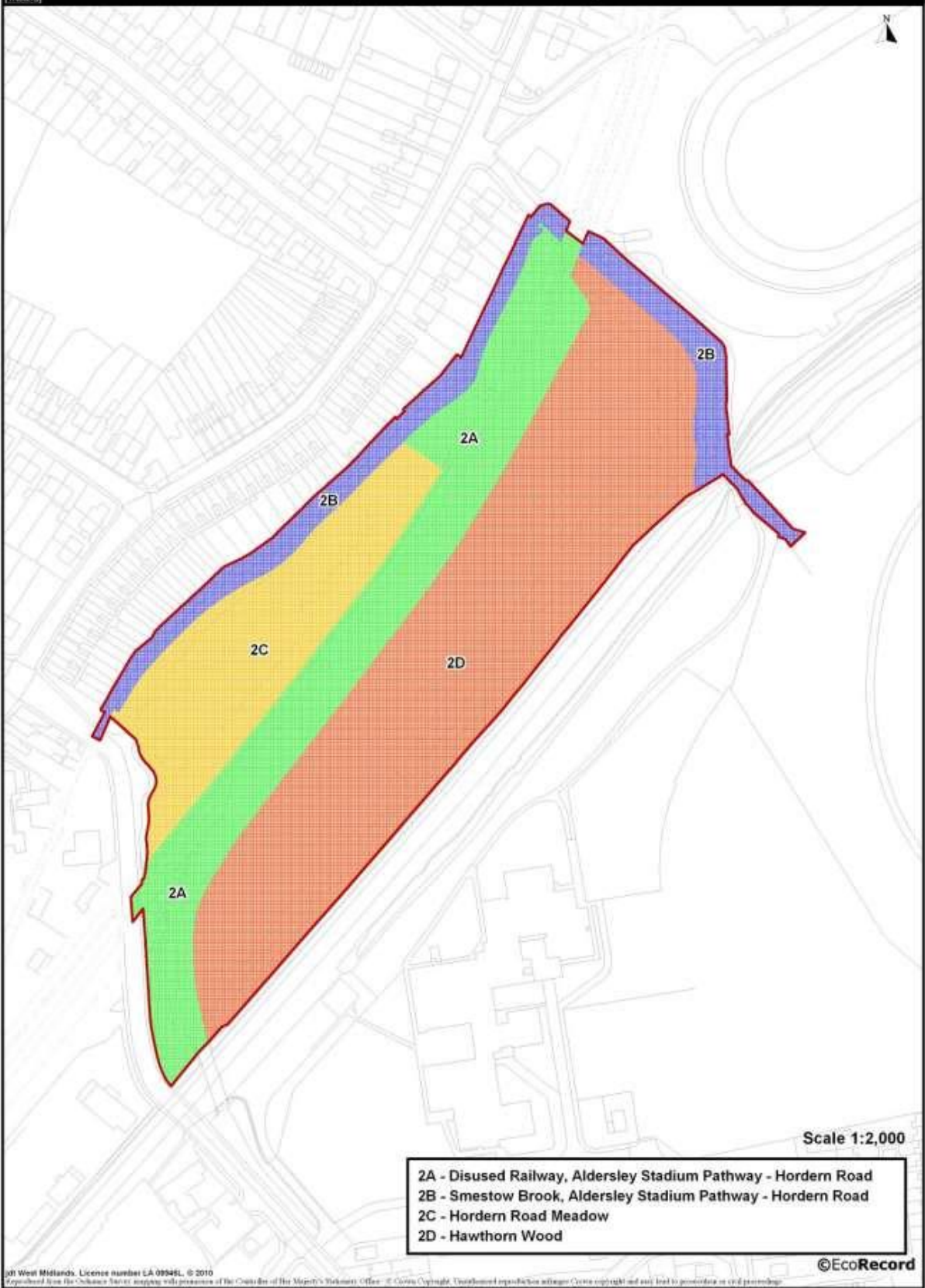
To provide further nesting habitat for wildlife, Wildside Activity Centre has installed bird and bat boxes with Hawthorn Wood and created habitat piles within the compartment.

In addition, to improve welcome and public services within the compartment, Wildside Activity Centre have installed benches, bins and interpretation boards, and undertaken regular litter picking and clear ups along the footpaths. In conjunction with this, City of Wolverhampton Council have installed safer railings on the Courtauld's Bridge.

Working in partnership the Wightwick Regis Enterprise Network (WREN) and the Canal & Rivers Trust secured £55,000, in 2011, to install a ramp to the towpath providing improved public access within the Local Nature Reserve.

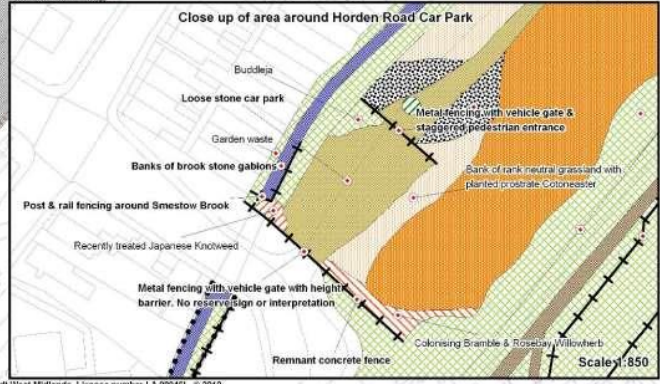
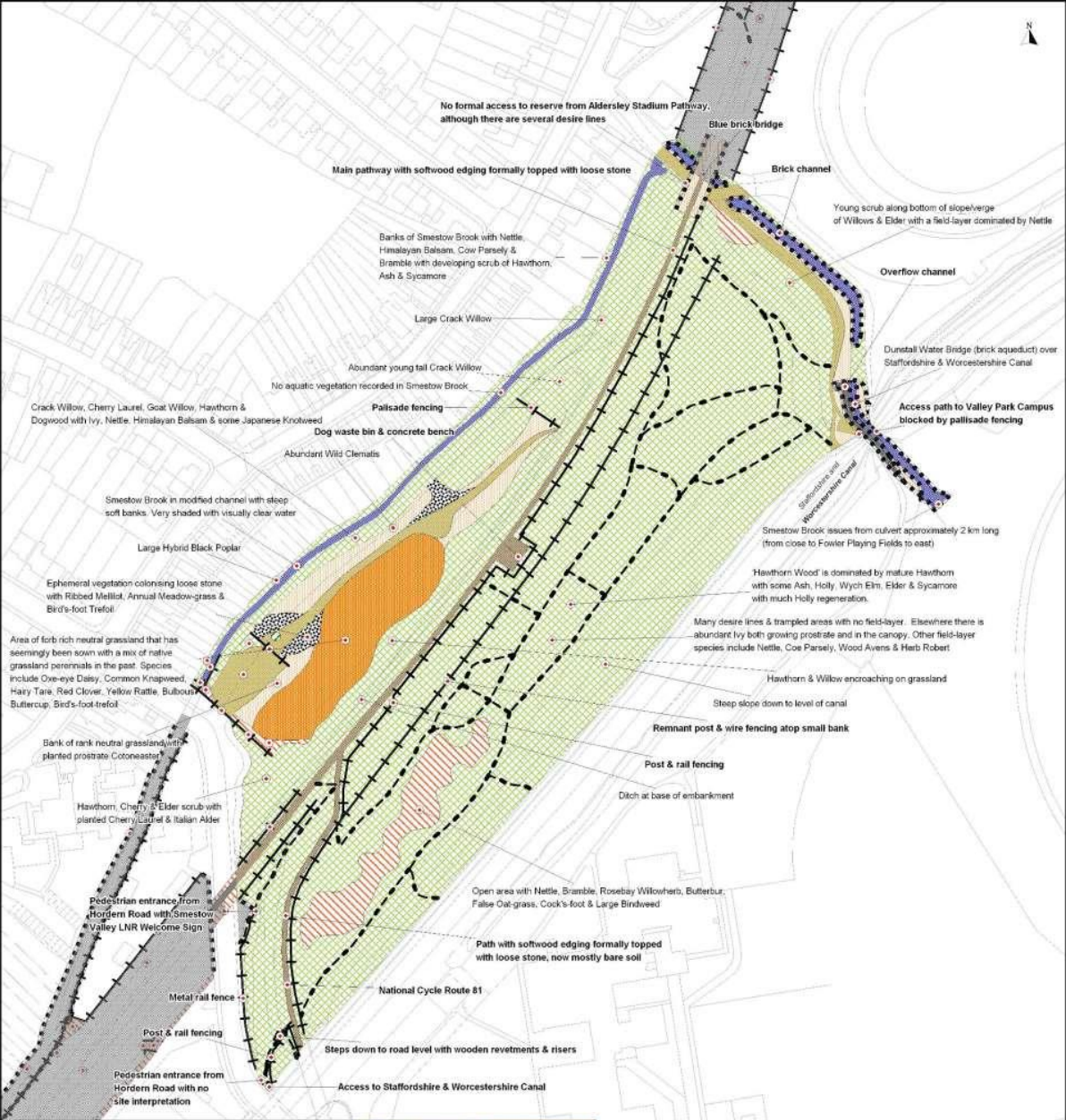


# Map 7 Compartment 2 - sub-compartments





# Map 8 Compartments 2A, 2B, 2C, 2D CURRENT STATE



Scale 1:1,500

**Legend:**

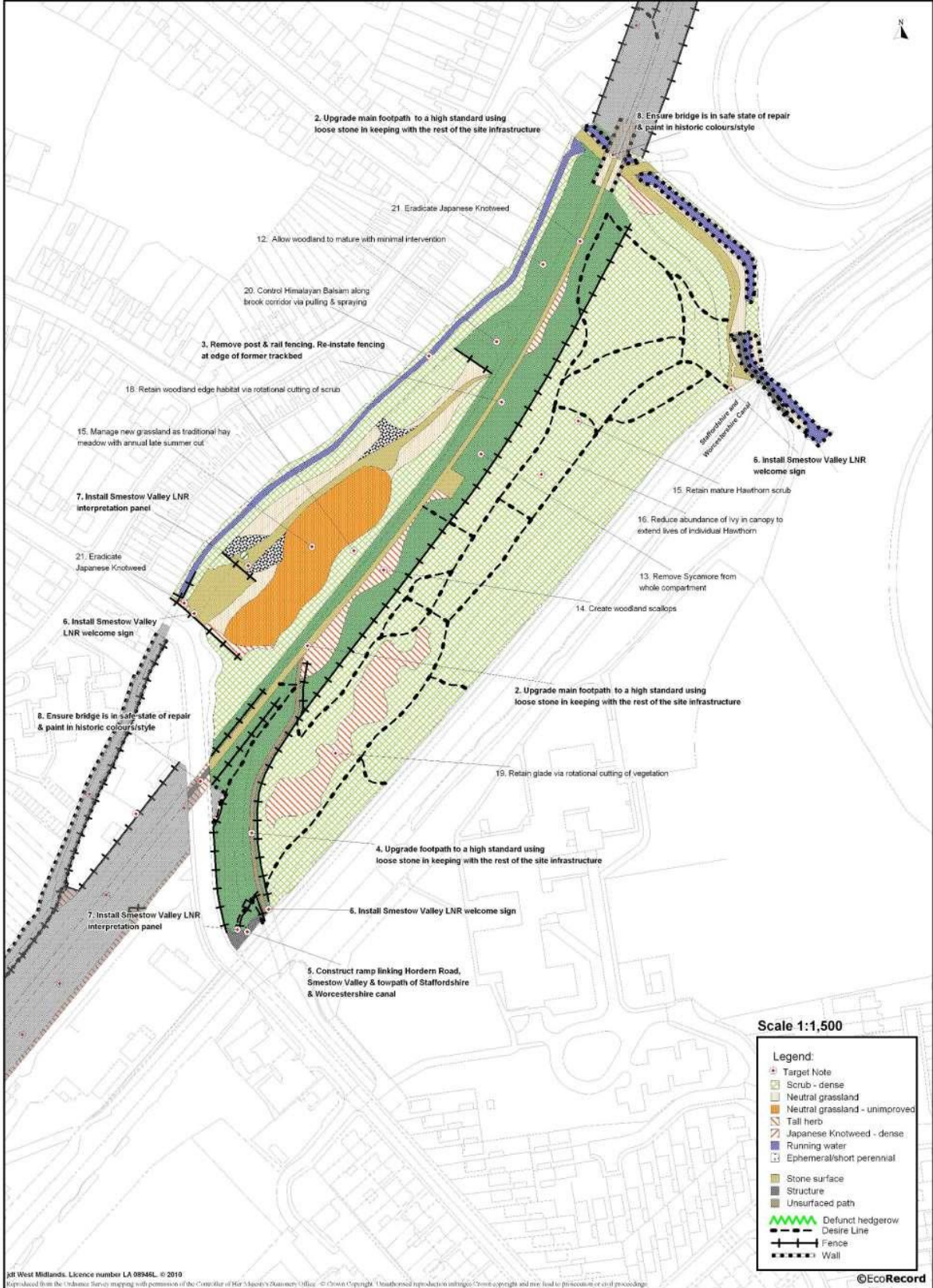
- Target Note
- Scrub - dense
- Neutral grassland
- Neutral grassland - unimproved
- Tall herb
- Japanese Knotweed - dense
- Running water
- Ephemeral/short perennial
- Stone surface
- Unsurfaced path
- Desire Line
- Fence
- Wall

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# Map 9 Compartments 2A, 2B, 2C, 2D DESIRED STATE



## Updated Management Actions – Compartment 2

Access & Infrastructure				
Action	Objective & Rationale	Method	Timings	
1	<b>Amend boundary of Smestow Valley Local Nature Reserve</b>	Within the compartment there are areas that form part of the Smestow Valley open space and that are of ecological and amenity value, but that are not within the current LNR boundary. So as to afford these areas the same protection as the existing LNR it is recommended that these areas are added to the designated area. In addition, there are sections of the adjoining canal corridor included in the LNR boundary. These areas should be removed from the designated area, as they form part of a separately designated site (Staffordshire & Worcestershire Canal SINC).	Future opportunity to formally add sections of Smestow Brook to designated area. Also make additional minor improvements to accuracy of digitised site boundary as shown on <b>maps 2 &amp; 3</b> . Additionally, formally remove sections of Staffordshire & Worcestershire Canal SINC from designated area. Local Nature Reserve status is afforded to sites by Natural England and there is a formal process that must be followed to amend the schedule.	Future opportunity
2	<b>Upgrade primary footpath</b>	The primary footpath which follows the trackbed of the former railway is in a poor state of repair and is difficult for many people, particularly those with limited mobility, to use. This is therefore a major barrier to accessing this part of the site for many people.	Contractor to upgrade footpath to a high standard using loose stone in keeping with the rest of the site infrastructure. The footpath should be upgraded along the whole length of the compartment.	Opportunity - When resources available.
3	<b>Remove post &amp; rail fencing. Re-instate fencing at edge of former trackbed</b>	Post & rail fencing was erected down the middle of the former railway trackbed some years ago. This has created a narrow, dark corridor and detracts from the historic extent of the railway line. This should be removed and the former fencing at the trackbed edge re-instated.	Remove post & rail fencing and erect post & rail fencing at edge of former trackbed.	Opportunity - When resources available.
4	<b>Upgrade footpath which links Hordern Road</b>	The footpath which follows the route of the former railway track to Courtauld's rayon plant and forms part of National Cycle Route 81 (joining Hordern Road via a long wooden ramp) is in a poor state of repair and is difficult for many people, particularly those with limited mobility, to use. This is therefore a major barrier to accessing this part of the site for many people.	Contractor to upgrade footpath to a high standard using loose stone in keeping with the rest of the site infrastructure.	Opportunity - When resources available.
5	<b>Install Welcome to Smestow Valley LNR signs</b>	At many of the reserve entrances and within the site there are small 'Welcome to Smestow Valley Local Nature Reserve' signs. These are a recognisable and effective way of making people aware that they are entering an area of public open space. There are many points around the reserve where these are absent, however, and here it is frequently not clear to new visitors that they are entering Smestow Valley LNR (or even an area of public open space).	Produce to same design as current welcome signs. Contractor to produce & install.	Opportunity - When resources available.
6	<b>Install Smestow Valley LNR interpretation panel</b>	There is very little interpretation around Smestow Valley LNR that describes the significance and value of the site or that informs people as to where they are and what they can see. A	To be designed in conjunction with local residents. Contractor to produce & install.	Opportunity - When resources available.

Action		Objective & Rationale	Method	Timings
		series of map based interpretation panels should therefore be produced that are tailored to each of the compartments.		
7	<b>Formalise and improve entrance into LNR</b>	The site entrances onto LNR are unattractive, unwelcoming and it is not clear that you are entering Smestow Valley LNR.	See <b>Actions 4, 5 &amp; 6.</b>	Opportunity - When resources available.
8	<b>Carry out tree safety inspection</b>	It is a legal requirement that tree safety inspections are undertaken on areas of public open space.	In line with Wolverhampton City Council policy.	As method.
9	<b>Remove garden waste</b>	The tipping of garden waste into sites of ecological value can introduce both unwanted nutrients and non-native species. Garden waste has been introduced into Smestow Valley LNR at points throughout the reserve.	Remove garden waste from site. Send a letter to local residents which describes the negative impacts that the introduction of garden waste has on wildlife sites and outlines the actions that can be taken by the local authority against offenders.	Ongoing.

Habitats & Species				
Action		Objective & Rationale	Method	Timings
10	<b>Allow woodland to mature</b>	Much of the woodland within the compartment is developing as relatively diverse woodland comprised predominantly of native species. The mature dense scrub is also maturing towards woodland. This should be allowed to continue with minimal management.	Minimal intervention wherever appropriate (though see invasive species).	Ongoing.
11	<b>Reduce Sycamore</b>	The non-native tree species Sycamore is present throughout the site and dominates parts of the woodland canopy. Sycamore colonises sites rapidly and can quickly become dominant. This is not only detrimental to the canopy and shrub layer species of a woodland, but due to the heavy shading and dense leaf-litter that Sycamore produces, to field-layer species also. The amount of Sycamore in the woodland canopy should therefore be reduced.	Divide the woodland & scrub in each sub-compartment into five areas. Select one area in each of the five years of the management plan & selectively remove (killing stumps with stump grinders or with herbicide) as many individuals (of all ages) as is reasonable (i.e. retain a full canopy & retain aesthetic quality). Remove all regeneration & young trees in each sub-compartment annually.	Autumn-winter 202-2024 (to aid identification it may be necessary to mark the trees earlier in the growing season). Regeneration & young trees can be removed all year.
12	<b>Reduce abundance of Ivy in canopy</b>	Ivy dominates the field-layer & is abundant in the crowns of many of the individual Hawthorn which comprise Hawthorn Wood.	Remove Ivy growing in crown of mature Hawthorn from 10% of trees/shrubs.	Autumn-winter 2020-2024.

Action	Objective & Rationale	Method	Timings
	Although of some ecological value to invertebrates etc. & aesthetically interesting, this abundance in the crown is detrimental to the individual Hawthorns & die-back is frequently in evidence. To retain both the appearance of the area and extend the lives of the individual Hawthorn it is necessary to rotationally remove Ivy from the crowns.		
13	<b>Manage grassland via traditional 'hay-meadow' method</b>	The following management method has been designed to mimic traditional hay meadow management: I. Leave area uncut from November – August. II. Cut & remove arisings in first week of August. III. Gang mow & remove arisings August – October.	Annually as method.
14	<b>Retain woodland edge habitat</b>	Cut back 20% of shrubs and small trees each year around edges of woodland over five years.	Autumn-winter 2020-2024.
15	<b>Control Himalayan Balsam</b>	Pull Himalayan Balsam by hand throughout the growing season. Spraying of large stands may be appropriate away from open water, though a suitably qualified and experienced individual should undertake this.	May-August 2020-2024.
16	<b>Remove Cotoneaster</b>	Pull by hand or cut and treat with appropriate herbicide.	Ongoing.
17	<b>Retain suitable habitat for Kingfisher</b>	Any naturally eroded cliffs along Smestow brook should be retained, away from publicly accessible areas, for nesting habitat for Kingfisher.	Ongoing
18	<b>Enhancement of foraging and nesting opportunities on site for</b>	Management practices to promote varying in age structure and flora diversity within onsite habitats to increase foraging and nesting resources on site.	As shown within method above.

Action	Objective & Rationale	Method	Timings
	<p><b>breeding and overwintering birds and native bat species</b></p> <p>To further increase the opportunity for these species on site management practices should aim to increase structural and floristic diversity of broadleaved woodland, scrub and grassland on site to provide optimal nesting material and foraging habitat (berries, nuts and invertebrates).</p>	<p>Follow the relevant management practices (<b>10, 11, 12, 14, 15, 16 and 17</b>) as described within the table above.</p>	
<p><b>19</b></p>	<p><b>Enhancement of Smestow Brook to provide opportunities for local water vole populations</b></p> <p>Water vole records are known to present within the compartment. To utilise the river corridor, water voles relies on marginal and bankside planting for foraging resources. As the banksides becomes dominated by invasive species such as Himalayan balsam other marginal species become further restricted reducing the year around food resource for the species.</p> <p>To improve the bankside habitats control works should be undertaken to reduce and prevent the further spread of Himalayan balsam.</p> <p>Bank side planting should be undertaken within the areas treated for Himalayan balsam to prevent Himalayan balsam recolonising the area and to improve floristic diversity along the brook corridor.</p>	<p>Works to control and prevent the further spread of Himalayan balsam should be undertaken as per <b>management action 15</b>.</p> <p>Once the areas has been treated for Himalayan Balsam the bankside planting (to include purple loosestrife) should be implemented to prevent Himalayan balsam re-colonising the treated area.</p>	<p>May-August 2020-2024.</p>
<p><b>20</b></p>	<p><b>Enhancement of grassland and woodland for Invertebrates</b></p> <p>The physical structure of the grassland sward in addition to high floristic diversity within the habitat is important for a wide variety of invertebrates. This will not only ensure an abundance of the necessary food plant but varied topography such as areas of short and tall grass and bare soil on site.</p> <p>To improve the semi-improved neutral grassland within the compartment as traditional hay meadow management will assist in achieving a good floristic diversity. In addition, by retain an area of grassland on a rotation basis uncut and any areas of bare earth will ensure a varied structure which will benefit invertebrates.</p> <p>The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p>	<p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol> <p>A field margin should be left uncut each August to provide additional food for bird species through winter. This should be undertaken on a rota to ensure that no margins remain uncut for a period of two years. This would ensure that successional growth does not extend into the grassland.</p> <p>An bare earth areas within the grassland or along embankments on site should be retained in situ for ground nesting bees.</p> <p>Log piles should be placed / dead wood to be left in situ within areas of the broadleaved woodland.</p>	<p>Annually as method.</p> <p>Autumn / winter 2020</p>
<p><b>21</b></p>	<p><b>Monitoring of management action and action results</b></p> <p>As management actions are undertaken, it is important to monitoring the completion of those actions and the results of the management to ensure the desired impact / outcome has occurred.</p>	<p>All local authority and community group should report completion of management actions and future proposals at regular liaison group meetings to ensure that no duplications</p>	<p>Ongoing as management activity are undertaken.</p>

Action	Objective & Rationale	Method	Timings
		<p>or opportunities are not missed. In addition, to any issues caused by habitat works.</p> <p>At end of the period covered by the management plan, an assessment should be undertaken to confirm all actions undertaken within the period and should include a review and an update of the Smestow Valley Management Plan.</p>	<p>A completed assessment undertaken at the completion of the management period late 2024.</p>

## **Compartment 3. Hordern Road – Tettenhall Road**

### **Compartment Description Amendments**

Upon review of the Smestow Valley Management Plan compartment description, consultations and the undertaking of site visits, it is assessed that the previous provided description is still valid to cover compartment 3 Hordern Road – Tettenhall road. Therefore, no amendments are required to the description provided in the former management plan.

### **Works Proposed / Undertaken as per the 2012-17 plan**

As per management actions detailed within the 2012-2017 plan, the Birmingham and the Black Country Wildlife Trust work party has undertaken Himalayan Balsam control along the river corridor.

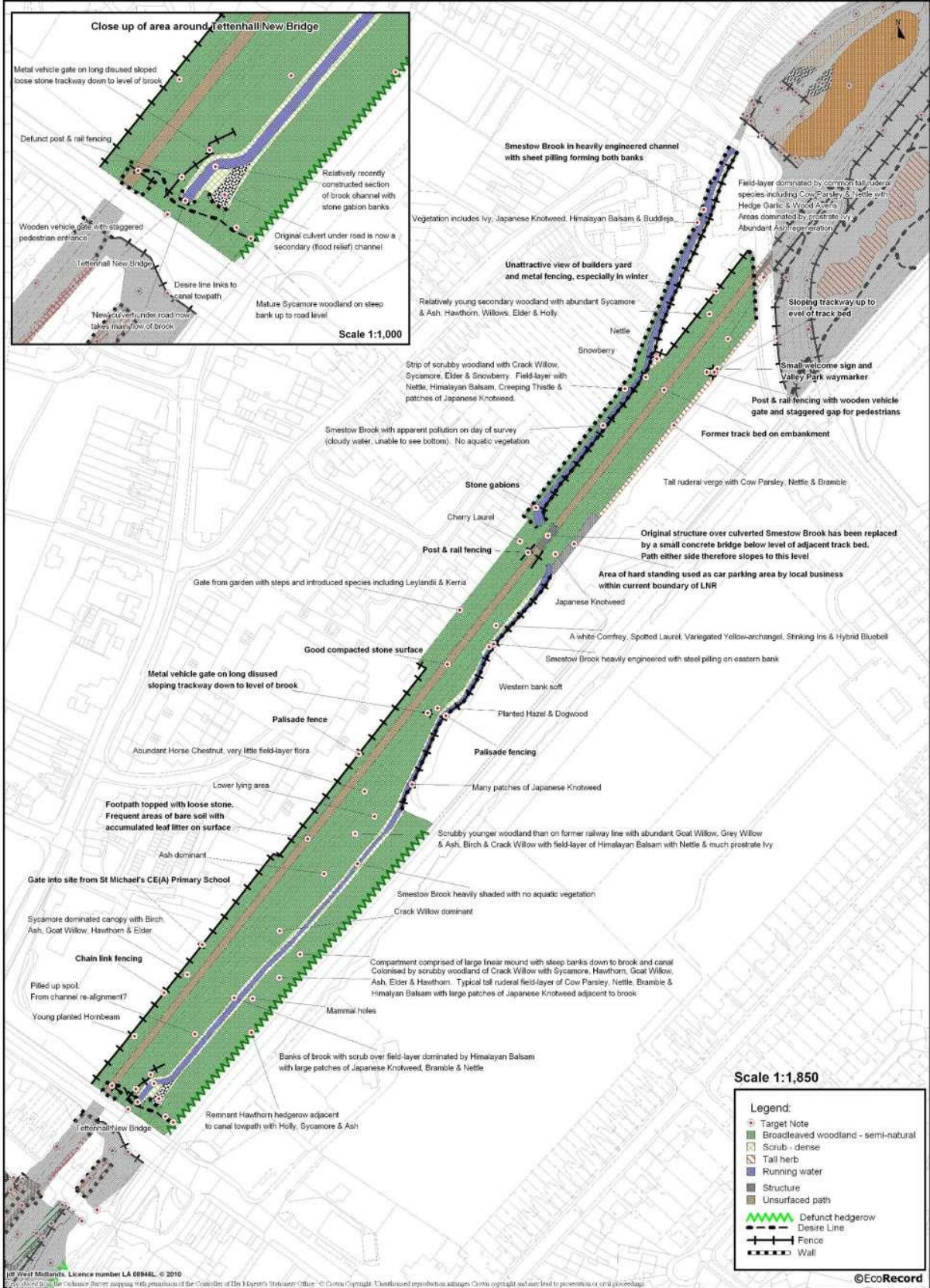
The Salmon in the Stour project, a partnership between the Environment Agency, the Wildlife Trust for Birmingham and the Black Country, Worcestershire Wildlife Trust and the Severn Rivers Trust, is a relatively new project aiming to improve the River Stour and its tributaries for wildlife and people. The project has proposed works to re-naturalise the Smestow Brook within the Smestow Valley LNR by creating meanders, braided channels, islands, riffles, marginal shelves, in-channel woody debris, reed beds and undertaking marginal planting along the bankside.



# Map 10 Compartment 3 - sub-compartments

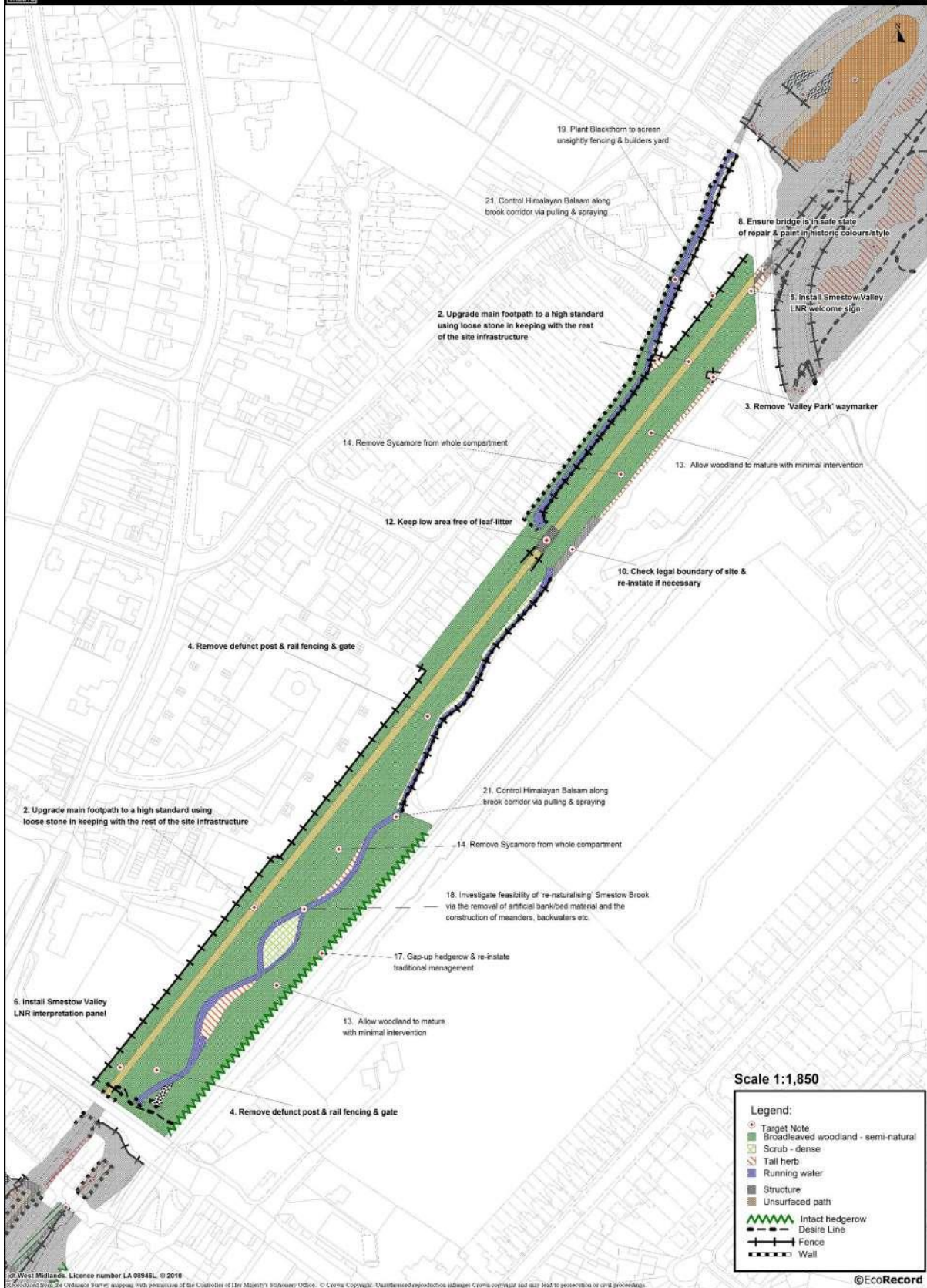


# Map 11 Compartments 3A, 3B, 3C CURRENT STATE





# Map 12 Compartments 3A, 3B, 3C DESIRED STATE



## Updated Management Actions – Compartment 3

Access & Infrastructure				
Action	Objective & Rationale	Method	Timings	
1	<b>Amend boundary of Smestow Valley Local Nature Reserve</b>	Within the compartment there are areas that form part of the Smestow Valley open space and that are of ecological and amenity value, but that are not within the current LNR boundary. These include the southern sections of Compartments 3A & 3B and the whole of Compartment 3C. So as to afford these areas the same protection as the existing LNR it is recommended that these areas are included in the designated area.	Future opportunity to formally add the southern sections of Compartments 3A & 3B and the whole of Compartment 3C to the designated area. Also make additional minor improvements to accuracy of digitised site boundary as shown on <b>maps 2 &amp; 3</b> . Local Nature Reserve status is afforded to sites by Natural England and there is a formal process that must be followed to amend the schedule.	Future Opportunity .
2	<b>Upgrade primary footpath</b>	The primary footpath which follows the trackbed of the former railway is in a poor state of repair in parts, and is difficult for many people, particularly those with limited mobility, to use. This is therefore a major barrier to accessing this part of the site for many people.	Contractor to upgrade footpath to a high standard using loose stone in keeping with the rest of the site infrastructure. The footpath should be upgraded along the length of the compartment where necessary.	Opportunity - When resources available.
3	<b>Remove Valley Park waymarker</b>	Next to the entrance from the trackway which leads off Hordern Road there is a way marker for Valley Park. Valley Park is the former name of the nature reserve and signs with this on may lead to confusion.	Remove Valley Park way marker.	Late 2020.
4	<b>Remove defunct post &amp; rail fencing &amp; gates</b>	There are two short stretches of post & rail fencing with metal vehicular gates leading from the former track bed down to the level of the Smestow Brook. This infrastructure has become defunct, however, does provide a partial barrier to anti-social behaviour involving motorcycles. Therefore, assessment should be made on whether this infrastructure is required or should be removed for aesthetic reasons.	Remove defunct post & rail fencing & gates should the assessment to determine that the infrastructure should be removed.	Late 2020.
5	<b>Install Welcome to Smestow Valley LNR signs</b>	At many of the reserve entrances and within the site there are small 'Welcome to Smestow Valley Local Nature Reserve' signs. These are a recognisable and effective way of making people aware that they are entering an area of public open space. There are many points around the reserve where these are absent, however, and here it is frequently not clear to new visitors that they are entering Smestow Valley LNR (or even an area of public open space).	Produce to same design as current welcome signs. Contractor to produce & install.	Opportunity - When resources available.
6	<b>Regularly litter pick/clean-up site</b>	Smestow Valley suffers from large amounts of littering and dumping of larger objects. This is unattractive, is a barrier to people using the site and is potentially damaging to wildlife.	Regular clean-ups were previously undertaken by the site rangers up until 2017. However, this activity was lost when the site rangers were moved to other projects / schemes. These regular clean-ups should be re-instated with additional volunteer help sought. Other local authority staff called upon to deal with larger objects or other fly-tipped material.	Weekly.

Action	Objective & Rationale	Method	Timings	
7	<b>Formalise and improve entrance into LNR</b>	The site entrances onto LNR are unattractive, unwelcoming and it is not clear that you are entering Smestow Valley LNR.	See <b>Actions 3, 5, 6 &amp; 7.</b>	Opportunity - When resources available.
8	<b>Ensure bridge is in safe state of repair &amp; paint in historic colours/style</b>	The bridge present within the compartment is not historic, however, it has value due to its association with railway line. As with the other bridges along the railway line throughout Smestow Valley. Many have not been maintained as part of transport infrastructure for many decades and may be in need of repair so as to ensure that they are safe for public use.	This should be undertaken as a part of a wider heritage project.	Opportunity - When resources available.
9	<b>Carry out tree safety inspection</b>	It is a legal requirement that tree safety inspections are undertaken on areas of public open space.	In line with Wolverhampton City Council policy.	As method.
10	<b>Remove garden waste</b>	The tipping of garden waste into sites of ecological value can introduce both unwanted nutrients and non-native species. Garden waste has been introduced into Smestow Valley LNR at points throughout the reserve.	Remove garden waste from site. Send a letter to local residents which describes the negative impacts that the introduction of garden waste has on wildlife sites and outlines the actions that can be taken by the local authority against offenders.	Ongoing.
11	<b>Keep low area free of leaf-litter</b>	The low-lying area on the railway path where the original bridge structure has been replaced accumulates a large amount of leaf-litter which makes the area difficult to pass following wet weather.	Remove leaf-litter at regular intervals.	Ongoing.

## Habitats & Species

Action	Objective & Rationale	Method	Timings	
12	<b>Allow woodland to mature</b>	The woodland that now occupies much of the former railway track has developed naturally through the colonisation of predominantly native tree & shrub species. Most of the individual trees that comprise the woodland are, however, relatively young.  <i>West Midland Bird Club recommended: Woodland blocks should be allowed to mature, with appropriate management of non-native species and promotion of favoured trees.</i>	Minimal intervention wherever appropriate (though see invasive species).	Ongoing.

Action		Objective & Rationale	Method	Timings
13	<b>Reduce Sycamore</b>	The non-native tree species Sycamore is present throughout the site and dominates parts of the woodland canopy. Sycamore colonises sites rapidly and can quickly become dominant. This is not only detrimental to the canopy and shrub layer species of a woodland, but due to the heavy shading and dense leaf-litter that Sycamore produces, to field-layer species also. The amount of Sycamore in the woodland canopy should therefore be reduced.	Divide the woodland & scrub in each sub-compartment into five areas. Select one area in each of the five years of the management plan & selectively remove (killing stumps with stump grinders or with herbicide) as many individuals (of all ages) as is reasonable (i.e. retain a full canopy & retain aesthetic quality). Remove all regeneration & young trees in each sub-compartment annually.	Autumn-winter 2020-2024 (to aid identification it may be necessary to mark the trees earlier in the growing season). Regeneration & young trees can be removed all year.
14	<b>Control Himalayan Balsam</b>	Himalayan Balsam is a highly invasive non-native species of plant which can rapidly colonise an area to the detriment of native flora. The species is abundant along most of the Smestow Brook corridor.	Pull Himalayan Balsam by hand throughout the growing season. Spraying of large stands may be appropriate away from open water, though a suitably qualified and experienced individual should undertake this.	May 2020-August 2024.
15	<b>Eradicate Japanese Knotweed</b>	There are several stands of Japanese Knotweed throughout the compartment, particularly along the brook corridor. This is a highly invasive non-native species that can rapidly colonise an area to the detriment of native vegetation. Japanese Knotweed is listed on Schedule 9 Part 2 of the Wildlife and Countryside Act as a plant that may not be planted or otherwise caused to grow in the wild. It is therefore recommended that this species is eradicated from the site.	A suitably qualified and experienced individual should treat the stands with an appropriate herbicide until this is dead.	Spring and late summer 2020-2024.
16	<b>'Gap-up' hedgerow &amp; re-instate traditional hedgerow management</b>	The hedgerow which forms the boundary between the south-east of compartment 3C and the canal towpath has not been managed for many years and has frequently become gappy & outgrown. This diminishes the hedgerow's value as a habitat and as a landscape feature. Gaps in the hedgerow should therefore be filled and traditional hedgerow management instated.	Lay or coppice hedgerow then 'gap-up' by planting locally sourced Hawthorn. Once established manage using the traditional technique of hedge laying.	Autumn-winter 2020-2025.
17	<b>'Re-naturalise' Smestow Brook</b>	The Smestow Brook has been heavily modified and engineered for most of its length through Smestow Valley LNR and often flows in a highly artificial channel. This is both aesthetically unattractive & results in a watercourse of limited ecological value.  The Salmon in the Stour project has proposed the installation of deflectors within the river channel and planting of marginal vegetation to re-naturalise the Smestow Brook and improve water quality and species diversity. West Midland Bird Club recommended: <i>Whilst being sensitive to the needs of Kingfisher.</i>	To be undertaken in conjunction with Wildlife Trust for Birmingham and the Black Country and Salmon in the Stour.  With the Environment Agency & Wolverhampton City Council flood defence staff advising.	June 2020 – September 2020 should the funding bid be successful. .
18	<b>Plant Blackthorn</b>	To screen unsightly fencing & builders yard.	Plant Blackthorn 'whips' densely along the embankment.	Autumn 2020.
19	<b>Enhance bankside vegetation along the Smestow brook</b>	The bankside vegetation along the Smestow Brook is species poor, due to the heavy shading of the overhanging trees and the dominance of Himalayan Balsam along the bankside and	Specific areas on either side of the Smestow brook bank, to be determined, will be planted with species such as purple looestribe, and grass species known to improve bankside	Autumn 2020

Action	Objective & Rationale	Method	Timings	
	adjacent habitats. Therefore, efforts in conjunction with control of Himalayan Balsam ( <b>Action 15</b> ) should be made to enhance the bankside diversity and also colonise areas treated for Himalayan Balsam to prevent the invasive species taken hold again.	stability and species biodiversity after the removal of Himalayan balsam. This will be undertaken as part of the Biodiversity Boost Fund bid.		
<b>20</b>	<b>Enhancement of foraging and nesting opportunities on site for local bird and bat species</b>	The hedgerow and woodland habitat on site provide suitable habitat for local bat and bird population. To further increase the opportunity for these species on site management practices should aim to increase structural and floristic diversity of broadleaved woodland and hedgerow on site to provide optimal nesting material and foraging habitat (berries, nuts and invertebrates).	Management practices to promote varying in age structure and flora diversity within onsite habitats to increase foraging and nesting resources on site.  Follow the <b>management action 12, 13, 14 and 15</b> as described within the table above.	As shown above
<b>21</b>	<b>Retain suitable habitat for Kingfisher</b>	Kingfisher are known to be present along the Smestow valley and rely on bare eroded cliffs adjacent to water course to nesting. To ensure the retention of the species along the brook and to enhance the habitat for the species all naturally eroded cliffs along the watercourse should be retained and should be made inaccessible to public to reduce any potential disturbance to a nest site.	Any naturally eroded cliffs along Smestow brook should be retained, away from publicly accessible areas, for nesting habitat for Kingfisher.	Ongoing
<b>22</b>	<b>Enhancement of Smestow brook to provide opportunities for local water vole populations</b>	Water vole records are known to be present within the local area. However, due to the spread of Himalayan balsam there is limited foraging resource in the form of marginal vegetation for the species. To improve the bankside habitats, the woodland should be cut back to allow diversity in light along the banks and allow the establishment of additional bankside vegetation. The Himalayan balsam should be controlled as per <b>management practice 14</b> . Bank side planting should be undertaken within the areas treated for Himalayan balsam to prevent Himalayan balsam recolonising the area and to improve floristic diversity along the brook corridor. The re-naturalisation of this stretch of brook should involve the creation of meanders and back water to create additional habitat and physical variation along the river which will provide further opportunities for the species.	Undertake works as per the management <b>action 17 and 19</b> which details the re-naturalisation of the brook and bankside planting (to include purple loosestrife) in specified areas along the bankside.  Works to control and prevent the further spread of Himalayan balsam should be undertaken as per <b>management action 14</b> .	As shown with <b>management action 15, 18, and 20</b> .
<b>23</b>	<b>Monitoring of management action and action results</b>	As management actions are undertaken, it is important to monitoring the completion of those actions and the results of the management to ensure the desired impact / outcome has occurred.	All local authority and community group should report completion of management actions and future proposals at regular liaison group meetings to ensure that no duplications	Ongoing as management activity are undertaken.

Action	Objective & Rationale	Method	Timings
		<p>or opportunities are not missed. In addition, to any issues caused by habitat works.</p> <p>At end of the period covered by the management plan, an assessment should be undertaken to confirm all actions undertaken within the period and should include a review and an update of the Smestow Valley Management Plan.</p>	<p>A completed assessment undertaken at the completion of the management period late 2024.</p>

## **Compartment 4. Tettenhall Road – Meccano Bridge**

### **Compartment Description Amendments**

Upon review of the Smestow Valley Management Plan compartment description, consultations and the undertaking of site visits, it is assessed that the previous provided description is still valid to cover compartment 4 Tettenhall Road – Meccano Bridge. Therefore, no amendments are required to the description provided in the former management plan.

### **Works Proposed / Undertaken as per the 2012-17 plan**

At the current time, it is considered that no works have been undertaken within the compartment area as per the 2012-17 plan.

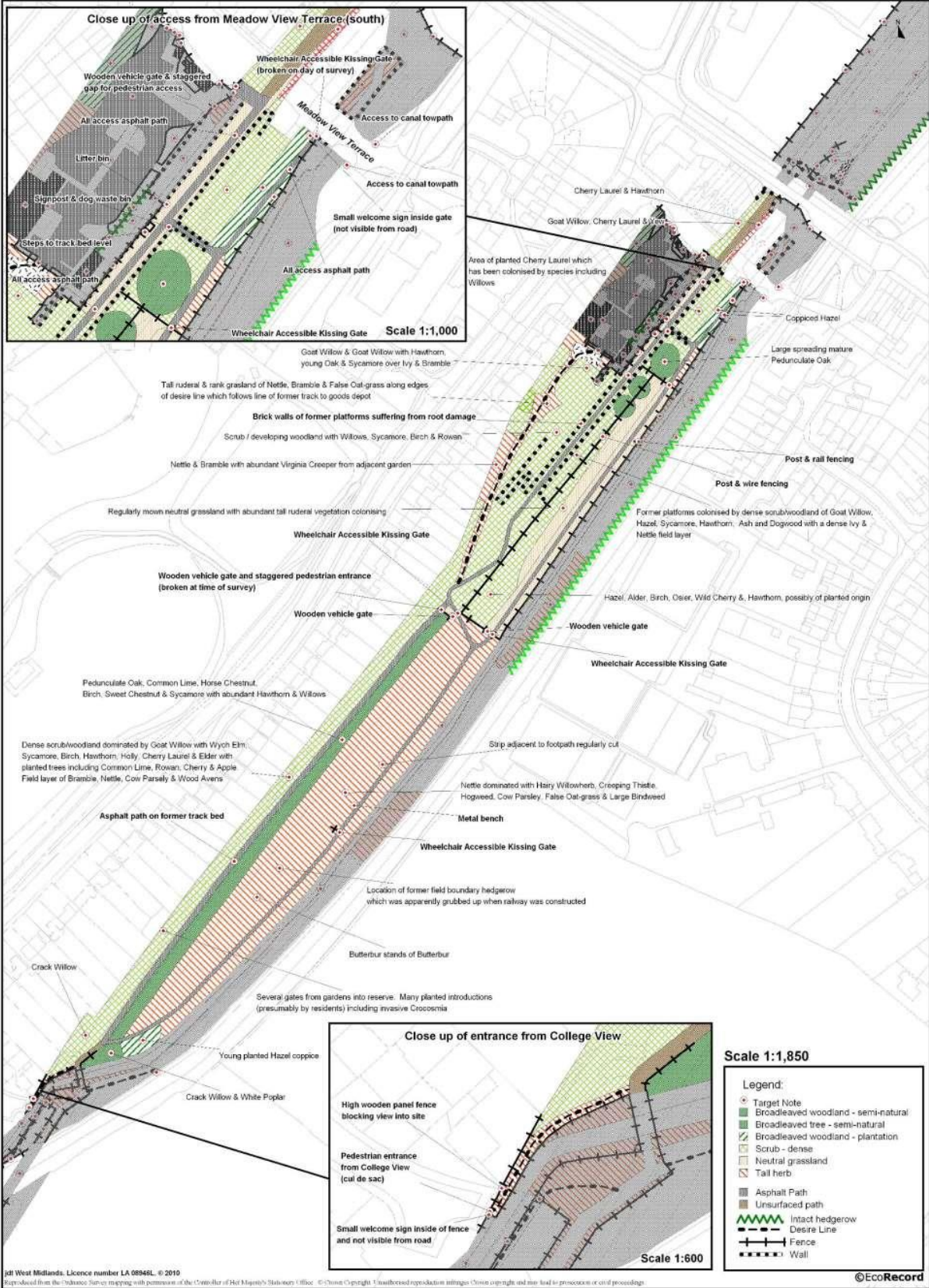


## Map 13 Compartment 4 - sub-compartments





# Map 14 Compartments 4A, 4B CURRENT STATE



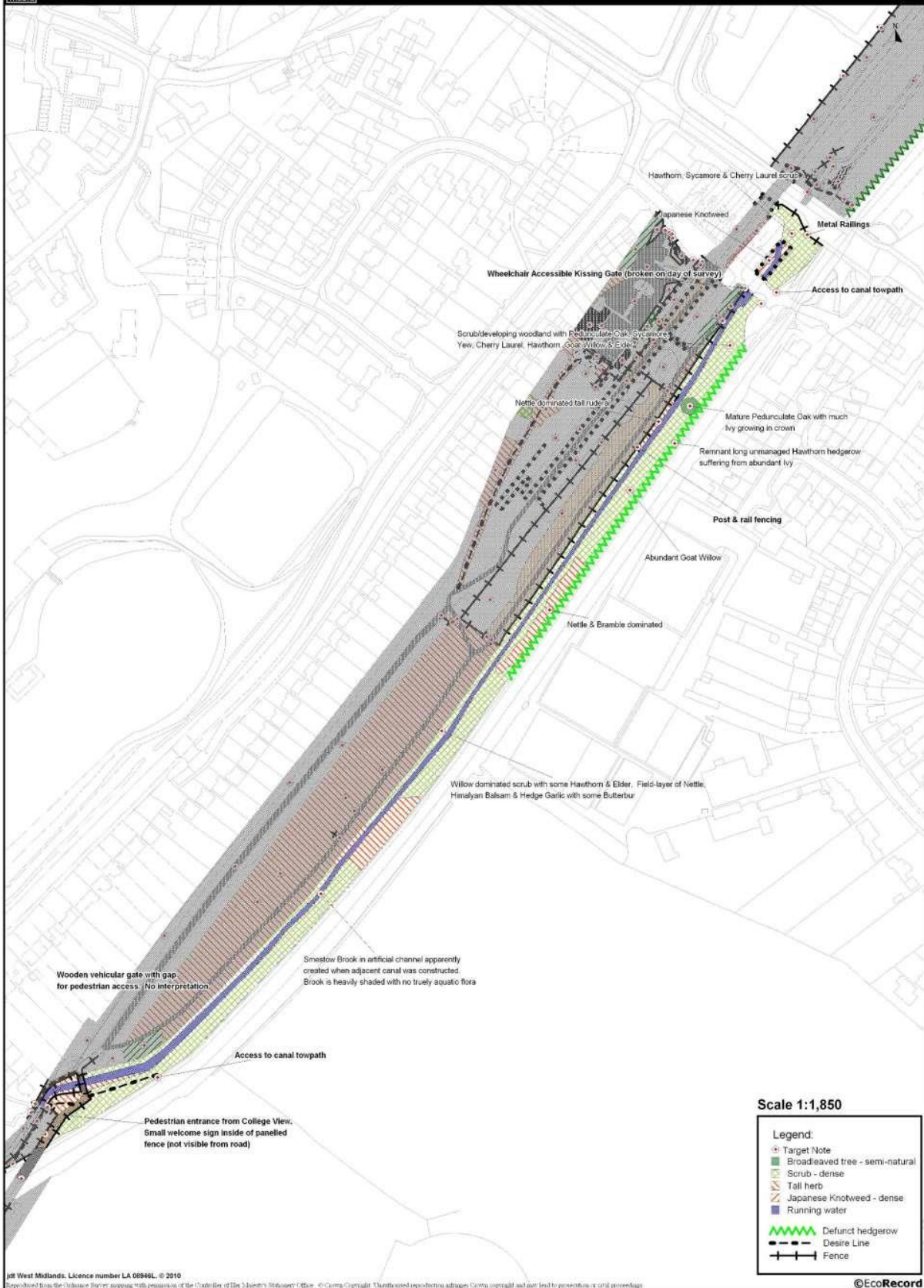
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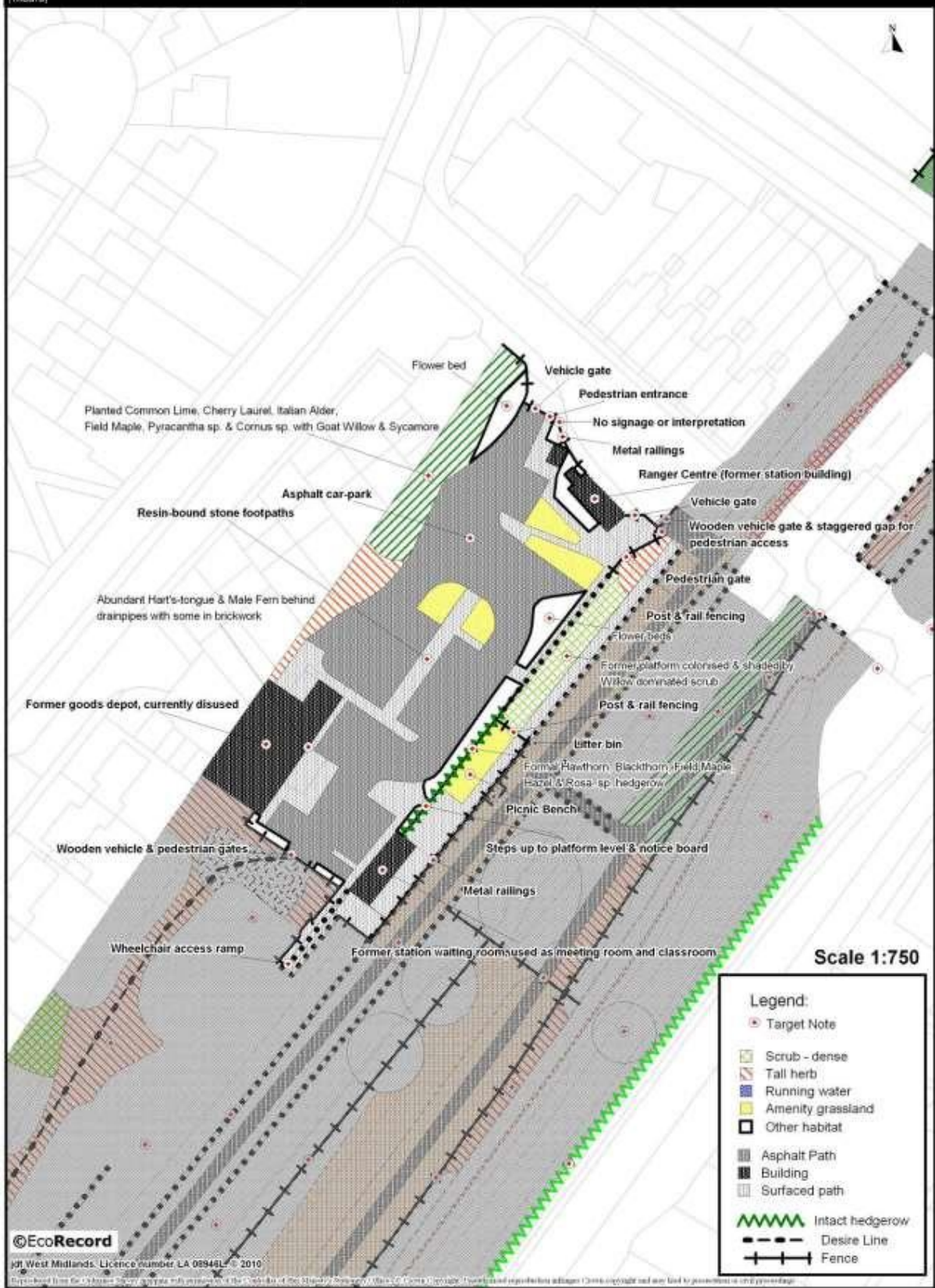


# Map 15 Compartments 4C, 4D CURRENT STATE



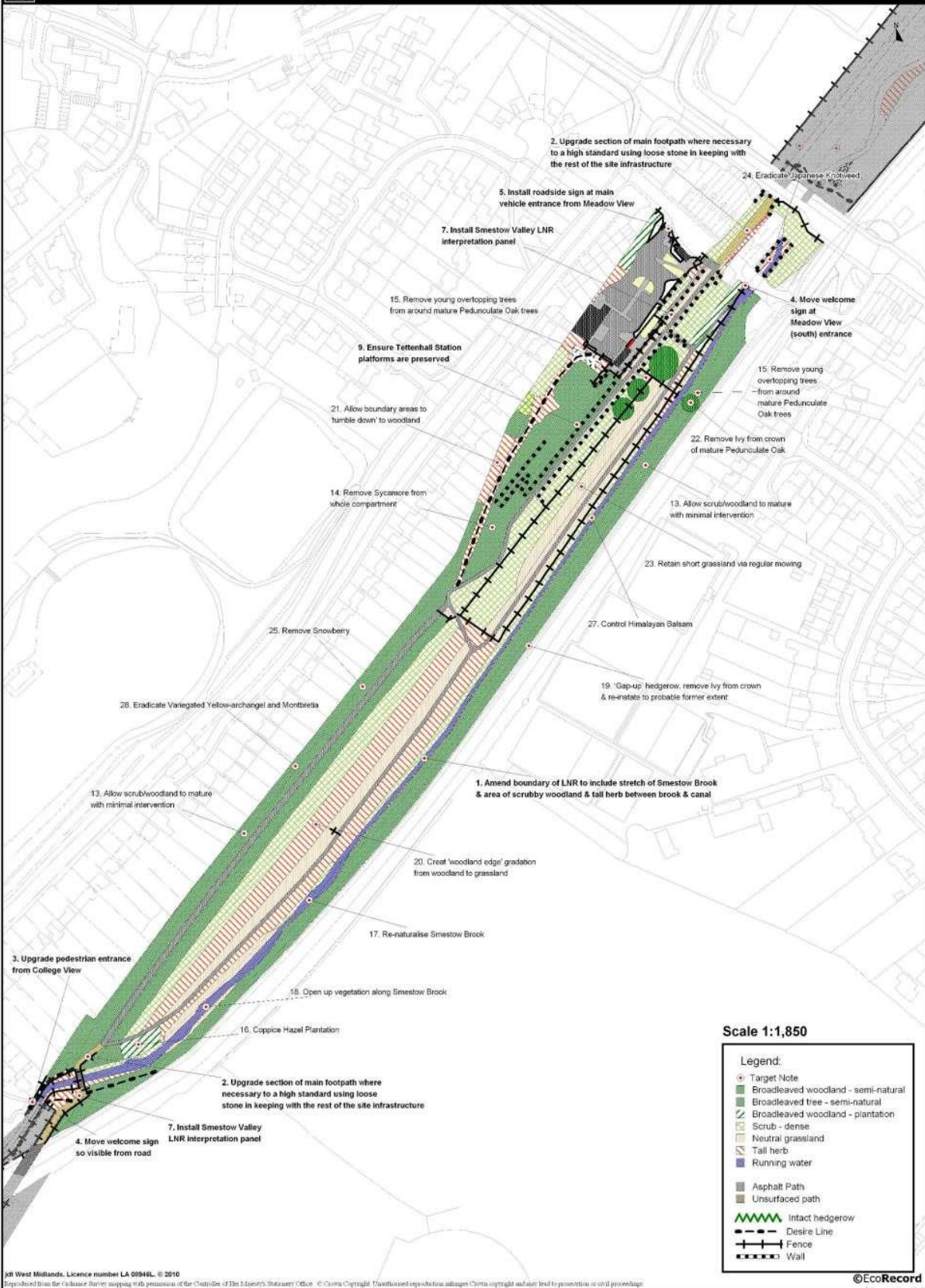


# Map 16 Compartment 4E CURRENT STATE





# Map 17 Compartment 4 DESIRED STATE



## Updated Management Actions – Compartment 4

Access & Infrastructure				
Action	Objective & Rationale	Method	Timings	
1	<b>Amend boundary of Smestow Valley Local Nature Reserve</b>	The current Smestow Valley LNR boundary does not include the section of the Smestow Brook which runs through the compartment or the area of scrub located between this and the canal corridor (Compartments 4C & 4D). Both of these areas are designated as part of the Smestow Valley SINC (Site of Importance for Nature Conservation) and are ecologically valuable parts of the Smestow Valley open space. So as to afford these areas the same protection as the existing LNR it is recommended that these areas are added to the designated area.	Future opportunity to formally add the section of the Smestow Brook and woodland between this and the canal corridor to the designated LNR. Also make additional minor improvements to accuracy of digitised site boundary as shown on <b>maps 2 &amp; 3</b> . Local Nature Reserve status is afforded to sites by Natural England and there is a formal process that must be followed to amend the schedule.	Future Opportunity
2	<b>Upgrade primary footpath</b>	Within Compartment 4 there is a fully wheelchair accessible circular footpath which is surfaced with asphalt. This is in a very good state of repair and currently requires no maintenance. At both the northern and southern ends of the site, however, there are short sections of the primary footpath which follows the track bed which have not been upgraded. These are in a poor state of repair and can be difficult for many people, particularly those with limited mobility, to use. This is therefore a barrier to accessing Compartments 3 and 5 from this point for many people. The sections should be upgraded.	Contractor to upgrade northern and southern ends of primary track bed footpath to a high standard using loose stone in keeping with the rest of the site infrastructure.	Opportunity - When resources available.
3	<b>Upgrade entrance from College View</b>	The entrance from College View is the closest entrance to Smestow Valley LNR for many local residents. Currently this entrance is obscure, unattractive and uninviting. In addition, the welcome sign is obscured from view (see <b>Action 4</b> ) and it is not clear from the road that this is an entrance to an area of public open space.	The wooden panel fence should be removed and replaced with metal railings (see also <b>Action 4</b> ).	Opportunity - When resources available.
4	<b>Move welcome sign at College Road &amp; Meadow View (south) entrances</b>	Currently the 'Welcome to Smestow Valley' sign at the College View pedestrian entrance is behind a wooden panel fence and not visible from the road. Similarly, the welcome sign at the Meadow View (south) pedestrian entrance is not visible from the road.	Move the welcome sign in front of the fence at College View (see also <b>Action 3</b> ) so that it is visible from College View. Move the welcome sign at the entrance from Meadow View (south) so that it is visible as you approach the entrance.	Late 2020.
5	<b>Install roadside sign at main vehicle entrance from Meadow View</b>	The main entrance for many site visitors who drive to the site, and particularly those who require wheelchair access, is the Tettenhall Station car park from Meadow View off Henwood Road. There is a brown tourism road sign directing the public to the entrance from Henwood Road, however, once on Meadow	Contractor to produce and install new main welcome sign in keeping with recently installed 'Ranger Centre' sign.	Opportunity - When resources available.

Action	Objective & Rationale	Method	Timings
	View there is no signage giving a clear indication for new visitors as to where the entrance or car park is.		
6	<b>Install Welcome to Smestow Valley LNR signs</b> At many of the reserve entrances and within the site there are small 'Welcome to Smestow Valley Local Nature Reserve' signs. These are a recognisable and effective way of making people aware that they are entering an area of public open space. There are many points around the reserve where these are absent, however, and here it is frequently not clear to new visitors that they are entering Smestow Valley LNR (or even an area of public open space).	Produce to same design as current welcome signs. Contractor to produce & install.	Opportunity - When resources available.
7	<b>Install Smestow Valley LNR interpretation panel</b> There is very little interpretation around Smestow Valley LNR that describes the significance and value of the site, or that informs people as to where they are and what they can see. A series of map based interpretation panels should therefore be produced that are tailored to each of the compartments.	To be designed in conjunction with local residents. Contractor to produce & install.	Opportunity - When resources available.
8	<b>Ensure former station platforms &amp; associated historic structures are preserved</b> The station platforms at Tettenhall Station remain in situ. For the most part these have been colonised by dense scrub and woodland and the structures are not maintained. Consequently, the platforms are suffering from root damage, with walls having large cracks and coping stones coming away.	Advice should be sought from the Black Country Archaeologist (based in Wolverhampton City Council), appropriate local heritage groups and an appropriately experienced engineer on how to best preserve the structures for the future. The ecological and aesthetic quality of the habitats that have colonised the structures must be considered as a part of this, and should be retained where possible.	Late 2020.
9	<b>Ensure Meccano Bridge is in safe state of repair &amp; paint in historic colours</b> The former railway bridge over the Staffordshire & Worcestershire canal, known as 'Meccano Bridge', is perhaps the best known of the historic bridges associated with the railway line. This has not been maintained as part of transport infrastructure for many decades, and may be in need of repair so as to ensure that it is safe for public use. Meccano Bridge is of significant local historic and landscape value, and the restoration of this to its historic appearance would be of great benefit to this part of Wolverhampton.	This should be undertaken as a part of a wider heritage project.	Opportunity - When resources available.
10	<b>Regularly litter pick/clean-up site</b> Smestow Valley suffers from large amounts of littering and dumping of larger objects. This is unattractive, is a barrier to people using the site and is potentially damaging to wildlife.	Regular clean-ups were previously undertaken by the site rangers up until 2017. However, this activity was lost when the site rangers were moved to other projects / schemes. These regular clean-ups should be re-instated with additional volunteer help sought. Other local authority staff called upon to deal with larger objects or other fly-tipped material.	Weekly.
11	<b>Carry out tree safety inspection</b> It is a legal requirement that tree safety inspections are undertaken on areas of public open space.	In line with Wolverhampton City Council policy.	As method.
12	<b>Remove garden waste</b> The tipping of garden waste into sites of ecological value can introduce both unwanted nutrients and non-native species.	Remove garden waste from site. Send a letter to local residents which describes the negative impacts that the introduction of garden waste has on wildlife sites and outlines	Ongoing.

Action	Objective & Rationale	Method	Timings
	Garden waste has been introduced into Smestow Valley LNR at points throughout the reserve.	the actions that can be taken by the local authority against offenders.	

## Habitats & Species

Action	Objective & Rationale	Method	Timings
13 <b>Allow scrub/woodland to mature</b>	The woodland within the compartment is developing as relatively diverse woodland comprised predominantly of native species. The mature dense scrub is also maturing towards woodland. This should be allowed to continue with minimal management. <i>West Midland Bird Club recommended: Woodland blocks should be allowed to mature, with appropriate management of non-native species and promotion of favoured trees.</i>	Minimal intervention wherever appropriate (though see invasive species).	Ongoing.
14 <b>Reduce Sycamore</b>	The non-native tree species Sycamore is present throughout the site and dominates parts of the woodland canopy. Sycamore colonises sites rapidly and can quickly become dominant. This is not only detrimental to the canopy and shrub layer species of a woodland, but due to the heavy shading and dense leaf-litter that Sycamore produces, to field-layer species also. The amount of Sycamore in the woodland canopy should therefore be reduced.	Divide the woodland & scrub in each sub-compartment into five areas. Select one area in each of the five years of the management plan & selectively remove (killing stumps with stump grinders or with herbicide) as many individuals (of all ages) as is reasonable (i.e. retain a full canopy & retain aesthetic quality). Remove all regeneration & young trees in each sub-compartment annually.	Autumn-winter 2020-2023 (to aid identification it may be necessary to mark the trees earlier in the growing season). Regeneration & young trees can be removed all year.
15 <b>Remove young overtopping trees from around mature Pedunculate Oak trees</b>	In the north of Compartment 4 there are four mature Pedunculate Oak trees. These are now surrounded by younger trees and shrubs which are vigorously growing upwards in an effort to maximise available light. This is creating shady conditions for the Oaks which have matured in open conditions, which is leading to crown dieback. This will undermine the health of the Oaks and may shorten their lives. Surrounding trees & shrubs should therefore be reduced or removed.	Reduce height of or remove young trees & shrubs which are growing in close proximity to mature Pedunculate Oaks.	When required, autumn-winter 2020-2024.
16 <b>Coppice Hazel plantation</b>	There is a small Hazel plantation in the south of the compartment. Hazel has traditionally been coppiced to produce poles which were historically put to a wide variety of uses. This coppicing regime is beneficial to wildlife as it results in physical and light regime variation which can be utilised by a variety of species. The area was coppiced in 2009/10.	Cut Hazel stools to ground level (ensuring angled clean cut to prevent rot &/or disease) and remove arisings.	Autumn-winter 2020/21.
17 <b>'Re-naturalise' Smestow Brook</b>	The Smestow Brook has been heavily modified and engineered for most of its length through Smestow Valley LNR and often flows in a highly artificial channel. This is both aesthetically unattractive & results in a watercourse of limited ecological value. An investigation should be carried out in conjunction with the Environment Agency & Wolverhampton City Council flood	To be undertaken in conjunction with Environment Agency & Wolverhampton City Council flood defence staff.	Begin liaison in 2020 & undertake when resources allow.

Action	Objective & Rationale	Method	Timings
	<p>defence staff which aims to identify where and how the channel can be re-naturalised via the removal of artificial bank/bed material and the construction of meanders, backwaters etc. Within Compartment 4 the all access asphalt path runs alongside the brook, leaving limited scope for alteration of the course. There is, however, scope to change bank profiles, widen sections etc.</p>		
<p><b>18</b>    <b>Open up vegetation along Smestow Brook</b></p>	<p>For much of its length through the LNR the Smestow Brook is heavily shaded by scrub and woodland type vegetation. The shade this creates prevents the utilisation of the watercourse by most flora and many fauna species. A diversity of light levels and structure of bankside vegetation will enable many more species to utilise the watercourse. Areas should therefore be selected along the course of the brook where vegetation is regularly cut back.</p> <p>West Midland Bird Club recommended: <i>Banks of the Smestow Brook should be regarded and its course realigned, where possible, creating shallower gradients, shelves and riffles, whilst being sensitive to the needs of Kingfisher. Stands of Sallow and Willow along the brook side should be coppiced on rotation.</i></p>	<p>Cut &amp; remove woody vegetation from selected areas in year 1. This will result in young regrowth from the trees and shrubs and a variety of perennial herbaceous species in the following year. Each autumn from year 2 these areas should be cut and the arisings removed.</p>	<p>Autumn 2020: cut &amp; remove woody vegetation.</p> <p>Autumn 2021-24: cut regrowth of all vegetation &amp; remove arisings.</p>
<p><b>19</b>    <b>'Gap-up' hedgerow, remove Ivy from crown &amp; re-instate to probable former extent</b></p>	<p>The hedgerow which forms the boundary between the north-east of compartment 4D and the canal towpath has not been managed for many years and is very gappy &amp; outgrown. This diminishes the hedgerow's value as a habitat and as a landscape feature. In addition, the surviving fragments are suffering from excess Ivy growth and are suffering die-back. This may significantly shorten their lifespan. The hedgerow should be restored to its (probable) original extent (i.e. along the entire canal towpath).</p>	<p>Lay or coppice surviving fragments of hedgerow then 'gap-up' by planting locally sourced Hawthorn and other native species including Field Maple and Hazel. Once established manage using the traditional technique of hedge 'laying'. Ivy will need to be checked and removed annually to prevent this 'choking' the regrowth &amp; young hedging plants.</p>	<p>Lay/coppice &amp; gap-up in Autumn 2020.</p> <p>Lay regrowth in autumn 2024.</p>
<p><b>20</b>    <b>Create 'woodland edge' gradation from woodland to grassland</b></p>	<p>In the southern part of Compartment 4 in the area known as 'The Paddocks' there is a large stand of tall ruderal vegetation which has colonised former grassland. This area should be divided into strips to be subjected to differing management in order to create a 'woodland edge', i.e. a gradation from woodland, through scrub &amp; tall ruderal to grassland. This variation in structure promotes species diversity by providing different niches for a wide range of flora and fauna.</p> <p>West Midland Bird Club recommended: <i>Much of the Paddock is of limited value to birds and should be managed as a woodland edge, including planting of appropriate native shrub species and management of the vegetation.</i></p>	<p>Divide the area between the woodland which occupies the railway corridor and the asphalt all access footpath into three roughly equal strips. Manage each strip as follows:</p> <p>i. (strip adj. railway corridor): No management for duration of plan (5 years, after this period rotational coppicing is likely to be appropriate).</p> <p>ii. (central strip): Cut annually &amp; remove arisings in late August–September.</p> <p>iii. (strip adjacent footpath): Cut twice annually in May &amp; August–September &amp; remove arisings. In 2012 <i>only</i> follow each cut with application of selective herbicide (so as to reduce</p>	<p>See method.</p>

Action	Objective & Rationale	Method	Timings	
		the dominance of tall ruderal species & allow re-colonisation by grasses. This action must be undertaken by a suitably qualified & experienced individual).		
21	<b>Allow boundary areas of tall ruderal vegetation &amp; Bramble to 'tumble down' to woodland</b>	The scrub and tall ruderal habitats which form parts of the north-western boundary are succeeding to secondary woodland comprised of mostly native species. For aesthetic reasons it is recommended that this is allowed to develop naturally.	No thinning, removal (other than of invasive species, see other actions) or planting etc. is currently required in these areas.	Ongoing.
22	<b>Remove Ivy from crown of mature Pedunculate Oak</b>	A large amount of Ivy has colonised the crown of the mature Pedunculate Oak located in the north of Compartment 4D. There are signs that this has started to cause die-back of the canopy, and if left unchecked this may significantly impact upon the health and lifespan of the tree. Ivy should therefore be removed.	Cut & remove 30cm lengths from all Ivy stems towards the base of the trunk.	Spring 2020 & winter 2024.
23	<b>Retain short grassland via regular mowing</b>	Either side of the southern-most footpath in the north of compartment 4A there is a linear area of neutral grassland. This contains a high proportion of tall ruderal species and if left unmown would revert to a tall ruderal habitat. To retain this area as grassland regular cutting is necessary. Arisings from this should be removed.	Mow regularly throughout the growing season & remove arisings. Consideration should also be given to the application of a selective herbicide (so as to reduce the dominance of tall ruderal species & allow re-colonisation by grasses. This must be undertaken by a suitably qualified & experienced individual).	Mow regularly throughout the growing season each year. Apply herbicide during 2020 <i>only</i> in May & August.
24	<b>Eradicate Japanese Knotweed</b>	Several stands of Japanese Knotweed have become established along the brook corridor in Compartment 4. This is a highly invasive non-native species that can rapidly colonise an area to the detriment of native vegetation. Japanese Knotweed is listed on Schedule 9 Part 2 of the Wildlife and Countryside Act, as a plant that may not be planted or otherwise caused to grow in the wild. It is therefore recommended that this species is eradicated from the site.	A suitably qualified and experienced individual should treat the stands with an appropriate herbicide until this is dead.	Spring and late summer 2020-2024.
25	<b>Remove Snowberry</b>	There are stands of the introduced Snowberry within the site. This species can become invasive and shades out field-layer vegetation.	Remove Snowberry through cutting followed by herbicide treatment of the stumps.	Autumn-winter 2020-2024.
26	<b>Reduce abundance of Cherry Laurel</b>	There are several mature stands of the introduced species Cherry Laurel. This species can become invasive and shades out field-layer vegetation.	Selectively remove mature Cherry Laurel through cutting followed by herbicide treatment of the stumps. Regeneration should be pulled by hand.	Autumn-winter 2020-2024.
27	<b>Control Himalayan Balsam</b>	Himalayan Balsam is a highly invasive non-native species of plant which can rapidly colonise an area to the detriment of native flora. The species is abundant along most of the Smestow Brook corridor.	Pull Himalayan Balsam by hand throughout the growing season. Spraying of large stands may be appropriate away from open water, though a suitably qualified and experienced individual should undertake this.	May & August 2020-2024.
28	<b>Eradicate Variegated Yellow-archangel and Montbretia</b>	The plant species' Variegated Yellow-archangel and Montbretia have both been introduced to the site, apparently through the dumping of garden waste. Due to their invasive and potentially	Both species are difficult to eradicate via mechanical means and should therefore be treated with a herbicide via 'weed	August-September 2020-2024.

Action	Objective & Rationale	Method	Timings
	damaging nature both are listed under Schedule 9 Part 2 of the Wildlife and Countryside Act, as plants which 'may not be planted or otherwise caused to grow in the wild'. These species should therefore be eradicated.	wiping'. This should be undertaken by an appropriately trained and experienced individual.	
29	<p><b>Retain suitable habitat for Kingfisher</b></p> <p>Kingfisher are known to be present along the Smestow valley and rely on bare eroded cliffs adjacent to water course to nesting.</p> <p>To ensure the retention of the species along the brook and to enhance the habitat for the species all naturally eroded cliffs along the watercourse should be retained and should be made inaccessible to public to reduce any potential disturbance to a nest site.</p>	Any naturally eroded cliffs along Smestow brook should be retained, away from publicly accessible areas, for nesting habitat for Kingfisher.	Ongoing
30	<p><b>Enhancement of foraging and nesting opportunities on site for local bird (nesting and overwintering species) and bat species</b></p> <p>The scrub, hedgerow and woodland habitat on site provide suitable habitat for local bat and bird population.</p> <p>To further increase the opportunity for these species on site management practices should aim to increase structural and floristic diversity of broadleaved woodland, scrub and hedgerow on site to provide optimal nesting material and foraging habitat (berries, nuts and invertebrates).</p>	<p>Management practices to promote varying in age structure and flora diversity within onsite habitats to increase foraging and nesting resources on site.</p> <p>Follow the relevant management actions (<b>13, 14, 16, 18, 19 and 20</b>) as described within the table above.</p>	As shown above
31	<p><b>Enhancement of Smestow brook to provide opportunities for local water vole populations</b></p> <p>Water vole records are known to be present within the compartment. However, due to over shading from the adjacent broadleaved woodland and the spread of Himalayan balsam there is limited foraging resource in the form of marginal vegetation for the species.</p> <p>To improve the bankside habitats, the selected areas of bankside scrub and woodland should be cut back to allow diversity in light along the banks and allow the establishment of additional bankside vegetation.</p> <p>The Himalayan balsam should be control as <b>management practice 27</b>.</p> <p>The re-naturalisation of this stretch of brook involving the creation of meanders and back water will create addition habitat and variation along the river which will provide further opportunities for the species.</p> <p>Bank side planting should be undertaken within the areas treated for Himalayan balsam to prevent Himalayan balsam recolonising the area and to improve floristic diversity along the brook corridor.</p>	<p>Undertake works as per the <b>management action 17 and 18</b> which details the re-naturalisation of the brook and cutting back of vegetation in specified areas along the bankside.</p> <p>Works to control and prevent the further spread of Himalayan balsam should be undertaken as per management action 27.</p> <p>Once the areas has been treated for Himalayan Balsam the bankside planting(to include purple loosestrife) should be implemented to prevent Himalayan balsam re-colonising the treated area.</p>	As shown with <b>management action 17, 18 and 27</b> .
29	<p><b>Monitoring of management action and action results</b></p> <p>As management actions are undertaken, it is important to monitoring the completion of those actions and the results of the management to ensure the desired impact / outcome has occurred.</p>	All local authority and community group should report completion of management actions and future proposals at regular liaison group meetings to ensure that no duplications or opportunities are not missed. In addition, to any issues caused by habitat works.	Ongoing as management activity are undertaken.

Action	Objective & Rationale	Method	Timings	
			At end of the period covered by the management plan, an assessment should be undertaken to confirm all actions undertaken within the period and should include a review and an update of the Smestow Valley Management Plan.	A completed assessment undertaken at the completion of the management period late 2024.

## **Compartment 5. Meccano Bridge – Bridgnorth Road**

### **Compartment Description Amendments**

Upon review of the Smestow Valley Management Plan compartment description, consultations and the undertaking of site visits, it is assessed that the previous provided description is still valid to cover compartment 5 Meccano Bridge – Bridgnorth Road. Therefore, no amendments are required to the description provided in the former management plan.

### **Works Proposed / Undertaken as per the 2012-17 plan**

As per the management actions detailed within the 2012-2017 plan, the Wildlife Trust for Birmingham and the Black Country have been undertaking works, within the compartment.

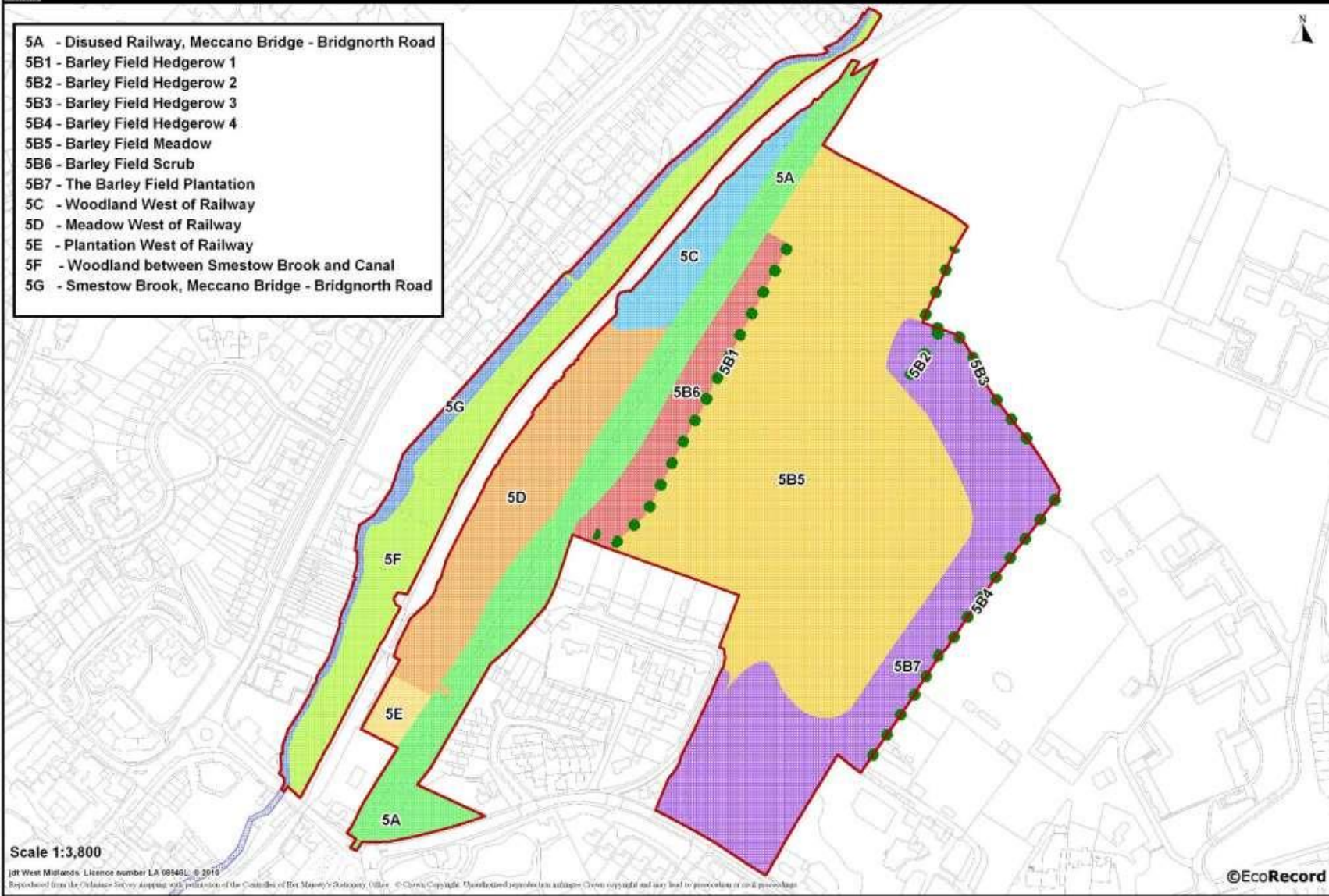
The habitat improvement works have been focused within compartment 5B7, as shown in Map 18, and have included:

- Coppicing the hazel plantation, located in the south eastern section, in winter 2018;
- Native bluebell seeds were sown along the northern remnant hedgerow in 2018;
- The silver birch woodland plantation, adjacent to the hazel plantation, was subject to thinning works in 2013 to 2014; and
- As part of the Wildlife Trust's Growing Local Flora project woodland plants including red campion, foxglove, native bluebell, yellow archangel, greater stitchwort and wood speedwell were introduced to the broadleaved woodland plantation.



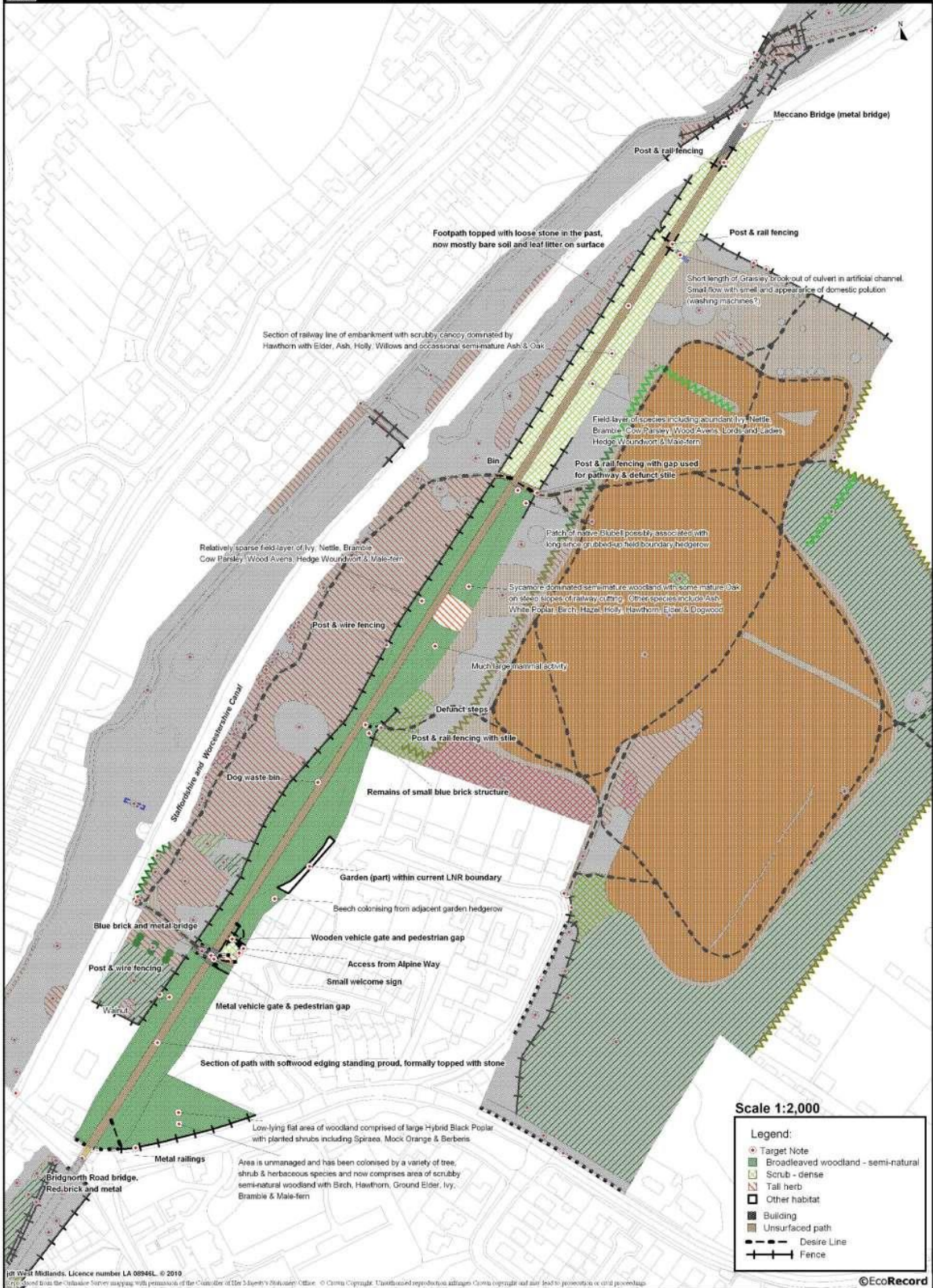
## Map 18 Compartment 5 - sub-compartments

- 5A - Disused Railway, Meccano Bridge - Bridgnorth Road
- 5B1 - Barley Field Hedgerow 1
- 5B2 - Barley Field Hedgerow 2
- 5B3 - Barley Field Hedgerow 3
- 5B4 - Barley Field Hedgerow 4
- 5B5 - Barley Field Meadow
- 5B6 - Barley Field Scrub
- 5B7 - The Barley Field Plantation
- 5C - Woodland West of Railway
- 5D - Meadow West of Railway
- 5E - Plantation West of Railway
- 5F - Woodland between Smestow Brook and Canal
- 5G - Smestow Brook, Meccano Bridge - Bridgnorth Road



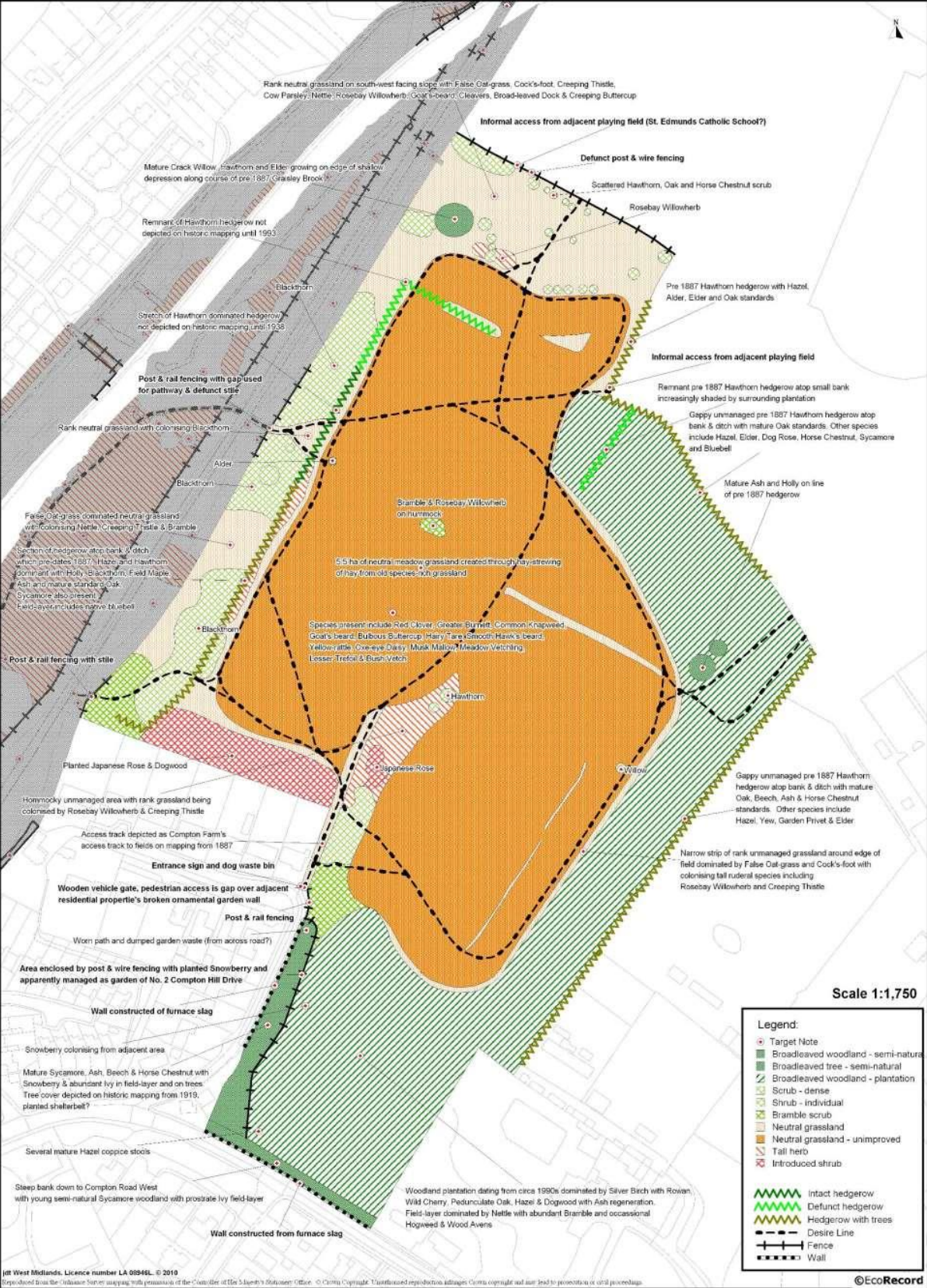


# Map 19 Compartment 5A CURRENT STATE





# Map 20 Compartment 5B CURRENT STATE



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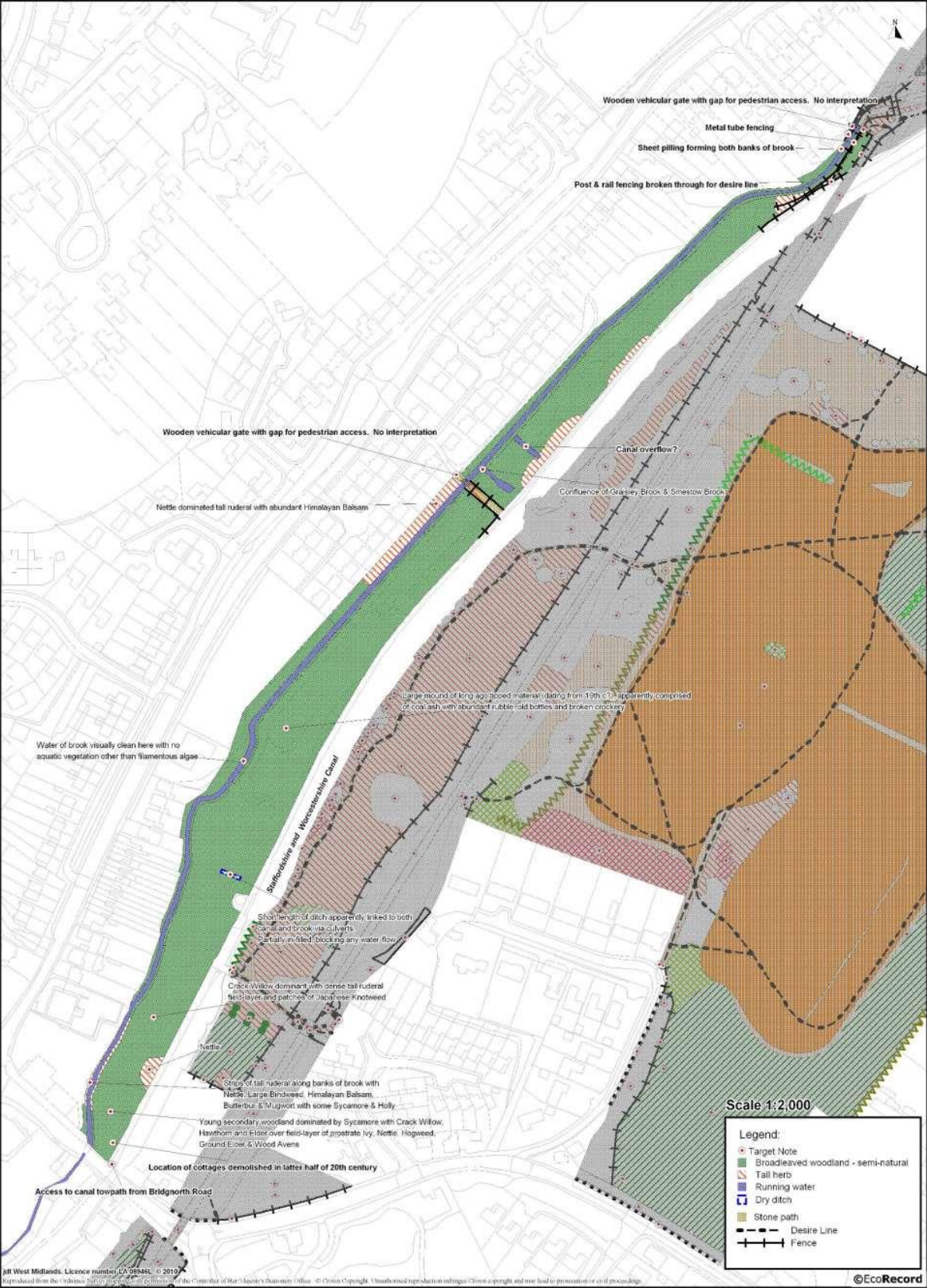
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# Map 22 Compartments 5F, 5G CURRENT STATE



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# Map 23 Compartment 5A, 5C, 5D, 5E, 5F, 5G DESIRED STATE



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# Map 24 Compartment 5B DESIRED STATE



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EcoRecord

## Updated Management Actions – Compartment 5

Access & Infrastructure				
Action	Objective & Rationale	Method	Timings	
1	<b>Amend boundary of Smestow Valley Local Nature Reserve</b>	The current Smestow Valley LNR boundary does not include the section of the Smestow Brook which runs through the compartment or the area of woodland located between this and the canal corridor (compartments 5F & 5G). Both of these areas are designated as part of the Smestow Valley SINC (Site of Importance for Nature Conservation) and are ecologically valuable parts of the Smestow Valley open space. So as to afford these areas the same protection as the existing LNR it is recommended that these areas are added to the designated area.	Future opportunity to formally add the section of the Smestow Brook and woodland between this and the canal corridor to the designated LNR. Also make additional minor improvements to accuracy of digitised site boundary as shown on <b>maps 2 &amp; 3</b> . Local Nature Reserve status is afforded to sites by Natural England and there is a formal process that must be followed to amend the schedule.	Future Opportunity
2	<b>Upgrade primary footpath</b>	The primary footpath which follows the trackbed of the former railway is often in a poor state of repair and is difficult for many people, particularly those with limited mobility, to use. This is therefore a major barrier to accessing much of the site for many people. The footpath should therefore be upgraded wherever necessary.	Contractor to upgrade footpath to a high standard using loose stone in keeping with the rest of the site infrastructure. The footpath should be upgraded along the length of the compartment where necessary.	Opportunity - When resources available.
3	<b>Upgrade desire line which links canal towpath with primary footpath</b>	The desire line which runs from adjacent to Compton Lock through Compartment 5D to link with the primary footpath in Compartment 5A is a major pedestrian route into the site from Compton & the Staffordshire & Worcestershire Canal & forms an important link with the canal network. This is unsurfaced and therefore inaccessible to those with limited mobility, particularly when waterlogged. This should therefore be upgraded.	Contractor to construct high quality loose stone footpath in keeping with the rest of the site infrastructure.	Opportunity - When resources available.
4	<b>Upgrade pedestrian entrance from Compton Hill Drive</b>	The entrance from Compton Hill Drive comprises a locked wooden vehicle gate in a poor state of repair. To gain access to the site members of the public have apparently created a gap to one side of the gate & over the corner of the adjacent residential garden. This has resulted in damage to the householders' garden wall. The entrance is unattractive, unwelcoming and it is not clear that you are entering Smestow Valley LNR. The entrance should therefore be upgraded.	Upgrade entrance by replacing vehicle access gate & installing new staggered pedestrian entrance.	Opportunity - When resources available.
5	<b>Install Welcome to Smestow Valley LNR signs</b>	At many of the reserve entrances and within the site there are small 'Welcome to Smestow Valley Local Nature Reserve' signs. These are a recognisable and effective way of making people aware that they are entering an area of public open space. There	Produce to same design as current welcome signs. Contractor to produce & install.	Opportunity - When resources available.

Action	Objective & Rationale	Method	Timings
	are many points around the reserve where these are absent, however, and here it is frequently not clear to new visitors that they are entering Smestow Valley LNR (or even an area of public open space).		
6	<b>Install Smestow Valley LNR interpretation panel</b>	To be designed in conjunction with local residents. Contractor to produce & install.	Opportunity - When resources available.
7	<b>Install direction sign for Smestow Valley</b>	Install direction sign in location depicted on map.	Opportunity - When resources available.
8	<b>Formalise and improve entrance into LNR</b>	See <b>Actions 3, 4, 5, 6 &amp; 7.</b>	Opportunity - When resources available.
9	<b>Ensure Compton Bridge is in safe state of repair &amp; paint in historic colours</b>	This should be undertaken as a part of a wider heritage project.	Opportunity - When resources available.
10	<b>Remove defunct stile</b>	Remove stile.	2020.
11	<b>Remove stile</b>	Remove stile	2020.
12	<b>Remove defunct post &amp; wire fencing</b>	Remove fencing.	2020.
13	<b>Replace defunct steps</b>	Remove steps & construct a suitable ramp in keeping with existing site infrastructure.	Opportunity - When resources available.

Action	Objective & Rationale	Method	Timings	
	Additionally, steps are a potential barrier to those with limited mobility. The steps should therefore be removed & replaced with a ramp.			
14	<b>Regularly litter pick/clean-up site</b>	Smestow Valley suffers from large amounts of littering and dumping of larger objects. This is unattractive, is a barrier to people using the site and is potentially damaging to wildlife.	Regular clean-ups were previously undertaken by the site rangers up until 2017. However, this activity was lost when the site rangers were moved to other projects / schemes. These regular clean-ups should be re-instated with additional volunteer help sought. Other local authority staff called upon to deal with larger objects or other fly-tipped material.	Weekly.
15	<b>Carry out tree safety inspection</b>	It is a legal requirement that tree safety inspections are undertaken on areas of public open space.	In line with Wolverhampton City Council policy.	As method.
16	<b>Check legal boundary of LNR &amp; reinstate/adjust boundary accordingly</b>	A section of Compartment 5A & a section of Compartment 5B7 which are designated as part of the Local Nature Reserve currently form part of adjoining gardens.	The legal boundary of the reserve should be checked in conjunction with Wolverhampton City Council Planning Department &, as appropriate, either legal advice sought on reclaiming these areas or the LNR boundary redrawn to reflect ownership.	Late 2020.
17	<b>Remove garden waste</b>	The tipping of garden waste into sites of ecological value can introduce both unwanted nutrients and non-native species. Garden waste has been introduced into Smestow Valley LNR at points throughout the reserve.	Remove garden waste from site. Send a letter to local residents which describes the negative impacts that the introduction of garden waste has on wildlife sites and outlines the actions that can be taken by the local authority against offenders.	Ongoing.

Habitats & Species			
Action	Objective & Rationale	Method	Timings
18	<b>Allow woodland to mature</b>	Much of the woodland within the compartment is developing as relatively diverse woodland comprised predominantly of native species. The mature dense scrub is also maturing towards woodland. This should be allowed to continue with minimal management.  West Midland Bird Club recommended: <i>Create and encourage standing deadwood in and around the scrub adjacent to the railway walk to hopefully allow Willow Tit to return.</i>	Minimal intervention wherever appropriate (though see invasive species).  Ongoing.
19	<b>Reduce Sycamore</b>	The non-native tree species Sycamore is present throughout the site and dominates parts of the woodland canopy. Sycamore colonises sites rapidly and can quickly become dominant. This is not only detrimental to the canopy and shrub layer species of a woodland, but due to the heavy shading and dense leaf-litter that Sycamore produces, to field-layer species also. The amount of Sycamore in the woodland canopy should therefore be reduced.	Divide the woodland & scrub in each sub-compartment into five areas. Select one area in each of the five years of the management plan & selectively remove (killing stumps with stump grinders or with herbicide) as many individuals (of all ages) as is reasonable (i.e. retain a full canopy & retain aesthetic quality). Remove all regeneration & young trees in each sub-compartment annually.  Autumn-winter 2020-2024 (to aid identification it may be necessary to mark the trees earlier in the growing season). Regeneration & young trees can be removed all year.
20	<b>Coppice &amp; thin planted woodland blocks</b>	The planted woodland blocks are dense, dark, structurally poor & support little flora. These areas have reached the stage of maturity where they would benefit from selective coppicing & thinning. The aim should be to create a woodland comprised of a canopy of mature 'standard' trees with an understorey of shrubs & multi-stemmed trees. Such structural diversity should allow a much greater diversity of flora & fauna species to colonise the woodland.  West Midland Bird Club recommended: <i>Plantation woodlands need thinning to favour selected species and trees, as well as introduction of native ground flora to increase their value for wildlife.</i>	Works have already been undertaken as part of the previous management plan to thin woodland plantation dominated by Silver Birch in the southern section.  This should be continued throughout the site. By undertake 40% to 50 % thin and treat stumps with herbicide. Under-plant with Oak to diversify canopy and Hazel, Rowan and Field Maple to create shrub-layer.  Autumn-winter 2020-2024.
21	<b>Create woodland edge habitat</b>	Scrub at the edges of woodland forms a 'woodland edge', i.e. an edge comprised of scrubby vegetation rather than the 'high forest' canopy that is desired in the woodland interior. This variation in structure promotes species diversity by providing different niches for a wide range of flora and fauna, especially when this grades into other habitat such as tall herb and/or grassland.	Divide the edge of the woodland of Compartment 5B7 which faces Compartment 5B5 into 20m lengths. In each of the five years of the management plan select 20% of the 20m lengths & coppice to a depth of 5m (each 20m length should only be cut once in five years).  Autumn-winter 2020-2024.

Action	Objective & Rationale	Method	Timings
<p><b>22</b>   <b>Reduce planted trees overtopping adjacent hedgerow with trees</b></p>	<p>The woodland which comprises Compartment 5B7 was planted adjacent to historic field boundary hedgerows which are ecologically valuable &amp; which contain a number of mature trees of species including Pedunculate Oak &amp; Ash. The younger planted trees are growing vigorously upwards &amp; have created shady conditions for the hedgerow shrubs &amp; trees which had matured in open conditions. This is leading to crown dieback which will undermine the health of the shrubs/trees &amp; may shorten their lives. Surrounding trees &amp; shrubs should therefore be reduced or removed.</p>	<p>Reduce height of or remove young trees &amp; shrubs which are growing in close proximity to the old hedgerows.</p>	<p>When required, autumn-winter 2020-2024.</p>
<p><b>23</b>   <b>'Gap-up' hedgerows &amp; re-instate traditional hedgerow management</b></p>	<p>The existing hedgerows within the compartment have not been managed for many years and have frequently become gappy or outgrown. This diminishes the hedgerow's value as habitats and as landscape features. Gaps in the hedgerows should therefore be filled and traditional hedgerow management instated where feasible.</p>	<p>'Gap-up' hedgerows by planting locally sourced Hawthorn. Where hedgerows are low and 'leggy' it may be possible to lay or coppice the hedgerows prior to gapping-up. Once these have established they should be managed using the traditional technique of hedge laying. It is not appropriate to coppice large, outgrown hedgerows. These should be managed by gapping-up, facing-up &amp; topping so as to retain as large &amp; entire feature hedgerows.</p>	<p>Autumn-winter 2020-2024.</p>
<p><b>24</b>   <b>Plant new hedgerow</b></p>	<p>The northern boundary of Compartment 5B5 is currently formed by a defunct post &amp; wire fence. This should be replaced (see also ?) with a hedgerow with standard trees. This will provide additional habitat for a variety of fauna and flora whilst being of significant landscape value.</p>	<p>Plant a Hawthorn dominated hedgerow with a mix of other locally native tree and shrub species. Plant trees within hedgerow that will be allowed to mature as standards. Species particularly appropriate for standards include Pedunculate Oak and Ash. Following establishment the hedgerows should be managed using the traditional technique of hedge laying.</p>	<p>Autumn-winter, when resources available.</p>
<p><b>25</b>   <b>Manage grassland via traditional 'hay-meadow' method</b></p>	<p>The 'meadow' grassland which comprises most of compartment 5B5 was created in the 1980s using the technique of 'hay-strewing' with hay from an old species-rich grassland. This supports a relatively diverse &amp; very attractive sward. To maintain the diversity of this habitat, to encourage the recruitment of additional grassland species &amp; to prevent colonisation by non-grassland species traditional hay-meadow type management must be undertaken annually.</p>	<p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol>	<p>Annually as method.</p>
<p><b>26</b>   <b>Retain open glade</b></p>	<p>Compartment 5B6 comprises an area of neutral grassland which has been, and which continues to be, rapidly colonised by thickets of Blackthorn. In the south of the compartment there is a remnant area of grassland which is only accessible by going through a hedgerow or through dense Blackthorn &amp; Bramble. When surveyed a high number of invertebrates were noted utilising this sunny &amp; undisturbed 'glade'. The colonisation of the</p>	<p>Cut (with strimmer or similar equipment) &amp; remove arisings.</p>	<p>Annually in late August-September.</p>

Action	Objective & Rationale	Method	Timings
	area by Blackthorn & Bramble should be prevented so as to retain the glade.		
27	<p><b>De-culvert Graisleley Brook &amp; re-instate original channel</b></p> <p>The Graisleley Brook is a small watercourse which historically formed part of the boundary between the parishes of Tettenhall &amp; Wolverhampton. The brook runs north-west from the Compton Road (close to Glencourt) through the open space of Compton Park and then into the north of Compartment 5B. From here it continues under the former railway line &amp; southwards through Compartment 5C to its confluence with the Smestow Brook. This stretch of the brook had already been channelised by the time of the mapping of 1887, and during the mid 20<sup>th</sup> century was culverted (with the exception of approximately 200m in Compartment 5C). The section running through the north of Compartment 5B is located in a straight &amp; deep culvert to the north of its former course. Culverts create a wholly artificial watercourse of very limited ecological (&amp; aesthetic) value. The Graisleley Brook should therefore be de-culverted &amp; its original course restored.</p>	<p>The historic line of the Graisleley Brook is depicted on historic mapping dating to 1887 (as a remnant ditch &amp; parish boundary) &amp; is apparently still discernable on the ground as a shallow scrub lined depression. In conjunction with Wolverhampton City Council flood defence staff &amp; the Environment Agency the line of the brook should be re-excavated &amp; connected to the existing course. The arisings from the excavation can then be used, in part, to backfill the culvert.</p>	<p>Begin liaison in 2020 &amp; undertake when resources available.</p>
28	<p><b>Change bank profile to increase flooding of Compartment 5C</b></p> <p>Compartment 5C comprises a low-lying area which contains a 200m stretch of the Graisleley Brook. The area is apparently periodically inundated &amp; has a high water table. A combination of tall ruderal vegetation, Common Reed &amp; Crack Willow dominated woodland has established here. The stand of Common Reed is the only 'reedswamp' (i.e. tall herbaceous vegetation in standing water or waterlogged soils) in the entire LNR. This is a valuable habitat type which can support flora &amp; fauna not present elsewhere in the site. The amount of water should be increased here so as to encourage the expansion of reedswamp at the expense of tall ruderal vegetation.</p>	<p>Attempts have been made previously to encourage a similar Common Reed dominated habitat. These have involved the excavation of shallow trenches which have required significant maintenance to prevent them from becoming silted or vegetated up. To create a wetland that requires little maintenance the banks of the Graisleley Brook should be lowered to increase water inundation into the area. This should create a permanently water-logged area which will provide suitable conditions for the expansion of reedswamp. Advice should be sought on bank re-profiling from the Environment Agency.</p>	<p>Begin liaison in 2020 &amp; undertake when resources available.</p>
29	<p><b>Plant locally sourced Black Poplar along course of Graisleley Brook</b></p> <p>The sub-species of Black Poplar native to the UK was formally relatively common along waterways, but is now Britain's rarest native 'timber' tree. The de-culverting of the Graisleley Brook presents an opportunity to introduce this species to the Smestow Valley.</p>	<p>Take cuttings from confirmed local native Black Poplar &amp; plant in banks of Graisleley Brook.</p>	<p>As soon as Graisleley Brook is de-culverted.</p>
30	<p><b>'Re-naturalise' Smestow Brook</b></p> <p>The Smestow Brook has been heavily modified and engineered for most of its length through Smestow Valley LNR and often flows in a highly artificial channel. This is both aesthetically unattractive &amp; results in a watercourse of limited ecological value. An investigation should be carried out in conjunction with the Environment Agency &amp; Wolverhampton City Council flood defence staff which aims to identify where and how the channel can be re-naturalised via the removal of artificial bank/bed material and the construction of meanders, backwaters etc. Within Compartment 5G the brook runs in a straight course</p>	<p>To be undertaken in conjunction with Environment Agency &amp; Wolverhampton City Council flood defence staff.</p>	<p>Begin liaison in 2020 &amp; undertake when resources available.</p>

Action	Objective & Rationale	Method	Timings
	between housing & the large bank which comprises Compartment 5F. This may leave limited scope for alteration of the course, however, there is potential to change bank profiles, widen sections etc.		
31 <b>Open up vegetation along Smestow Brook</b>	For much of its length through the LNR the Smestow Brook is heavily shaded by scrub and woodland type vegetation. The shade this creates prevents the utilisation of the watercourse by most flora and many fauna species. A diversity of light levels and structure of bank-side vegetation will enable many more species to utilise the watercourse. Areas should therefore be selected along the course of the brook where vegetation is regularly cut back.	Cut & remove woody vegetation from selected areas in year 1. This will result in young regrowth from the trees and shrubs and a variety of perennial herbaceous species in the following year. Each autumn from year 2 these areas should be cut and the arisings removed.	Autumn 2020: cut & remove woody vegetation. Autumn 2020-21: cut regrowth of all vegetation & remove arisings.
32 <b>Re-instate grassland in Compton Lock Meadow</b>	Compartment 5D comprises the remnants of two former fields which prior to the construction of the railway extended eastwards. The compartment was formally dominated by neutral grassland, but in recent years has been almost entirely colonised by tall ruderal vegetation of a few ubiquitous species. Scattered scrub is also now colonising and it is likely that the area will become dense scrub if left unmanaged. The area should be re-instated as grassland with a woodland edge of scrub & tall ruderal vegetation along the boundary with the woodland of Compartment 5A.	<p>I. Autumn-winter - cut all vegetation (with the exception of the established areas of dense scrub) other than a 5m strip along the eastern edge &amp; remove arisings.</p> <p>II. Following April – apply herbicide to all of area other than a 10m strip along the eastern edge.</p> <p>III. Following July – reapply herbicide.</p> <p>IV. Cut all vegetation (with the exception of the established areas of dense scrub) other than a 5m strip along the eastern edge &amp; remove arisings.</p> <p>V. Spread arisings (hay) from local species-rich 'hay meadow' onto prepared area immediately following harvest (to introduce seed).</p> <p>VI. Growth of the vegetation should be slow with much bare earth visible, but by autumn some meadow species should have become established (probably along with a number of ruderal annuals/biennials). If there is an extensive problem with non-target perennial species such as Broad-leaved Dock or Nettle, then localised herbicide may be applied during the following autumn or spring growing season.</p> <p>The following management should then be implemented from the next summer. This method is designed to mimic the traditional hay meadow management method:</p> <p>I. Leave area uncut from November – August.</p> <p>II. Cut &amp; remove arisings in first week of August.</p> <p>III. Gang mow &amp; remove arisings August – October.</p>	As method, when resources available.
33 <b>Re-instate hedgerow in Compton Lock Meadow</b>	Compartment 5D comprises the remnants of two former fields which prior to the construction of the railway extended eastwards. The hedgerow which formed the boundary between the two fields	Plant a Hawthorn dominated hedgerow with a mix of other locally native tree and shrub species. Plant trees within hedgerow that will be allowed to mature as standards. Species	Autumn-winter, when resources available.

Action	Objective & Rationale	Method	Timings	
	is depicted on the earliest sourced mapping (1887) up to 1919. Hedgerows are an important habitat & part of historic landscape. The hedgerow should be re-instated in the same location as depicted on the historic mapping.	particularly appropriate for standards include Pedunculate Oak and Ash. Following establishment the hedgerows should be managed using the traditional technique of hedge laying.		
34	<b>Remove Snowberry</b>	There are stands of the introduced Snowberry within the site. This species can become invasive and shades out field-layer vegetation.	Remove Snowberry through cutting followed by treatment of the stumps.	Autumn-winter 2020-2024.
35	<b>Control Himalayan Balsam</b>	Himalayan Balsam is a highly invasive non-native species of plant which can rapidly colonise an area to the detriment of native flora. The species is abundant along most of the Smestow Brook corridor.	Pull Himalayan Balsam by hand throughout the growing season. Spraying of large stands may be appropriate away from open water, though a suitably qualified and experienced individual should undertake this.	May-August 2020-2023.
36	<b>Eradicate Japanese Knotweed</b>	There are several stands of Japanese Knotweed throughout the compartment. This is a highly invasive non-native species that can rapidly colonise an area to the detriment of native vegetation. Japanese Knotweed is listed on Schedule 9 Part 2 of the Wildlife and Countryside Act as a plant that may not be planted or otherwise caused to grow in the wild. It is therefore recommended that this species is eradicated from the site.	A suitably qualified and experienced individual should treat the stands with an appropriate herbicide until this is dead.	Spring and late summer 2020 - 2023.
37	<b>Remove Cotoneaster</b>	There are several small stands of Cotoneaster ( <i>Cotoneaster</i> sp.) within the compartment. These are non-native and potentially invasive species and should be removed.	Pull by hand or cut and treat with appropriate herbicide.	Ongoing.
38	<b>Enhancement of grassland for ground nesting birds and overwintering birds</b>	Ground nesting birds require a variation of short and tall grass to nest in and for shelter. While the provision of species rich grassland will provide an enhanced foraging habitat for seeding eating birds.  As such it is important to undertake a management on the onsite grassland to allow the grassland species to flower. In addition, leaving uncut margins and corner within the onsite grassland would extend the availability of seeds into the winter period where food can be more scarce.	The following management method ( <b>Action 25, 26 and 32</b> ) has been designed to mimic traditional hay meadow management: I. Leave area uncut from November – August. II. Cut & remove arisings in first week of August. III. Gang mow & remove arisings August – October.  A field margin should be left uncut each August to provide additional food for bird species through winter. This should be undertaken on a rota to ensure that no margins remain uncut for a period of two years. This would ensure that successional growth does not extend into the grassland.	Annually as method.
39	<b>Enhancement of Smestow brook and de-culvert Graisle Brook to provide opportunities for</b>	Water vole records are known to be present within the local area. However, due to over shading from the adjacent broadleaved woodland and the spread of Himalayan balsam there is limited foraging resource in the form of marginal vegetation for the species.	Undertake works as per the <b>management action 27, 28, 29 and 30</b> which details the re-naturalisation of the brook, the de-culverting Graisle brook and opening up vegetation along the brook.	As shown with management action 27, 28, 29, 30 and 35

Action	Objective & Rationale	Method	Timings
<p><b>local water vole populations</b></p>	<p>To improve the bankside habitats, the selected areas of bankside scrub and woodland should be cut back to allow diversity in light along the banks and allow the establishment of additional bankside vegetation.</p> <p>The Himalayan balsam should be control as <b>management practice 35</b>.</p> <p>The re-naturalisation of this stretch of brook involving the creation of meanders and back water will create addition habitat and variation along the river which will provide further opportunities for the species.</p> <p>De-culverting of Graislely brook will allow for potentially additional habitat for this species within the compartment.</p>	<p>Works to control and prevent the further spread of Himalayan balsam should be undertaken as per management action 35.</p>	
<p><b>40 Retain suitable habitat for Kingfisher</b></p>	<p>Kingfisher are known to be present along the Smestow valley and rely on bare eroded cliffs adjacent to water course to nesting.</p> <p>To ensure the retention of the species along the brook and to enhance the habitat for the species all naturally eroded cliffs along the watercourse should be retained and should be made inaccessible to public to reduce any potential disturbance to a nest site.</p>	<p>Any naturally eroded cliffs along Smestow brook should retained, away from publicly accessible areas, for nesting habitat for Kingfisher.</p>	<p>Ongoing</p>
<p><b>41 Enhancement of foraging and nesting opportunities on site for local bird and bat species</b></p>	<p>The grassland, scrub, hedgerow and woodland habitat on site provide suitable habitat for local bat and bird population.</p> <p>To further increase the opportunity for these species on site management practices should aim to increase structural and floristic diversity of broadleaved woodland, scrub, hedgerow and grassland on site to provide optimal nesting material and foraging habitat (berries, nuts and invertebrates).</p>	<p>Management practices to promote varying in age structure and flora diversity within onsite habitats to increase foraging and nesting resources on site.</p> <p>Follow the relevant management practices (<b>18, 19, 20, 22 – 26</b>) as described within the table above.</p>	<p>As shown above</p>
<p><b>42 Enhancement of grassland and woodland for Invertebrates</b></p>	<p>The physical structure of the grassland sward in addition to high floristic diversity within the habitat is important for a wide variety of invertebrates. This will not only ensure an abundance of the necessary food plant but varied topography such as areas of short and tall grass and bare soil on site.</p> <p>To improve the semi-improved neutral grassland within the compartment as traditional hay meadow management will assist in achieving a good floristic diversity. In addition, by retain an area of grassland on a rotation basis uncut and any areas of bare earth will ensure a varied structure which will benefit invertebrates.</p> <p>The broadleaved woodland present on site provides suitable habitat for numerous invertebrates that thrive in this habitat.</p> <p>Similar to nesting birds and bats they thrive on a structural variation within woodland to the bespoke habitat that its species</p>	<p>The following management method (<b>action 25</b>) has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol> <p>A field margin should be left uncut each August to provide additional food for bird species through winter. This should be undertaken on a rota to ensure that no margins remain uncut for a period of two years. This would ensure that successional growth does not extend into the grassland.</p>	<p>Annually as method.</p>

Action	Objective & Rationale	Method	Timings
	<p>and sub species required. In addition to management method mentioned above within <b>action 41</b>. The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p> <p>The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p>	<p>Management practices to promote varying in age structure and flora diversity within onsite woodland habitats to increase foraging and nesting resources on site.</p> <p>Follow the relevant <b>management practices (18, 19, 20, 22 - 26)</b> as described within the table above.</p> <p>Any bare earth areas within the grassland or along embankments on site should be retained in situ for ground nesting bees.</p> <p>Log piles should be placed / dead wood left in situ within areas of the broadleaved woodland.</p>	
<p><b>43</b> <b>Monitoring of management action and action results</b></p>	<p>As management actions are undertaken, it is important to monitoring the completion of those actions and the results of the management to ensure the desired impact / outcome has occurred.</p>	<p>All local authority and community group should report completion of management actions and future proposals at regular liaison group meetings to ensure that no duplications or opportunities are not missed. In addition, to any issues caused by habitat works.</p> <p>At end of the period covered by the management plan, an assessment should be undertaken to confirm all actions undertaken within the period and should include a review and an update of the Smestow Valley Management Plan.</p>	<p>Ongoing as management activity are undertaken.</p> <p>A completed assessment undertaken at the completion of the management period late 2025.</p>

## Compartment 6. Bridgnorth Road – Windmill Lane & Castlecroft Road

### Compartment Description Amendments

Upon review of the Smestow Valley Management Plan compartment description, consultations and the undertaking of site visit to the site area, it is assessed that the previous provided description is still valid to cover compartment 6 Bridgnorth road – Windmill Lane and Castlecroft road. Therefore, no major amendments to habitat description are believed to be necessary.

However, one amendment has been made to the desired state of two areas of habitat shown on map 36. This has come about in response to the successional growth that has occurred over time within the habitats on site. As such, contrary to Map 36 – Compartment 6F – G & K (north) in the 2012-17 plan, both compartments 6F and 6G4 will be managed to become broadleaved woodland rather than managed as unimproved neutral grassland. Therefore, the grassland area will no longer be fenced.

In addition, Map 36, denotes the creation of two new ponds within the proposed grassland. Due to the changes in the decision to allow successional growth to result in woodland these ponds will no longer be created.

### Works Proposed / Undertaken since 2012

The City of Wolverhampton Council have undertaken bankside works in and around the perimeter of Turner's Pond to remove all scrub and young trees. In addition to this two large mature willow trees that were overhanging the pond have been cut back to the main trunk. These works have been undertaken to reduce over shading and to limit a potential contributing factor to the drop in water levels noted within Turner's Pond.

The City of Wolverhampton Council has also worked to improve access within the site area through the resurfacing of footpaths within compartment 6G4 and with the creation of a new path and bridge (with signage) along the Finchfield Brook designed to link the railway walk to the school.

In addition, Waterside Care has undertaken regularly maintenance and works along Finchfield Brook. This has included:

- Regular litter picks from the brook and the banks;
- Cutting back overgrowth, scrub and bankside trees to open up the stream and public footpath, where appropriate;
- Clearance of debris and litter which accumulates where the brook flows into the culvert under the playing field;
- Undertaking water quality surveys, through kick sampling of aquatic invertebrates. During the surveys if pollution was encountered this was reported to the Environment Agency;
- Invasive species control, through the removal of Himalayan Balsam and reporting presence of Japanese Knotweed to City of Wolverhampton Council;
- Repairs to the wooden footbridge which had been damaged on a number of occasions; and
- Clearance of an oil spillage from the brook, which occurred during work to lay tarmac paths through Castlecroft Field.

The Wildlife Trust for Birmingham and the Black Country have been undertaking work throughout the compartment as detailed below.

Within sub compartment 6G5 works included:

- The planting of understorey plants such as hazel and guelder rose within the broadleaved woodland and the woodland plants such as red campion, foxglove, native bluebell, yellow archangel, greater stitchwort, wood speedwell and a number of woodland grass species;
- The young oak trees present within the woodland were subject to thinning works to open up canopy and allow for further understorey growth; and
- The hazel and hawthorn present was subject to coppicing and pollarding to promote further growth.

Within compartment 6I2 works included:

- The neutral grassland was strewn with green hay, in 2014, to enhance species diversity. In addition to ox eye daisy and yellow rattle seed being sown on to the grassland;
- The colonising oak trees within the grassland were felled and stumps treated with herbicide to stop the successional growth occurring within the grassland;
- As part of reinstating the grassland and preventing successional growth ruderal habitat dominated by great willowherb and selective areas of bramble scrub were cut and treated, in 2014.
- Further scrub clearance occurred in 2016 to manage encroachment;
- Turner's Field was subject to hay meadow management in 2017;
- The silver birch woodland plantation was subject to thinning works in 2013 to 2014; and
- Finally, in 2018 the Black Country Blue Network project allowed for the scarifying and further green hay strewing, sourced from Castle Vale Meadows in Birmingham, to further enhance the sward. This also occurred in compartment 6G4, 6D2 and 6C2.

Within compartment 6G4 the woodland present was subject to coppicing and the creation of scallops along the woodland edges. In addition to this the footpath in this compartment was resurfaced to improve access.

Finchfield Brook, compartment 6K, was subject to habitat improvement works in 2017 where a pre-planted 9m coir mat was installed to enhance the bankside vegetation. In addition, six black poplar trees were planted along the bankside.

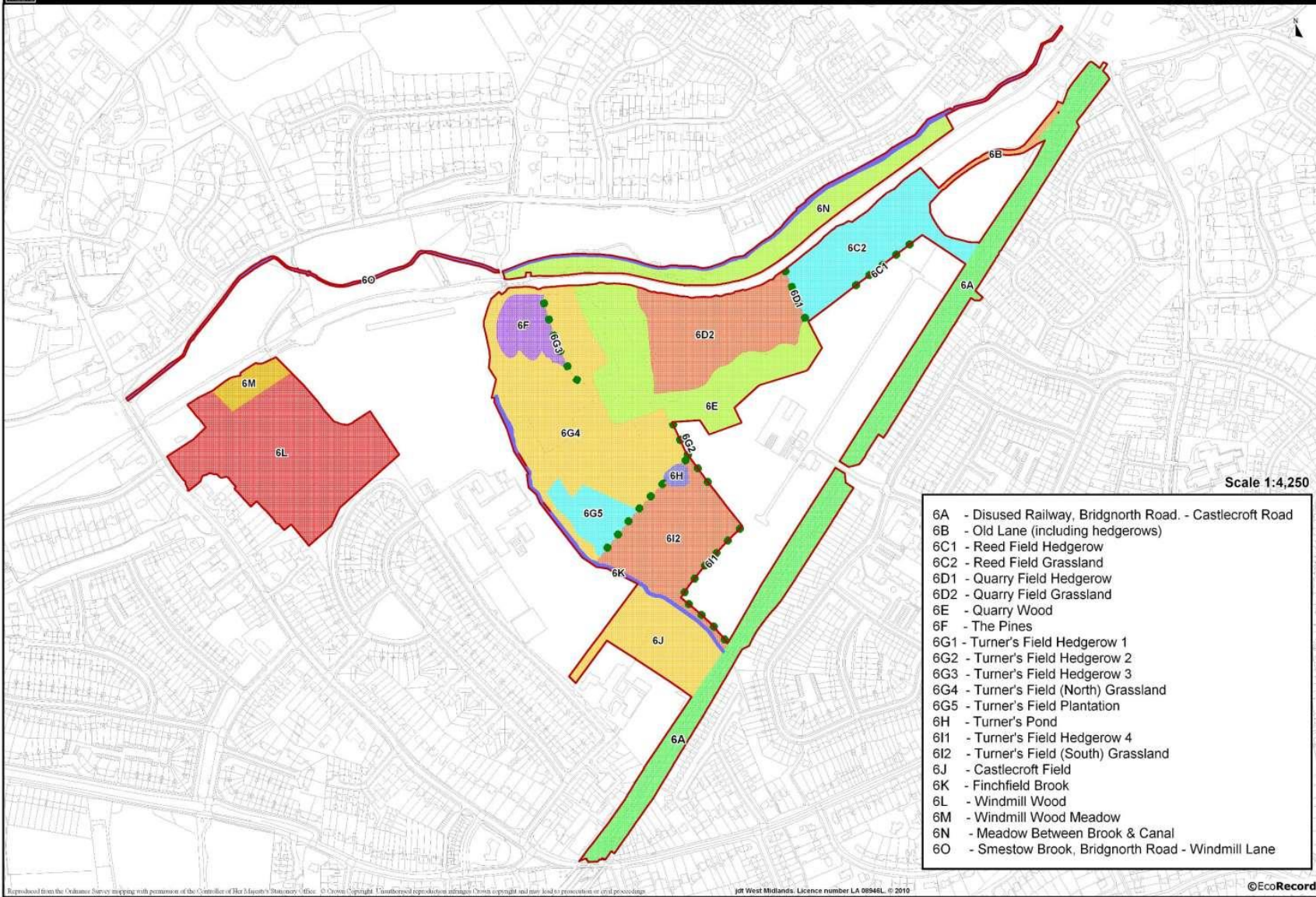
Within compartment 6A along the woodland edge a variety of locally native flora including red campion, foxglove, native bluebell, yellow archangel and yellow pimpernel were sown or planted.

The volunteers from FACTAR managed to secure funding to paint the Castlecroft Road bridge in its historic colours. WREN volunteers are currently looking into improving access from the bridge with an access ramp.

The Canal & Rivers Trust's Wandering Vole project, whose funding has been provided by a number of groups including WREN and the Wildlife Trust for Birmingham and the Black Country, has installed pre-planted coir rolls on the canal bank adjacent to Smestow School.

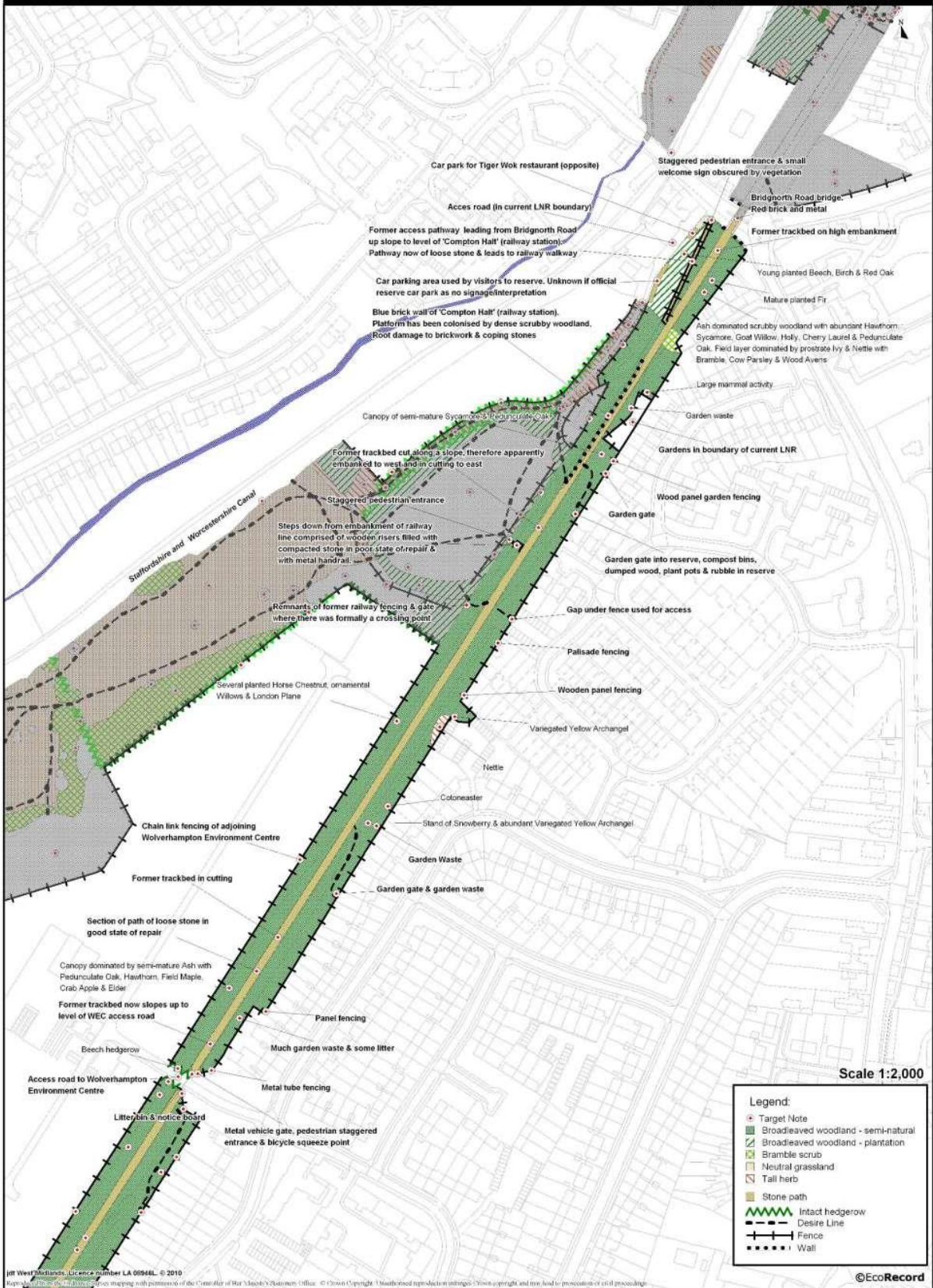


### Map 25 Compartment 6 - sub-compartments



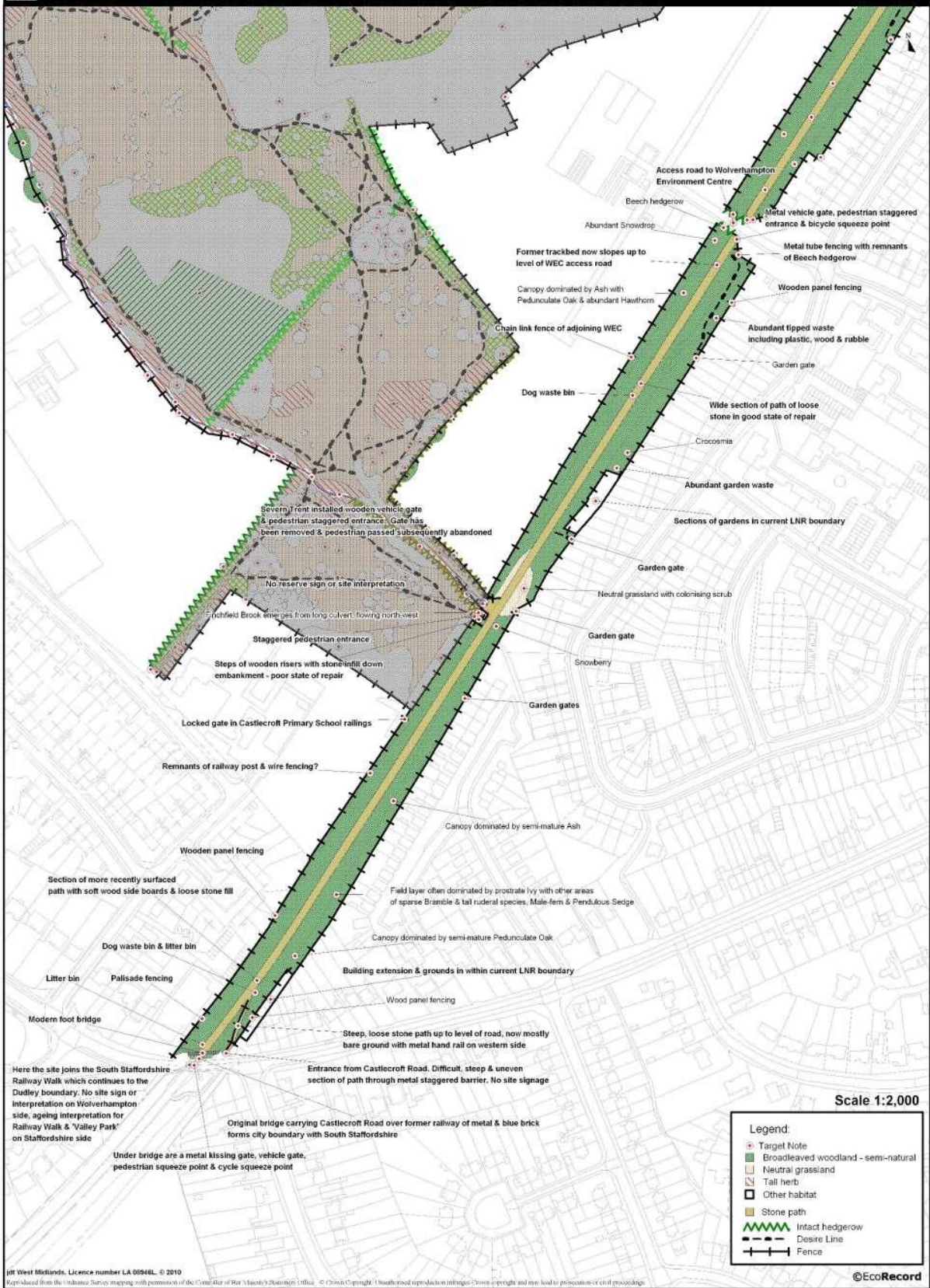


# Map 26 Compartment 6A (north) CURRENT STATE





# Map 27 Compartment 6A (south) CURRENT STATE

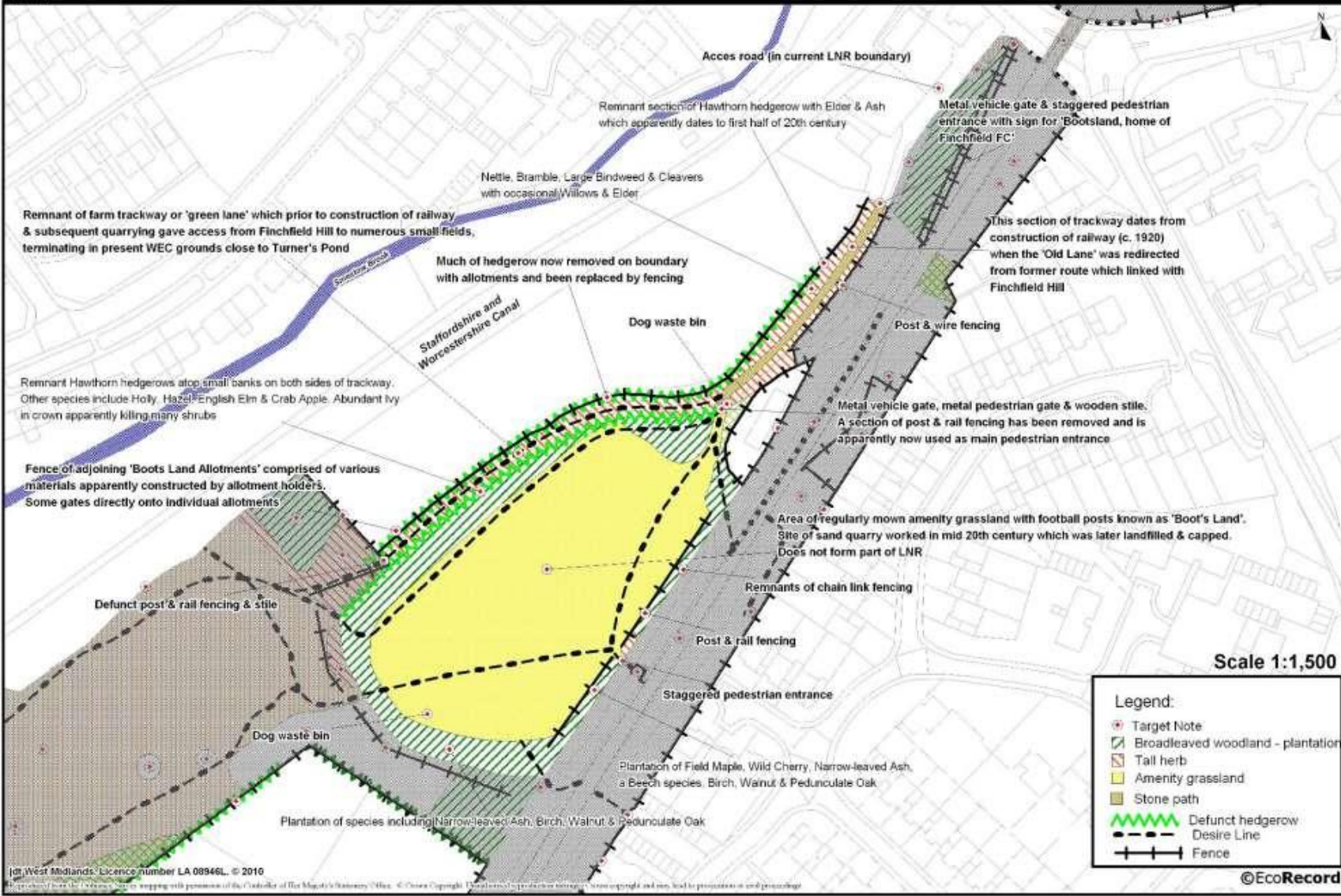


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# Map 28 Compartment 6B (& Boots Land Playing Field) CURRENT STATE



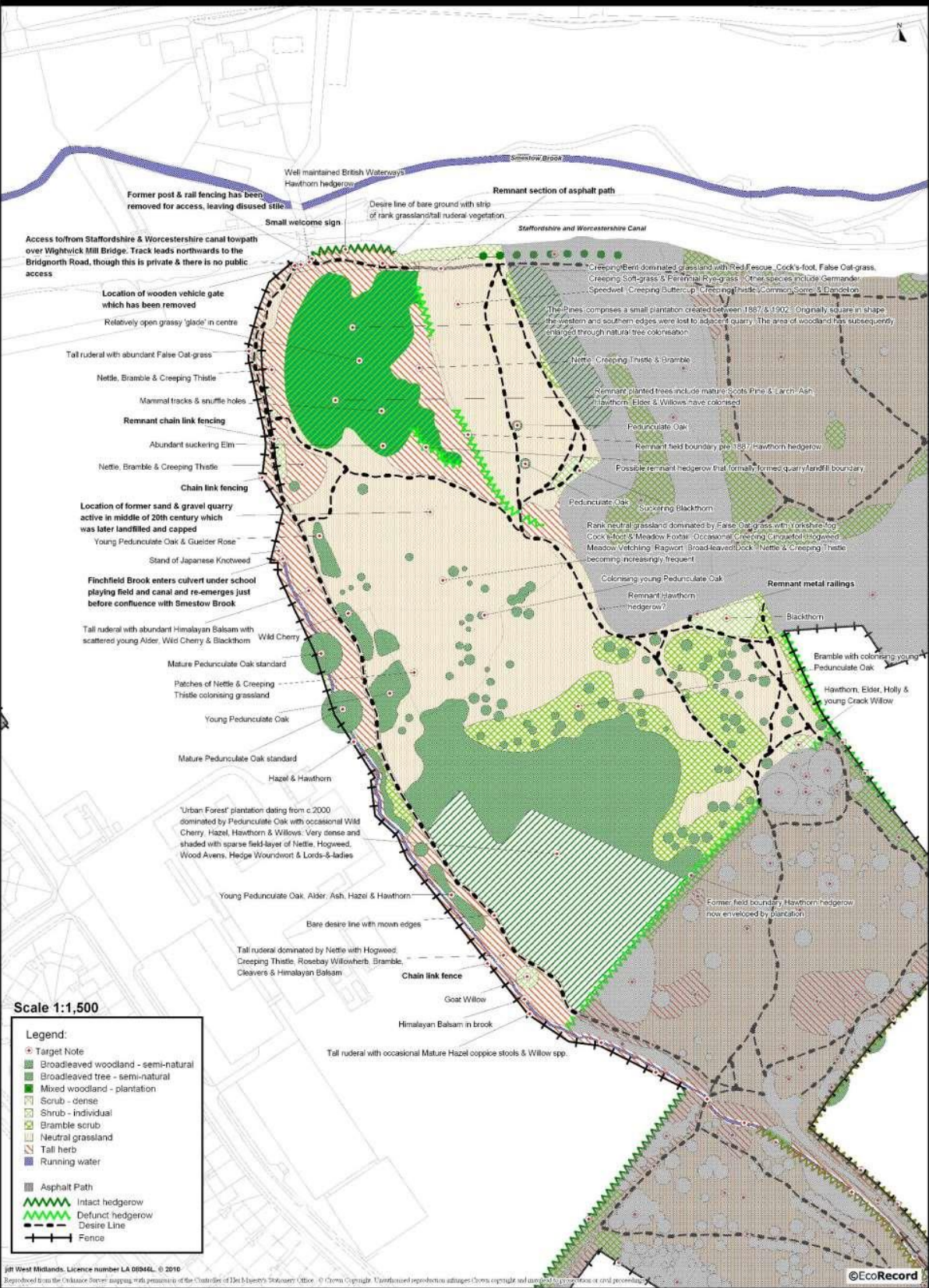


# Map 29 Compartment 6C - E CURRENT STATE



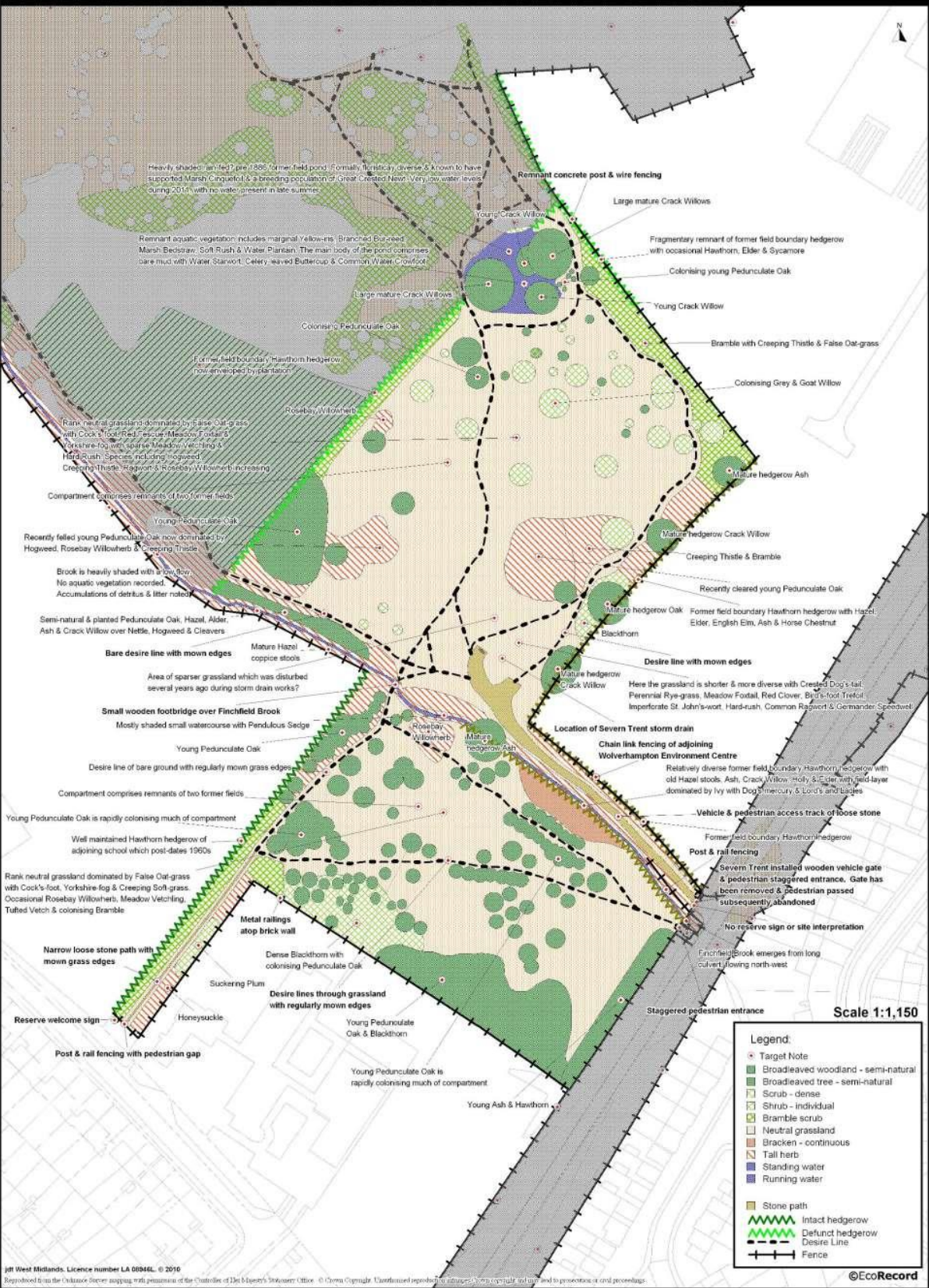


# Map 30 Compartment 6F - G & K (north) CURRENT STATE





# Map 31 Compartment 6H - J & K (south) CURRENT STATE



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EcoRecord



# Map 32 Compartment 6L - M CURRENT STATE





# Map 33 Compartment 6A DESIRED STATE





### Map 34 Compartment 6B (& Boots Land Playing Field) DESIRED STATE





### Map 35 Compartment 6C - E DESIRED STATE

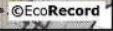




# Map 36 Compartment 6F - G & K (north) DESIRED STATE



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# Map 37 Compartment 6H - J & K (south) DESIRED STATE





### Map 38 Compartment 6L - M DESIRED STATE



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## Updated Management Actions – Compartment 6

Access & Infrastructure				
Action	Objective & Rationale	Method	Timings	
1	<b>Amend boundary of Smestow Valley Local Nature Reserve</b>	The ground survey identified a number of areas around the periphery of the compartment where the designated LNR boundary does not match the site on the ground. The designated boundary should therefore be updated as depicted on <b>Map 2</b> .	Make improvements to accuracy of designated site boundary. Local Nature Reserve status is afforded to sites by Natural England and there is a formal process that must be followed to amend the schedule.	Future Opportunity.
2	<b>Upgrade primary footpath</b>	Some sections of the primary footpath which follows the trackbed of the former railway are in a poor state of repair, and are therefore difficult for many people, particularly those with limited mobility, to use. This is a major barrier to accessing this part of the site for many people & the footpath should therefore be upgraded where necessary.	Contractor to upgrade footpath to a high standard using loose stone in keeping with the rest of the site infrastructure. The footpath should be upgraded along the whole length of the compartment where necessary.	Opportunity - When resources available.
3	<b>Upgrade footpath which links canal towpath with primary footpath</b>	The footpath which links the Wightwick Mill Bridge site entrance to the primary footpath in compartment 6A is a major pedestrian route and forms an important link with the canal network. This is unsurfaced and therefore inaccessible to those with limited mobility particularly when waterlogged. This should therefore be upgraded.	Contractor to construct high quality loose stone footpath in keeping with the rest of the site infrastructure.	Opportunity - When resources available.
4	<b>Upgrade access from Castlecroft Road</b>	The entrance from Castlecroft Road is unattractive & uninviting and the access ramp is steep & in a poor state of repair. This is a major barrier to access for many people, particularly those with limited mobility. The entrance & access ramp should therefore be upgraded and steps installed.	Contractor to design & construct new entrance, steps & access ramp.	Opportunity - When resources available.
5	<b>Paint Castlecroft Road bridge in historic colours/style</b>	The structures associated with the former railway are of significant local historic and landscape value and the restoration of these to their historic appearance (including painted advertising as recorded on historic photographs) would be of great benefit to this part of Wolverhampton.	This should be undertaken as a part of a wider heritage project.	Opportunity - When resources available.
6	<b>Install fencing etc. to enable re-instatement of grazing</b>	To enable the safe re-introduction of grazing to the Compartment G12 it will be necessary to install fencing & associated infrastructure. Fencing should be installed as depicted on <b>Map 37</b> to delineate grazing areas that are not accessible to the public. Wherever possible designated grazing areas should not include areas that are currently regularly accessed by the general public (i.e. established desire lines).	Fence areas as depicted on <b>Map 37</b> with high quality post & rail fencing and that existing metal rails be replaced where feasible. Locations of other infrastructure (e.g. gates, holding pens) etc. should be sought from potential graziers.	Opportunity - When resources available.

Action	Objective & Rationale	Method	Timings	
7	<b>Re-instate 'Old Lane' as accessible track to enable management &amp; pedestrian access</b>	The compartment known as 'Old Lane' (Compartment 6B) is the remnant of a historic trackway bounded by old hedgerows which formally linked Finchfield Hill with the agricultural land which now comprises this part of the LNR. The lane is an important ecological & historic landscape feature & should be retained. The re-instatement of this to a passable trackway would additionally enable vehicle access to both the Reed Field & Quarry Field (Compartment 6C2 & 6D2), therefore enabling the prescribed management for these areas (see <b>Map 34 Compartment 6B</b> )	Cut back tall ruderal vegetation which has colonised the trackway regularly throughout the growing season, re-instate hedgerows (see <b>Map 34 Compartment 6B</b> ) & install wooden vehicle gates with pedestrian squeeze points so as to prevent unofficial vehicle access.	Opportunity - When resources available.
8	<b>Install Welcome to Smestow Valley LNR signs</b>	At many of the reserve entrances and within the site there are small 'Welcome to Smestow Valley Local Nature Reserve' signs. These are a recognisable and effective way of making people aware that they are entering an area of public open space. There are many points around the reserve where these are absent, however, and here it is frequently not clear to new visitors that they are entering Smestow Valley LNR (or even an area of public open space).	Produce to same design as current welcome signs. Contractor to produce & install.	Opportunity - When resources available.
9	<b>Install Smestow Valley LNR interpretation panel</b>	There is very little interpretation around Smestow Valley LNR that describes the significance and value of the site, or that informs people as to where they are and what they can see. A series of map based interpretation panels should therefore be produced that are tailored to each of the compartments, showing the environmental and geological features present in the LNR.	To be designed in conjunction with local residents. Contractor to produce & install.	Opportunity - When resources available.
10	<b>Install direction sign for Smestow Valley</b>	The Smestow Valley LNR can be accessed via Castlecroft Road, with a directional sign has now been installed since the production of the previous management plan. However, a wooden signage, consistent with others used across the site would be more appropriate  however, this is not clear for first time visitors, as there is no obvious signage. Direction signs should therefore be installed.	Replace directional sign in location depicted on map with a wooden sign consistent with others across the LNR.	Opportunity - When resources available.
11	<b>Formalise and improve entrance into LNR</b>	The site entrances onto LNR are unattractive, unwelcoming and it is not always clear that you are entering Smestow Valley LNR.	See <b>Actions 3, 4, 5, 7, 8, 9 &amp; 10.</b>	Opportunity - When resources available.
12	<b>Install a bench or picnic table near the Old Nursery Pool</b>	There is little seating areas within this area of the LNR, as such it would be beneficial to install seating in a tranquil and highly aesthetic area of the LNR.	To be designed in conjunction with local residents.	Opportunity - When resources available.
13	<b>Ensure former Compton Halt platforms &amp;</b>	The station platforms at Compton Halt remain in situ. These have been colonised by dense scrub and woodland and the	Advice should be sought from the Black Country Archaeologist (based in Wolverhampton City Council), appropriate local	Late 2020

Action		Objective & Rationale	Method	Timings
	<b>associated historic structures are preserved</b>	structures are not maintained. Consequently, the platforms are suffering from root damage, with walls having large cracks and coping stones coming away.	heritage groups and an appropriately experienced engineer on how to best preserve the structures for the future. The ecological and aesthetic quality of the habitats that have colonised the structures must be considered as a part of this, and should be retained where possible.	
14	<b>Check legal boundary of LNR &amp; reinstate/adjust boundary accordingly</b>	There are several sections of Compartment 6A which are designated as part of the Local Nature Reserve, but that currently form part of adjoining gardens.	The legal boundary of the reserve should be checked in conjunction with Wolverhampton City Council Planning Department &, as appropriate, either legal advice sought on reclaiming these areas or the LNR boundary redrawn to reflect ownership.	Late 2020.
15	<b>Regularly litter pick/clean-up site</b>	Smestow Valley suffers from large amounts of littering and dumping of larger objects. This is unattractive, is a barrier to people using the site and is potentially damaging to wildlife.	Regular clean-ups were previously undertaken by the site rangers up until 2017. However, this activity was lost when the site rangers were moved to other projects / schemes. These regular clean-ups should be re-instated with additional volunteer help sought. Other local authority staff called upon to deal with larger objects or other fly-tipped material.	Weekly.
16	<b>Carry out tree safety inspection</b>	It is a legal requirement that tree safety inspections are undertaken on areas of public open space.	In line with Wolverhampton City Council policy.	As method.
17	<b>Remove garden waste</b>	The tipping of garden waste into sites of ecological value can introduce both unwanted nutrients and non-native species. Garden waste has been introduced into Smestow Valley LNR at points throughout the reserve.	Remove garden waste from site. Send a letter to local residents which describes the negative impacts that the introduction of garden waste has on wildlife sites and outlines the actions that can be taken by the local authority against offenders.	Ongoing.
18	<b>Develop an activity area for Young People around the existing Mountain Bike Trails in the Big Quarry</b>	There is opportunity to expand the existing Mountain Bike Trails to provide further activities for young people in terms of group lead activities or independent activity area such as green play area.	To be designed in conjunction and advised by local residents and liaison group. Contractor to produce & install.	Opportunity - When resources available.
19	<b>Conserve the geology, archaeology and the historical landscape</b>	The Smestow Valley Local Nature Reserve holds numerous a key features of geological, archaeology and historical interest such as the canal, 19 <sup>th</sup> century sand quarries, the plate layers' huts, telegraph poles, Tolkien Gates and field boundaries.  As such all works on the LNR and adjacent should consider the potential impact to these features to ensure the protection of these for future generations.	This is ongoing action and should be incorporated within the works undertaken by City of Wolverhampton Council and local groups.	Ongoing.

## Habitats & Species

Action	Objective & Rationale	Method	Timings
20 <b>Allow woodland to mature</b>	<p>Much of the woodland within the compartment is developing as relatively diverse woodland comprised predominantly of native species. The mature dense scrub is also maturing towards woodland. This should be allowed to continue with minimal management.</p> <p>West Midland Bird Club recommended: <i>The woodlands require control of Sycamore and other non-native species, some of which could be managed as standing deadwood.</i></p>	Minimal intervention wherever appropriate (though see invasive species).	Ongoing.
21 <b>Reduce Sycamore</b>	The non-native tree species Sycamore is present throughout the site and dominates parts of the woodland canopy. Sycamore can be detrimental to the ecological value of woodlands through the shading out of native flora. The amount of Sycamore in the woodland canopy should therefore be reduced.	Divide the woodland & scrub in each sub-compartment into five areas. Select one area in each of the five years of the management plan & selectively remove (killing stumps with stump grinders or with herbicide) as many individuals (of all ages) as is reasonable (i.e. retain a full canopy & retain aesthetic quality). Remove all regeneration & young trees in each sub-compartment annually.	Autumn-winter 2020-2024 (to aid identification it may be necessary to mark the trees earlier in the growing season). Regeneration & young trees can be removed all year.
22 <b>Allow areas of tall ruderal vegetation &amp; Bramble to 'tumble down' to woodland</b>	The scrub and tall ruderal habitats within 'The Pines' (Compartment 6F) are succeeding to secondary woodland comprised of mostly native species. It is recommended that areas are left to develop towards woodland naturally, therefore forming a larger area of woodland.	No thinning, removal (other than of invasive species, see other actions) or planting etc. is currently required in these areas.	Ongoing.
23 <b>Coppice &amp; thin planted woodland blocks</b>	The planted woodland block which comprises Compartment 6G5 is dense, dark, structurally poor & supports little flora. The plantation has reached the stage of maturity where it would benefit from selective coppicing & thinning. The aim should be to create a woodland comprised of a canopy of mature 'standard' trees with an understorey of shrubs & multi-stemmed trees. Such structural diversity should allow a much greater diversity of flora & fauna species to colonise the woodland.	Undertake 40% to 50 % thin and treat stumps with herbicide. Under-plant with Hazel to create shrub-layer.	Autumn-winter 2020-2024.
24 <b>Create woodland edge habitat</b>	Scrub at the edges of woodland forms a 'woodland edge', i.e. an edge comprised of scrubby vegetation rather than the 'high forest' canopy that is desired in the woodland interior. This variation in structure promotes species diversity by providing different niches for a wide range of flora and fauna, especially when this grades into other habitat such as tall herb and/or grassland.	Divide the developing woodland along the northern edge of Compartment 6G5 into 20m lengths. In each of the five years of the management plan select 20% of the 20m lengths & coppice (each 20m length should only be cut once in five years).	Autumn-winter 2020-2024.
25 <b>Reduce planted trees overtopping adjacent hedgerow</b>	The woodland which comprises Compartment 6G5 was planted adjacent to a historic field boundary hedgerow of ecological value & historic landscape value. The younger planted trees are growing vigorously upwards & have created shady conditions for the hedgerow which had matured in open conditions. This may lead to crown dieback which will undermine the health of the	Reduce height of or remove young trees & shrubs which are growing in close proximity to the old hedgerow.	When required, autumn-winter 2020-2024.

Action	Objective & Rationale	Method	Timings
	hedgerow. Surrounding trees & shrubs should therefore be reduced or removed.		
26	<b>Enhance field-layer of plantation woodland</b>	<p>This has been undertaken within specific areas of the compartment as detailed above. However, this work could be undertaken throughout the site to improve species diversity.</p> <p>A field-layer of locally sourced woodland plants should be introduced to the plantation. Species should include Red Campion, Foxglove, Bluebell, Yellow Archangel, Greater Stitchwort &amp; Wood Speedwell.</p>	Autumn, when resources available.
27	<b>'Gap-up' former hedgerows &amp; re-instate traditional hedgerow management</b>	<p>'Gap-up' hedgerows by planting locally sourced Hawthorn. Where hedgerows are low and 'leggy' it may be possible to lay or coppice the hedgerows prior to gapping-up. Once these have established they should be managed using the traditional technique of hedge laying. It is not appropriate to coppice large outgrown hedgerows, these should be managed by gapping-up, facing-up &amp; topping so as to retain as large &amp; entire feature hedgerows.</p>	Autumn-winter 2020-2024.
28	<p><b>Clear scrub, Bramble &amp; tall ruderal vegetation from Turner's Field &amp; Castlecroft Field</b></p> <p>Turner's Field (Compartments 6I2) &amp; Castlecroft Field (Compartment 6J) are former agricultural fields that until the 1980s were grazed by cattle. Since grazing has ceased the grassland has become rank &amp; large areas have been colonised by dense stands of tall ruderal &amp; scrub vegetation dominated by a low number of common species. This colonising vegetation should be removed.</p> <p>This work has been undertaken in 2014. However, with irregular grassland management have been undertaken since this period to early 2019 the grassland has started to become rank and colonisation for the adjacent woodland, ruderal and scrub habitat has been noted within the grassland. As such further removal of colonising vegetation will be required.</p> <p>West Midland Bird Club recommended: <i>The fields need proper management else they will be lost to scrub. Either grazing or cutting for hay and aftermath grazing would be appropriate.</i></p>	<p>Cut stands of Bramble, tall ruderal vegetation &amp; selectively remove scrub (see also <b>Actions 22 &amp; 23</b>). Treat stumps and regrowth with herbicide.</p> <p>To create a wildflower meadow on Turner's field and Castlecroft Field.</p> <p><b>I.</b> Autumn-winter - cut all vegetation (with the exception of the established areas of dense scrub) other than a 5m strip along the eastern edge &amp; remove arisings.</p> <p><b>II.</b> Following April – apply herbicide to all of area other than a 10m strip along the eastern edge.</p> <p><b>III.</b> Following July – reapply herbicide.</p> <p><b>IV.</b> Cut all vegetation (with the exception of the established areas of dense scrub) other than a 5m strip along the eastern edge &amp; remove arisings.</p> <p><b>V.</b> Spread arisings (hay) from local species-rich 'hay meadow' onto prepared area immediately following harvest (to introduce seed).</p> <p><b>VI.</b> Growth of the vegetation should be slow with much bare earth visible, but by autumn some meadow species should have become established (probably along with a number of ruderal annuals/biennials). If there is an extensive problem with non-target perennial species such as Broad-leaved Dock or Nettle, then localised herbicide may be applied during the following autumn or spring growing season.</p>	Autumn-winter 2020-21.

Action	Objective & Rationale	Method	Timings	
		<p>The following management should then be implemented from the next summer. This method is designed to mimic the traditional hay meadow management method:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol>		
29	<b>Select trees in Turner’s Field &amp; Castlecroft Field to retain as standards &amp; install guards</b>	<p>‘Standard’ trees are trees which grow in the open away from the shading effects of other trees and which when mature take on the familiar spreading form. These are of both significant ecological and landscape value. Standards are lacking in much of Smestow Valley.</p>	<p>Select the most mature &amp; healthy Pedunculate Oak trees which have become established in Turner’s Field &amp; Castlecroft Field to be retained as standards &amp; install guards to prevent grazing damage (see <b>action 25</b>).</p>	<p>Autumn-winter 2020-2021</p>
30	<b>Re-instate grazing on Turner’s Field (6I2) &amp; Castlecroft Field (6J)</b>	<p>It is likely that if left unchecked the whole of this area will become increasingly dominated by dense &amp; species-poor scrub. To prevent this &amp; to retain the associated historic landscape it is recommended that grazing is re-instated to these areas. The introduction of grazing will additionally encourage diversification of the sward by opening this up to colonisation by other flora species</p>	<p>The delineated areas should be grazed year round by a low number of cattle of a hardy traditional British breed. The stock should be rotated around the fenced grazing areas in such a way that both re-colonisation by scrub and overgrazing are prevented.</p> <p><b>Note that in absence of grazing the following hay-meadow type management should be implemented:</b></p> <p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol>	<p>From spring 2020 and Annually as method.</p>
31	<b>Cut un-grazed areas of Turner’s Field &amp; Castlecroft Field</b>	<p>Outside of the areas to be grazed there are additional areas of grassland which will require management to prevent colonisation by scrub.</p>	<p>Cut with strimmer or similar tool.</p>	<p>August-September 2020-2024.</p>
32	<b>Manage grassland via traditional ‘hay-meadow’ method</b>	<p>The areas of grassland which comprise Reed Field &amp; Quarry Field (Compartments 6C2 &amp; 6D2) are rank &amp; dominated by a low number of common species. These areas are also being colonised by stands of tall ruderal &amp; scrub species. To maintain the grassland sward &amp; to prevent colonisation by non-grassland species a traditional hay-meadow type management regime should be implemented here. This will additionally remove nutrients from the soil and open up the structure of the sward, therefore promoting colonisation of the area by other desirable grassland species.</p>	<p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol>	<p>Annually as method.</p>

Action	Objective & Rationale	Method	Timings
33 Investigate cause of drop in water levels in Turner's Pond	Turner's Field Pond (Compartment 6H) is a former field pond of significant ecological value which is known to support a breeding population of Great Crested Newt. Over recent years water levels in the pond have dropped significantly, & during 2011 the pond dried up completely. It is not clear if this is a result of the low rainfall of recent years, or if there are other causes. The causes of this should be investigated & remedial action taken if appropriate.	A suitably qualified & experienced hydrologist should be contracted to undertake an investigation into the drop in water levels.	2020/21
34 Create new pond	Turner's Pond supports a relatively high number of flora & fauna species not present elsewhere on the reserve (notably Great Crested Newt). These populations are susceptible to local extinction due to their reliance on a single waterbody. A new third waterbody should therefore be created within a 50m radius of Turner's Pool.	The most suitable method for creating a pond in this section of the site should be investigated prior to creation (e.g. the level of the local water-table will determine the need for/type of liner etc.). The pond should be constructed with a variety of depth and angle of bank slope. The proposed location is shown in <b>Map 37</b> in compartment G12.	Autumn 2020-24.
35 'Re-naturalise' Finchfield Brook	The Finchfield Brook has been modified and flows in a predominantly straight channel. This is both aesthetically unattractive & results in a watercourse of lesser ecological value than a natural watercourse. In addition, Finchfield Brook is prone to flooding of the upgraded footpath to Wightwick Mill Lock. Waterside Care has been advised that this flooding can be alleviated by the creation of ephemeral ponds. This would further assist naturalising the water course.	To be undertaken in conjunction with Environment Agency & Wolverhampton City Council flood defence staff.	Begin liaison in 2020 & undertake when resources available.
36 Creation of ephemeral pools adjacent to the path and close proximity to Finchfield Brook	At the current time the lower grill in front of the lower culvert often gets blocked with debris, even with regular clearance works by volunteers. This has caused flooding on to the path. To alleviate this issue a permanent plan has been proposed to create ephemeral pools beside the path, which would addition provide additional habitat for invertebrates and amphibians on site.	To be advised by Environment Agency & City of Wolverhampton Council flood defence staff in regards to its feasibility and design. Any works would need to take into account the protected status of Water voles and Great Crested Newts known to be present within the area.	2020 – 2021.
37 Creation of a flood alleviation plan	In conjunction with <b>management action 35 and 36</b> a flood alleviation plan should be produced for the Finchfield brook. It should aim to aid in managing water levels, describe in detail management of bankside vegetation and aid in the minimisation of flooding.	This should be undertaken in conjunction with the Environment Agency, Canal Rivers Trust and City of Wolverhampton Council.	2020.
38 Open up vegetation along Finchfield Brook	The Finchfield Brook is becoming increasingly shaded by scrub and woodland type vegetation. The shade this creates prevents the utilisation of the watercourse by most flora and many fauna species. A diversity of light levels and structure of bankside vegetation will enable many more species to utilise the watercourse. Areas should therefore be selected along the course of the brook where vegetation is regularly cut back.	Cut & remove vegetation from selected areas annually.	Autumn-winter 2020-2024.

Action		Objective & Rationale	Method	Timings
39	<b>Eradicate Japanese Knotweed</b>	There are several stands of Japanese Knotweed throughout the compartment, particularly along the brook corridor. This is a highly invasive non-native species that can rapidly colonise an area to the detriment of native vegetation. Japanese Knotweed is listed on Schedule 9 Part 2 of the Wildlife and Countryside Act as a plant that may not be planted or otherwise caused to grow in the wild. It is therefore recommended that this species is eradicated from the site.	A suitably qualified and experienced individual should treat the stands with an appropriate herbicide until this is dead.	Spring and late summer 2020-2024.
40	<b>Control Himalayan Balsam</b>	Himalayan Balsam is a highly invasive non-native species of plant which can rapidly colonise an area to the detriment of native flora. The species is abundant along most of the Smestow Brook corridor.	Pull Himalayan Balsam by hand throughout the growing season. Spraying of large stands may be appropriate away from open water, though a suitably qualified and experienced individual should undertake this.	May 2020-August 2024.
41	<b>Eradicate Variegated Yellow-archangel</b>	The plant species Variegated Yellow-archangel has been introduced to the site, apparently through the dumping of garden waste. Due to the invasive & potentially damaging nature the species it is listed under Schedule 9 Part 2 of the Wildlife and Countryside Act, as a plant which 'may not be planted or otherwise caused to grow in the wild'. This species should therefore be eradicated.	Variegated Yellow-archangel is difficult to eradicate via mechanical means and should therefore be treated with a herbicide via 'weed wiping'. This should be undertaken by an appropriately trained and experienced individual.	Spring and late summer 2020-2024.
42	<b>Re-expose valuable geological exposures</b>	There are several quarry exposures around the site that are of value for geological interpretation/education. These have been colonised by scrub. This has not only obscured the features of interest, but has contributed to weathering of the exposures in places (through root damage).  Proposed works has commenced removal scrub vegetation exposes the geological however, the works have not been complete and will be ongoing.	Cut and remove scrub and other colonising vegetation annually. Advice should be sought from the Black Country Geological Society on how to undertake this so as to ensure no damage is done to the features of value.	Autumn-winter 2020-2024.
43	<b>Manage Windmill Meadow as hay-meadow</b>	Compartment 6M comprises an area of created meadow (hay strewing). This should be retained as meadow through a traditional hay-meadow type management regime. There has been some encroachment into this of tall herb/scrub vegetation and this should be cut back and the management method undertaken in these areas also.	The following management method has been designed to mimic traditional hay meadow management: I. Leave area uncut from November – August. II. Cut & remove arisings in first week of August. III. Gang mow & remove arisings August – October.  Review potential access issues to allow for the management.	As method.
44	<b>Non-intervention woodland</b>	It is important to leave some areas where wildlife can develop naturally without intervention. Windmill Wood is not publically accessible and is therefore particularly suitable for this approach. West Midland Bird Club recommended: <i>Restricting public access into Windmill Wood must remain.</i>	Non-intervention. Works have been undertaken here. Would be worth mentioning Ellen Comments. Quarterly or biannual inspection.	Ongoing.

Action	Objective & Rationale	Method	Timings
<p><b>45</b>   <b>Enhancement of onsite pond for amphibians (including GCN)</b></p>	<p>Turner's pond provides potential aquatic habitat for local amphibian population. However, at the current time due to tree works along the bankside, the pond has limited area of shading is limited to small sections.</p> <p>The addition of further bankside scrub planting will increase suitability of the onsite for these species.</p>	<p>Bankside scrub planting, should be planted along section of Turner's pond to provide a mosaic of open and shaded habitat for amphibian species.</p> <p>Planting of scrub along a section of the bankside margins would provide a varying bankside structure allowing open and sheltering habitat for amphibians. While also providing an area of shoreline and standing water which will remain undisturbed by public and dogs.</p> <p>Installation of hibernacula within close proximity within the existing ponds and future proposed ponds.</p> <p>All Management practices undertaken within the pond or within close proximity should take in to account GCN present.</p>	<p>Early 2021</p>
<p><b>46</b>   <b>Enhancement of grassland for ground nesting birds and overwintering birds</b></p>	<p>Ground nesting birds require a variation of short and tall grass to nest in and for shelter. While the provision of species rich grassland will provide an enhanced foraging habitat for seeding eating birds.</p> <p>As such it is important to undertake a management on the onsite grassland to allow the grassland species to flower. In addition, leaving uncut margins and corner within the onsite grassland would extend the availability of seeds into the winter period where food can be more scarce.</p>	<p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol> <p>A field margin should be left uncut each August to provide additional food for bird species through winter. This should be undertaken on a rota to ensure that no margins remain uncut for a period of two years. This would ensure that successional growth does not extend into the grassland.</p>	<p>Annually as method.</p>
<p><b>47</b>   <b>Enhancement of foraging and nesting opportunities on site for local bird and bat species</b></p>	<p>The grassland, scrub, hedgerow and woodland habitat on site provide suitable habitat for local bat and bird population.</p> <p>To further increase the opportunity for these species on site management practices should aim to increase structural and floristic diversity of broadleaved woodland, scrub, hedgerow and grassland on site to provide optimal nesting material and foraging habitat (berries, nuts and invertebrates).</p> <p>The opening up and re naturalisation of Finchfield Brook will further enhance the watercourse creating variation in foraging and nesting habitat for breeding and overwintering birds.</p>	<p>Management practices to promote varying in age structure and flora diversity within onsite habitats to increase foraging and nesting resources on site.</p> <p>Follow the relevant management practices (<b>20, 21, 22, 23, 24, 26, 27, 28, 30 &amp; 31</b>) as described within the table above.</p> <p>Follow the relevant management practices <b>35 and 36</b> as described within the table above.</p>	<p>As shown above</p>
<p><b>48</b>   <b>Enhancement of Finchfield brook to provide opportunities for local water vole populations</b></p>	<p>Water vole records are known within the local area as such have potential to use Finchfield brook. To utilise a river corridor, water voles relies on marginal and bankside planting for food resources. As the brook becomes further shaded by scrub and woodland habitat although this does provide shelter habitat and</p>	<p>The Finchfield Brook is becoming increasingly shaded by scrub and woodland type vegetation. The shade this creates prevents the utilisation of the watercourse by most flora and many fauna species. A diversity of light levels and structure of bankside vegetation will enable many more species to utilise</p>	<p>Cut &amp; remove vegetation from selected areas annually.</p>

Action	Objective & Rationale	Method	Timings
	<p>reduce disturbance from the public, it also restricts the foraging resources they require.</p> <p>To improve the bankside habitats selected areas of the watercourses should be opened up through the cutting back of vegetation to allow marginal planting to establish.</p> <p>In the open areas coir rolls to be installed to increase the marginal planting along the brook.</p>	<p>the watercourse. Areas should therefore be selected along the course of the brook where vegetation is regularly cut back.</p> <p>Coir rolls to be installed in suitable location along Finchfield brook.</p>	<p>Opportunity – When resources allow.</p>
<p><b>49</b> <b>Enhancement of grassland, Finchfield brook and woodland for Invertebrates</b></p>	<p>The physical structure of the grassland sward in addition to high floristic diversity within the habitat is important for a wide variety of invertebrates. This will not only ensure an abundance of the necessary food plant but varied topography such as areas of short and tall grass and bare soil on site.</p> <p>To improve the semi-improved neutral grassland within the compartment as traditional hay meadow management will assist in achieving a good floristic diversity. In addition, by retain an area of grassland on a rotation basis uncut and any areas of bare earth will ensure a varied structure which will benefit invertebrates.</p> <p>The broadleaved woodland present on site provides suitable habitat for numerous invertebrates that thrive in this habitat.</p> <p>Similar to nesting birds and bats they thrive on a structural variation within broadleaved woodland to provide the bespoke habitat that its species and sub species required. In addition to management method mention above within action 41. The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p> <p>The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p> <p>The Finchfield Brook is becoming increasingly shaded by scrub and woodland type vegetation. The shade this creates prevents the utilisation of the watercourse by most flora and many fauna species. A diversity of light levels and structure of bankside vegetation will enable many more species to utilise the watercourse. Areas should therefore be selected along the course of the brook where vegetation is regularly cut back.</p>	<p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol> <p>A field margin and strips of grassland within the central area of the grassland should be left uncut each August to provide additional food for invertebrates through winter. This should be undertaken on a rota to ensure that no margins or strip remain uncut for a period of two years. This would ensure that successional growth does not extend into the grassland.</p> <p>The additional benefit of incorporating this management structure within the grassland management is to ensure the provision of long grass, therefore shelter, throughout the year for small mammal populations.</p> <p>Management practices to promote varying in age structure and flora diversity within onsite habitats to increase resources on site.</p> <p>Follow the relevant management actions (<b>actions 20, 21, 22, 23, 24, 26, 27, 28, 30 &amp; 31</b>) as described within the table above.</p> <p>Bare earth areas within the grassland or along embankments on site should be retained in situ for ground nesting bees.</p> <p>A log piles should be placed / dead wood to left in situ within areas of the broadleaved woodland.</p>	<p>Annually as method.</p> <p>Opportunity – When resources allow.</p>

Action	Objective & Rationale	Method	Timings
<p><b>50</b>   <b>Monitoring of management action and action results</b></p>	<p>As management actions are undertaken, it is important to monitoring the completion of those actions and the results of the management to ensure the desired impact / outcome has occurred.</p>	<p>All local authority and community group should report completion of management actions and future proposals at regular liaison group meetings to ensure that no duplications or opportunities are not missed. In addition, to any issues caused by habitat works.</p> <p>At end of the period covered by the management plan, an assessment should be undertaken to confirm all actions undertaken within the period and should include a review and an update of the Smestow Valley Management Plan.</p>	<p>Ongoing as management activity are undertaken.</p> <p>A completed assessment undertaken at the completion of the management period late 2024..</p>

## **Compartment 7 Windmill Lane – City Boundary**

### **Compartment Description Amendments**

Compartment 7 lies within the designated Local Wildlife Site of Smestow Valley (SLINC), but is not under the ownership or management of Wolverhampton City Council. This area is included as a compartment in the plan, however, as ecological records (for example for birds) are likely to be collected for the area, and it is important that they are considered in the context of the wider Smestow Valley. Recent surveys have not been undertaken in this area and no management actions have been prescribed or implemented.

## Compartment 8. Former Wolverhampton Environment Centre (WEC), Smestow Valley

<b>Grid Reference</b>	<b>SO879982</b>
<b>N.C. Designation(s)</b>	<b>SINC</b>
<b>Site Ownership</b>	<b>City of Wolverhampton Council</b>
<b>Current Area of SINC</b>	<b>4.4 ha</b>
<b>Proposed Area of LNR</b>	<b>4.4 ha</b>

### Site Description

The Wolverhampton Environment Centre (WEC) is a former environmental education centre that has been disused for approximately eight years. The former offices and nursery have been demolished and fenced off, by palisade fencing, due to the area being allocated for residential housing. The remaining area will be opened up to be included within the Local Nature Reserve and undergo enhancement work funded the ERDF Black Country Blue Network project. The aims of the ERDF Black Country Blue Network project are to enhance the area for biodiversity to include meadow creation through green hay strewing, woodland thinning and woodland field-layer planting and sowing.

The site is located in the Finchfield area of Wolverhampton in the west of the city. The WEC is entirely surrounded by Smestow Valley Local Nature Reserve with the only formal access point being from an access road off the residential Westacre Crescent.

The site is relatively flat throughout and sits at a level above the dismantled railway line that forms the eastern boundary. Adjacent to parts of the western boundary there are the steep slopes of a former sand quarry which is now an area of semi-natural woodland. Some of the site boundaries follow historic field boundaries and there are remnants of old hedgerows on the Smestow Valley side of the chain-link fence which forms the entire site boundary.

The northern and southern sections of the site are dominated by planted woodland no more than approximately 30 years old. In the southern section of the site there is a pond with associated boardwalk and platforms. In the northern section (on the site of a now-removed wood processing area) a spontaneous grassland has developed. In each section there is an asphalt-surfaced access road which links to the central area and access gate. Around the fencing of the former Nursery and buildings lies areas of disturbed ground caused by enabling works for the demolition. In majority, this area is dominated by bare ground, however, an area of species poor grassland and dense scrub is also present. Due to the lack of current management in this area the plantation woodland has begun to encroach in to the area resulting in areas of scattered scrub leading from the northern plantation woodland.

As part of the current development works occurring in the former Wolverhampton Council's Central Plant Nursery located between the northern and southern areas, access improvements have been undertaken within the southern area of WEC in the form of a surfaced footpath leading from the South Staffordshire Railway Walk throughout the site to Compartment 6 Bridgnorth road – Windmill lane and Castlecroft road and clearance of mature willow scrub around the perimeter of the onsite pond. Further clearance of areas of marginal planting along the pond banks have also occurred. The brash and cut willow limbs have been used to create two hibernacula adjacent to the pond for amphibians.

In 2019, a planning application was made for the central area of the WEC where the former nursery was located. The planning application was for a residential development. At the time of the management plan the application had not received approval, however, this would need to be taken into account of at the next revision of the management plan should the application be approved.

### Habitats

Phase 1 Name	Phase 1 Code	Statutory	BAP Priority Habitat	NERC P.I.	Rarity
<b>Broadleaved woodland - plantation</b>	<b>A112</b>				

The oldest planted woodland on the site is approximately 30 years old and this covers most of the two sections. These areas were originally part of the plant nursery and are therefore planted in rows and blocks. The areas are consequently densely planted, though some thinning work was undertaken as part of a field-layer introduction project (University of Wolverhampton) in the 1990s. Locally there is often little diversity of canopy species, however, across the whole site diversity is relatively high with more than 20 species recorded. Native species include Field Maple, Silver Birch, Hazel, Alder Buckthorn, Ash, Holly, Wild Cherry, Aspen, Guelder Rose, Oak and several willows. Non-native species include Norway Maple, Sycamore, Wingnut, Horse Chestnut, Beech (not native to the West Midlands), Cherry Plum, Common Lime, Chinese Necklace Poplar and Swedish Whitebeam. As the plantations have matured the structure of these has diversified through tree falls and colonisation by other species. Where the canopy is more open and mature a shrub-layer of Holly, Elder and Hawthorn has developed. The Wingnut is suckering and beginning to form a dense thicket in the southern section of the site.

In the areas where the canopy is densest there is little field-layer and much bare ground, however, across most of the site a field-layer typical of young woodland has developed with species including Cow Parsley, Nettle, Wood Avens and Bramble. In parts Ivy is growing prostrate in dense mats to the exclusion of other species.

In the approximate centre of the southern plantation a population of native Bluebell and Primrose has successfully been established through the field-layer introduction project. Other species thought to be introductions include Ramsons, Wood Millet, Wood False-brome, Red Campion and Wood Speedwell.

In the south-western part of northern section there is a more recent plantation dominated by Hazel with very occasional Pedunculate Oak, Ash, Silver Birch and Wild Cherry. Here the ground is mostly bare with a small amount of Wood Avens, Rough Meadow-grass and Nettle.

<b>Scrub - dense/continuous</b>	<b>A21</b>				
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In the very north of the site there is an area of young developing woodland/scrub with Goat and Grey Willow, Blackthorn, Silver Birch and Ash. Around the pond in the southern section there is a stand of Goat Willow, Grey Willow and Osier with a sparse Soft Rush and Creeping Buttercup field-layer. The bare ground and lack of field-layer suggests the area is periodically inundated with water.

There are several stands of Bramble scrub around the site which are colonising adjacent habitats. Growing within these are common tall herb species including Rosebay Willowherb, Nettle and Creeping Thistle.

Within the central area of the WEC adjacent to the residential development area lies an area of dense mature scrub likely originating from when the Nursery was in use.

<b>Neutral grassland</b>	<b>B2</b>				
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In the northern section a spontaneous and relatively diverse grassland comprised of ephemeral and perennial species has developed on an area of gravel. Here there is abundant False Oat-grass, Crested Dog's-tail and Red Fescue with Smooth Hawk's-beard, Montbretia, Herb Robert, Perforate St. John's Wort, Common Cat's-ear, Soft Rush, Hard Rush, Black Medick, Mouse-ear Hawkweed, White Clover, Creeping Buttercup and Common Vetch. This is also reflected in the two small areas of grassland located with the central area and a small area in the south of the site. However, in these area diversity is diminishing from the adjacent works and lack of management.

<b>Tall herb</b>	<b>C31</b>				
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There are several stands of tall herb across the site that have colonised areas which have been unmanaged for some years. These often form woodland edge or glade habitat and add to the diversity on site. Species include Rosebay Willowherb, Great Willowherb, Broad-leaved Dock, Hybrid Comfrey, Nettle, Creeping Thistle, Nettle and Pendulous Sedge.

<b>Pond &amp; Marginal Vegetation</b>	<b>G1 &amp; F21</b>				
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The created pond in the southern section of the site has been planted with a wide variety of emergent and floating-leaved species and is highly attractive. In the open water there are several White Waterlilies that cover much of the surface. Around the edges a tall marginal vegetation of Lesser Pond-sedge and Reed Sweet-grass has developed. Locally abundant is Common Club-rush. Other species include Reedmace, Yellow Iris, Soft Rush, Hard Rush, Water Mint, Australian Swamp Stonecrop, Great Willowherb, Ragged Robin, Marsh Marigold and Bogbean. On the day of survey several damselfly and dragonfly species were noted and the pond is thought to be used as breeding habitat for the known local population of Great Crested Newt.

As stated above in spring 2020 clearance works were undertaken on mature willow scrub around the perimeter of the onsite pond, with further clearance of areas of marginal planting along the banks.

### Fauna

The broadleaved and mixed woodland present on site will likely support a wide range of common bird species such as great spotted woodpecker, tree creeper, black cap and great tit, while offering potential roosting opportunity for native bat species.

The pond onsite within the southern area provides an additional habitat to the site with the potential to support amphibians including the European protected species Great Crested Newt known to be present within Turner's pond located less than 50m from the site. The pond also provided habitat opportunity for Damselflies and Dragonflies present within the surrounding area.

### Species of Note [1]

#### Flora

Species	Common Name	Statutory	BAP P.S.	NERC P.I.	RL	Rarity	Date
<i>Caltha palustris</i>	Marsh Marigold					U (intro.)	2015
<i>Lychnis flos-cuculi</i>	Ragged Robin					U (intro.)	2015
<i>Menyanthes trifoliata</i>	Bogbean					R (intro.)	2015
<i>Primula vulgaris</i>	Primrose					U (intro.)	2015
<i>Veronica montana</i>	Wood Speedwell					U (intro.)	2015

Fauna							
Species	Common Name	Statutory	BAP P.S.	NERC P.I.	RL	Concern	Date
<i>Garrulus glandarius</i>	Jay	EHD					2015
<i>Meles meles</i>	Badger	PBA					2015
<i>Turdus philomelos</i>	Song Thrush	EHD				R	2015

Invasive Species [2]			
Species	Common Name	Location	Abundance (DAFOR)
<i>Crassula helmsii</i>	New Zealand Pymgyweed	SO87899821	Frequent
<i>Robinia pseudoacacia</i>	False Acacia	Southern Plantation	Rare

[1] HABITATS/SPECIES OF NOTE TABLES – ATTRIBUTE DEFINITIONS

**STATUTORY (PROTECTED) -**

**EHD** = EU Habitats Directive (plus where relevant the Annex II or IV). **PBA** = Protection of Badgers Act 1992.

**WCA S1** = Wildlife & Countryside Act Schedule 1 (birds protected at all times). **WCA S5** = Wildlife & Countryside Act Schedule 5 (animals with various levels of protection). **WCA S8** = Wildlife & Countryside Act Schedule 8 (higher and lower plants with various levels of protection).

**BAP** – Habitats/Species included on current UK BAP list of Priority Habitats/Species.

**NERC P.I.** - Habitats/Species included on current list of Principal Importance in England under Section 41 of the NERC Act (2006).

**RL** - Species included on Global IUCN & British Red Lists (Red Data Books).

**RARITY (HABITATS) - BIRMINGHAM & BLACK COUNTRY** - Habitats included on the B&BC list of locally rare habitats (administered by EcoRecord).

**RARITY (FLORA SPECIES) - BIRMINGHAM & BLACK COUNTRY** - (based on data held and managed by EcoRecord).

**VR** = Very Rare - a species present in less than 1.0% of 1Km squares, tetrads, or 5Km squares in B&BC.

**R** = Rare - a species present in 1.0% - 4.3% of 1Km squares, tetrads, or 5Km squares in B&BC.

**U** = Uncommon - a species present in 4.3% - 12% of 1Km squares, tetrads or 5Km squares in B&BC.

**CONCERN (FAUNA SPECIES OF CONSERVATION CONCERN) -**

Birds: **R** = Red List - species that are Globally Threatened according to the International Union for Nature Conservation criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery. **A** = Amber List - species with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.

Mammals: **ND** = National Decline and **ED** = England Decline as measured by the Mammal Societies Table of Recent Population Changes in the Native Species of Land Mammals.

Invertebrates: **RD** = Regional Decline identified in Butterfly Conservation West Midlands Regional Action Plan.

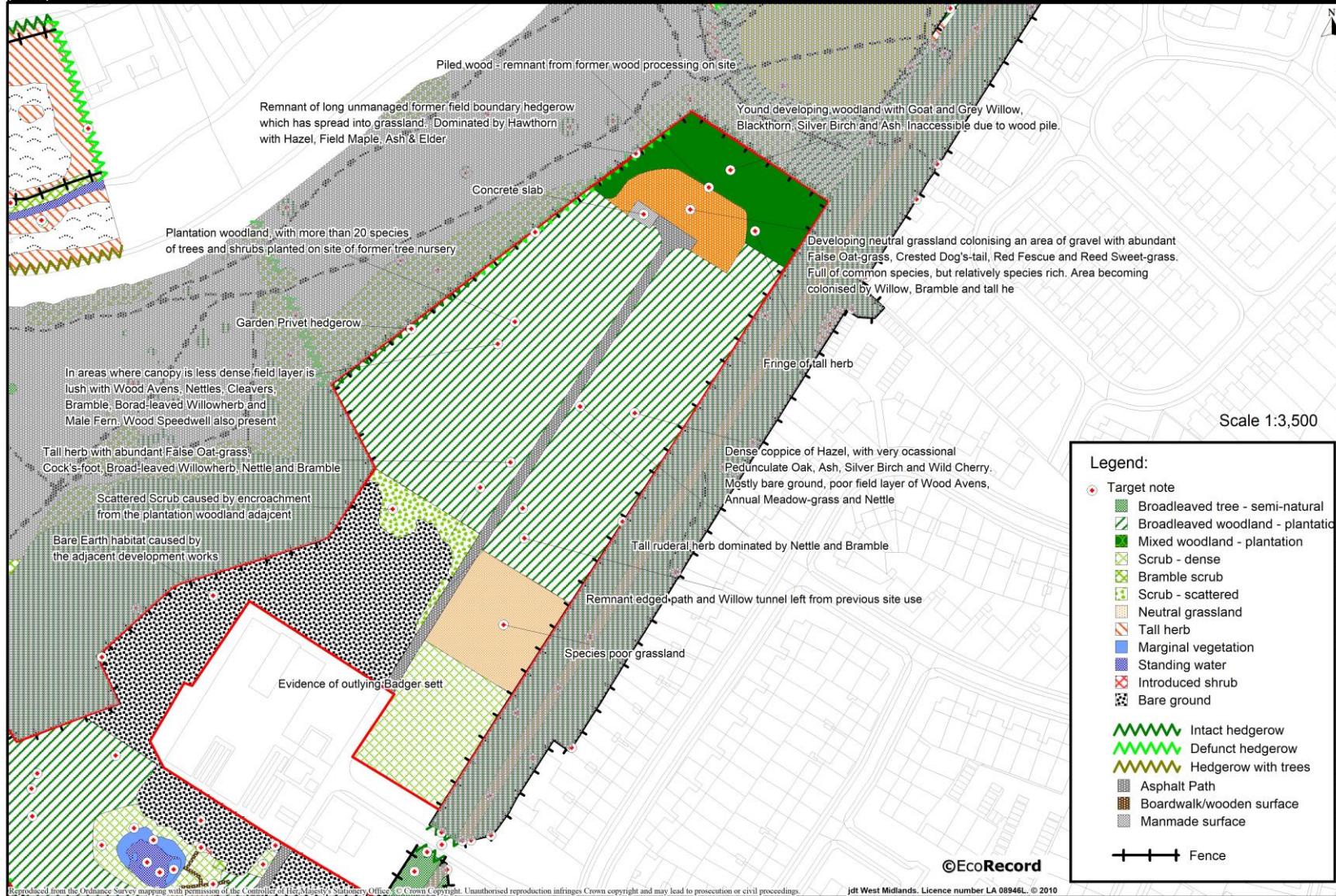
**DATE** - The most recent date the species has been recorded.

**[2] Species listed on Schedule 9 part 1 (animals) and part 2 (plants) of the Wildlife and Countryside Act 1981 as amended**

- this lists animals which may not be released or allowed to escape into the wild and plants which may not be planted or otherwise caused to grow in the wild.

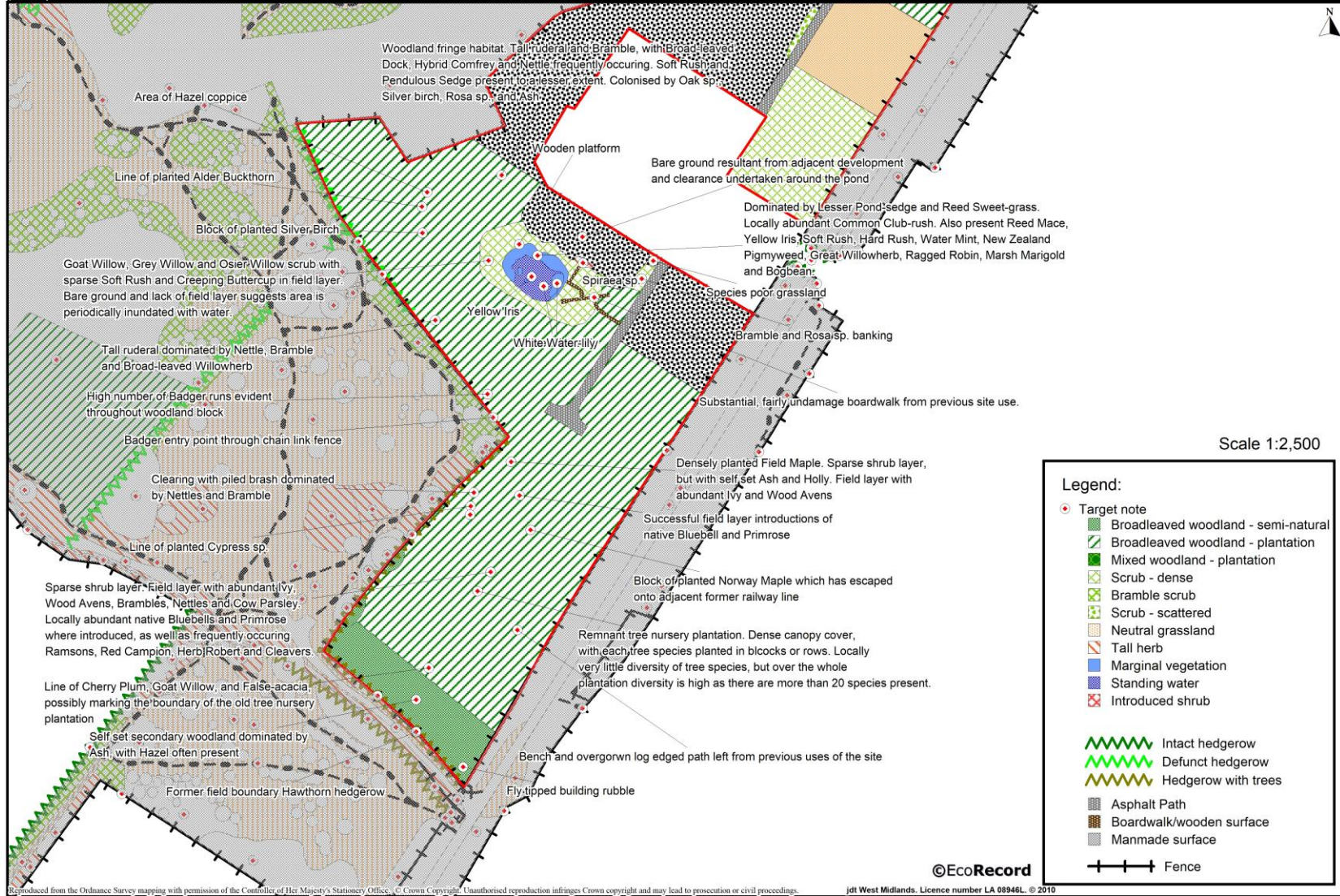


# Map 39 WEC North CURRENT STATE - July 2019



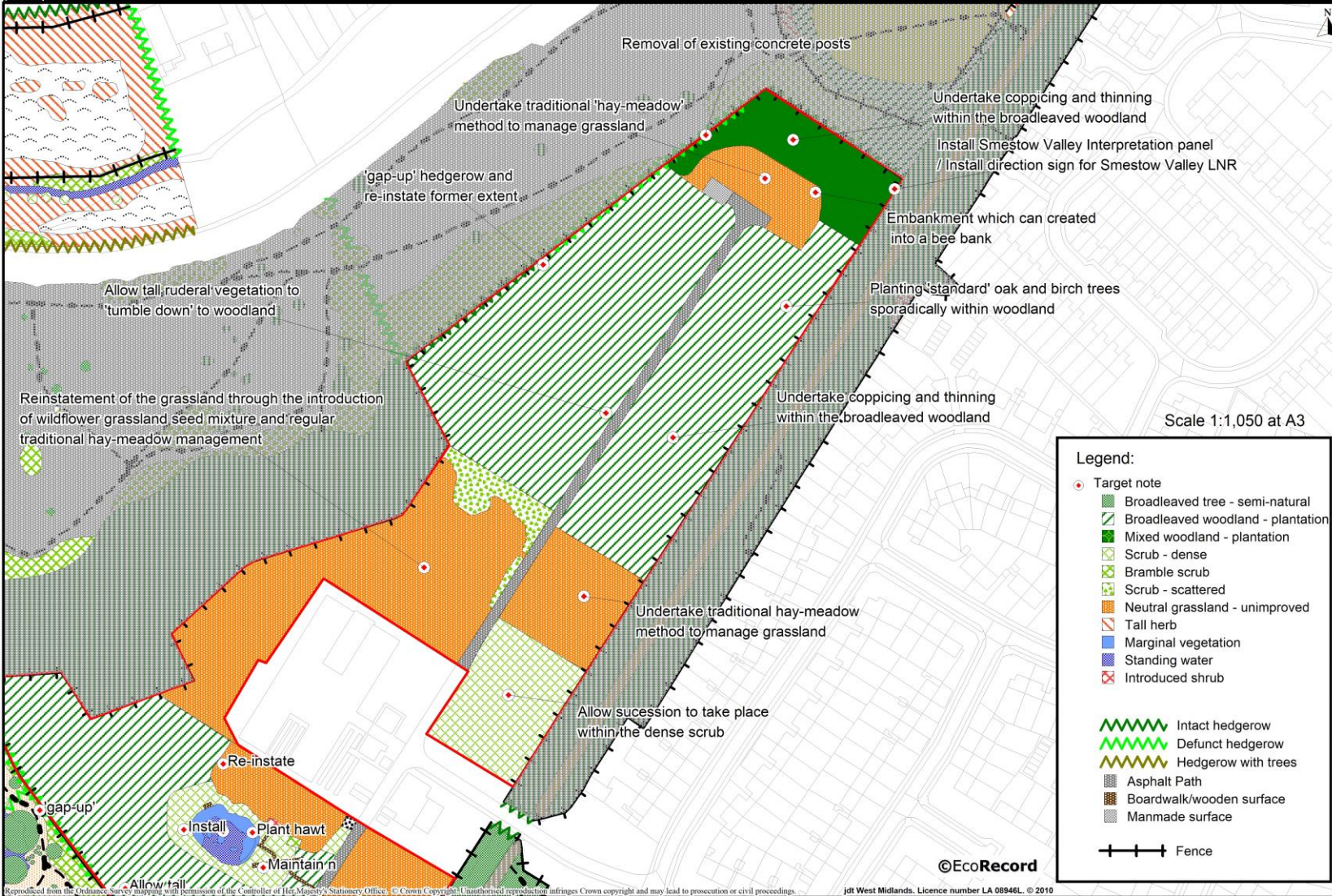


# Map 40 WEC South CURRENT STATE - July 2019





# Map 41 WEC North DESIRED STATE





# Map 42 WEC South DESIRED STATE



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## Management Actions – Compartment 8

Access & Infrastructure				
Action	Objective & Rationale	Method	Timings	
1	<b>Extend boundary of Smestow Valley Local Nature Reserve to include the WEC.</b>	The current Smestow Valley LNR boundary does not include the WEC. Both of northern and southern areas are designated as part of the Smestow Valley SINC (Site of Importance for Nature Conservation) and are ecologically valuable parts of the Smestow Valley open space. So to afford these areas the same protection as the existing LNR is recommended.	Future opportunity to formally add the WEC to the designated LNR. Local Nature Reserve status is afforded to sites by Natural England and there is a formal process that must be followed to amend the schedule.	Late 2020.
2	<b>Maintain newly installed footpath</b>	Within the southern compartment a circular surfaced footpath that is fully wheelchair accessible has been installed in Spring 2019. The footpath should be regularly inspected for signs of wear and tear to ensure that the footpath stays in a good state of repair permanently.	The installed footpaths should be placed under a watching brief to ensure the maintenance of the newly installed footpaths.	Ongoing
3	<b>Regularly litter pick/clean-up site</b>	Smestow Valley suffers from large amounts of littering and dumping of larger objects. This is unattractive, is a barrier to people using the site and is potentially damaging to wildlife.	Regular clean-ups should be undertaken with additional volunteer help sought. Other local authority staff called upon to deal with larger objects or other fly-tipped material.	Weekly.
4	<b>Carry out tree safety inspection</b>	It is a legal requirement that tree safety inspections are undertaken on areas of public open space.	In line with Wolverhampton City Council policy.	As method.
5	<b>Remove garden waste</b>	The tipping of garden waste into sites of ecological value can introduce both unwanted nutrients and non-native species. Garden waste has been introduced into Smestow Valley LNR at points throughout the reserve.	Remove garden waste from site. Send a letter to local residents which describes the negative impacts that the introduction of garden waste has on wildlife sites and outlines the actions that can be taken by the local authority against offenders.	Ongoing.
6	<b>Install Welcome to Smestow Valley LNR signs, should the site be included within the LNR</b>	With the inclusion of the WEC within the LNR boundary. This should be promoted to make people aware that they will be entering an area of public open space.	Produce to same design as current welcome signs. Contractor to produce & install.	Opportunity - When resources available.
7	<b>Install Smestow Valley interpretation panel, should the site be included within the LNR</b>	There is very little interpretation around Smestow Valley that describes the significance and value of the site, or that informs people as to where they are and what they can see. Should the WEC be included within the WEC a series of map based interpretation panels should therefore be produced that are tailored to each of the compartments.	To be designed in conjunction with local residents. Contractor to produce & install.	Opportunity - When resources available.
8	<b>Formalise and improve entrance into LNR</b>	The site entrances onto LNR are unattractive, unwelcoming and it is not clear that you are entering Smestow Valley LNR.	See <b>Actions 2, 6 &amp; 7.</b>	Opportunity - When resources available.

Action	Objective & Rationale	Method	Timings
9 <b>Restriction of access to onsite pond by dogs</b>	The onsite pond provides potential habitat for great crest newts, other amphibians and wildfowl. However, disturbance from dog usage of the pond may lead to reduction in suitability of habitat. As such selective plant around the perimeter of the pond will reduce the areas in which dogs can access. Allowing for undisturbed areas to exist within the pond.	Plant hawthorn or blackthorn shrub species in selective areas around the onsite pond.	Opportunity - When resources available.
10 <b>Removal of concrete post for former chain link fencing surrounding the WEC</b>	The former chain link fence that surrounds the WEC has been removed. However, the concrete post still remain in situ. For aesthetic reasons it is recommended that these posts are removed.	Contractor to remove	Opportunity - When resources available undertake in a phased process.

## Habitats & Species

Action	Objective & Rationale	Method	Timings
11 <b>Coppice &amp; thin planted woodland blocks</b>	The two planted woodland blocks have been historical thinning and coppice in the 1990s. However, this management practice has not be continued as such the woodland has become dense, structurally poor & support little flora. Therefore, both areas would benefit from selective coppicing & thinning. The aim should be to create a woodland comprised of a canopy of mature 'standard' trees with an understorey of shrubs & multi-stemmed trees. Such structural diversity should allow a much greater diversity of flora & fauna species to colonise the woodland.  <i>West Midland Bird Club recommended: Plantation woodlands need thinning to favour selected species and trees, as well as introduction of native ground flora to increase their value for wildlife.</i>	This should be continued throughout the site. By undertake 40% to 50 % thin and treat stumps with herbicide. Selective thinning should seek to remove non-native species.	Autumn-winter 2020-2024.
12 <b>Plant 'standard' trees</b>	The broadleaved plantation woodland is species poor and dominated by hazel and birch. Therefore, effort should be made to improve species diversity by planting pedunculate oak and birch trees within the broadleaved wood.	Individual Pedunculate Oak and birch trees of local provenance should be planted as sporadically within the broadleaved plantation to enhance species diversity within woodland	Autumn 2020.
13 <b>Reinstate the small section of grassland within the WEC south</b>	The created 'meadow' grassland which located in the southern section of the WEC due to habitat works on the pond this area has become heavily disturbed and much of the grassland has been lost.  As the grassland supported an additional habitat within a woodland dominated habitat and provide foraging habitat for invertebrates using the onsite. It would be beneficial to reinstate the grassland and managed using traditional hay meadow management.	The following method is outline only and expert advice should be sought prior to undertaking:  <b>VII.</b> Apply herbicide to existing vegetation in mid-summer. <b>VIII.</b> Spread arisings (hay) from local species-rich 'hay meadow' onto prepared area immediately following harvest (to introduce seed). <b>IX.</b> Growth of the vegetation should be slow with much bare earth visible, but by autumn some meadow species should have become established (probably along with a number	Annually as method.

Action	Objective & Rationale	Method	Timings
		<p>of ruderal annuals/biennials). If there is an extensive problem with non-target perennial species such as Broad-leaved Dock or Nettle, then localised herbicide may be applied during the following autumn or spring growing season.</p> <p>The following management should then be implemented from the next summer. This method is designed to mimic the traditional hay meadow management method:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol>	
<p><b>14</b>   <b>Manage grassland via traditional ‘hay-meadow’ method</b></p>	<p>The area of neutral grassland within the northern compartment is becoming rank, with numerous debris present throughout. To maintain the grassland sward &amp; to prevent colonisation by non-grassland species a traditional hay-meadow type management regime should be implemented here. This will additionally remove nutrients from the soil and open up the structure of the sward, therefore promoting colonisation of the area by other desirable grassland species.</p> <p>This management should be undertaken with the clearance of the debris presence.</p>	<p>Contractor should be used to remove all debris from the grassland area.</p> <p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> <li>III. Gang mow &amp; remove arisings August – October.</li> </ol>	<p>Annually as method.</p>
<p><b>15</b>   <b>‘Gap-up’ hedgerow &amp; re-instate to probable former extent</b></p>	<p>The historic hedgerow which forms the boundary between the WEC and Compartment 6 Bridgnorth Road – Windmill lane &amp; Castlecroft road sub compartment 6C2. This habitat provides a valuable habitat for a range of fauna and flora as such should be re-instate through cutting and gapping up.</p>	<p>Lay or coppice surviving fragments of hedgerow then ‘gap-up’ by planting locally sourced Hawthorn and other native species including Field Maple and Hazel.</p> <p>Once established manage using the traditional technique of hedge ‘laying’.</p>	<p>Lay/coppice &amp; gap-up in Autumn 2020.</p> <p>Lay regrowth in autumn 2024.</p>
<p><b>16</b>   <b>Investigation of Turners’ pond’s water levels</b> <b>The creation of the pond may have caused interference with the hydrology of the original pool (Turner’s pond). Should this be investigated.</b></p>	<p>Concerns have been raised that the Turner’s pond’s water levels have dropped since the creation of the second pond. This may have occurred if the second pond has impacted on the original ponds hydrology.</p>	<p>An assessment should be undertaken to confirm or disprove concerns, through consultation with the EA. If concerns are confirmed, then the assessment should advised whether the impact can be removed or reduced to ensure the retention of both ponds.</p>	<p>2020/21</p>
<p><b>17</b>   <b>Allow woodland edge areas of tall ruderal vegetation &amp; Bramble to ‘tumble down’ to woodland</b></p>	<p>The scrub and tall ruderal habitats which form parts of the north-western boundary are succeeding to secondary woodland comprised of mostly native species. For aesthetic reasons it is recommended that this is allowed to develop naturally.</p>	<p>No thinning, removal (other than of invasive species, see other actions) or planting etc. is currently required in these areas.</p>	<p>Ongoing.</p>

Action	Objective & Rationale	Method	Timings
<b>18 Eradicate Australian Swamp-stonecrop</b>	<p>The non-native invasive species Australian Swamp-stonecrop is present within the onsite pond. The species is easily spread to other waterbodies and could potentially be detrimental to the value of the adjacent pond in the Smestow LNR. It is therefore recommended that this species is eradicated from the site.</p> <p>As the waterbody is thought to support populations of Great Crested Newt consideration should be given to this European protected species prior to any habitat works occurring.</p>	<p>A suitably qualified and experienced individual should treat the Australian Swamp-stonecrop with an appropriate herbicide.</p>	<p>Spring and late summer 2020-2024.</p>
<b>19 Determine presence/ absence and population size of Great crested newts (GCN)</b>	<p>Records of great crested newts have been found within 50m of the site, within Turner's pond. As such there is a high likelihood for great crested newts to be present on site.</p> <p>To ascertain to population size of this European protected species it is recommended the GCN surveys are undertaken on the onsite pond.</p> <p>If presence is confirmed, management practices should be undertaken to provide enhanced aquatics and terrestrial habitat for GCN.</p>	<p>The onsite pond should be subject to surveys in accordance with best practice guidelines outlined in Great Crested Newt Mitigation Guidelines (English Nature, 2001).</p> <p>All Management practices undertaken within the pond or within close proximity should take in to account GCN present.</p>	<p>2020/21.</p>
<b>20 Enhancement of onsite pond for amphibians (including GCN)</b>	<p>The onsite pond provides potential aquatic habitat for local amphibian population. However, at the current time due to works on the surrounding woodland the pond has limited area of shading and planting is limited to small sections.</p> <p>The addition of further marginal and bankside planting will increase suitability of the onsite for these species.</p>	<p>Marginal and bankside planting, to include water mint, should be planted along section of the pond to provide additional egg laying plant material for GCN and smooth newts.</p> <p>Planting of scrub / willow trees along a section of the bankside margins would provide a varying bankside structure allowing open and sheltering habitat for amphibians.</p>	<p>Early 2020</p>
<b>21 Badger Surveys to ascertain presence / likely absence of a badger sett/s on site</b>	<p>During the Local site assessment survey in 2015 evidence of badger was found on site in the form of an outlying badger sett.</p> <p>Further survey work would endeavour to determine whether the sett is active, badger activity across site and if further badger setts are present.</p>	<p>The site should be subject to a detailed site walkover by a suitably qualified ecologist recording all badger setts identified and field signs.</p>	<p>Autumn/Winter 2020/21</p>
<b>22 Enhancement of foraging and nesting opportunities on site for breeding and winter birds and native bat species</b>	<p>The grassland, scrub, hedgerow and woodland habitat on site provide suitable habitat for local bat and bird population.</p> <p>To further increase the opportunity for these species on site management practices should aim to increase structural and floristic diversity of broadleaved woodland, scrub, hedgerow and grassland on site to provide optimal nesting material and foraging habitat (berries, nuts and invertebrates).</p>	<p>Management practices to promote varying in age structure and flora diversity within onsite habitats to increase foraging and nesting resources on site.</p> <p>Follow the relevant management practices as described within the table above.</p>	<p>As shown above.</p>
<b>23 Enhancement of grassland and woodland for Invertebrates</b>	<p>The physical structure of the grassland sward in addition to high floristic diversity within the habitat is important for a wide variety of invertebrates. This will not only ensure an abundance of the necessary food plant but varied topography such as areas of short and tall grass and bare soil on site.</p>	<p>The following management method has been designed to mimic traditional hay meadow management:</p> <ol style="list-style-type: none"> <li>I. Leave area uncut from November – August.</li> <li>II. Cut &amp; remove arisings in first week of August.</li> </ol>	<p>Annually as method.</p>

Action	Objective & Rationale	Method	Timings
	<p>To improve the semi-improved neutral grassland within the compartment as traditional hay meadow management will assist in achieving a good floristic diversity.</p> <p>There is an opportunity within the northern area of grassland in form of a bare earth embankment to create a bee bank which would enhance opportunities for ground burring bees and other invertebrates associated with areas of short grass and bare earth.</p> <p>The broadleaved woodland present on site provides suitable habitat for numerous invertebrates that thrive in this habitat.</p> <p>Similar to nesting birds and bats they thrive on a structural variation within broadleaved woodland to provide the bespoke habitat that its species and sub species required. In addition to management method mention above within action 41. The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p> <p>The provision of dead wood within the woodland will provide additional habitat for a wide range of invertebrates.</p>	<p>III. Gang mow &amp; remove arisings August – October.</p> <p>Retain banked area of bare earth within the north area of the WEC as bee bank. This area should be left bare and allowed to be colonised naturally. To ensure the bank retains areas of bare earth it should be cut annual as the above traditional hay meadow management to prevent tall ruderal species spread.</p> <p>Management practices to promote varying in age structure and flora diversity within onsite habitats to increase resources on site.</p> <p>Follow the relevant management actions (<b>actions 11, 12 13, 14, 15 &amp;17</b>) as described within the table above.</p> <p>A log piles should be placed / dead wood to left in situ within areas of the broadleaved woodland.</p>	<p>Opportunity – When resources allow.</p>
<p><b>24</b>   <b>Monitoring of management action and action results</b></p>	<p>As management actions are undertaken, it is important to monitoring the completion of those actions and the results of the management to ensure the desired impact / outcome has occurred.</p>	<p>All local authority and community group should report completion of management actions and future proposals at regular liaison group meetings to ensure that no duplications or opportunities are not missed. In addition, to any issues caused by habitat works.</p> <p>At end of the period covered by the management plan, an assessment should be undertaken to confirm all actions undertaken within the period and should include a review and an update of the Smestow Valley Management Plan.</p>	<p>Ongoing as management activity are undertaken.</p> <p>A completed assessment undertaken at the completion of the management period late 2025.</p>

## Flora

COMPARTMENT 8 (1) WEC North – Woodland	
Scientific Name	Common Name
<i>Acer campestre</i>	Field Maple
<i>Acer platanoides</i>	Norway maple
<i>Acer pseudoplatanus</i>	Sycamore
<i>Aesculus hippocastanum</i>	Horse-Chestnut
<i>Aesculus sp.</i>	
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Alnus glutinosa</i>	Alder
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Artemisia vulgaris</i>	Mugwort
<i>Arum maculatum</i>	Lord-and-ladies
<i>Atrichum undulatum</i>	Common Smoothcap
<i>Betula pendula</i>	Silver Birch
<i>Carex pendula</i>	Pendulous Sedge
<i>Carpinus betulus</i>	Hornbeam
<i>Cornus sanguinea</i>	Dogwood
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Dactylis glomerata</i>	Cock's-foot
<i>Dryopteris filix-mas</i>	Male-fern
<i>Epilobium montanum</i>	Broad-leaved Willowherb
<i>Fagus sylvatica</i>	Beech
<i>Fraxinus excelsior</i>	Ash
<i>Galium aparine</i>	Cleavers
<i>Geranium robertianum</i>	Herb Robert
<i>Geum urbanum</i>	Wood Avens
<i>Heracleum sphondylium</i>	Hogweed
<i>Hyacinthoides x massartiana</i>	Hybrid Bluebell
<i>Hypochaeris radicata</i>	Cat's Ear
<i>Ilex aquifolium</i>	Holly
<i>Lonicera japonica</i>	Honeysuckle
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Platanus x hybrid</i>	London Plane
<i>Poa annua</i>	Annual Meadow-grass
<i>Poa pratensis</i>	Smooth Meadow-grass
<i>Poa trivialis</i>	Rough Meadow-grass
<i>Populus x canescens</i>	Italian Poplar
<i>Populus lasiocarpa</i>	Chinese Necklace Poplar
<i>Prunus avium</i>	Wild Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Quercus robur</i>	Pendunculate Oak
<i>Ribes sp.</i>	A Currant
<i>Rosa arvensis</i>	Field Rose
<i>Rubus fruticosus agg.</i>	Bramble
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Salix caprea</i>	Goat Willow

<i>Salix cinerea</i>	Grey Willow
<i>Salix viminalis</i>	Osier
<i>Senecio jacobaea</i>	Common Ragwort
<i>Silene dioica</i>	Red Campion
<i>Sorbus aria</i>	Common Whitebeam
<i>Symphoricarpos albus</i>	Snowberry
<i>Taraxacum officinale</i> agg.	Common Dandelion
<i>Tilia x vulgaris</i>	Common Lime
<i>Urtica dioica</i>	Common Nettle
<i>Veronica chamaedrys</i>	Germander Speedwell
<i>Veronica filiformis</i>	Slender Speedwell
<i>Veronica montana</i>	Wood Speedwell
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell

#### COMPARTMENT 8 (1) WEC North – Grassland

Scientific Name	Common Name
<i>Alchemilla vulgaris</i>	Lady's Mantle
<i>Alnus cordata</i>	Italian Alder
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Bellis perennis</i>	Daisy
<i>Calystegia sepium</i> sl.	Hedge Bindweed
<i>Carex otrubae</i>	False Fox-sedge
<i>Chamerion angustifolium</i>	Rosebay Willowherb
<i>Cirsium vulgare</i>	Spear Thistle
<i>Corylus avellana</i>	Hazel
<i>Cotoneaster</i> sp.	Cotoneaster
<i>Crepis capillaris</i>	Smooth Hawk's-beard
<i>Crocsmia x crocosmiiflora</i>	Montbretia
<i>Dactylis glomerata</i>	Cock's-foot
<i>Epilobium hirsutum</i>	Great Willowherb
<i>Festuca rubra</i>	Red Fescue
<i>Geranium robertianum</i>	Herb Robert
<i>Geum urbanum</i>	Wood Avens
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Hypericum perforatum</i>	Perforate St. John's-wort
<i>Hypochaeris radicata</i>	Cat's Ear
<i>Juncus effusus</i>	Soft Rush
<i>Juncus inflexus</i>	Hard Rush
<i>Medicago lupulina</i>	Black Medick
<i>Pilosella aurantiaca</i>	Fox-and-cubs
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Ranunulus repens</i>	Creeping Buttercup
<i>Rubus fruticosus</i> agg.	Bramble
<i>Rubus idaeus</i>	Raspberry
<i>Rumex acetosa</i>	Common Sorrel
<i>Salix cinerea</i>	Grey Willow
<i>Salix viminalis</i>	Osier
<i>Trifolium campestre</i>	Hop Trefoil
<i>Trifolium arvense</i>	Hare's foot Clover
<i>Trifolium repens</i>	White Clover
<i>Urtica dioica</i>	Common Nettle
<i>Vicia hirsuta</i>	Hairy Tare

<i>Vicia sativa</i>	Common Vetch
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#### COMPARTMENT 8 (2) WEC South – Pond

Scientific Name	Common Name
<i>Caltha palustris</i>	Marsh Marigold
<i>Carex acutiformis</i>	Lesser Pond-sedge
<i>Crassula helmsii</i>	New Zealand Pygmy weed
<i>Epilobium hirsutum</i>	Great Willowherb
<i>Equisetum arvense</i>	Field Horsetail
<i>Glyceria maxima</i>	Reed Sweet-grass
<i>Iris pseudacorus</i>	Yellow Iris
<i>Juncus effusus</i>	Soft Rush
<i>Juncus inflexus</i>	Hard Rush
<i>Lychnis flos-cuculi</i>	Ragged Robin
<i>Mentha aquatica</i>	Water Mint
<i>Menyanthes trifoliata</i>	Bogbean
<i>Nymphaea alba</i>	White Water-lily
<i>Schoenoplectus lacustris</i>	Common Club-rush
<i>Typha latifolia</i>	Reedmace

#### COMPARTMENT 8 (2) WEC South – Meadow

Scientific Name	Common Name
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Bellis perennis</i>	Daisy
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Chamerion angustifolium</i>	Rosebay Willowherb
<i>Crataegus monogyna</i>	Hawthorn
<i>Festuca rubra</i>	Red Fescue
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Lathyrus pratensis</i>	Meadow Vetchling
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil
<i>Lychnis flos-cuculi</i>	Ragged-robin
<i>Medicago lupulina</i>	Black Medick
<i>Pilosella aurantiaca</i>	Fox-and-cubs
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Potentilla reptans</i>	Creeping Cinquefoil
<i>Primula veris</i>	Cowslip
<i>Quercus robur</i>	Pedunculate Oak
<i>Rhinanthus minor</i>	Yellow Rattle
<i>Rosa canina</i>	Dog Rose
<i>Rosa rugosa</i>	Japanese Rose
<i>Rubus fruticosus agg.</i>	Bramble
<i>Senecio jacobaea</i>	Common Ragwort
<i>Taraxacum officinale</i>	Common Dandelion
<i>Trifolium pratense</i>	Red Clover
<i>Vicia cracca</i>	Tufted Vetch
<i>Vicia sativa</i>	Common Vetch
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Bellis perennis</i>	Daisy
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Chamerion angustifolium</i>	Rosebay Willowherb

<i>Crataegus monogyna</i>	Hawthorn
<i>Festuca rubra</i>	Red Fescue
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Lathyrus pratensis</i>	Meadow Vetchling
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil
<i>Lychnis flos-cuculi</i>	Ragged-robin
<i>Medicago lupulina</i>	Black Medick
<i>Pilosella aurantiaca</i>	Fox-and-cubs
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Potentilla reptans</i>	Creeping Cinquefoil
<i>Primula veris</i>	Cowslip
<i>Quercus robur</i>	Pedunculate Oak
<i>Rhinanthus minor</i>	Yellow Rattle
<i>Rosa canina</i>	Dog Rose
<i>Rosa rugosa</i>	Japanese Rose
<i>Rubus fruticosus agg.</i>	Bramble
<i>Senecio jacobaea</i>	Common Ragwort
<i>Taraxacum officinale</i>	Common Dandelion
<i>Trifolium pratense</i>	Red Clover
<i>Vicia cracca</i>	Tufted Vetch
<i>Vicia sativa</i>	Common Vetch

#### COMPARTMENT 8 (2) WEC South – Woodland

Scientific Name	Common Name
<i>Acer campestre</i>	Field Maple
<i>Acer platanoides</i>	Norway maple
<i>Acer pseudoplatanus</i>	Sycamore
<i>Aesculus hippocastanum</i>	Horse-Chestnut
<i>Allium ursinum</i>	Ramsons
<i>Alnus glutinosa</i>	Alder
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Arum maculatum</i>	Lord-and-ladies
<i>Atrichum undulatum</i>	Common Smoothcap
<i>Betula pendula</i>	Silver Birch
<i>Brachypodium sylvaticum</i>	False Brome
<i>Carex sylvatica</i>	Wood-sedge
<i>Carex pendula</i>	Pendulous Sedge
<i>Carpinus betulus</i>	Hornbeam
<i>Cerastium fontanum</i>	Common mouse-ear
<i>Cornus sanguinea</i>	Dogwood
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Cynosurus cristatus</i>	Crested Dog's-tail
<i>Cypress sp.</i>	Cypress
<i>Dryopteris dilatata</i>	Broad Buckler-fern
<i>Dryopteris filix-mas</i>	Male-fern
<i>Epilobium montanum</i>	Broad-leaved Willowherb
<i>Equisetum arvense</i>	Field Horsetail
<i>Fagus sylvatica</i>	Beech
<i>Frangula alnus</i>	Alder Buckthorn
<i>Fraxinus excelsior</i>	Ash
<i>Galium aparine</i>	Cleavers

<i>Geranium robertianum</i>	Herb Robert
<i>Geum urbanum</i>	Wood Avens
<i>Hedera helix</i>	Ivy
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Hyacinthoides x massartianna</i>	Hybrid Bluebell
<i>Ilex aquifolium</i>	Holly
<i>Iris pseudacorus</i>	Yellow Iris
<i>Juncus effusus</i>	Soft Rush
<i>Laburnum anagyroides</i>	Laburnum
<i>Lonicera periclymenum</i>	Honeysuckle
<i>Milium effusum</i>	Wood Millet
<i>Platanus x hybrid</i>	London Plane
<i>Poa trivialis</i>	Rough Meadow-grass
<i>Populus tremula</i>	Aspen
<i>Primula vulgaris</i>	Primrose
<i>Prunus avium</i>	Wild Cherry
<i>Prunus cerasifera</i>	Cherry Plum
<i>Prunus sp.</i>	A Cherry
<i>Prunus spinosa</i>	Blackthorn
<i>Pterocarya sp.</i>	A Wingnut
<i>Quercus robur</i>	Pendunculate Oak
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rhododendron ponticum</i>	Rhododendron
<i>Ribes sp.</i>	A Currant
<i>Robinia pseudoacacia</i>	False Acacia
<i>Rosa sp.</i>	Rose sp.
<i>Rubus fruticosus agg.</i>	Bramble
<i>Rubus idaeus</i>	Raspberry
<i>Rumex obtusifolius</i>	Broad-leaved Dock
<i>Rumex sanguineus</i>	Wood Dock
<i>Salix caprea</i>	Goat Willow
<i>Salix cinerea</i>	Grey Willow
<i>Salix sp.</i>	Willow sp.
<i>Salix viminalis</i>	Osier
<i>Sambucus nigra</i>	Elder
<i>Silene dioica</i>	Red Campion
<i>Sorbus aucuparia</i>	Rowan
<i>Sorbus intermedia</i>	Swedish Whitebeam
<i>Spiraea sp.</i>	Spiraea sp.
<i>Stachys sylvatica</i>	Hedge Woundwort
<i>Symphytum sp.</i>	A Comfrey
<i>Syringa vulgaris</i>	Lilac
<i>Taraxacum officinale agg.</i>	Common Dandelion
<i>Taxus baccata</i>	Yew
<i>Tilia x vulgaris</i>	Common Lime
<i>Urtica dioica</i>	Common Nettle
<i>Veronica chamaedrys</i>	Germander Speedwell
<i>Veronica filiformis</i>	Slender Speedwell
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell
<i>Viburnum lantana</i>	Wayfaring-tree

<i>Viburnum opulus</i>	Guelder-rose
<i>Vicia cracca</i>	Tufted Vetch
<i>Vicia hirsuta</i>	Hairy Tare
<i>Vicia sativa</i>	Common Vetch
<i>Viola riviniana</i>	Common Dog-violet

