



## Salisbury River Park Master Plan

Habitats Regulations Assessment: Appropriate Assessment

HRA AA | 5

27 May 2021 Wiltshire Council



## Salisbury River Park Master Plan

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### Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
1	17.03.21	HRA Appropriate Assessment	Alice Shoebridge	Jon Barnes	Stuart Hedgecott	PS Rayner
2	31.03.21	HRA Appropriate Assessment	Alice Shoebridge	Corinna Morgan	Updated with Wiltshire Council's Major Project Team's comments	
3	29.04.21	HRA Appropriate Assessment, updated following meeting with NE	Alice Shoebridge	Updated with Wiltshire Council's Major Project Team and Ecology Team comments		
4	17.05.21	Formal response from NE received and HRA updated	Alice Shoebridge	Updated with Wiltshire Council's Major Project Team's comments.		
5	27.05.21	Formal response received from NE permitting Master Plan HRA.				

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## Appendix A. Update on Master Plan design

## 1. Record of Appropriate Assessment

The Salisbury River Park Master Plan (SRPMP) has been developed by Wiltshire Council to present the council's vision for a river park; a green infrastructure link that connects and enhances the linear riverside route through the centre of Salisbury. The plan comprises a series of modifications to the River Avon, Summerlock Stream and Mill Stream in Salisbury to increase flood resilience whilst also improving wildlife and biodiversity as well as public amenities. These watercourses form part of the River Avon Special Area of Conservation (SAC).

There are six phases to the SRPMP, with each phase corresponding to a different reach of the River Avon SAC through Salisbury. Phase 1 of the SRPMP (the River Corridor Improvement Scheme Phase 1) has undergone a separate HRA Screening and Appropriate Assessment which has concluded no impact on site integrity<sup>1</sup>.

This HRA Appropriate Assessment focusses on Phases 2-6, which will be treated alone and in-combination with the other phases (including Phase 1). Phases 2-6 of the SRPMP are referred to as the 'Master Plan'.

Jacobs have been commissioned to undertake the Habitats Regulations Assessment (HRA) for the Salisbury River Park Master Plan on behalf of Wiltshire Council.

The HRA Stage 1 Screening assessment concluded there is potential for Likely Significant Effects (LSE) alone and in-combination on the qualifying features of the River Avon SAC; Atlantic salmon, brook lamprey, bullhead and water courses of plain to montane levels with *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation. Natural England were consulted and agreed with the conclusions of the HRA Screening and requirement for Appropriate Assessment.

This is a record of the Appropriate Assessment required by Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended), undertaken by Jacobs on behalf of Wiltshire Council in respect of the permission, plan or project (PPP) detailed in Section 14 for the following relevant sites:

- River Avon SAC (UK0013016)<sup>2</sup>

This Appropriate Assessment will consider the implications of the Master Plan in view of the River Avon SAC Conservation Objectives.

### River Avon SAC (UK0013016) Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its qualifying features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species and,
- The distribution of qualifying species within the site.

Further information is provided in the River Avon SAC Conservation Objectives Supplementary Advice. This can be found from the Natural England publication 'European Site Conservation Objectives for River Avon SAC (UK0013016) (<http://publications.naturalengland.org.uk/publication/6048472272732160?category=6528471664689152>).

<sup>1</sup> Environment Agency (2021). River Corridor Improvement Scheme (Phase 1) HRA Screening and Appropriate Assessment.

<sup>2</sup> Protected area under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017

## 2. Summary of Stage 1 Screening

The Stage 1 Screening identified the proposed developments in the Master Plan which have potential pathways to effect on the River Avon SAC qualifying features.

The River Avon SAC is designated for the following qualifying features; water courses of plain montane levels with *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation, Atlantic salmon (*Salmo salar*), brook lamprey (*Lampetra planeri*), bullhead (*Cottus gobio*), Desmoulin's whorl snail (*Vertigo moulinsiana*) and sea lamprey (*Petromyzon marinus*). Natural England has confirmed<sup>3</sup> that Desmoulin's whorl snail is no longer present in this part of the Avon catchment and was therefore *screened out of the HRA assessment*. Fisheries surveys have been undertaken by the Environment Agency for over 20 years at many sites within the River Avon and its tributaries<sup>4</sup>; only two sea lamprey have been identified from the catchment in 2005 and 2011, near Christchurch, approximately 40km downstream of the plan area. As such, sea lamprey have been *screened out of the assessment*.

The permanent long-term enhancements through habitat and biodiversity improvements as a result of the Master Plan will result in a number of positive likely significant effects on the qualifying features of the SAC. In-channel, bankside and riparian improvements, including naturalisation of existing modified margins with planting will improve the aquatic habitat and functioning within the River Avon SAC for its qualifying features and other species which utilise the corridor. A full description of positive LSE of the Master Plan is provided in Section 4.6.

A summary of the potential pathways to effect which may result in negative likely significant effect is presented in Table 2.1.

Table 2.1: Summary of proposed developments of the Master Plan and pathways to effect on the River Avon SAC features.

Qualifying feature	Risk (pressure)	Proposed development (Master Plan Phase)	Likely Significant Effect alone	Likely significant effect in-combination
Water courses of plain to montane levels with <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)	Habitat loss	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A)	Yes (construction)	Yes
Atlantic salmon Brook lamprey Bullhead		River channel improvements (including de-culverting) (Phase 4A) River margin naturalisation & river bank landscape planting (Phase 4A, 5A) Landscaping on banks of river corridor enhancing public access (Phase 4A)	Yes (construction)	Yes

<sup>3</sup> through telephone communications between the biodiversity officer at the Environment Agency and Natural England on 16/1/20.

<sup>4</sup> Environment Agency Ecology and Fish Data Explorer - <https://environment.data.gov.uk/ecology-fish/>

Qualifying feature	Risk (pressure)	Proposed development (Master Plan Phase)	Likely Significant Effect alone	Likely significant effect in-combination
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)  Atlantic salmon Brook lamprey Bullhead	Habitat fragmentation	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A, 5A)	Yes (construction)	Yes
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)  Atlantic salmon Brook lamprey Bullhead	Natural function	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A, 5A)	Yes (construction)	Yes
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)Atlantic salmon Brook lamprey Bullhead	Siltation, smothering, turbidity	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A, 5A; riparian planting Phase 6A/B)	Yes (construction)	Yes
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)  Atlantic salmon Brook lamprey Bullhead	Increased recreational use	Reconfiguration and/or changes to pedestrian footpaths (including associated lighting) (Phase 3A, 4A, 5A, 6A, 6B) Landscaping on banks of river corridor enhancing public areas (including stone-stepped seating, Phases 4A, 5A) New/encouraged commercial activity (retail, entertainment, food) not impinging on river bank (Phases 4A, 5A, 6A)	Yes (operation)	Yes
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)  Atlantic salmon Brook lamprey Bullhead	Physical damage	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A, 5A)	Yes (construction)	Yes

Qualifying feature	Risk (pressure)	Proposed development (Master Plan Phase)	Likely Significant Effect alone	Likely significant effect in-combination
<p>Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)</p> <p>Atlantic salmon Brook lamprey Bullhead</p>	<p>Toxic contamination</p>	<p>All phases. Risk of accidental release from construction plant in-channel and risk of run-off from areas of riparian construction activities.</p>	<p>Yes (construction)</p>	<p>Yes</p>
<p>Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)</p> <p>Atlantic salmon Brook lamprey Bullhead</p>	<p>Invasive species</p>	<p>Landscaping on banks of river corridor enhancing public areas (Phase 4A) River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation &amp; river bank landscape planting (Phase 3A, 4A, 5A) Replacement bridge (Phase 6B)</p>	<p>Yes (construction)</p>	<p>Yes</p>

### **3. Further information about the proposal**

Prior to public consultation in November 2020, Wiltshire Council updated the draft Master Plan by removing the pavement lighting and floating garden proposals from Phase 3A and the riverside beach from Phase 4A. Post consultation in February 2021, Phase 2A was amended to remove the decking for public/café seating platform over Summerlock stream. Further clarification was also provided on some of the design aspects for each Phase. These are provided in Appendix A. This Appropriate Assessment considers these current Master Plan proposals.



## 4. Appropriate Assessment: assessing the effects alone

The Stage 1 Screening identified that the Salisbury Master Plan has the potential for LSE on the qualifying habitat feature 'Water courses of plain to montane levels with *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation' and qualifying fish species (Atlantic salmon, bullhead, brook lamprey).

These effects are assessed further below for each risk (pressure). Section 4.6 provides an assessment in view of the River Avon SAC's Conservation Objectives.

### 4.1 Habitat loss, habitat fragmentation and natural function

The risk of habitat loss and habitat fragmentation from the Master Plan on the characteristic habitats and qualifying fish species of the River Avon SAC, as well as risks to natural functioning, are considered together in this section of the Appropriate Assessment; this is due to their inter-connected nature. Also, the mitigation measures identified are considered to reduce effect of all risks (habitat loss, habitat fragmentation and natural function).

Table 4.1 provides a summary of the Stage 1 Screening which identified LSE of habitat loss, fragmentation and natural functioning from the associated work elements of the Master Plan.

Table 4.1: Summary of Master Plan Stage 1 Screening; LSE and pathways to effect on the River Avon SAC features.

Qualifying feature	Risk (pressure)	Proposed work element (Master Plan Phase)	Likely Significant Effect alone
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)	Habitat loss	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A)	Yes (construction)
Atlantic salmon Brook lamprey Bullhead		River channel improvements (including de-culverting) (Phase 4A) River margin naturalisation & river bank landscape planting (Phase 4A, 5A) Landscaping on banks of river corridor enhancing public access (Phase 4A)	Yes (construction)
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)	Habitat fragmentation	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A, 5A)	Yes (construction)
Atlantic salmon Brook lamprey Bullhead			
Water courses of plain to montane levels with <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (rivers with floating vegetation often dominated by water crowfoot)	Natural function	River channel improvements (including de-culverting) (Phase 3A, 4A) River margin naturalisation & river bank landscape planting (Phase 3A, 4A, 5A)	Yes (construction)
Atlantic salmon Brook lamprey			

Qualifying feature	Risk (pressure)	Proposed work element (Master Plan Phase)	Likely Significant Effect alone
Bullhead			

The proposed work elements which act as a potential pathway to effect on habitat loss, habitat fragmentation and natural functioning of the River Avon SAC features are identified in the construction phase (Table 4.1) and an assessment is provided below.

Water crowfoot and other vegetated in-channel communities provide habitat, refuge and food for other species (macro-invertebrates, fish, water vole) and also play an integral role in ecosystem processes including sedimentation and flow diversity. Disturbance to these habitats during any in-channel improvements, marginal naturalisation, landscaping of banks or flood defence changes as part of the Master Plan has the potential to cause changes to the characteristic habitat of the River Avon SAC through direct habitat loss, discontinuity of the habitat and changes to lateral and longitudinal connectivity. The Stage 1 Screening identified these work elements to have a potential LSE during the temporary construction phase of the Master Plan.

Fish are mobile species and will move away from in-channel disturbance and seek out alternative habitat. Barriers within the watercourse caused by in-channel works (physical barriers, vibrations from plant machinery) will restrict their ability to do this temporarily, and cause fragmentation of habitat. This is specifically pertinent for Atlantic salmon which are known to transit through Salisbury to reach spawning habitat in the River Avon in Salisbury town centre<sup>5</sup> and the upper reaches of the River Avon (November to April). Atlantic salmon, brook lamprey and bullhead select specific habitat based on substrate type and flow for spawning and juvenile life stages. Direct loss of habitat and restricting the ability of individuals to reach habitat from in-channel works could result in a decline in spawning success and a loss of developmental habitat for earlier life stages of these qualifying features of the SAC. The physical changes associated with the in-channel habitat enhancements and modifications to the concrete flood wall are considered to have temporary localised effects on the current condition of the river corridor during the construction phase through in-channel activities.

The Stage 1 Screening identified potential LSE on qualifying habitat (habitat loss, fragmentation, natural function) and fish species; Atlantic salmon, bullhead and brook lamprey (habitat fragmentation and natural function) during the temporary construction phase.

The reach of the River Avon at the location of Phase 3A is heavily modified with concrete banks along the majority of the left bank and sections of the right bank. The river is deep (>1m), wide (10m) and slow flowing and substrates are smothered by overlying silt. Macrophyte surveys undertaken within this reach indicate 15% total cover of macrophytes, with water crowfoot communities representing 1% - 2.5% of this, within the 100m survey length<sup>6</sup>. It is considered sub-optimal habitat for characteristic plant communities. It is also considered sub-optimal spawning habitat for qualifying fish species and juvenile habitat for brook lamprey, comprising slow flows and coarse substrates covered with overlying silt.

The reach at Phase 3A totals approximately 0.07% of the entire River Avon SAC, and although it is identified that only short sections of the river channel within this reach will require in-channel and bankside works, predominantly to the west bank, it is noted the Conservation Objective of the River Avon SAC is to restore the total extent of the feature. Considering the amount of sub-optimal habitat lost, the temporary nature of the works and the availability of mitigation measures (outlined below), Phase 3A of the Master Plan is considered to have no long term adverse impact on the extent and distribution of the SAC habitat or the qualifying features of the SAC. During operation the enhancements made to the River Avon corridor through re-naturalisation of the river corridor, improving in-channel and marginal diversity (including the two-stepped channel) as well as connectivity to improved riparian areas will promote a mosaic of habitats within the river corridor. This will

<sup>5</sup> Environment Agency, 2012, Hampshire Avon Salmon redd count report.

<sup>6</sup> Environment Agency, 2020. Salisbury River Corridor Improvement Scheme (Phase 1) Macrophyte Survey Report.

benefit fish communities and water crowfoot habitat, thus supporting other distinctive species of the River Avon SAC.

In Phase 4A of the Master Plan, an improved public area which engages with the river is proposed. Creation of seating in an informal park-like environment (with grass, tree and shrub planting) will improve public amenity and enable the public to enjoy the river views and enhanced natural environment. Phase 5A proposes stone-stepped seating as part of the creation of a linear park with natural planting. The River Avon at these locations is heavily modified with artificial vertical banks and riparian areas are heavily urbanised. It is considered that the creation of any seating with the addition of vegetation planting ('greening-up') will enhance the current riparian environment from the existing heavily modified nature, providing most existing trees are maintained.

In addition to the seating in Phase 4A and 5A, Phase 4A proposes improvements to enhance biodiversity on the banks of the River Avon as well as in-channel ecological improvements and potential de-culverting of a section of the River Avon where opportunities arise if in agreement with interested parties. Phase 5A also proposes enhancement of the marginal area through planting. The Stage 1 Screening identified these reaches may be impacted temporarily during the construction period through loss of habitat and fragmentation of habitat as well as changes to natural functioning.

The River Avon in the location of Phase 4A and Phase 5A flows through an urbanised area of Salisbury. The reach at Phase 4A and Phase 5A is heavily modified, with vertical hard engineered banks and a straightened channel, lacking any prevalent marginal communities. The current conditions lack lateral connectivity between the channel and its marginal/bank/riparian areas. However, in channel habitat within these two reaches is optimal for both water crowfoot and spawning habitat for qualifying SAC fish species, comprising a diverse substrate complexity dominated by gravels and pebbles and riffle-run-glide sequences. Water crowfoot has been identified to be dominant within the Phase 4A reach and covering 50%-75% of the macrophyte survey area in the Phase 5A reach<sup>7</sup>.

Phases 4A and 5A represents approximately 0.05% of the total area of the River Avon SAC, if in-channel works were undertaken throughout the entire reach. In reality, this figure would be significantly reduced as in-channel works in Phase 5A will be restricted to localised sections of marginal areas on both banks of the River Avon.

In all phases of the Master Plan during construction, there will be no barriers restricting movement in the channel. Maintaining longitudinal connectivity during and after in-channel works will aid downstream drift of seed propagules from vegetation communities upstream to re-establish in those areas where in-channel works have disturbed the habitat. Maintaining connectivity will also allow fish passage for transient species and movement of macro-invertebrates.

The methods of construction delivery will include mitigation to protect the qualifying features. Restricting in-channel works to summer months will protect the salmon migration season (October to December) and the salmon (November to April) and bullhead (March to May) spawning seasons. Ensuring works are undertaken during daylight hours will enable a large proportion of any 24-hour period for the movement of Atlantic salmon and other fish species.

During operation, Phases 3A, 4A and 5A will provide permanent long-term enhancements to the river corridor and riparian areas through habitat and biodiversity enhancement within the River Avon SAC. The enhancements include improving in-channel habitat and bank habitat, creation of wetland habitat on the west bank and vegetation planting in the riparian area (Phase 3A), in-channel and bankside improvements (Phase 4A) and enhancement/creation of marginal areas and vegetation planting in riparian areas (Phase 5A). The works will also provide a continuation of the river corridor improvements delivered by Phase 1, and specifically its in-channel and bankside enhancements and removal of Swimming Pool Gate promoting lateral and longitudinal connectivity. It is considered these enhancements will have a long-term positive effect on the qualifying features of the River Avon SAC above the existing baseline condition.

<sup>7</sup> Environment Agency, 2020. Salisbury River Corridor Improvement Scheme (Phase 1) Macrophyte Survey Report.

A five-year monitoring plan, which will include monitoring of recreational use will be developed with Natural England prior to construction of the Master Plan phases to monitor changes to the qualifying features of the SAC within the Master Plan scheme area, including recreational use. The monitoring plan will include triggers for action, should they be needed.

Assessment of the Master Plan in view of the Conservation Objectives is provided in Section 4.6. An assessment of any adverse impact on site integrity is also provided.

As part of Phase 3A, enhancements to the river corridor include creation of wetland on the west bank which will improve lateral connectivity and access for wildlife to the river corridor. The Stage 1 Screening identified potentially significant effects of the increase in risk of cats and foxes accessing the marginal areas (gentler bank profiles) and affecting water vole populations. However, to completely understand this risk, a water vole survey will be undertaken to determine the presence and extent of water voles within the area and presence of any burrows. An appraisal of the results of the survey will be carried out, alongside any mitigation and discussed with Natural England prior to planning application.

## 4.2 Siltation, smothering, turbidity

The Stage 1 Screening of the Master Plan identified the potential for LSE of siltation/smothering/turbidity on the qualifying features of the River Avon SAC (fish and water crowfoot communities) during the construction of the Master Plan:

- River channel improvements (including de-culverting) (Phase 3A, 4A, 5A) and,
- River margin naturalisation and river bank landscape planting (Phase 3A, 4A, 5A and riparian planting Phase 6A/B).

It is considered silt mobilisation caused by riparian works (run-off) and in-channel works resulting in changes to channel bed, banks and flows has the potential to increase silt deposition, smothering *Ranunculus* and other vegetation communities and clean gravels utilised by Atlantic salmon, bullhead and brook lamprey for spawning, and changes to turbidity which may impact behaviour in Atlantic salmon and bullhead. These impacts would be temporary, during the construction phase only and wholly addressed by mitigation measures outlined below.

- Construction Environmental Management Plans (CEMP) will be prepared to accompany any environmental assessments for consenting of individual schemes arising from the Master Plan and will include all measures agreed with Natural England to mitigate the identified effects of the Master Plan works on water turbidity and sediment movement and to ensure overall environmental protection and management during the works. The CEMPs will be developed with Natural England prior to construction of individual schemes. Individual method statements will be prepared by the Contractor that will outline working practices that target specific elements of construction work at specific locations. These will include, *inter alia*, site-specific measures to remove sediment or minimise its mobilisation, to control down-drift where essential to prevent smothering of particularly sensitive habitats/reaches, and to plan, practice and if necessary, implement incident response measures in the event of a potentially impacting sediment plume.
- The Contractor will follow best practice (such as the Environment Agency's former Pollution Prevention Guidelines (PPG 5: *Works and maintenance in or near water*<sup>8</sup>)) to reduce the risk of silt mobilisation during the construction phase.
- Construction works will be undertaken in accordance with a Soil Management Plan which will follow Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites and require working areas to be stripped of both topsoil and subsoil down to a firm base and the soils stored appropriately for re-use, with method statements in place to protect watercourses from water quality issues. Further guidance can be found at Defra's Good practice guide for handling soils<sup>9</sup>.
- An Ecological Clerk of Works (ECW) who is a suitably qualified aquatic ecologist will be present during construction works that are undertaken within or adjacent to the rivers. Toolbox talks will be given by the ECW prior to and during the construction works as necessary to ensure that the risk of pollution incidents is

<sup>8</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/485199/pmho1107bnkg-e-e.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/485199/pmho1107bnkg-e-e.pdf)

<sup>9</sup> [\[ARCHIVED CONTENT\] Defra, UK - Farming - Land use planning - Good practice guide for handling soils \(nationalarchives.gov.uk\)](https://www.nationalarchives.gov.uk/ARCHIVED_CONTENT/Defra_UK_-_Farming_-_Land_use_planning_-_Good_practice_guide_for_handling_soils_(nationalarchives.gov.uk))

minimised. The talks will ensure that construction staff are aware of the site's ecological sensitives, the aims of environmental management practices and relevant working methods.

Assessment of the Master Plan in view of the Conservation Objectives is provided in Section 4.6. An assessment of any adverse impact on site integrity is also provided.

### 4.3 Increased recreational use

The aim of the Salisbury River Park Master Plan is to provide *'a lasting legacy of riverside green space and urban wildlife habitat for the people of Salisbury and its visitors to enjoy well into the future...while delivering essential flood risk mitigation'<sup>10</sup>*. It is therefore evident that increased recreational use of the River Avon corridor will be a direct result of the Master Plan and intended outcome.

Increased recreational use of the River Avon corridor in the Master Plan was identified in the HRA Screening as having a potential for LSE on the qualifying features (fish, water crowfoot habitat) of the River Avon SAC during the operational phase as a result of increased footfall from the following elements:

- Reconfiguration and/or changes to pedestrian footpaths (Phase 3A, 4A, 5A), which could bring more people and dogs into indirect contact with the river (no creation of direct access is proposed);
- Landscaping on banks of river corridor enhancing public access (seating; Phase 4A, 5A), which could introduce new and potentially damaging (e.g. erosion from footfall access to the water's edge/dogs, littering) activities alongside the river, and,
- New/encouraged commercial activity (retail, entertainment, food; not impinging on river bank; Phases 4A, 5A, 6A), with similar risks as above, e.g. wind-blown 'event' litter.

Improvements to the watercourses at 3A, 4A, 5A and 6A will be designed to not actively encourage the public or their dogs to enter the water. However, such access is already possible along the river corridor throughout Salisbury due to the pedestrian walkway which exists adjacent to the River Avon. The development extends this walkway by the river and may therefore bring an increased risk of people/dogs walking off the footpaths and along the water's edge and/or entering the water due to increased footfall; this may cause local damage to the bank, marginal and gravel substrate habitats. In addition, it is considered that an increase in footfall to the area, together with food outlets and attractions which encourage people to linger, may result in greater risks for affecting qualifying features through littering of the area, beyond the current condition/baseline.

Increased risk of litter becoming trapped within the river system and polluting riparian areas has the potential to affect the structure and function of the qualifying habitat and features of the River Avon SAC. Provision of litter bins and signage/information boards alongside a focus on the environmental and flood benefits will reduce the likelihood of this impact by increasing the awareness of the natural environment in public consciousness. Other facilities to improve awareness and provide educational opportunities will be considered and developed where appropriate in discussion with Natural England during the detailed design stage of the Master Plan, as well as other stakeholders. Vandalism of the river corridor environment is also a potential pathway to effect on qualifying features from increased use of the river corridor.

Active management by Wiltshire Council will include setting out specific requirements for new commercial premises/pop-ups and events, and commitment to managing littering and other anti-social behaviours.

Although the Master Plan does not propose any direct access to the River Avon, it must be noted that the actions of the general public cannot be controlled (such as dogs entering the river). Management of this will be considered at the detailed design stage and examples of methods to reduce this risk include strategic planting in the riparian areas and signposting to locations where focussed access are present. These focussed areas currently exist upstream on the River Avon, within the Fisherton Recreation Ground/Avon Valley Nature Reserve. Focussed areas and access points are also included as part of the Salisbury River Park Phase 1 Scheme, the locations of which will be discussed and agreed with Natural England during the detailed design.

<sup>10</sup> Salisbury River Park Master Plan, Wiltshire Council, draft July 2020.

The Screening identified any modified or additional artificial lighting associated with the widening of pedestrian and cycle paths along the River Avon at Phase 3A has the potential to affect fish populations, specifically those migratory species which are features of the SAC, and other distinctive species of the SAC, namely water vole and otter. An appraisal of lighting will be carried out, discussed and agreed with NE, in pre-planning application stages, to avoid any risk of significant effects to wildlife along the river corridor.

Part of the Salisbury River Park Phase 1 Scheme comprises modifications of the river corridor, including river widening, removal of impoundment (replacement with rock weirs) and a new offtake channel from the River Avon at Ashley Road/Fisherton Recreation Ground. Phase 1 is expected to be complete in 2024, with subsequent phases of the Master Plan to begin post-Phase 1 completion. It is considered as part of the future design phases of the Master Plan a review of the implementation of the Phase 1 Scheme is to be undertaken, relating specifically to the use of the river corridor by the public and whether this has been received as expected. This evidence should be used to inform the future design phases of the Master Plan with respect to avoiding adverse effects of increased recreational use of the river corridor.

Assessment of the Master Plan in view of the Conservation Objectives is provided in Section 4.6. An assessment of any adverse impact on site integrity is also provided.

#### **4.4 Physical damage**

The HRA Screening identified the potential for physical damage to water crowfoot and other vegetated habitat and to fish species from any in-stream or bank works during the construction of the Master Plan:

- River channel improvements (including de-culverting) (Phase 3A, 4A) and,
- River margin naturalisation and river bank landscape planting (Phase 3A, 4A, 5A).

The impact of physical damage/removal of designated vegetated habitat has the potential to disrupt the structure and function of the SAC and its supporting distinct species (fish, macro-invertebrate, water vole, otter). The presence of water crowfoot and other vegetated habitat varies throughout Phase 3A, 4A and 5A locations along the River Avon SAC.

The reach of the River Avon at the location of Phase 3A is considered sub-optimal for water crowfoot and other macrophyte communities, as well as other distinct species of the SAC (fish, macro-invertebrates, water vole); macrophyte and geomorphology surveys<sup>11</sup> identified the reach to be artificially modified, with homogenous habitat and flow types. Although there is potential for physical damage, it is considered any in-channel impacts caused by construction works would not cause adverse impact on site integrity from the current baseline, however mitigation measures outlined below will also be applied.

Any in-channel works in the River Avon during Phase 4A and Phase 5A of the Master Plan has the potential to affect the structure of the watercourse though physical damage of macrophyte communities; water crowfoot habitat was identified to be prevalent at these locations. The proposed working period during the summer months coincides with the primary growing and flowering period for water crowfoot and consequently risks physical damage (and removal). Effects will be mitigated by reducing disturbance to the accumulated seed bank in sediments and maintaining connectivity to populations upstream, from which communities will repopulate through natural drift. Completion of works in the autumn provides opportunity for the water crowfoot to establish through dispersal of seeds from upstream communities during the following spring/summer months. Any effect from physical damage will be localised and temporary and will re-establish upon completion of the scheme. Where water crowfoot and its sediments are removed, this will be placed elsewhere in the watercourse to retain invertebrate life and seed bank for recolonisation.

Fish species are mobile and able to move away from disturbance caused by in-channel plant and machinery to avoid physical damage. In-stream works such as dewatering, over pumping and machinery in the watercourse will cause vibrations that have the potential to harm fish and impact behaviour. Piling methods will be specified during detailed design, in agreement with Natural England and Environment Agency fisheries, to minimise the risk of adverse effects on qualifying fish species, including physical harm and behavioural disturbance. Percussive

<sup>11</sup> Environment Agency, 2020. Salisbury River Corridor Improvement Scheme (Phase 1) Macrophyte Survey Report.

piling presents the greatest risk of harm to fish and will be avoided (assuming not essential due to the geological conditions). Salmonids in particular are considered 'poor hearers' and as such are unlikely to be affected by short duration, bank-based piling using non-percussive piling methods. If percussive piling is required in or alongside the watercourse, a piling impact assessment to identify other management methods will be undertaken. Any percussive piling activities will be undertaken outside of sensitive spawning or migratory periods, be undertaken non-continuously to allow fish to move past the site and will be required to initiate a soft, or ramped start to allow mobile species to move away from the source of vibration before harmful levels are reached.

It should be noted that a more detailed HRA(s) will be undertaken in consultation with Natural England when specific details of the scale and nature of the works are known.

Mitigation to reduce the risk of in-stream works impacting on fish species includes,

- Restricting riverside construction activities to daylight hours (to be confirmed during the detailed HRA for each Phase), which will provide a large proportion of any 24-hour period available to Atlantic salmon and other fish species to move in the absence of acoustic deterrents and,
- Scheduling in-channel works for June to September outside of the migration period for salmon (October to December) and the spawning and egg incubation seasons for salmon (October to April) and bullhead (March to May).

Avoidance of potentially harmful construction methods and key sensitive seasons will therefore ensure no adverse effect on the qualifying fish populations and no significant risk of physical harm to individuals.

Assessment of the Master Plan in view of the Conservation Objectives is provided in Section 4.6. An assessment of any adverse impact on site integrity is also provided.

#### **4.5 Toxic contamination and invasive species**

The Master Plan has been assessed to have the potential for LSE on qualifying features of the River Avon SAC (fish and water crowfoot communities) from the accidental release of toxic pollutants and invasive species during construction. The work elements associated with the potential for toxic contamination and invasive species are:

- Landscaping on banks of river corridor enhancing public areas (Phase 4A);
- River channel improvements (including de-culverting) (Phase 3A, 4A);
- River margin naturalisation & river bank landscape planting (Phase 3A, 4A, 5A) and,
- Replacement bridge, if required (Phase 6B).

The potential risks of pollution incident and invasive species on the qualifying features of the SAC caused by the work elements are considered together. This is because the impact to pathway and associated risk is considered the same.

The construction of Phases 3A, 4A and 5A have the potential to adversely affect the water quality of the qualifying watercourses and its characteristic plant communities including water crowfoot populations, as well as qualifying fish species (which are susceptible to poor water quality) through a pollution incident, should it occur. The presence of construction plant and equipment in-channel and in riparian areas similarly has the potential for introduction (and/or spread, see below) of invasive species to the river corridor.

There is also a risk of creating a pathway to effect from any riparian/bank excavations/groundworks (run-off) since soils and/or silts may contain contaminants that have the potential to be released during construction.

The Environment Agency has carried out invasive non-native species survey as part of the Phase 1 Scheme, which covered a large proportion of the Master Plan area. A further invasive species survey will be carried out to identify any known populations of invasive non-native species within the additional areas of the Master Plan not previously assessed, to prevent the spread during the construction phase of works. This will be used to inform

the Construction Environmental Management Plan (CEMP). A separate chapter on INNS will be provided where necessary.

A CEMP will be prepared and will include all measures agreed with Natural England to mitigate the identified effects of the Master Plan works on the SAC and to ensure overall environmental protection and management during the works. The CEMP will be developed with Natural England prior to construction of the scheme. Individual method statements will be prepared by the Contractor that will outline working practices that target specific elements of construction work. These will include (i) measures to ensure that any pollution risk is minimised, (ii) incident response details are consistent with the best practice prevention guidelines and (iii) invasive non-native species (INNS) hygiene methods are adopted to prevent their introduction and/or spread on construction equipment.

Works will be undertaken in accordance with best practice to reduce the risk of contamination of the watercourse arising through pollution incidents and INNS from plant machinery and equipment. Best practice includes the Environment Agency's former Pollution Prevention Guidelines (PPG 5: *Works and maintenance in or near water*<sup>12</sup>) and SEPAs Temporary Construction Methods.<sup>13</sup>

All works will be restricted to defined working areas and works compounds and material storage areas will be sited on hard-standing and/or avoid areas of known ecological interest. These areas will be appropriately mapped and agreed with Wiltshire Council.

Strict adherence to the best practice guidelines, assigning site responsibility to ensure this and client commitment to accepting the implications is necessary to ensure appropriate environmental management of the SAC. An Ecological Clerk of Works (ECW) who is a suitably qualified ecologist will be present to ensure environmental management is strictly adhered to throughout the construction phase. This will include toolbox talks given by the ECW prior to and during the construction works as necessary to ensure that the risk of pollution incidents is minimised, and the spread of INNS is avoided. The talks will ensure that construction staff are aware of the site's ecological sensitives, the aims of environmental management practices and relevant working methods.

Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended) (WCA) lists a number of INNS plant species that are established in England and Wales. This legislation makes it an offence to cause Schedule 9 plant species to grow in the wild and, if transported off-site, there is a duty of care with regard to the disposal of any part of the plant that may facilitate establishment in the wild and cause environmental harm, including, whole plants, seeds, rhizomes, bulbs, corms and cuttings.

The Infrastructure Act 2015 amended the WCA to put in place powers to issue species control agreements and species control orders. Schedule 9 was updated in 2019 by the Invasive Alien Species (Enforcement and Permitting) Order 2019 to include certain INNS which are listed as Invasive Alien Species of Union concern under EU IAS Regulation 1143/2014, which sets out measures to prevent and minimise the impact of the introduction and spread of invasive non-native animals and plants including prevention, early detection/rapid eradication and appropriate management. Alerts about any new INNS are coordinated by the Non-Native Species Secretariat.

#### **4.6 Assessment in view of the River Avon SAC's Conservation Objectives for which the site is designated.**

The design of the Master Plan aims to re-naturalise and promote the River Avon through Salisbury whilst improving flood resilience, through a combination of in-channel and marginal improvements as well as bankside and riparian enhancements. These are presented in Table 4.2.

<sup>12</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/485199/pmho1107bnkg-e-e.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/485199/pmho1107bnkg-e-e.pdf)

<sup>13</sup> [https://www.sepa.org.uk/media/150997/wat\\_sq\\_29.pdf](https://www.sepa.org.uk/media/150997/wat_sq_29.pdf)



Table 4.2: Positive LSE of elements in Phases 3A, 4A, 5A, 6A and 6B of the Master Plan and consideration of contribution to achieving Conservation Objectives of the River Avon SAC.

Positive LSE of Master Plan	Contribution to achieving Conservation Objectives
Permanent long-term enhancements through habitat and biodiversity improvements.	All Conservation Objectives.
Continuation of the green corridor that is part of Phase 1.	Restore extent and features (fish, water crowfoot) within the site.
Species-rich grassland, native trees and shrub planting in riparian areas.	Restore extent of riparian and in-channel habitat mosaic. Riparian zone structure.
In-channel improvements.	Restore presence of woody debris in-channel.
Bankside improvements.	Restore flow diversity.
Marginal improvements.	Restore natural sediment regime.
Naturalisation of existing modified margins with planting.	Restore biological connectivity.
Environmental improvements to enhance County Wildlife Site	Restore and/or maintain presence of key structural, influential and/or distinctive species (such as diverse fish community, water crowfoot communities, macro-invertebrate assemblages, otter and water vole.
De-culverting.	
Creation of linear park and natural planting	Fisheries – restore fish densities to a level at or below the natural carrying capacity of the River Avon.
Resulting improvements to lateral and longitudinal connectivity between the channel, margins, banks and riparian areas.	Cover of submerged macrophytes – maintain sufficient proportion of aquatic macrophytes to allow reproduction in suitable habitat.

Table 4.3 provides an overview of the risks to qualifying SAC features from the Master Plan, alongside mitigation measures and an assessment of this contribution to achieving the Conservation Objectives of the River Avon SAC. Any adverse effect on site integrity is also provided.

Table 4.3: Risks (LSE) to qualifying SAC features, mitigation measures, an assessment of the contribution to achieving the Conservation Objectives of the River Avon SAC and conclusion on any impact on site integrity.

Risk (LSE)	Phase	Mitigation measures	Contribution to achieving Conservation Objectives	Adverse effect on site integrity alone?
Habitat loss Habitat fragmentation Natural function	Phases 3A, 4A, 5A  Construction phase Localised Temporary	Maintenance of longitudinal connectivity (no physical barriers to movement) during in-channel works.  Suitable habitat is maintained/replaced after any disturbance.  Restricting in-channel works to June to September to avoid the salmon migration season and the salmon and bullhead spawning seasons.  Ensuring works are undertaken during daylight hours (TBC during detailed design) will enable a large proportion of any 24-hour period for the movement of Atlantic salmon and other fish species if present.  Water vole survey to determine the presence and extent of water voles within the area and presence of any burrows. Mitigation provided, if required.	Working methods (mitigation measures) will avoid and/or minimise short term habitat loss, fragmentation and impacts on the natural function of the river and the in-channel and bankside river restoration proposals will help to restore: <ul style="list-style-type: none"> <li>▪ extent and features (fish, water crowfoot) within the site.</li> <li>▪ extent of riparian and in-channel habitat mosaic.</li> <li>▪ Riparian zone structure.</li> <li>▪ presence of woody debris in-channel.</li> <li>▪ natural flow regime.</li> <li>▪ natural sediment regime.</li> <li>▪ biological connectivity.</li> </ul>	No

Risk (LSE)	Phase	Mitigation measures	Contribution to achieving Conservation Objectives	Adverse effect on site integrity alone?
		<p>A five-year monitoring plan will be developed with Natural England prior to construction of the Master Plan phases to monitor changes to the qualifying features of the SAC within the Master Plan scheme area.</p>	<ul style="list-style-type: none"> <li>▪ Restore and/or maintain presence of key structural, influential and/or distinctive species (such as diverse fish community, water crowfoot communities, macro-invertebrate assemblages, otter and water vole.</li> <li>▪ Fisheries – restore habitat to support fish densities to a level at or below the natural carrying capacity of the River Avon.</li> <li>▪ Cover of submerged macrophytes – maintain sufficient proportion of aquatic macrophytes to allow reproduction in suitable habitat.</li> </ul>	
Siltation/smoothing/turbidity	<p>Phases 3A, 4A, 5A, 6A and 6B</p> <p>Construction phase Localised Temporary</p>	<p>Construction Environmental Management Plan implemented.</p> <p>Ecological Clerk of Works.</p> <p>Best Practice Guidance.</p> <p>Defra’s Construction Code of Practice for the Sustainable Use of Soils on Construction Sites.</p>	None directly. Fine sediment pollution to the river will be avoided/reduced to a level which will only have a minimal temporary impact.	No
Increased recreational use	<p>All Phases (3A, 4A, 5A, 6A and 6B)</p> <p>Operation phase Localised Temporary</p>	<p>Provision of litter bins and signage.</p> <p>Opportunities for educational purposes including education on Natural Flood Management benefits over implementation of hard engineered structures.</p> <p>Review (and implementation of recommendations) of recreational use following Phase 1.</p> <p>Management of new commercial/pop-up/events by Wiltshire Council and retailer’s requirements.</p> <p>Facilities to improve awareness and provide educational opportunities will be considered and developed where appropriate in discussion with Natural England during the detailed design stage of the Master Plan.</p>	<p>None directly.</p> <p>The risk of increased recreational use cannot be removed from the Master Plan; it is a fundamental effect of the principle of the Master Plan, i.e. to promote the river corridor for biodiversity and public amenity.</p> <p>With careful design and appropriate mitigation, (and overall positive LSE of the Master Plan on the qualifying features of the River Avon SAC (Table 4.3)), it is considered that the risks of recreational impact are minimised as much as possible and are unlikely to impact on site integrity</p>	No
Physical damage	Phases 3A, 4A, 5A	Reduce disturbance to accumulated seed bank in sediments (water crowfoot etc).	Restore and/or maintain presence of key structural, influential and/or distinctive species (such as diverse fish	No

Risk (LSE)	Phase	Mitigation measures	Contribution to achieving Conservation Objectives	Adverse effect on site integrity alone?
	Construction phase Localised Temporary	<p>Maintain connectivity to allow repopulation through natural drift.</p> <p>Piling methods will be specified during detailed design to avoid any adverse effects on fish species (physical harm, behavioural disturbance). If percussive piling is required, a piling impact assessment to identify other management methods will be undertaken and detailed mitigation will be provided in individual HRA(s) for the Phases.</p> <p>Restricting in-channel works to June to September to avoid the salmon migration season and the salmon and bullhead spawning seasons.</p> <p>Ensuring works are undertaken during daylight hours (TBC during detailed design) will enable a large proportion of any 24-hour period for the movement of Atlantic salmon and other fish species.</p>	<p>community, water crowfoot communities, macro-invertebrate assemblages, otter, and water vole.</p> <p>Cover of submerged macrophytes – maintain sufficient proportion of aquatic macrophytes to allow reproduction in suitable habitat.</p>	
Toxic contamination	All Phases 3A, 4A, 5A, 6A, 6B  Construction phase Localised Temporary	<p>Construction Environmental Management Plan implemented</p> <p>Best Practice Guidance</p> <p>Defined material storage areas avoiding areas of ecological interest.</p> <p>Consider temporary pop-up habitats as a food source for pollinators.</p> <p>Ecological Clerk of Works</p>	None directly. Pollution of the river will be avoided.	No
Invasive species	Phases 3A, 4A, 5A, 6B  Construction phase Localised Temporary	<p>INNS survey to cover those areas of the Master Plan not surveyed as part of the Phase 1 Scheme to inform the CEMP.</p> <p>Construction Environmental Management Plan implemented</p> <p>Best Practice Guidance</p> <p>Ecological Clerk of Works - biosecurity</p>	Invasive, non-native and/or introduced species – ensure non-native species categorised as 'high-impact' in the UK under the Water Framework Directive are either rare or absent, but if present having minimal impact on the integrity of habitat.	No

## Opinion on adverse impacts in alone assessment

When It is considered alone, alongside mitigation measures/conditions outlined above, there will be **no adverse effect on site integrity of the River Avon SAC from the Master Plan (Phases 3A, 4A, 5A, 6A and 6B)**. The naturalisation of the channel and riparian areas through the study area will improve the functioning of the River Avon, and contribute to the restoration of its qualifying features and the overall ecological community to favourable condition. The Master Plan will provide positive enhancement on qualifying features of the River Avon SAC. It is considered the scheme will enhance biodiversity and directly contributes to the River Avon SAC Conservation Objectives.

## 5. Appropriate Assessment: assessing the effects in-combination

Phases 3A, 4A, 5A, 6A and 6B have no effect in alone assessment, subject to the implementation of defined mitigation measures, but effects were not completely avoided. An assessment of 'in-combination effects' is therefore presented in Table 5.1.

The phases of the Master Plan will be defined as different schemes and timings will not coincide.

Table 5.1: In-combination effects of the Master Plan and other plans/projects within the study area which may contribute to impacts on qualifying features of the River Avon SAC.

Other Plan, project or proposal	Identified potential effects on SAC from other plans/projects	Will scale of impact of Master Plan works lead to adverse effect on integrity of the site in-combination?	Can in-combination effects be avoided?	Can adverse effects be avoided?
Salisbury River Corridor Improvement Scheme (RCI; Phase 1)	<b>Construction</b> Habitat loss & fragmentation, natural function, turbidity/siltation/smothering, increased recreational use, physical damage	No	Yes. Mitigation measures outlined in this HRA reduce risk of these effects to qualifying species of the SAC.  The RCI has undergone a separate HRA. Avoidance of risk and mitigation measures are detailed.  Timing of works different.  Anticipated loss of SAC habitat in the Phase 1 Scheme is approximately 0.02ha (infilling of the Summerlock Stream). However, the new wetland habitat will create 0.36ha of chalk stream and riparian habitat.  During operation of Phases 3A, 4A and 5A of the Master Plan, in-channel and marginal improvements will enhance the river corridor habitat.	Yes
Maltings Central Car Park	<b>Construction</b> Siltation, turbidity, smothering	No	Yes. Mitigation measures outlined in this HRA reduce risk of these effects to qualifying species of the SAC.	Yes
Hydropower scheme under consideration at Bishop's Mill	<b>Construction</b> Siltation, turbidity, smothering	No	As a planning application for this project has not been submitted, no further details are available at the current time.	N/A – it is currently unknown if this scheme is moving forward. During detailed HRA(s) of the individual Phases, further information will be sought on the development of the scheme to assess in-combination effects.

Other Plan, project or proposal	Identified potential effects on SAC from other plans/projects	Will scale of impact of Master Plan works lead to adverse effect on integrity of the site in-combination?	Can in-combination effects be avoided?	Can adverse effects be avoided?
<p>Castle Street change of use from offices to flats</p>	<p><b>Construction</b>                      Siltation, turbidity, smothering                      Toxic contamination                      Specifically: lowering of the existing sheet piled wall, surface water drainage and potential naturalising of the river margins.                      Increased predation - cats</p>	<p>No</p>	<p>Yes. Mitigation measures outlined in this HRA reduce risk of these effects to qualifying species of the SAC.                      Timing of works different (finished by October 2022)                      Further review of the development when available will be undertaken during the development or design of any schemes arising from the Master Plan to ensure any conflicts and potentially adverse cumulative impacts are avoided in the affected area.</p>	<p>Yes</p>

**It is concluded, the Master Plan (Phases 3A, 4A, 5A, 6A and 6B) will have no adverse impact on integrity of the River Avon SAC in-combination with other plans and projects.**

## **6. Information/Advice**

### **Natural England**

The Salisbury River Park Master Plan HRA Screening was sent to Natural England for comment, and a response received (8<sup>th</sup> January 2021). Natural England provided comment on the HRA Screening, and the HRA Screening was updated in response. Natural England concurred that an Appropriate Assessment is required.

### **Wiltshire Council**

Wiltshire Council hosted a meeting on 26<sup>th</sup> January 2021 with the Environment Agency and Jacobs to discuss moving the Master Plan forwards and timescales.

### **E-mail correspondence**

28<sup>th</sup> January 2021: revised timescale for Master Plan HRA Appropriate Assessment - proposed early/mid-March for a draft to be issued to Wiltshire Council, to accommodate the statutory 28-day response period on submission to Natural England.

6<sup>th</sup> February 2021: Wiltshire Council provided updated Master Plan.

### **Jacobs**

Following formal submission of the HRA AA to Natural England on 31<sup>st</sup> March 2021 (Revision 2), this document (Revision 3) was updated following a meeting with Natural England and Wiltshire Council on 27<sup>th</sup> April 2021. A formal response was received from NE and the HRA Appropriate Assessment was updated accordingly (Revision 4). Revision 5 of the HRA Appropriate Assessment is cleaned of comments addressed.

## 7. Draft Conclusion

Jacobs carried out the HRA Appropriate Assessment on behalf of the Wiltshire Council for the Salisbury River Park Master Plan and concludes that **the Master Plan (Phases 3A, 4A, 5A, 6A and 6B) will have no adverse effect on the integrity of the River Avon SAC in alone assessment and in-combination assessment.** This conclusion is dependent on the following mitigation measures and/or conditions during construction delivery:

- Maintenance of longitudinal connectivity (no barriers to movement) during in-channel works;
- Suitable habitat is maintained/replaced after any disturbance;
- Restricting in-channel works to summer months to protect the salmon migration season (October to December) and the salmon (November to April) and bullhead (March to May) spawning seasons;
- Ensuring works are undertaken during daylight hours to enable a large proportion of any 24-hour period for the movement of Atlantic salmon and other fish species;
- Construction Environmental Management Plan;
- Ecological Clerk of Works;
- Best Practice Guidance including Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites;
- Active commitments from Wiltshire Council and others to mitigate littering pressures as a result of increased footfall;
- Piling impact assessment to identify other management methods and any piling methods used to avoid any adverse effects on fish species (physical harm, behavioural disturbance);
- Water vole survey to determine the presence and extent of water voles within the area and presence of any burrows;
- A proportionate five-year monitoring plan to be developed with Natural England prior to construction of the Master Plan phases to monitor changes to the qualifying features of the SAC within the Master Plan scheme area;
- INNS survey to cover those areas of the Master Plan not surveyed as part of the Phase 1 Scheme to inform the CEMP and,
- A more detailed HRA(s) to be undertaken in consultation with Natural England when specific details of the scale and nature of the works (and other developments for example Castle Street) are known. This will describe the potential effects of the works proposed as part of future schemes, together with project level mitigation measures.

The Master Plan will support the SAC Conservation Objectives which will contribute to restoring and enhancing the River Avon SAC through Salisbury. In-channel, marginal and riparian improvements will enhance habitat diversity within the designated site. These enhancements will support the natural functioning of the SAC and help to restore the extent and pattern of in-channel and riparian habitats to that of characteristic natural fluvial processes.

**Wiltshire Council is minded to proceed with the project.**

**Wiltshire Council Officer: Natasha Styles**

**Date: 29.04.2021**

To note, the HRA AA was submitted formally to Natural England on 31<sup>st</sup> March 2021 (Revision 2). This document was updated following discussions with Natural England on 27<sup>th</sup> April 2021 (Revision 3). A formal response was received from Natural England on 14<sup>th</sup> May 2021, whereby the HRA was amended following comments (Revision 4). Revision 5 is the HRA Appropriate Assessment approved by NE with comments addressed and the document 'cleaned'.

## **8. Formal Consultation**

### **Natural England consultation**

Date sent to Natural England for formal consultation: 31<sup>st</sup> March 2021. Following formal submission of the HRA AA to Natural England on 31<sup>st</sup> March 2021 (Revision 2), this document (Revision 3) was updated following a meeting with Natural England and Wiltshire Council on 27<sup>th</sup> April 2021. A formal response was received from Natural England on 14<sup>th</sup> May 2021, whereby the HRA was amended following comments (Revision 4). Revision 5 is the HRA Appropriate Assessment approved by NE with comments addressed and the document 'cleaned'.

Date response received from Natural England: 25<sup>th</sup> May 2021

Natural England advises that *'having considered the assessment, and the measures proposed to mitigate for all identified adverse effects that could potentially occur as a result of the proposal, Natural England advises that we concur with the assessment conclusions, providing that all mitigation measures are appropriately secured in any permission given'*.

Name of Natural England officer: James Hughes

Job title: Planning and Conservation Lead

Date: 25<sup>th</sup> May 2021



## 9. Final Appropriate Assessment Record

This is a record of the appropriate assessment required by Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended), undertaken by Jacobs for the Wiltshire Council.

The screening (Stage 1) concluded that the PPP would be likely to have a significant effect on the following site(s):

River Avon SAC (UK0013016) ^

An appropriate assessment has been undertaken of the implications of the proposal in view of the site's conservation objectives.

It can be ascertained that the PPP would not have an adverse effect on the integrity of the following site(s), either alone or in combination with other plans and projects:

River Avon SAC (UK0013016) ^

This conclusion is dependent on the mitigation measures outlined in Section 7.

### Natural England Formal Consultation

Natural England was consulted on the screening and appropriate assessment throughout the development of the Salisbury Master Plan HRA, as detailed in Section 8. The conclusions of this appropriate assessment are in accordance with the advice and recommendations of Natural England.

### Public Consultation

The opinion of the public was taken under Regulation 63(4) by way of public advertisement and public consultation of the Master Plan and associated draft HRA screening and the views expressed have been taken into account.

## **Appendix A. Update on Master Plan design**

Appendix A provides details of the updated Master Plan, as provided by Wiltshire Council (draft received 6.02.21, and updated 27.04.21). These figures are pending further minor updates to wording.

### Phase 2A: Sumerlock Bridge

Fisherton Street is an important gateway part of the city centre that would benefit from regeneration. The area around Summerlock Bridge provides an opportunity to regenerate part of Fisherton Street. It is home to a historic bridge that is currently characterised and hidden with too much signage and street clutter.

Delivery of Phase 2A will address the following:

- The narrowing of the road to be considered as part of a comprehensive assessment of the highways network within the city centre.
- An enhanced public realm with landscaping to segregate the road from pedestrian areas and removing street clutter.
- The historic townscape in this part of the Salisbury Conservation Area.
- Any works in proximity to service infrastructure is to be agreed with statutory service providers, such as Wessex Water.



### Phase 2B: Fisherton Bridge

Fisherton Bridge provides a wide area of public domain at a key pedestrian junction, overlooking the attractive river convergence at Bishops Mill. There is an opportunity to further enhance the public realm and plaza feel to this area.

Delivery of Phase 2B will address the following considerations:

- Development should seek to deliver a plaza style pedestrian dominated area with increased planting and enhanced seating areas. This could include new surfacing, landscaping and lighting.
- Consideration should be given to narrowing of the carriageway to extend the area for public space. The narrowing of the road will be considered as part of a comprehensive assessment of the highways network.
- Any proposals for development must give due consideration to the historic townscape in this part of the Salisbury Conservation Area.
- Any works in proximity to service infrastructure is to be agreed with statutory service providers, such as Wessex Water.

Consolidated and enhanced outside leisure area

Road significantly narrowed and segregated with large planters to introduce an area of public domain dominated by the pedestrian

Formation of new bridge plaza – public pedestrian area with seating and planting

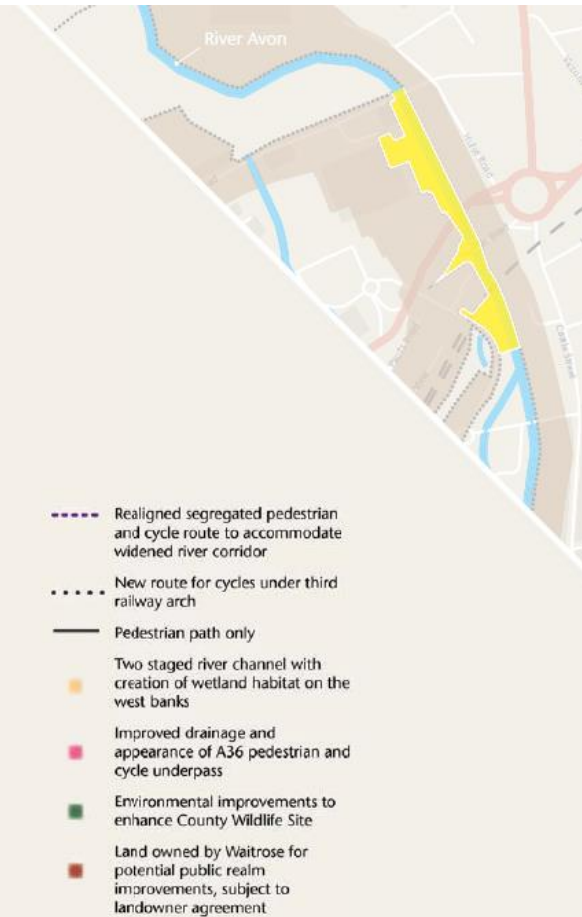


### Phase 3A: Riverside footpath between Ashley Road and Central Car Park

This part of the River Park forms a key pedestrian and cycle route linking the city centre to the northern residential areas of the city.

Delivery of Phase 3A will seek to deliver:

- aggregation of disparate clusters of green infrastructure into a consistent green route
- public realm improvements alongside river including increased planting and enhanced seating areas
- introduction of new cycle route under the railway arch adjoining Kivel Court. Potential widening of existing pedestrian route under railway bridge over river
- protection of views from the west bank of the river across to the rear gardens and garden outbuildings of Castle Street, which are part of the historic core of Salisbury
- retention of mature trees that form an important part of the character of the conservation area
- any works potentially affecting the bridge structure through the A36 underpass must be taken forward in close collaboration with Highways England.



Please note for Phase 3A, 'two-staged river channel' has been removed from the Master Plan (19.05.21).

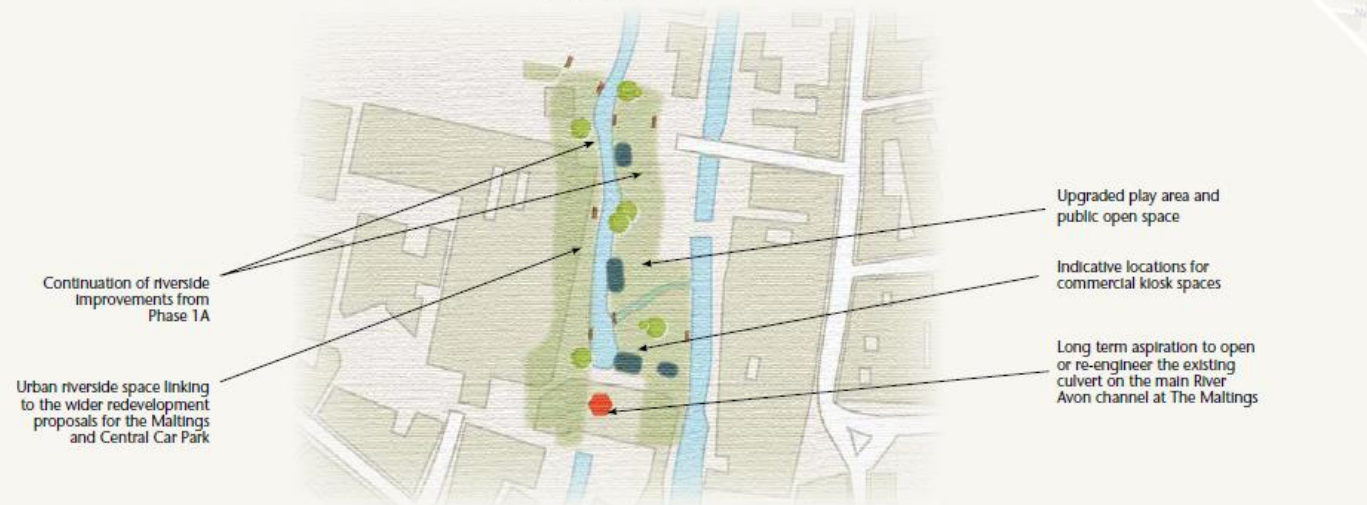
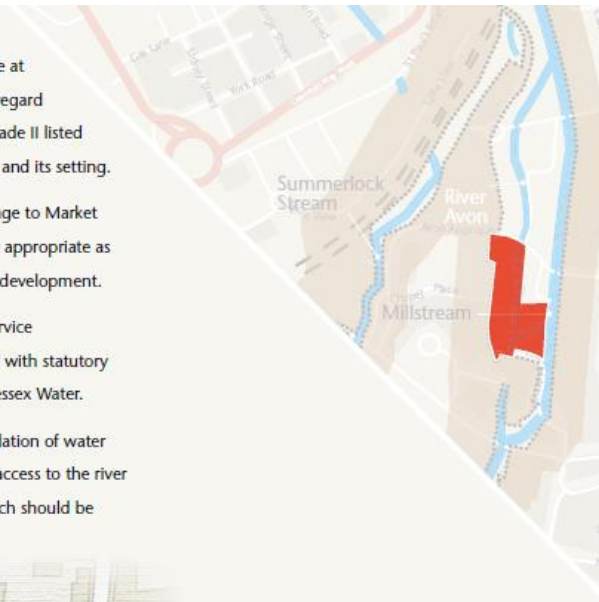
### Phase 4A: Land at MCCP (south)

Phase 4A will be delivered alongside the wider regeneration of the Maltings and Central Car Park site and will seek to extend the green infrastructure corridor than has been delivered through Phase 1A of the River Park to the north. In accordance with the MCCP masterplan, the green corridor will, wherever practicable, be 40m in width to enable flood risk alleviation infrastructure to be delivered, alongside improvements for biodiversity and the public realm. Phase 4A of the River Park will address the following requirements, as listed below and annotated on the map:

- Delivery of a mixture of public realm and wildlife areas.
- In-channel and bankside improvements to enhance biodiversity.
- New areas of public domain to host the evening economy, with potential for outdoor performance space and kiosks.

- Improved informal public seating areas, engaging with the rivers.
- Replacement and modernisation of the important open space and play area at The Maltings.
- Introduction of new public art.
- Management of artificial light levels to ensure an acceptable degree of protection of the rivers against light spill.
- Opening up some or all of the culvert that takes the River Avon under the existing shopping arcade, where opportunities arise in agreement with interested parties.

- Assessment and potential structural repair of the bridge at Bishops Mill, paying special regard to the preservation of the Grade II listed Salisbury Generating Station and its setting.
- Consideration of bridge linkage to Market Walk, to be realigned, where appropriate as part of the wider Maltings redevelopment.
- Any works in proximity to service infrastructure is to be agreed with statutory service providers, such as Wessex Water.
- There may be increased predation of water vole from increased / easier access to the river bank and marginal zone which should be considered.



### Phase 5A: Rivers edge and riverside walk to rear of High Street.

Phase 5A of the River Park seeks to deliver minor improvements to the riverside route between Fisherton Street and Crane Street, to the rear of premises on High Street. Any proposals in this area will need to take full consideration of the historic townscape in this part of the Salisbury Conservation Area.

Phase 5A will seek to deliver:

- public realm improvements including increased planting and enhanced seating areas, providing further opportunities for engagement with the river
- improvements to the river edge treatment with new marginal planting
- management of artificial light levels to ensure an acceptable degree of protection of the river against light spill
- encouragement of new active frontages addressing the river
- any planning applications for developing outdoor seating in nearby proximity to residential dwellings should be subject to a noise impact assessment and mitigation, where required
- seek opportunities to improve linkages and legibility with the High Street as set out in the Salisbury Central Area Framework.



A strong landscape strategy is key to the success of public spaces. This indicative plan shows potential proposals which could be developed to enliven the urban realm.

1. Gateway entrance sign/art work.
2. High quality paving materials and street furniture.
3. Informal seating.
4. Opportunity to use building facade for public art/projected imagery.
5. Naturalised river's edge - marginal planting.
6. Linear park - natural planting.
7. Stone stepped seating.
8. Informal lawn area with high-quality street furniture.
9. Moveable bistro furniture and high-quality moveable planters.
10. Footpath



**Phase 6A: NHS buildings and Tesco service yard**

Phase 6A will deliver minor improvements to the land around buildings to the south of the coach park, and surface level parking areas. A longer term aspiration is to acquire the surface level car parking areas to enable the extension of the Phase 1A and Phase 4A green corridor elements of the River Park into this area.

Phase 6A will seek to deliver:

- addition of planting to screen and green the appearance of the existing service yard and buildings, subject to discussion with landowners
- a longer term ambition to extend the public open space delivered as part of Phase 4A into the private surface level car parking area, to further open out the river frontage and improve the public realm
- any works in proximity to service infrastructure is to be agreed with statutory service providers, such as Wessex Water.



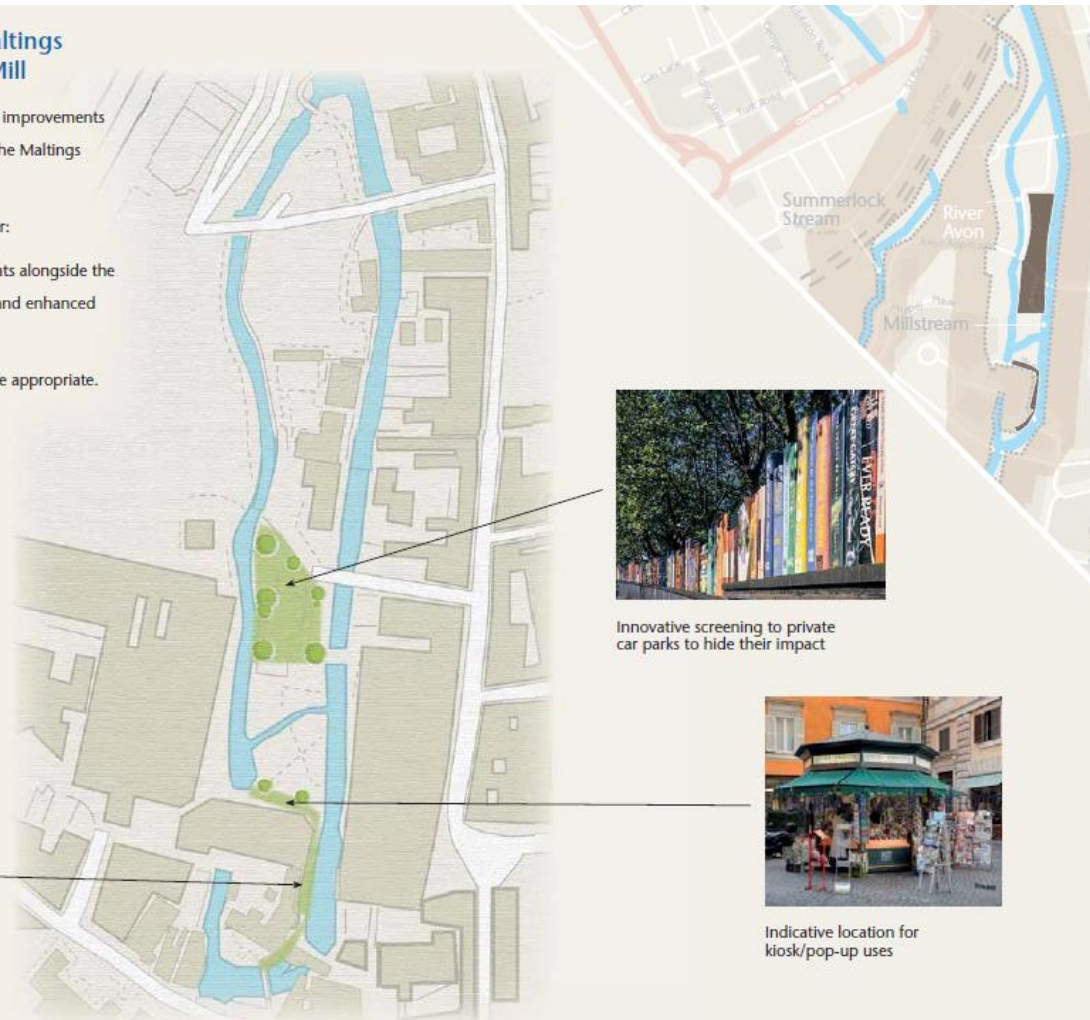
Existing walk way enhanced and bridge replaced/strengthened

**Phase 6B: The Maltings parade/Bishops Mill**

Phase 6B will deliver minor improvements to the public realm along the Maltings shopping parade.

Phase 6B will seek to deliver:

- public realm improvements alongside the river, increased planting and enhanced seating areas
- kiosks/pop-up uses, where appropriate.



Innovative screening to private car parks to hide their impact



Indicative location for kiosk/pop-up uses

