

Wilts & Berks Canal Trust

**Melksham Link Waterway,
Pedestrian and Off-road Cycle Routes**

**Environmental Statement in support of an Application for
Planning Permission**

Environmental Statement V 1.6

Document Control

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Author : Ken Oliver Wiltshire Council

Approval : John Laverick Wilts & Berks Canal Trust

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1. Executive Summary

Introduction

The overall objective of the Wilts & Berks Canal Trust is to restore the navigation between the Kennet and Avon Canal and the River Thames at Abingdon via Swindon together with the link north from Swindon to the Cotswold Canal. Whenever possible the objective is to restore the historic line of the canal but where this is not possible it is to develop new canal infrastructure as close as possible to the historic line. The complete restoration of the Wilts & Berks Canal is an ongoing long term project being undertaken in stages as and when land access is agreed, funding is secured and the necessary consents obtained.

This Environmental Statement covers one stage in this process and consists of the development of a new section of canal between a junction with the Kennet and Avon Canal (K&A) at Semington and a point where it joins the River Avon in Melksham just downstream of Challeymead Bridge. It also includes part of the river from the new junction just downstream of Challeymead Bridge upstream to just above the Melksham Gate weir.

This Statement consists of a compilation of available information identified by the accompanying Scoping Report. Specifically commissioned studies are included separately.

The main areas of study are dealt with under the general topic headings of:-

- Water and Ecology.
- Land and Resources.
- Human Activities.
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Further specific topics are covered as subsections within these general headings:-

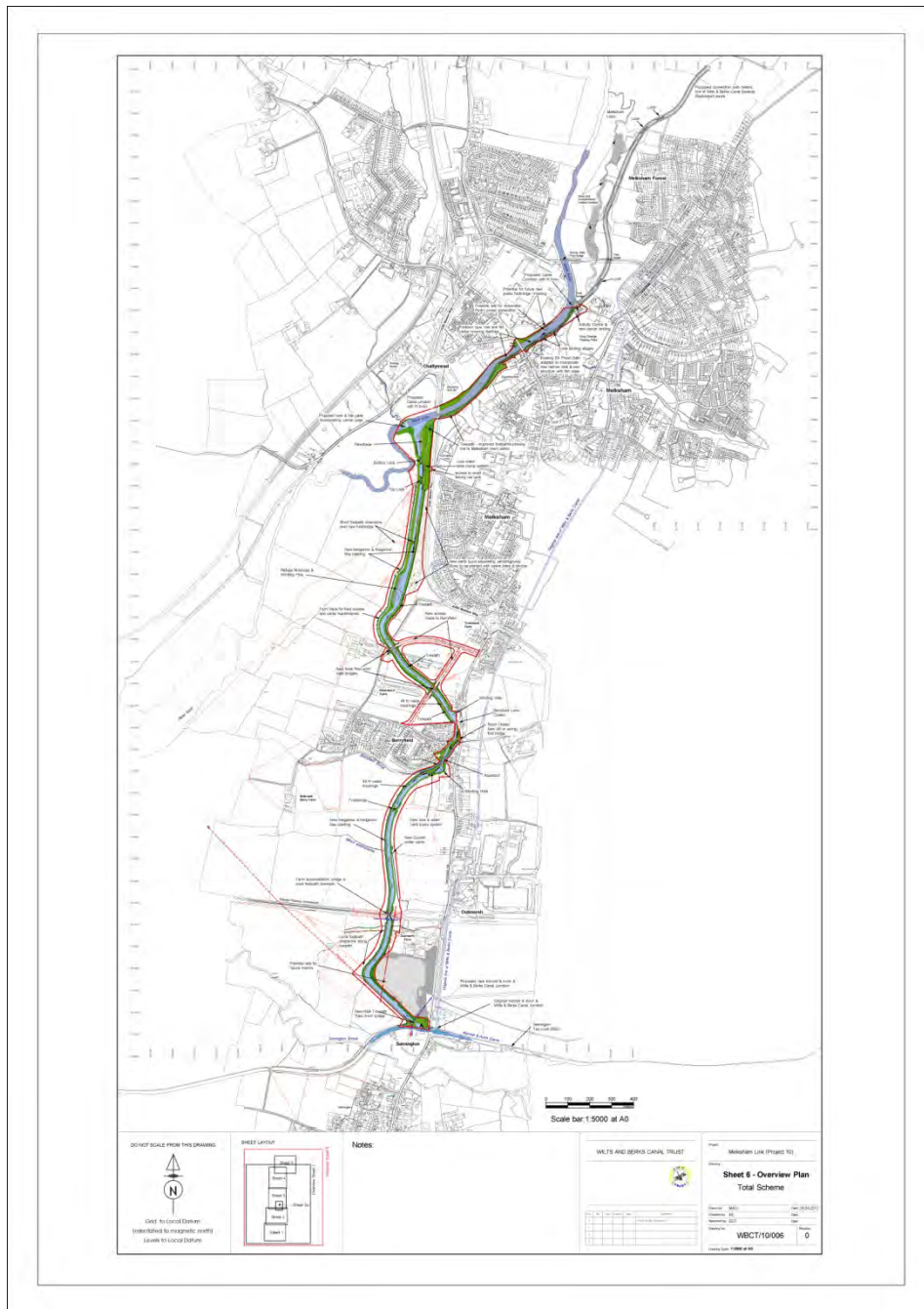
- Flood Risk & Drainage.
- Surface Water.
- Water Abstraction.
- Water Quality.
- Ecology.
- Landscape.
- Cultural Heritage.
- Agriculture & Land Use.
- Contaminated Land.
- Waste Management.
- Visual Amenity.
- Transport.
- Air Quality.
- Noise and Vibration.
- Socio-economics.
- Recreation and Amenity.
- Health and Safety.

To avoid duplication of information, where information is contained in separate written reports, the name of the relevant report is shown in brackets e.g.[see Flood Risk Assessment] rather inserting the information directly into this report.

2. Project Description and Area

The project is proposing a new route for the Wilts & Berks Canal through Melksham, incorporating a section of the River Avon. The new waterway will provide enhanced habitat and recreational facilities and opportunities for enabling development and regeneration.

The area of the Melksham Link project is shown within the red line in the map below.



3. Water & Ecology

Flood Risk

The accompanying documents [see FRA and FRA appendices 1,2,3 and Supplemental report] provide a Flood Risk assessment of the Melksham Link using specially commissioned studies for the River Avon (including Clackers Brook) and Berryfield Brook. Extensive consultation with the Environment Agency has taken place during the project design period.

Impact

The studies show that both downstream and upstream of the Melksham Flood weir and gate there is no difference in water level during flood conditions when the Melksham Link scheme is completed

Surface Water

Canal embankments and structures may have minor effects on local watercourses and runoff characteristics.

Impact

No net impact is expected.

Water Resources

The main requirement for water in the Melksham Link is the supply of the new canal section from the Kennet & Avon Canal to the River Avon. The supply for this new water body will be derived from and returned to the River Avon, via abstraction at two locations.

The new canal from its junction with the Kennet & Avon Canal to Berryfield Lock will be supplied from the Kennet & Avon Canal via the existing abstraction at Claverton and pumping along the Kennet & Avon Canal. British Waterways has an abstraction license that is operating at peak times to approximately 70-80% of maximum permitted abstraction. The proposal to supply additional water for the Melksham Link will use part of the 'spare capacity' of this license. To reduce losses from this supply back pumping will be provided at Berryfield Lock to return 60/70% of water used by boats in transiting the lock. The construction will minimize losses through the bed of the canal.

The new canal from Berryfield Lock to the River Avon will be supplied directly from pumps located locally at Challeymead. Water used by boats using the locks will be returned to the river.

Impact

Initial filling of the canal will require a one off consumptive supply of water. Bed losses and evaporation will add an operational consumption of water. This additional supply will be sustainable from the River Avon with little detrimental effect

Water Quality

The Melksham Link will create a new standing open water body of canal discharging into the River Avon.

Impact

Local discharge of canal water is not expected to deteriorate the water quality of the River Avon.

Mitigation

Monitoring of water quality of the canal and River Avon during operation to ensure the water quality of the River is not degraded.

Ecology

The new canal section of the proposal has been assessed by a Phase 1 habitat survey [see Wiltshire College Phase 1 Habitat Survey] . The route mostly uses agricultural land which is currently cultivated.

The river section of the proposal includes construction of two new structures, a new weir at Challeymead and a new lock/hydro power scheme adjacent to the existing Melksham gate and weir above Town Bridge. The existing habitats within the river corridor are essentially unchanged. Data concerning this section of the scheme is derived from surveys carried out for J Sainsbury's Ltd. [see Extended Phase 1 survey and Protected Species survey].

Impact

There will be temporary damage and disturbance to habitat during construction of the canal section.

There will be a loss of cultivated agricultural land.

A number of trees and sections of hedgerow will be removed .

The net gain of habitat will include 2km of new standing water with associated wetland marginal habitat and increased lengths of hedgerow. Landscaping will include the planting of many more trees.

There will be localised disturbance of riverine habitat during construction of the proposed weir and lock. The new weir at Challeymead will raise low flow 'summer' levels by approximately 0.5m between the new weir and the existing Melksham Gate weir. The impact of raising the water level will be small as it closely replicates the conditions caused naturally by fluctuating river levels caused by rainfall.

Mitigation

The river structures will include suitable fish passes.

The river bank adjacent to Conigre Mead Nature reserve will be re profiled to replicate the current shallowed edge.

Any trees and hedgerow removed will be replaced in new locations.

4. Land and Resources

Landscape

The Landscape features of the river corridor will remain largely unchanged . Changes to the landscape within the new canal section will be locally significant but as the built structures, hedgerows and other planting are essential at low level, and the canal corridor is relatively narrow no significant impact is expected when viewed from medium and long distance.

Photographic images of the area are shown on the following pages

Viewpoints Map



These images were taken during relatively high flows on the River Avon. This will simulate in the relevant area the expected visual impact of the new weir at Challeymead.

1 Proposed Kennet & Avon Junction



2. Agricultural land looking north towards Outmarsh Farm



3 Looking south towards Outmarsh Farm



4. Looking north towards Berryfield



5 Looking south from Berryfield Village Hall



6 Berryfield Village Hall and Play Area looking north



7 From Berryfield Lane looking south across public open space



8 Looking north from Berryfield Lane adjacent to Berryfield



9 From Berryfield Lane looking SE (adjacent to Boundary Farm)



10 From Berryfield Lane looking NW toward River Avon



11 Adjacent to A350 looking south



12 Adjacent to A350 looking north towards the River Avon



13 Challeymead (A350) bridge looking west



14 Adjacent to Conigre Mead Nature Reserve (Challeymead Bridge) looking east



15 River corridor /path adjacent to Sainsbury supermarket



16 Town Bridge looking NE



17 From Town Bridge looking downstream (SW)



18 From Town Bridge looking upstream



19 Melksham Gate and weir



20 Looking upstream from Melksham Gate



21 From Canoe Club River Avon upstream (junction with Melksham loop)



22 From Canoe Club looking downstream towards Melksham Gate



Trees

A separate report [Tree Survey Melksham Link] shows details of the trees affected by the Melksham Link scheme.

Impact

A number of mature trees will need to be removed.

Mitigation

An extensive hedgerow and tree planting scheme is proposed as part of the canal construction. Where tree removal is necessary as part of the construction proposals suitable replacement trees will be included in the planting programme.

6. Human Activities

Cultural Heritage

No ancient monument sites are located within the project area.

Town Bridge is a Grade II listed structure and the project will aim to enhance its setting.

Impact

None expected . A monitoring brief will carried out during excavation work.

Agriculture & Land Use

Impact

The new canal will take approx 7 Hectares of agricultural land from production and will require the relocation of the children's play area at Berryfield.

Mitigation

The project is seeking to find a acceptable location (shown indicatively) for the playground on adjacent land. No mitigation is proposed for the loss of agricultural land.

Contaminated Land

There are not expected to be any contaminated land issues.

Waste Management

Spoil from excavations is expected to remain on site either as part of construction of the canal embankments or as a noise bund between the canal and the A350.

Visual Amenity

Care has been taken in the design of the scheme to minimize the visual impact of structures either by location, or by design/appearance.

Impact

During construction there will be intrusion into views from local housing in Semington Road and Berryfield.

There will be a permanent change to landscape views with new structures, trees and hedgerows.

Transport

Vehicular access to Berryfield will be modified with two new proposed roads to replace the existing access via Berryfield Park Road and Berryfield Lane. Pedestrian access will be maintained into Berryfield Park Road.

Impact

There will be a minor increase in traffic density during construction. Disruption and diversions during construction will be kept to a minimum.

Air Quality

Impact

There may be possible dust and exhaust emissions from construction traffic and plant. Construction management actions will ensure that any dust nuisance is kept to a minimum.

Noise & Vibration

Impact

There will be noise effects from construction plant and traffic and possible temporary vibration from construction activities.

Socio Economics

Impact

There will be economic benefit to local businesses from recreational traffic on the proposed canal and substantially increased visitor numbers. British Waterways have produced data on the social economic benefit for Wiltshire of the restoration of the Kennet & Avon Canal [see Economic & Social Impact of the restoration of the Kennet & Avon Canal 2010 Update]

The Melksham Link will allow opportunity for enabling development and potential for the redevelopment of the River Avon corridor in Melksham.

Recreation & Amenity

Impact

There will be temporary footpath and bridleway disruption.

A new canal park will be created in Berryfield village.

New informal recreational opportunities will be created with the provision of additional footpaths and footpath links.

Improved and traffic free access from the existing riverside footpath in Melksham will be created to Berryfield and to the Kennet & Avon towpath.

Health & Safety

There are potential risks from the introduction of the proposed canal into Berryfield village, and potential benefits of reduction in local road traffic by the new road access.

Mitigation

Although two thousand five hundred miles of canal edge throughout the country are not fenced it is however proposed that the length of new canal through Berryfield will be provided with edge protection. (Feedback from public consultation suggested that this would be appropriate given that open water had not previously existed within the village).