HOBSON'S AND VICAR'S BROOK CORRIDOR 10-YEAR VISION

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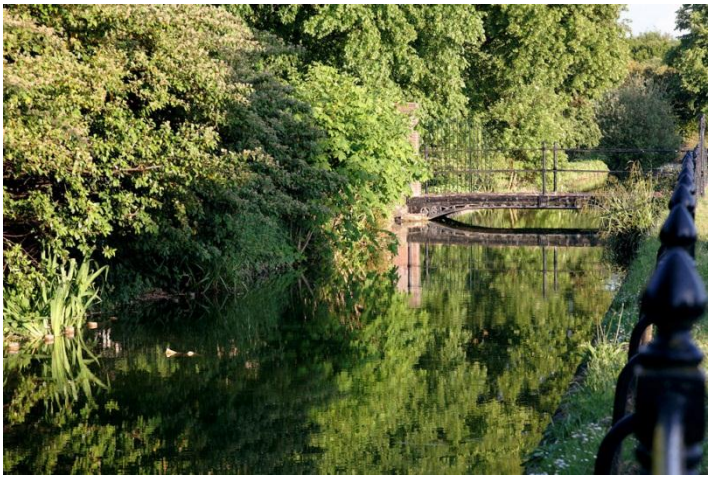


CHAPTER 1 - INTRODUCTION AND GEOGRAPHY

THE VISION

The Hobson's and Vicar's Brook corridor is an important green infrastructure corridor to the south of the City Centre in Cambridge. It has multiple aspects that enhance Cambridge, including being a rare chalk stream and ecological corridor, a unique historical waterway and an important flood risk management asset. There are increasing pressures on this area from growth, climate change, change of adjacent land use and ad-hoc reactive maintenance to structures and assets.

This Vision will describe the nature and character of the corridor, define the pressures and outline management and maintenance priorities for the Brooks. This will be based on the gathering and collation of data, reports and studies. Based on the collated information, a series of actions will be defined together with a timeline for implementation that will come together as a Vision for the corridor.

The aspects that will be looked at are:

- Vegetation management
- Silt management
- Historic structure management
- Flood risk management
- Ecological status and potential

A list of potential discrete and linked projects has been included.

This Vision will be used to guide interactions with the Corridor over the next 10 years and also be used to obtain funding for projects that have been suggested.

It will also be used to inform future local plan creation and be used as an evidence base to help make informed decisions regarding planning applications.

GEOGRAPHY OF THE CORRIDOR

The corridor can be divided into three sections, Hobson's Brook open section, Hobson's underground and roadside section and Vicar's Brook. For clarity, throughout this document, the open section is referred to as Hobson's Brook whilst the below ground section is referred to as Hobson's Conduit.

THE OPEN SECTIONS OF HOBSON'S AND VICAR'S BROOK

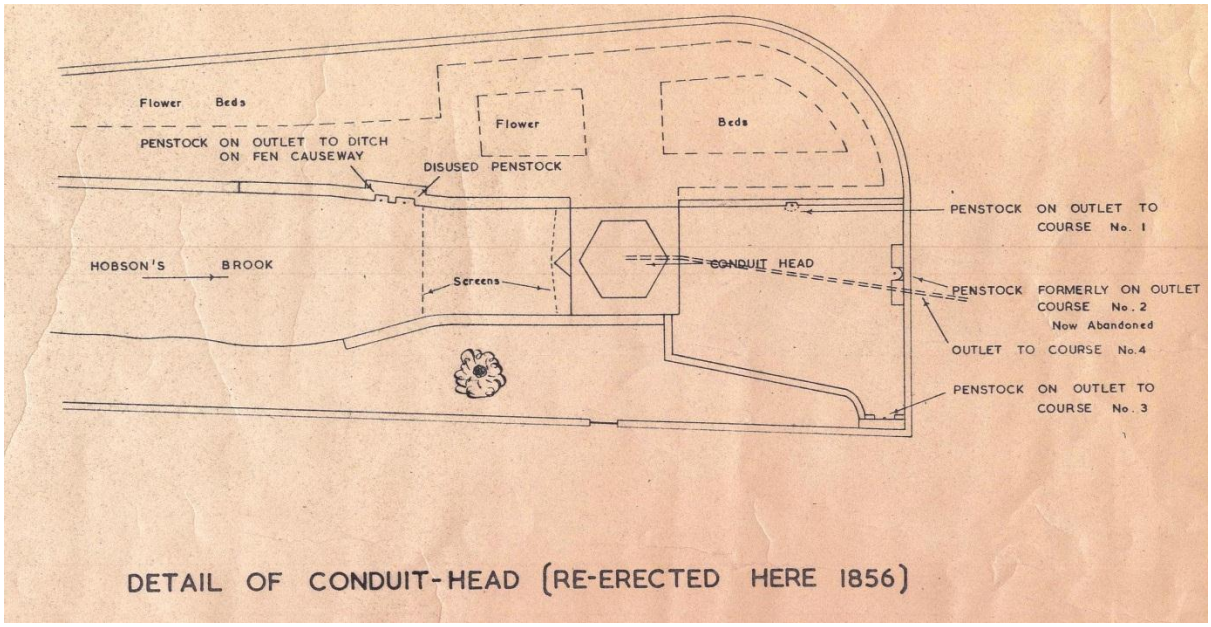
Hobson's Brook flows from its source at Nine Wells, south of Cambridge, north through open countryside initially. It then passes under the main rail line, through the green corridor adjacent to the new Clay Farm development, under Long Road passing playing fields and following the back of 1930s housing. Here Vicar's Brook branches off and flows under Trumpington Road bounding New Bit and Coe Fen until it reaches the River Cam. Hobson's Brook continues north under Brooklands Avenue, providing a boundary to the University Botanic Garden. The final part of the open section is under Bateman Street to Lensfield Road and here the open section meets the underground section at the site of Hobson's Conduit Monument.

For clarity in this report, the Brook will be divided into sections or ‘reaches’ based on different landscape characteristics and management regimes. These are:

HOBS-900-NINE	From Nine Wells to the railway crossing
HOBS-800-NINE	From the railway crossing to the Addenbrooke’s Access Road
HOBS-700-CLAY	From the Addenbrooke’s Access Road to the Guided Busway crossing
HOBS-600-CLAY	From the Guided Busway crossing to Long Road
HOBS-500-RUTH	From Long Road to the watercourse adjacent to Clare Wood
HOBS-400-CLAR	From the watercourse past Clare College to the Millennium Bridge
HOBS-300-ALOT	From the Millennium Bridge to Brooklands Avenue
HOBS-200-BOTG	From Brooklands Avenue to Bateman Street
HOBS-100-BROO	From Bateman Street to the Conduit Head

HOBSON’S CONDUIT (THE UNDERGROUND SECTION)

The underground section is further divided into sections that all start in Hobson’s Conduit Monument Basin on the corner of Trumpington Street and Lensfield Road, also known as the Conduit Head. There are four sections, or courses, that flow from this point.



Course 1

Course 1 feeds the two open channels that run down both sides of Trumpington Street. These are known as the runnels.

Course 2

Course 2 is now abandoned, but used to feed tanks outside of the original Addenbrooke's Hospital.

Course 3

Course 3 is the largest operational underground section. It begins at the Conduit Head, flows down Lensfield Road, and crosses Hill's Road and Gonville Place before running parallel with Regents Terrace and feeding into Emmanuel College ponds. From there it flows into Christ's College, also feeding ponds and then finally into the public sewer system and into the River Cam.

Course 4

Flow down Lensfield Road and then Tennis Court Road and feeds Pembroke College.

CHAPTER 2 - HISTORY

- Brief explanation of the history of the Brook and Conduit and the various sections including a timeline.

OWNERSHIP AND GOVERNANCE

- An explanation regarding ownership and governance including the role of the Trust and the City Council, landowners, riparian owners and the colleges.

HERITAGE AND ARCHAEOLOGY

- A description of the importance and classification of each section of the Brook and Conduit, including listings under the Planning (Listed Buildings and Conservation Areas) Act 1990.
- A description of the archaeological significance of the Brook and Conduit.

CHAPTER 3 - TODAY

PHYSICAL DESCRIPTION

- A section by section detailed description of the Brook and Conduit. Including reference to surveys (silt and CCTV) with photos and plans.

FLOOD RISK AND DROUGHT

- A description of the flood risk present in the Brook, referencing studies and reports.
- A description of drought pressures on the Brook and the consequences of low flows.

ECOLOGY

- A description of the key habitats including:
    - Spring heads
    - Chalk stream
    - Aquatic vegetation
    - Scrub
    - Tree/woodland
- A description of the key species (including invasive)

- Invertebrates (cray fish etc.)
- Fish (Bullhead, stickleback etc.)
- Amphibians (frogs etc.)
- Reptiles (grass snakes, etc.)
- Mammals (water voles etc.)
- Birds (kingfisher etc.)

LANDSCAPE, TREES AND AMENITY

- A description of the various landscape characters along the Brook.
- A description of the tree stock along the Brook highlighting significant individual trees.
- A description of the amenity value of the Brook.

WATER BODY QUALITY

- A description of the current water quality status of the Brook as described in Water Framework Directive terms.

PRESSURES

- Development
- Increase usage and footfall
- Climate change, winters with up to 65% additional flow due to rainfall, summers with more droughts that will (even with augmentation) cause temporary drying up of the Brook in some years

CHAPTER 4 - THE VISION

PHYSICAL DESCRIPTION

- A description section by section of how the Brook and Conduit would be in 10 years' time, in an ideal world with no constraints.

FLOOD RISK AND DROUGHT

- A description of the future flood risk that the Brook will face and the impacts that may have on the Brook and the surrounding environment.
- A discussion around future drought and low flow pressures on the Brook.

ECOLOGY

- A discussion on the importance of creating and maintaining a diverse range of habitats within and adjoining the Brook. Encouraging soft engineering principles to the south of Long Road creating a more natural channel, capable of sustaining aquatic species through time of low flow.

LANDSCAPE, TREES AND AMENITY

- A description of how the landscape and trees will be in 10 years' time.

- A discussion of the importance of the amenity of the Brook and the changes due to development.

WATER BODY QUALITY

- A description of what improvements could be made to achieve a status of good under the water framework directive.

PRESSURES

- A discussion around how the pressures experienced today could be mitigated against.

CHAPTER 5 - ACHIEVING THE VISION

PROJECTS

- A list of potential projects.

MANAGEMENT

- Physical management recommendations for the Brook.

FUNDING

- A discussion around funding, sources and application processes.

CHAPTER 6 - NEXT STEPS

- Steps to achieve the vision, with timescales.

CHAPTER 7 REFERENCES AND APPENDICES