

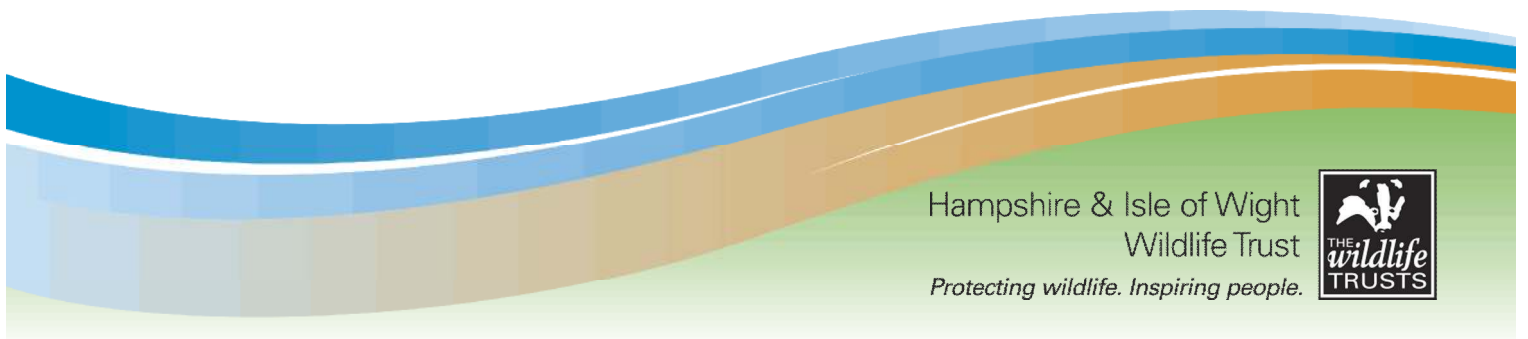


Heritage Report:

Preservation of Brambridge Hatch on the Itchen Navigation

Polly Whyte (2011)

**Produced by the Hampshire and Isle of Wight Wildlife Trust
on behalf of the Itchen Navigation Heritage Trail Project partnership**



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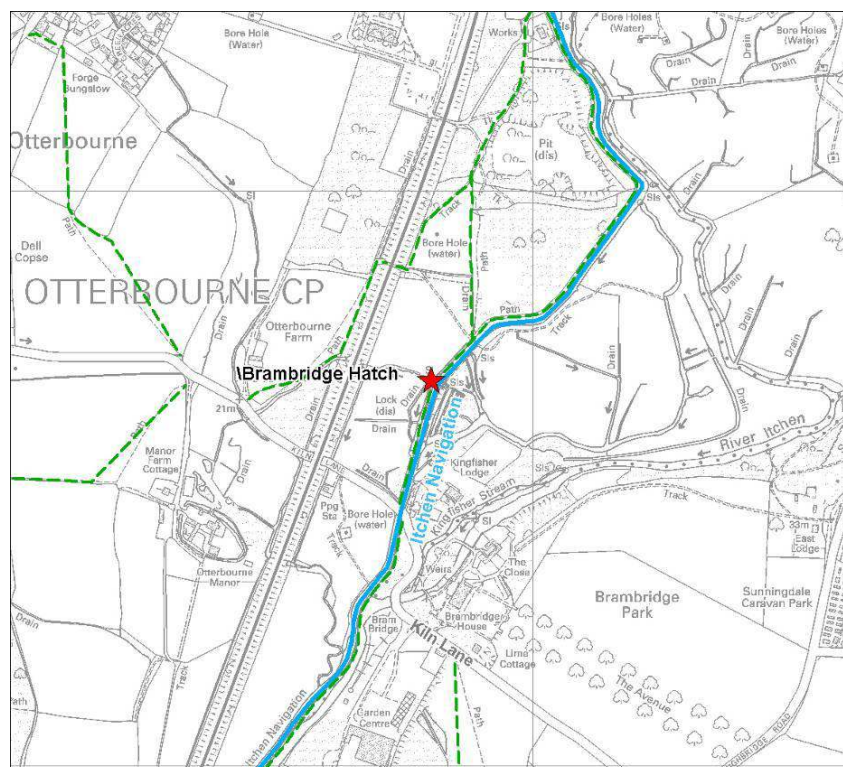
Introduction

The Itchen Navigation was completed in 1710 to carry barges loaded with coal and other goods from the seaport of Southampton to trading centre of Winchester. 15 locks and two half-locks on the 10.5 mile route helped float the barges up the Navigation. Hatches and sluices were also constructed to adjust water levels and flood water meadows adjacent to the channel. Water meadows were created in the 17th and 18th centuries to encourage grass growth by flooding fields periodically with river water. They were most successful in the chalk river valleys as the chalk particles in the water functioned to neutralise the soil. The water meadows of Hampshire are of national importance and the patterns of earthworks a distinctive historic landscape type.

The Itchen Navigation Heritage Trail Project was led by the Hampshire and Isle of Wight Wildlife Trust from 2008 to 2012. The aim of the project was to conserve the Itchen Navigation and to repair some examples of the heritage features found along its length. The project received a grant from the Heritage Lottery Fund in October 2007. The project was also funded and supported by: Environment Agency, Winchester City Council, Eastleigh Borough Council, Natural England, Hampshire County Council, Southampton City Council and the Inland Waterways Association.

Wessex Archaeology produced a heritage report on the Itchen Navigation in April 2005¹. This is available on the :History~ page of the Itchen Navigation project website: www.itchennavigation.org.uk. Wessex Archaeology (2005) describe a drain off the Itchen Navigation north of Brambridge Lock which may possibly be part of a post-medieval water meadows system. The drain is described as locally significant - an important element of the water management system in and around the system. It is recommended that the drain is interpreted and preserved through continued use. There is no mention of any sort of hatch structure in the heritage report or in Edwin Course's book on the Itchen Navigation². However, it was noted during the development of the Heritage Trail Project that metalwork from hatch mechanisms were present where the drain passes under the west bank (on which the footpath sits). Preservation of whatever structure resided at the start of the drain was identified as a feature to uncover and preserve. The structure is referred to hereon as :Brambridge Hatch~.

Brambridge Hatch is located at: SU 46830 22660



OS licence: 100015632

¹ Wessex Archaeology (2005). *Itchen Navigation Heritage Trail Hampshire. Heritage Report for a Conservation Management Plan*. Salisbury: Wessex Archaeology.

² Course, E. (1982). *The Itchen Navigation*. Southampton Archaeological Society.

Aims and Objectives

The aims of the preservation work were to:

- remove vegetation that was obscuring the hatch from view and causing damage to the structure
- stabilise and preserve the structure

Methods

Vegetation management

In November 2008, a volunteer work party set to work to remove vegetation that was covering and damaging Brambridge Hatch. The vegetation clearance revealed that Brambridge Hatch is a large structure constructed of stone which originally had three hatches to take water from the Navigation.

Stabilisation

Uncovering the structure revealed that the flow of water into the drain was a result of water leaking through material which had been used to block the hatches. The water flow was increasing as the material in the hatches gradually gave way. Wessex Land and Water (WLW) Ltd. produced a report and proposal for the preservation of the hatch and the stabilisation of the bank. The report commented that there was significant risk of collapse to sluice mechanism and breaching of the bank of the Navigation. Although the water flowing through the structure was damaging, it was also advantageous to the adjacent meadows. In the absence of funds to restore the hatches, it was decided to take action to prevent collapse of the sluice mechanism with the following aims:

- Support the structural integrity and prevent deterioration
- Permit the existing conveyance of water
- Leave uppermost stonework exposed for heritage interest
- Use locally available materials in keeping with environment

The stabilisation work was undertaken by WLW in July 2010. The following actions were taken:

- Stone gabions were installed to support the structure in a stepped design to leave uppermost stonework exposed.
- Pipes were installed underneath the gabion to allow water conveyance.

In 2011, a replacement oak beam was installed and the remaining cast iron hatch mechanism attached to it. One metal mechanism was stolen from the site after the initial vegetation clearance.

Discussion

Brambridge Hatch is large for a water meadow structure. It may have had a function beyond provision of water to the meadows. As the structure is located a short distance upstream of Brambridge Lock, it could have been used to quickly drop water levels when the lock was in danger of overtopping. It's possible it may also have provided water to a nearby mill.

Mike Clerk from Hampshire County Council's Historic Environment team inspected the structure and commented: *'The main walls of the structure are constructed of dressed stone, which is extremely rare on the Itchen, and indeed across the whole of Hampshire, which has little naturally occurring stone. The use of dressed stone, with tooling on the vertical faces, indicates a high value structure. Unusually, the operating mechanism for the hatch, which raised and lowered the timber boards to control the flow of water, is located on the downstream of the structure.'*



*Dressed stone with tooling on vertical faces
(Photo © Dennis Bright)*



*Ironwork from hatch mechanism on downstream
side of structure*

Photographic documentation

Before vegetation clearance work by Polly Whyte (Apr 2008)



Before vegetation clearance work by Polly Whyte (Aug 2008)



Exposed ironwork after scrub clearance by Polly Whyte (Nov 2008)



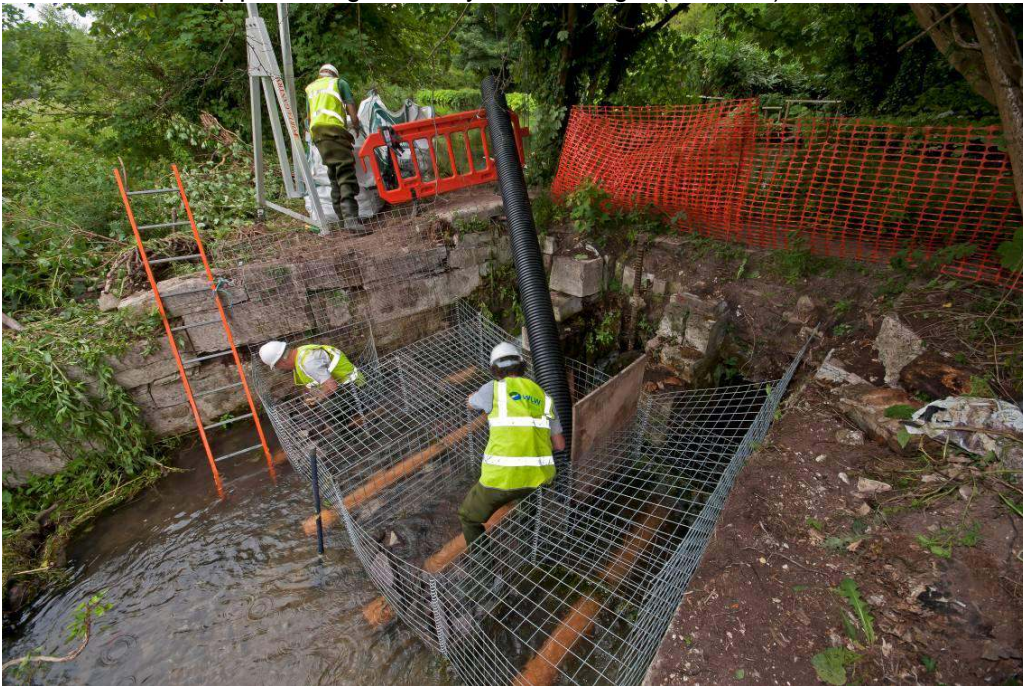
After scrub clearance work by Polly Whyte (Mar 2009)



After scrub clearance work by Dennis Bright (Jun 2009)



Installation of the pipes and gabions by Dennis Bright (Jul 2010)



Transporting materials to site using a boat by Dennis Bright (Jul 2010)



After installation of the stone-filled gabions by Dennis Bright (Jul 2010)



After installation of new oak beam with old hatch mechanism attached by Polly Whyte (Oct 2011)



References

Course, E (1983). *The Itchen Navigation*. Southampton: Southampton University Industrial Archaeology Group.

Wessex Archaeology (2005). *Itchen Navigation Heritage Trail Hampshire. Heritage Report for a Conservation Management Plan*. Salisbury: Wessex Archaeology.