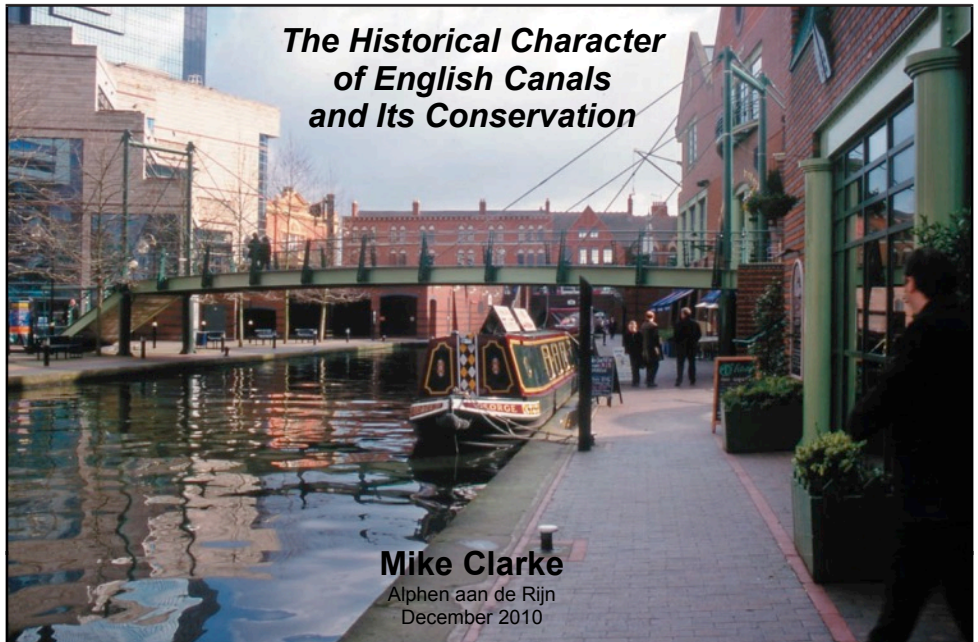


The Historical Character of English Canals and Its Conservation



A paper by Mike Clarke presented at the Historic Waterways
Symposium at Alphen aan de Rijn, Zuid-Holland.
2nd December, 2010.



The Increase in English waterways: 1700 to 1800

The Historical Character of English Canals and Its Conservation

Mike Clarke

Simply conserving large historic canal structures in isolation is not the best way to retain the historic character of a waterway. All aspects of a canal's operation and history should be researched, to provide a guide to the particular character of that canal, and this can then be used to help waterway staff and developers with conservation. Emphasis should be placed on the smaller details of the canal's working life which still survive. Although often not recognised by the public, it is these which give the real historic feeling to a canal location, and provide the best way to interpret historical aspects of the waterway.

Prior to 1700, most English waterways were concerned with supplying London with food. However, by 1800, many new canals had been built to serve growing industrial areas, particularly in the north of England. All were individual concerns, funded by local people to solve local transport needs, and were not seen as part of a national system. The publication of Andrew Yarranton's book, *England's*

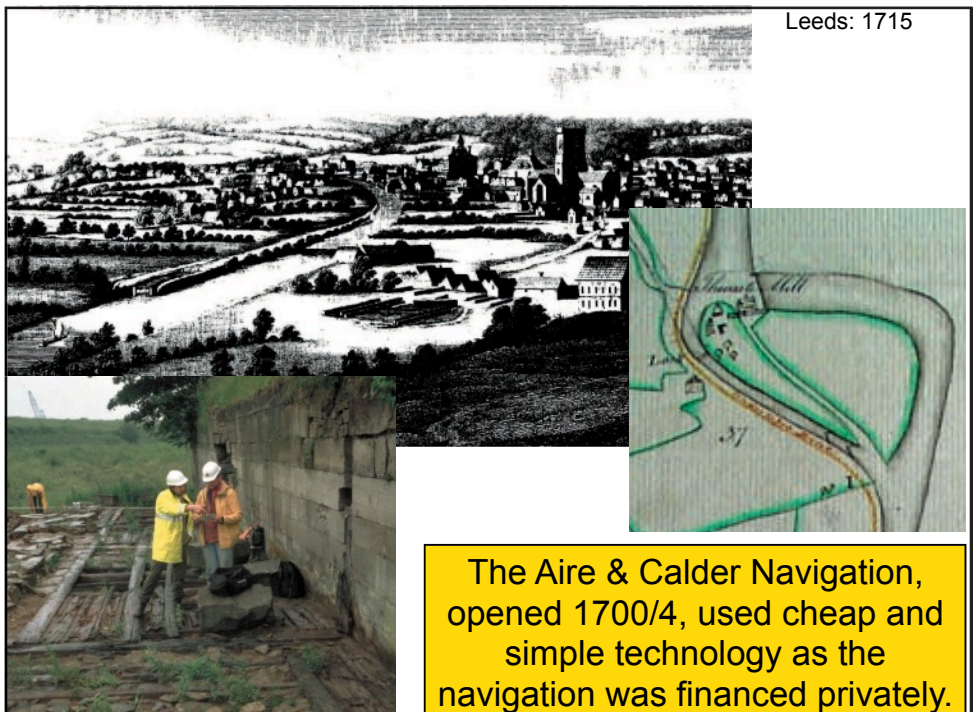
ENGLAND'S
Improvement
BY
SEA and LAND.
TO
Out-do the *Dutch* without Fighting,
TO
Pay Debts without Moneys,
To set at Work all the POOR of England with the Growth of our own Lands.
To prevent unnecessary SUITS in Law ;
With the Benefit of a Voluntary REGISTER.
Directions where vast quantities of Timber are to be had for the Building of SHIPS ;
With the Advantage of making the Great RIVERS of England Navigable.
RULES to prevent FIRES in London, and other Great CITIES ;
With Directions how the several Companies of Handicraftsmen in London may always have cheap Bread and Drink.
By ANDREW YARRANTON, Gent.
LONDON,
Printed by R. Everingham for the Author, and are to be sold by T. Parkhurst at the Bible and three Crowns in Cheap-side, and N. Simmons at the Princes Arms in S. Paul's Church-yard, M DC LXXVII.

Andrew Yarranton, in 1677, suggested building canals to help economic development.

Improvement by Sea and Land..., in 1677, was one reason behind this rapid growth in canal construction, as he suggested that the construction of new waterways would be a key factor in the economic development of England.

His ideas were quickly taken up by merchants and mill owners in the north of England, who were keen to improve and extend their trade. It was the opening of the Aire & Calder Navigation to Leeds in 1700, that marked the start of the industrial revolution. This was the first inland waterway financed and built by a group of coal owners, merchants and mill owners to help develop their businesses. National government only provided the authorisation for the navigation. At first, construction was very simple because finance was limited. The navigation owners had other interests to support, and transport was just one aspect of their businesses. Short lock cuts were provided around existing water mills, together with limited dredging of shallows in the river, but no major investment was made as the benefits of inland navigation had not yet been proved.

However, the Aire & Calder Navigation was successful, and during the first half of the eighteenth century, more and more navigations which served new and growing industries were authorised by Parliament. All were financed by local interests. It was the Bridgewater Canal of 1759, built by the Duke of Bridgewater to serve his collieries

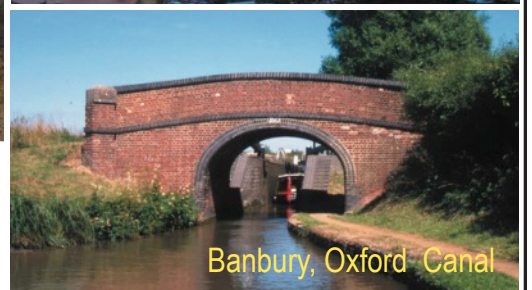
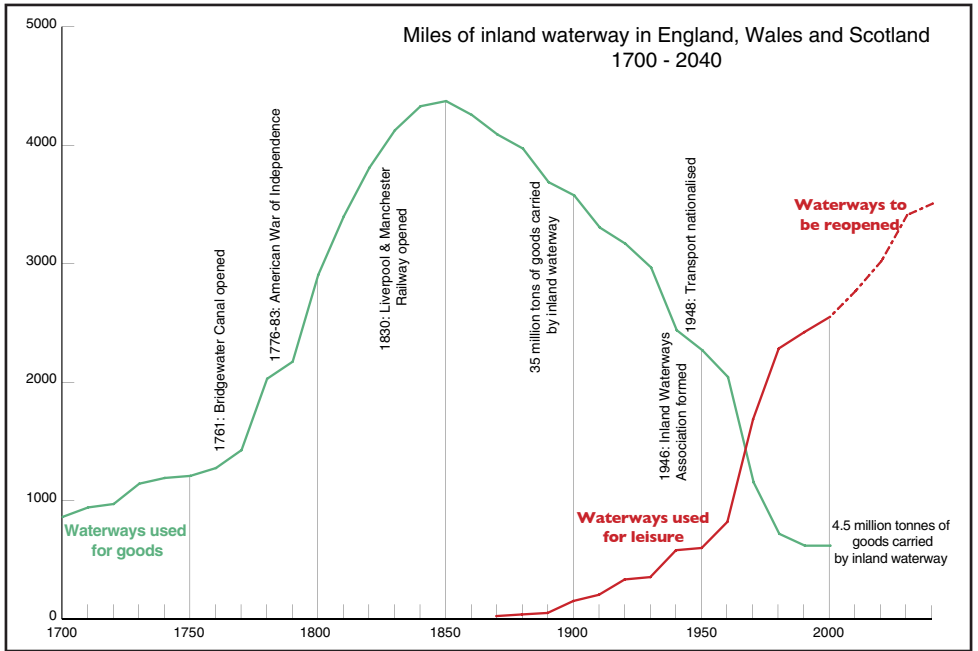


1287	Ancholme River	1727/32	Ouse River (York)
1425	Lea Navigation	1729	Coalisland Canal
1462	Ouse River (York)	1729	Newry Canal
1503	River Severn	1730	Kennet Navigation
1539	Exeter Canal	1730	Stroudwater Navigation
1651	Wey Navigation	1734	Dee River
1698	Aire & Calder Navigation	1734	Weaver Navigation
1699	Trent Navigation	1737	Worsley Brook
1700	Avon Navigation (Bristol)	1739	Lea Navigation
1701	Derwent River (Yorks)	1740	Medway River
1705	Stour River (Essex)	1749	Avon Navigation (Bristol)
1712	Avon Navigation (Bath)	1751	Avon Navigation (Warwick)
1714/25	Nene River	1751	Ouse River (Bedford)
1715	Kennet Navigation	1753	Lagan Navigation
1720	Douglas Navigation	1754	Nene (Bedford) River
1720	Kennet Navigation	1755	Newry Ship Canal
1720	Mersey & Irwell Navigation	1755	Sankey Brook Navigation
1720	Weaver Navigation	1756	Nene River
1724	Exeter Canal	1757	Ivel River (Bedford)
1726/44	Beverley Beck	1758	Calder & Hebble Navigation
1726/7	Don Navigation	1759	Bridgewater Canal

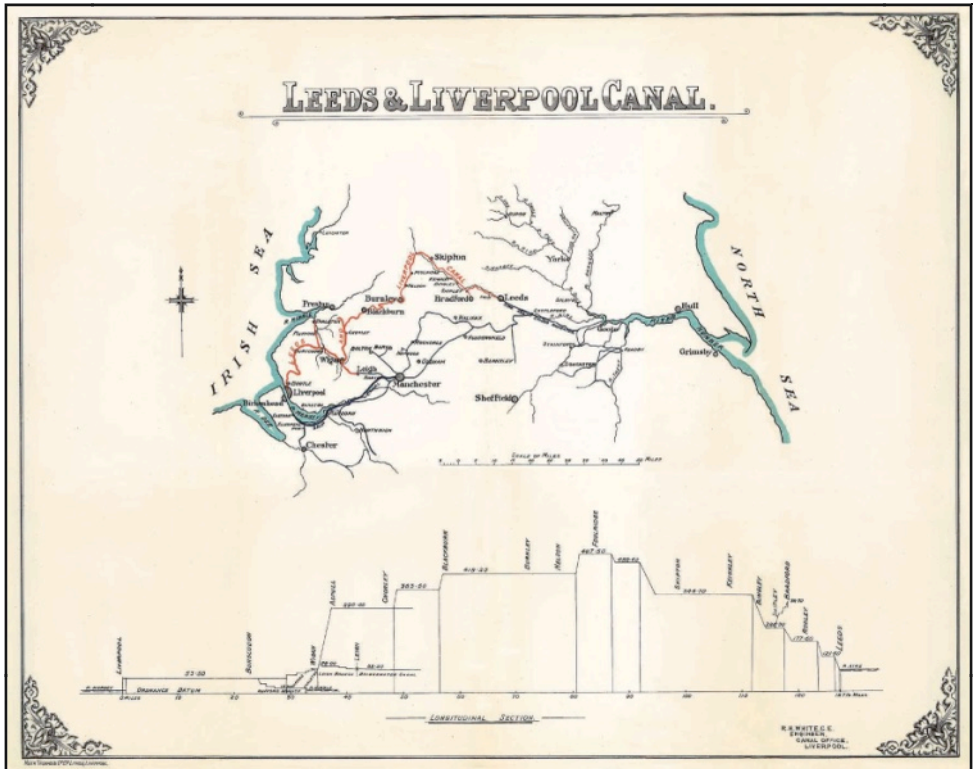
**English waterways authorised by Parliament up to 1760.
Those in black were industry-related.**

near Manchester, which is often regarded as the start of England's canal age, and the century after the authorisation of the Bridgewater Canal saw the construction of the majority of English canals. Today they remain very much as built in the eighteenth century, the factories and houses built along their banks making enlargement virtually impossible. Also, as private businesses, most could not afford the cost of improvement, particularly after profits declined from the mid-nineteenth century because of competition from railways.

Because they were built by and for local people and business, England's canals were never considered as a national system. Each canal had its own particular character, with details such as boat size and the building style of canal structures often easily identified as belonging to a particular canal. Bridges were one structure where different canals had different ideas. Many used brick or stone, though built to their own specific design, whilst others used cast or wrought iron. It was not until nationalisation in 1948 that English canals came under a single management. Following this some standardisation was introduced. However, more recently, the benefit of preserving individual canal character has been realised. Today, by keeping its individual character, each canal can be promoted as a unique destination, with benefits to tourism and in promoting local interest in the canal.



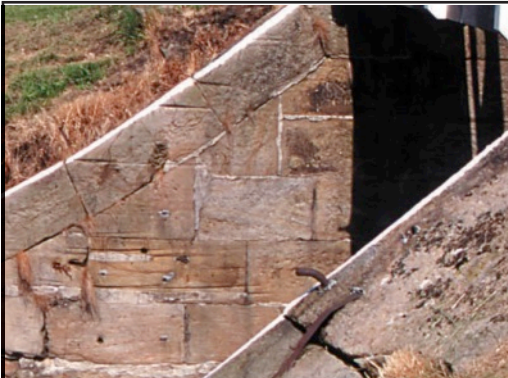
Every canal had its own identity.



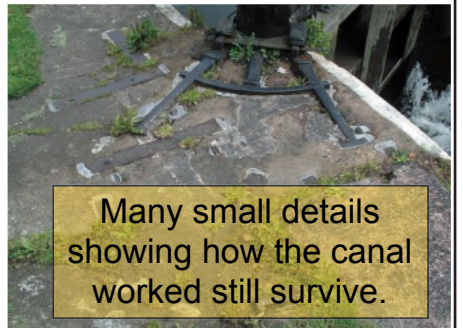
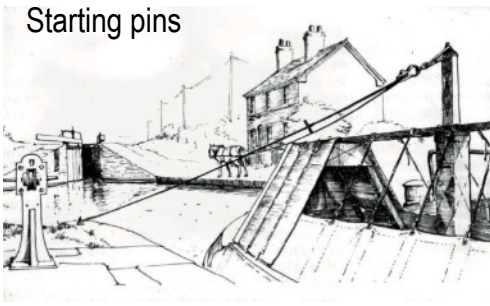
The Leeds & Liverpool Canal is typical of English canals, in that it was built by merchants, in this case from Bradford and Liverpool, to serve local industries. These industries were in the Aire Valley and linked to the new docks in Liverpool, with the industries of East Lancashire also developing rapidly after the canal opened. Traffic was mainly between Liverpool and Blackburn and Burnley, or from Leeds to the towns of Shipley, Bingley and Skipton. There was little traffic exchanged with other canals. The structures along the canal are all recognisable as belonging to the Leeds & Liverpool Canal. The canal took over forty years to build, so technology improved during construction, as is seen with the design of these locks. Wooden floors are found on the earliest locks, from the 1770s, with stone invert (floors) being used from the 1790s. Stone was always the material for building the lock chamber walls, with the sluices for filling and emptying the chamber also of types only found on the Leeds & Liverpool Canal. The detail design of locks varied from canal to canal, with few being exactly the same. Often the locks still have the rope grooves caused by the tow lines of horse-drawn boats. Occasionally starting pins, used to help horses pull boats out of locks, survive. Such features can be used to explain to the public how the canal operated, and bring the history of the canal to life.

Lock design varies as technology improves, but the style is recognisable as that for the Leeds & Liverpool Canal.

1770s



Starting pins



The bridges also have a character recognisable as belonging to the Leeds & Liverpool Canal. Wooden rollers were provided to stop tow lines from damaging the stonework. Different systems, such as cast iron guards, were used on other canals, often providing a unique solution to the problem. The design of the bridges themselves were also recognisable as belonging to a particular canal, and this can be important for restoration when they are damaged. The white paint around the arch of the bridge is typical for the Leeds & Liverpool Canal, where boats worked 24 hours a day. The white band made working at night easier.

English canals have rarely been improved, and often retain features which show 200 years of usage. Rope grooves caused by towing lines are just one such feature. These need to be retained if possible when structures, such as these bridges or locks, are maintained. One problem here is ensuring that engineers and contractors realise the historical importance of such details.

Buildings built by the canal company also have their own particular style, and are ideal places to interpret the history of the canal. These warehouses at Burnley were built at various times between 1801 and 1900, and show that the canal was successful even after railways opened to the town in 1850. Simple details, such as old mooring rings, and cargo handling equipment need conservation in such situations. One such

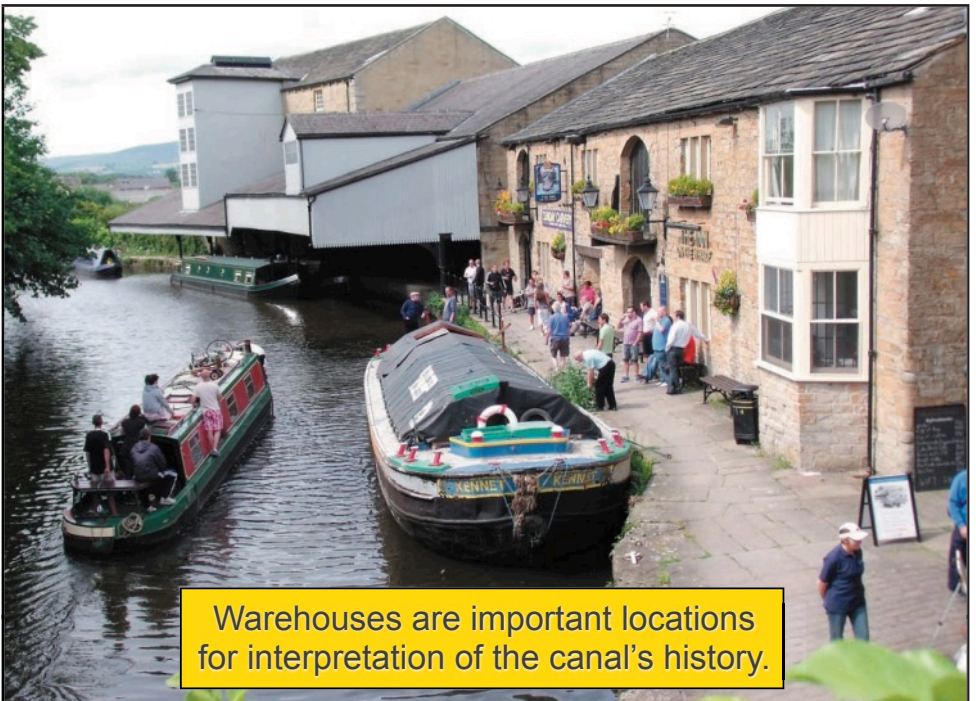


Bridges.
There are detail differences in design, but the style is still the same for the whole canal.





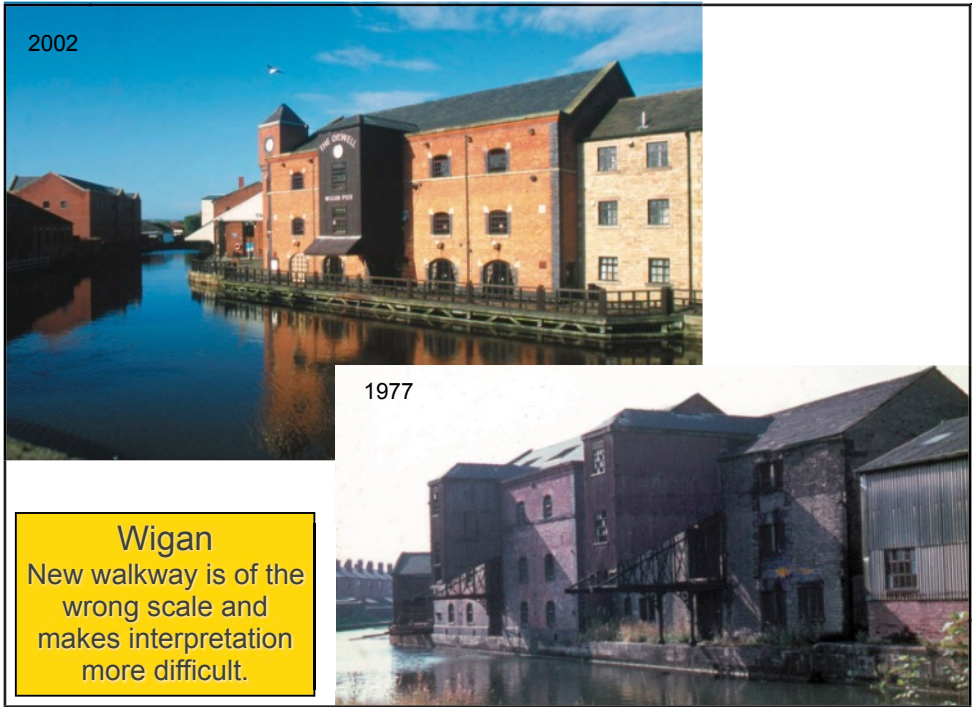
Rope marks need conserving as they are important for interpretation.



Warehouses are important locations for interpretation of the canal's history.

detail is the pulley on the towpath just in front of the boat, used when horses provided the main power on the canal. Without recognition of its historical importance, it could easily have been removed as a trip hazard for visitors.

Careful planning and design are needed to retain the individuality of English canals. Here, in Wigan, a walkway has been added to the canal frontage of a warehouse. Although it improves public access, it does make interpreting the use of the warehouse more difficult. The dimensions of the wooden walkway framework are also larger than is really necessary for a small English canal. Scale is one of the most important factors in maintaining historical integrity when building new canalside structures.



Over the past twenty years or so, many lock keepers cottages have been sold by the national waterway authority. The new owners have often planted or erected fences which detract from the historical integrity of the site by creating a barrier between the canal and the cottage. At one time it was important for the cottage occupants to see the lock; now they want to be away from public view.

It is often difficult to convince planners of the benefit of conserving a large historical canal site, such as this group of mills and a canal warehouse in Blackburn. Although the warehouse itself has now been converted to new uses, the other old industrial buildings in the area have been demolished, making the creation of an



1989



2005

Blackburn

Historic context has been lost as the lock cottage has become more isolated from the lock due to new fencing.



1990

Blackburn
Demolition of old mill buildings, and unsympathetic new ones, have made good conservation more difficult.



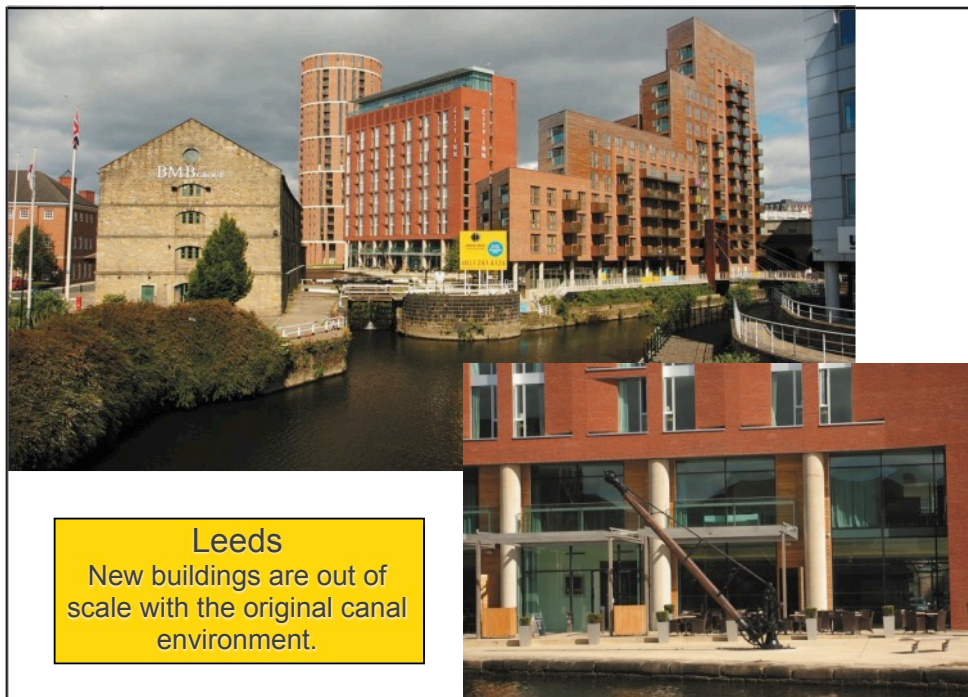
2010



interesting conservation area impossible. What is worse, the buildings replacing the old ones have little architectural merit or relationship with the canal.

The scale of modern development can also be out of keeping with the historic canal environment, and this too can destroy the historical integrity of a site. Here, in Leeds, the new multi-storey buildings dwarf the old canal basin. Once, the canal warehouse was the largest building in the area, but it is now overshadowed by the new buildings. An attempt has been made to give some historical perspective by installing an old crane, though the result may be seen as creating conflict between old and new, as well as lacking in authenticity.

To sum up, firstly it is important that some form of canal heritage guidance should be provided for planners and developers. In this guidance, it should be recognised that it is often the small historic features which make the canal environment so pleasant for visitors. To conserve these, it is vital to understand the history of the waterway. To address some of these problems, in 2009, England's national waterway authority, British Waterways, together with English Heritage, produced a booklet for developers called England's Historic Waterways, which looks at the requirements for creating high quality waterside developments. It can be downloaded from <http://www.britishwaterways.co.uk/our-work/delivering-public-benefit/heritage>.



Conclusions

1. Canal heritage guidance should be provided for those developing canal side sites, and for those maintaining the canal. It is often the small features which makes the canal environment feel historic. To conserve these, it is vital to understand the history of the waterway.
2. Just developing or improving the canal side or water space is not enough; it must have some relationship with the surrounding area. Size is important, particularly on small English waterways, where tall modern buildings can destroy the historical integrity and human scale of a site, and make it a much greater challenge to provide a place where residents and visitors can feel comfortable.

Secondly, just developing or improving the water space, or conserving a single building or structure is not enough; they must have some relationship with the surrounding area. Size is also important, particularly on small English waterways, where tall modern buildings can destroy the historical integrity and human scale of a site, and make it a much greater challenge to provide a place where residents and visitors can feel comfortable.

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