Chapter 10

The Bridgewater Canal in Cheshire: Recent Archaeological Investigations

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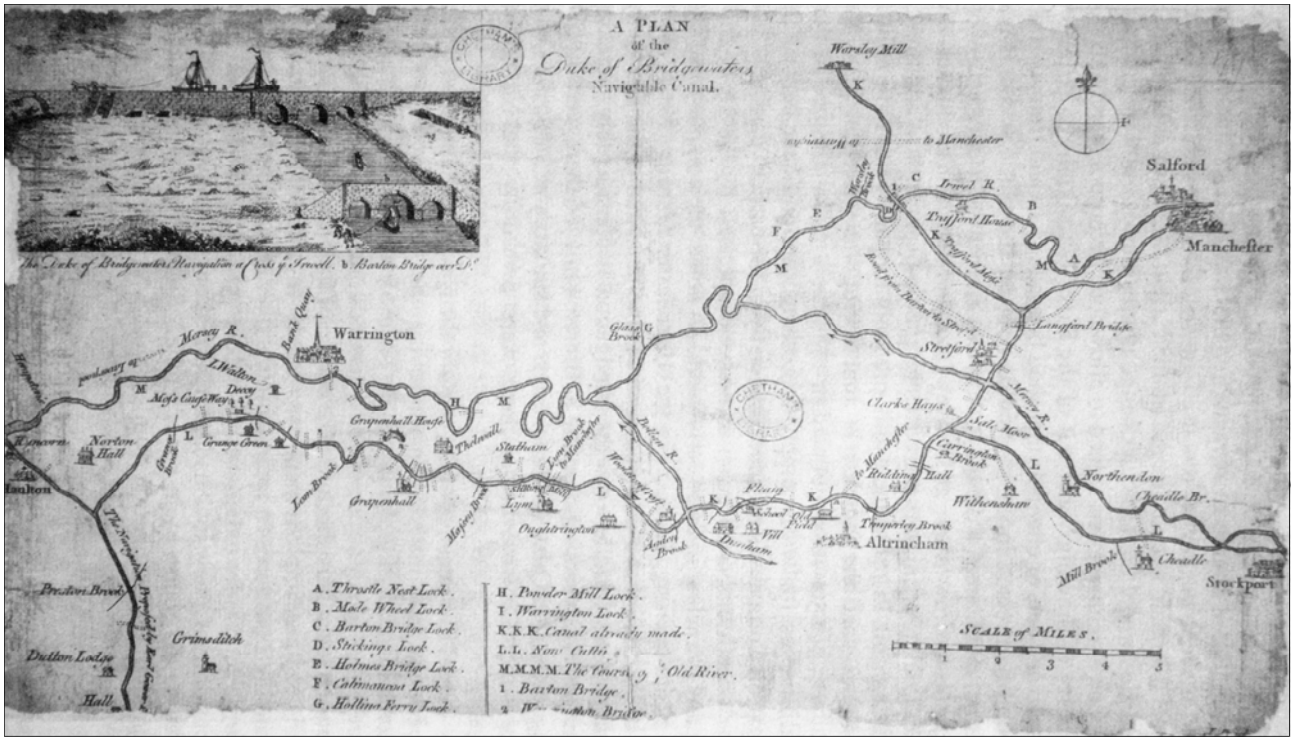
Introduction

The western extension of the Bridgewater Canal, running between Manchester in the east and Runcorn in the west, (Fig 10.1) has been relatively overlooked, archaeologically and historically, compared to the stretch from Worsley to Castlefield. A cursory glance at the bibliography at the end of the current volume shows the majority of attention from archaeologists and historians has been focused upon the Barton Aqueduct, Castlefield canal basin, Worsley underground mines, and Worsley terminus. Yet the extension to Runcorn gave the Bridgewater access to the great agricultural estates of northern Cheshire whose produce helped to feed the enormous population growth of Manchester in the late-eighteenth and early-nineteenth centuries.[1] It also provided access to the sea, allowing goods to be brought either directly to Manchester without being transhipped at Liverpool docks or being transhipped into Mersey Flats at the Duke's Quay at Liverpool and then sailed across the Mersey estuary to Runcorn. Either route provided an alternative to the Mersey and Irwell Navigation, the Bridgewater's chief rival until the company bought the Navigation in 1844. It thus lifted the Bridgewater Canal from a primarily local venture to an innovative transport network of national importance.

The line was first surveyed in 1762 for the third Act[2] and the Runcorn terminus received its first loaded vessel of 50 tons from the Mersey on New Year's Day 1773, although the completion of the line

Fig 10.1: The line of the Bridgewater Canal through Cheshire, c. 1776 (courtesy of Chetham's Library).



of the canal was delayed by the protracted negotiations with Sir Richard Brooke of Norton Priory. Consequently, it was not until the 21st March 1776 that the full length of the canal was finally opened from Runcorn to Manchester and Worsley.[3]

There was a proposal to build a further branch of the Bridgewater Canal from Sale Moor to Stockport, a distance of 7.5 miles (*c.* 12.07 kilometres), and thereby link with a proposed canal to Macclesfield. The Act for this was passed in March 1766.[4] The line of this branch is shown on a plan of that year but since the Act for the Macclesfield to Stockport Canal was rejected by Parliament in 1766 the Duke's branch was never undertaken.[5]

The engineering along this 28.5 mile (45.87 kilometres) stretch of the canal was as impressive as along the stretch from Worsley to Manchester. It included the two-arched stone aqueduct, with cutwaters,[6] over the River Mersey overflow channel off Hawthorne Road in Stretford;[7] the single span 70 foot (*c.* 21.34 metres) brick and stone Barfoot Bridge aqueduct over the River Mersey in Sale; a nearly two-mile-long (2.9 kilometres) embankment over Sale Moor; the mile-long Dunham aqueduct and embankment over the Bollin valley, aqueducts over the brooks at Lymm and Preston; a junction with the Trent and Mersey Canal which included a 1,239 yard long (1,133 metres) tunnel from Preston Brook to Dutton; and a flight of ten locks and a canal basin with a sea lock at the Runcorn terminus.[8]

Early Industrial Archaeology Recording

There was some limited archaeological work along the Cheshire section of the canal in the late-twentieth century, against the national background of the rise in interest in industrial archaeology.[9] This work, however, post-dated the abandonment of traffic through the locks and the infilling of the Runcorn locks and canal basins in the 1960s.[10]

In the 1970s Archaeological Survey Ltd recorded for the Warrington Development Corporation the quay at London Road Bridge in Stockton Heath.[11] At the time this included, on the western side of London Road and on the southern bank of the canal, a four-storey, brick warehouse with phases covering the period *c.* 1780 to 1840, and at the western end of the range a single-storey transhipment shed with a pent over the canal. There was also a late-nineteenth-century blacksmiths opposite this on the eastern side of the road. All of these structures have long since been replaced by housing.

At the Runcorn terminus there was some limited archaeological investigation in the 1980s during reclamation work in the vicinity of the locks connecting the Bridgewater Canal to the Manchester Ship Canal. This was the original, old, line of locks built in the period 1771-3, and the work revealed a number of canal barges in the basin at the top of the locks.[12] These investigations appear to have led to the excavation of the old line of locks and their conversion into a footpath. More extensive investigation of the line of the Bridgewater Canal in Cheshire had to await the end of the twentieth century and the early twenty-first century. Like the work undertaken during the mid-twentieth century this latest research has been stimulated by the interest of several local archaeology groups on various aspects of the canal structure; the weir at Cornbrook, the quay at Broadheath, the Bollin aqueduct and embankment, and by redevelopment work at the Runcorn end of the canal. Interest may also have been rekindled by the nominations of the Worsley to Castlefield section of the canal as part of the potential Manchester World

Fig 10.2: Foulkes' 1785 map of the Bridgewater Canal showing Cornbrook Weir. Courtesy of Salford City Archive (Bridgewater Collection).

Heritage site in 1999[13] and research leading to a national industrial archaeology conference held in Manchester in 2000 by the Association for Industrial Archaeology.[14]

Cornbrook: Brindley's Other Weir

During 1997 the site of the Cornbrook Weir in Old Trafford was cleared of vegetation and the apron of the weir with its syphon recorded in detail. This work was undertaken by the Manchester Region Industrial Archaeology Society who surveyed the surviving apron and the central syphon.[15] Smiles records that Brindley was overseeing the works at Cornbrook towards the end of 1763 (Fig 10.2), when he was short of men for the works there.[16]

The earliest representation of this feature was John Foulkes' map of 1785 which shows a circular weir with a central siphon. However, the present form of the structure is a flattened oval, with the canal on the western side, roughly 30 metres long north to south and 13 metres wide west to east. Immediately to the east of the weir and defining its eastern boundary was the brick viaduct for the line of the Manchester South Junction and Altrincham Railway, opened in 1849. An overspill channel on the western canal-side was designed to take excess water from the canal into the Cornbrook, which still flows beneath the Bridgewater via a spillway, and a central siphon 5 metres in diameter. This survey work (Figs 10.3 & 10.4) demonstrated that the existing fabric of the weir represented nearly all of the original eighteenth century structure. This weir clearly did not silt in the way that the clover-leaf weir had at Castlefield (see Chapter 5), and which led to that structure being replaced. It also suggested the impact of the adjacent railway viaduct on the form of the weir was minimal.

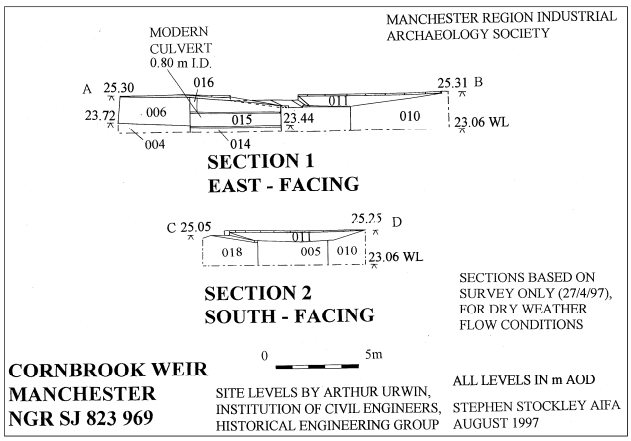
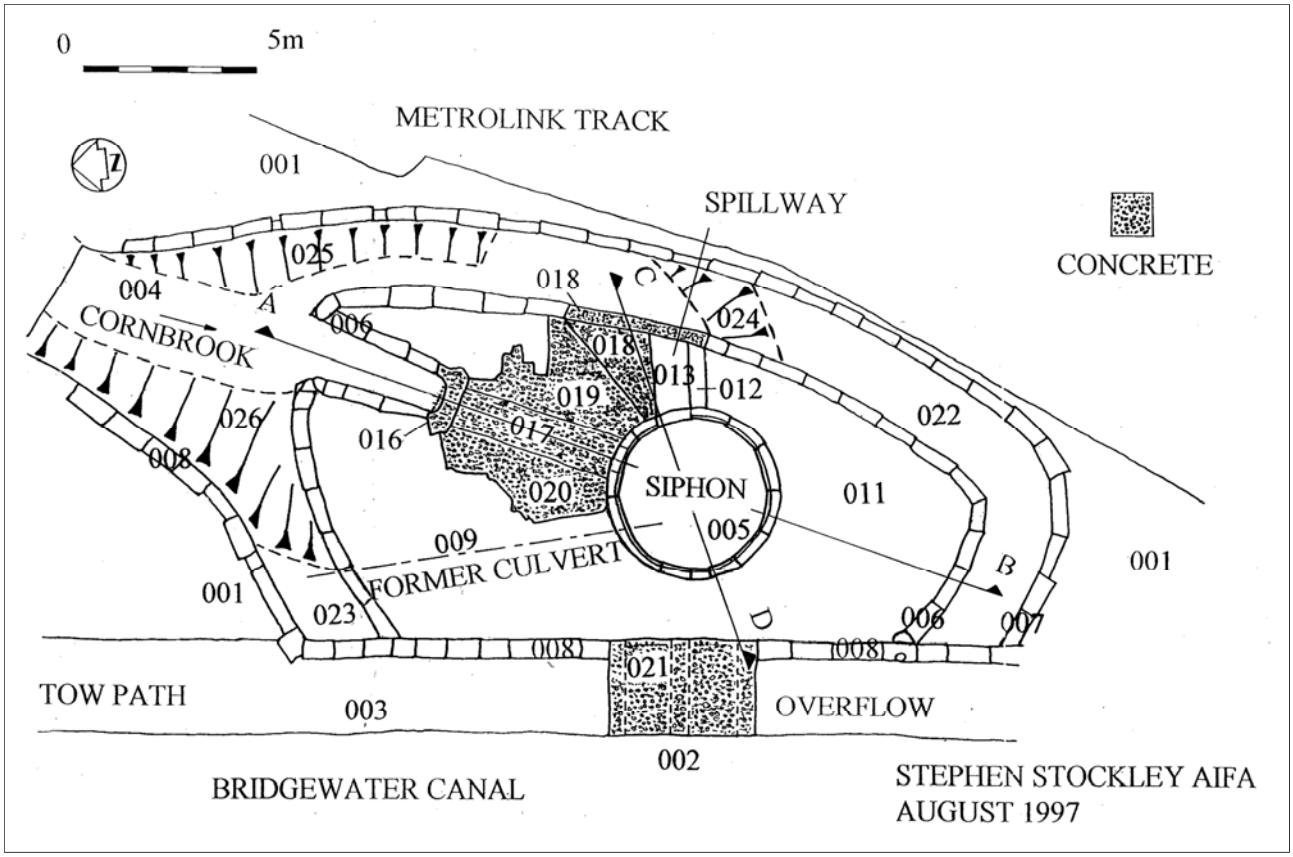


Fig 10.4: Plan of the Cornbrook Weir (copyright MRIAS).

Dunham Aqueduct: Bridging the Bollin

The Manchester Region Industrial Archaeology Society have also studied one of the major engineering challenges along the Cheshire line of the canal; the

Fig 10.3: Cross-sections through Cornbrook as recorded by MRIAS in 1997 (copyright MRIAS).



crossing of the River Bollin, its valley and two roads on 'vast arches'.[17] As the canal was conceived as a contour waterway, the option of using locks to cross the valley, where the river level was 10 metres below that of the canal, was not available. Brindley thus used a technique he had employed on the primary line of the canal to cross the Irwell, and which he had employed to cross the Mersey and its valley; namely long embankments either side of a stone aqueduct over the river itself. Foulkes' 1785 map of this part of the canal shows the long embankments leading to the aqueduct over the Bollin, with the direction of the canal changing at the point of the aqueduct. Negotiations to purchase the land began in 1762, but were not complete until 1767.[18] Nevertheless, the aqueduct, the road bridge at Dunham Woodhouses and the embankments were ready by 1769.[19]

The work of MRIAS, between 2004 and 2007 (Figs 10.5 & 10.6), recorded archaeologically the line of the embankments and their revetments, the Dunham Woodhouses road-bridge, the stone aqueduct across the Bollin and to the south a flood channel. The recording emphasised the complex and monumental nature of this part of the canal, especially the work on stabilising and revetting the embankments with stone walls.

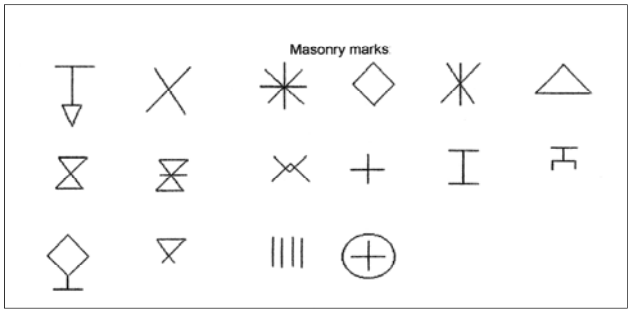


Fig 10.6: Masons' marks from the Bollington Aqueduct. Identical marks can be seen on the surviving western bridge abutment of the original Barton Aqueduct and on the Sale and Stretford Aqueducts (copyright MRIAS).

The canal narrows to half its normal width as is approaches the aqueduct, presumably to reduce the weight of water in the trough and so to aid stabilisation (a section of the northern embankment failed on 2nd March 1971, blocking the Bollin and flooding adjacent farmland). The aqueduct itself has a parabolic wall, *c.* 50 metres long, on its western side, although the eastern side has a wider embankment and a straight stone revetment wall, (unlike Foulkes' 1785 map which shows two parabolic revetment walls flanking the trough) suggesting that this had been rebuilt at some stage. There are indications along the

Fig 10.5: The north-western curved retaining wall for the Bollin aqueduct (copyright MRIAS).

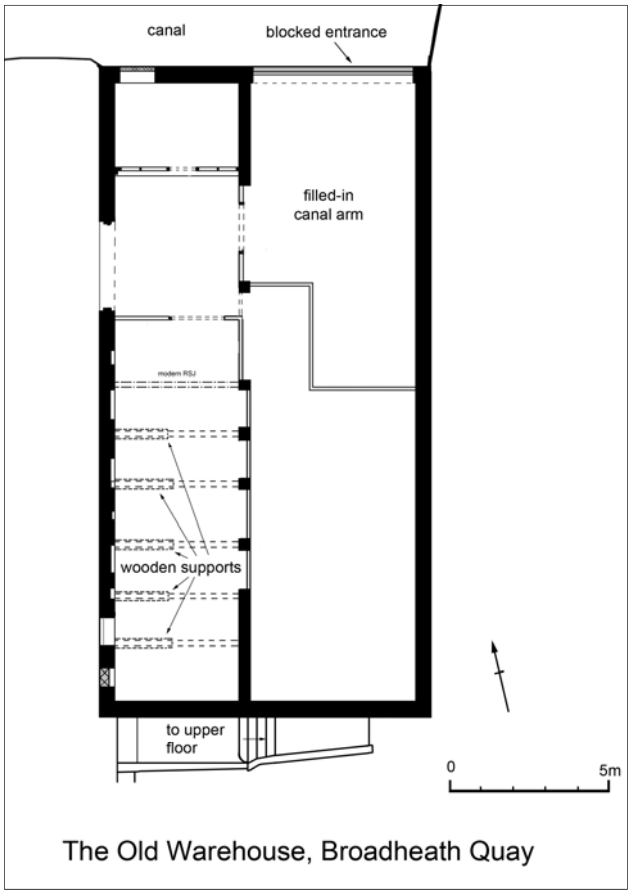
aqueduct of later work, in the form of brickwork and a date of '1814' on one section. The western elevation is almost identical in form and plan to the aqueduct spanning the mill stream in Lymm. It is also covered in masons' marks, some of which are identical to those seen on the surviving Barton Aqueduct abutment.

Broadheath Quay: Feeding Manchester

An important feature of the Cheshire branch of the Bridgewater Canal was the quays along its 28.5 mile length. These could be found at Stretford, Sale Moor, Broadheath, Heatley, Lymm, Stockton Heath, Norton, Preston Brook and, of course, at the Runcorn terminus (see below). The inland quays gave access to the agricultural lands of several of the great northern Cheshire estates, such as those belonging to the Trafford family in Stretford, the Earl of Stamford around Dunham and Altrincham, and the Warburton family of Arley, who owned extensive lands along the line of the canal in Appleton, Grappenhall, Lymm, and Stockton Heath.

Few of these quays have been studied in detail, that at Stockton Heath, on London Road, being a notable exception. Whereas that site has since been cleared

Fig 10.7: Plan of the late eighteenth century Old Warehouse at Broadheath Quay (copyright STAG).



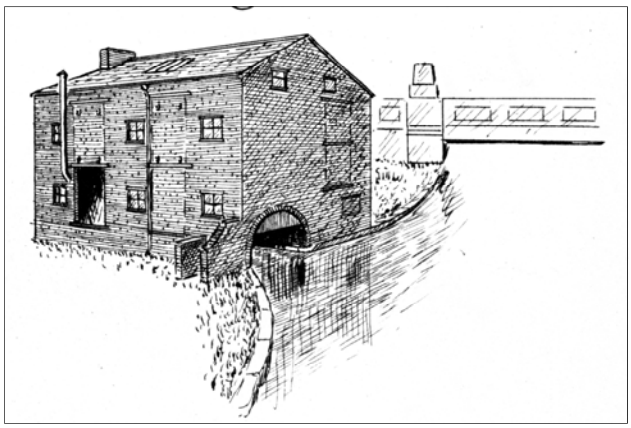
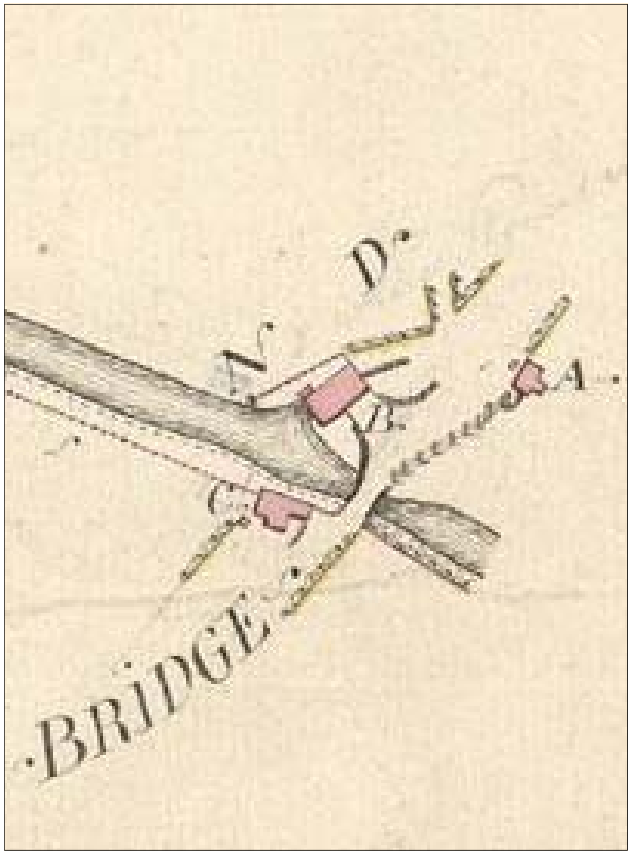


Fig 10.8: A sketch of the Old Warehouse at Broadheath Quay in 1943 (courtesy of John Aldred).

of structures other quays, such as those at Broadheath (Fig 10.9), Heatley, Norton and Preston Brook, retain some of their original canal infrastructure, such as stables, offices and warehouses. This information is also supplemented by a survey of the warehouses along the Bridgewater Canal and associated waterways undertaken by the Manchester Ship Canal in 1943 (Fig 10.8), which included sketches of 44 properties.[20] The survival of several canal-related structures at the Broadheath quay was highlighted in 1990 and again in a study of Trafford's Industrial Archaeology in 2000.[21] Recent survey work by the South

Fig 10.9: Foulkes' 1785 map of the Bridgewater Canal showing the site of the Broadheath Quay and its warehouse. North is at the bottom of the page. Courtesy of Salford City Archive (Bridgewater Collection).



Trafford Archaeology Group (Fig 10.7) has shown that three canal-related buildings survive along the southern side of the quay.

The quay at Broadheath was in operation from the 3rd October 1767, when daily passenger boats to Manchester began. Arthur Young noted in 1769 that 'at Altrincham Bridge the Duke has a large warehouse on the side of the canal, several stories high' and described a coal wharf with cranes. Once the canal was fully opened in 1776 two boats plied the waterway from the canal basins at Manchester and Runcorn each day. In 1788 the down boat was scheduled to leave Manchester at 8am, reaching Altrincham at 10am, Lymm at 11.30am, Stockton Quay at 1pm, Preston Brook at 2.30pm and Runcorn at 4pm.[22] Broadheath's real role, however, was as a transhipment point for agricultural produce from the surrounding lands and from the Earl of Stamford's estates in particular. In 1770 the annual tonnage of 'market goods' (such as cheese, grain and vegetables) leaving the Broadheath quay was 2,730 tons, a figure which had risen to 7,060 tons in 1849.[23]

Foulkes' map of the quay in 1785 shows two buildings on the eastern side of Manchester Road. The one on the northern side of the canal was according to the map evidence demolished in the mid-1930s. Old photographs show that this was a two storey brick building with pitching eyes at first floor level and an arched cart entrance fronting the towpath flanked by what appear to be stable doors.[24] Such details suggest that the building may have been used as a combined stables and hay store, and this appears to be confirmed by a map of 1852 which labels the western part of this building as stables.[25]

The building on the southern side of the canal is shown in 1785 as having a short canal arm. The current structure is a two storey brick building with a blocked canal entrance at the northern end. Although it now lies behind the Old Packet House Pub, the building was described on the 1835 tithe award for Altrincham as a warehouse and as late as 1943 was described as the 'Old Warehouse'.[26] This structure still survives, although in a truncated form. The recent survey work has indicated that this building originally had three floors, as shown in a sketch from 1943, although this had been reduced to two by 1990. A blocked shipping hole lay in the northern gable and the infilled interior canal arm ran half-way along the length of the building. Blocked loading bays were also recorded in the northern gable facing the canal and in the western elevation, whilst the drawing from 1943 indicated the location of two sets of further loading bays in the eastern elevation. Surviving lintels above the openings showed that these were shallow cambered arches, rather than the keystone arches used in the Grocers' Warehouse in Castlefield. It is possible but not entirely certain that this building was the warehouse described in 1769 by Young. In 1833 a second warehouse was added west of the old coal staithes beyond Manchester Road on the southern side of the canal. This building has a northern classical façade facing the canal with a central pediment above a single shipping hole with stone quoins and a stone parapet. There were three floors and a gravity hoist in the roof of the pediment. It was described on the 1835 tithe map as a warehouse and in the 1943 Manchester Ship Canal document as the 'New Warehouse'.

Later still, between 1852 and 1877 according to the map evidence[27] a two storey forge with access to the canal was built on the southern side of the Bridgewater. Lying on the eastern side of Wharf Road, this structure was later used as part of a radium works and still survives. Its northern gable fronts the towpath where a blocked arched cart entrance can still be seen, emphasising that canal transport in Broadheath for market goods and coal remained important into the late-nineteenth century. This was despite the development at railway sidings north of the canal on Atlantic Street and at the nearby Timperley Junction. The survey work by the South Trafford Archaeology Group may thus have revealed the upstanding remains of the second oldest canal warehouse on the Bridgewater Canal system, the 'Old Warehouse', which survives in a truncated form in commercial use. Its precise construction date is unclear, although it was standing by 1785, whilst its design provides a useful comparison with the Grocers' Warehouse built in the 1770s.

The Runcorn Terminus

The Runcorn Terminus (Fig 10.10) was built in the years 1771-3 and by the early nineteenth century had developed into an extensive complex of docks, locks, basins, wharves and warehouses surrounding the offices of the Bridgewater Canal, Bridgewater House. The initial layout of the terminus involved a run of ten locks[28] that took the canal from 21.3m AOD at Higher Runcorn to 3.7m AOD at the tidal lock on

Fig 10.10: A 1943 sketch of the crate warehouses at the Runcorn terminus (courtesy of John Aldred).

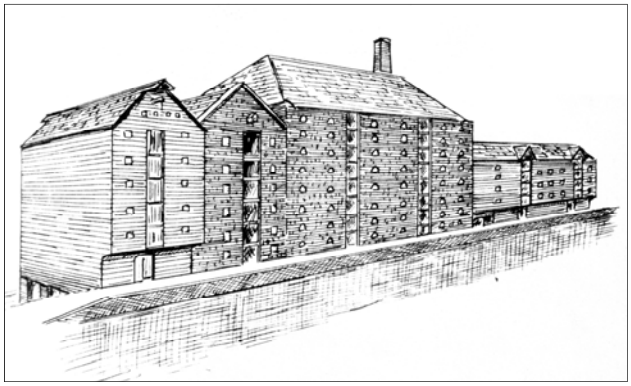


Fig 10.11 (top): the line of the new locks (left) and old locks (right) at the Runcorn terminus in the 1960s. (courtesy of Salford City Archive, the Mullineux Collection).
Fig 10.12 (bottom): The line of the old locks, dating from 1771-3 at the Runcorn terminus looking north towards Bridgewater House. Abandoned in the 1930s these were converted into a public footpath in the late twentieth century (copyright Michael Nevell).

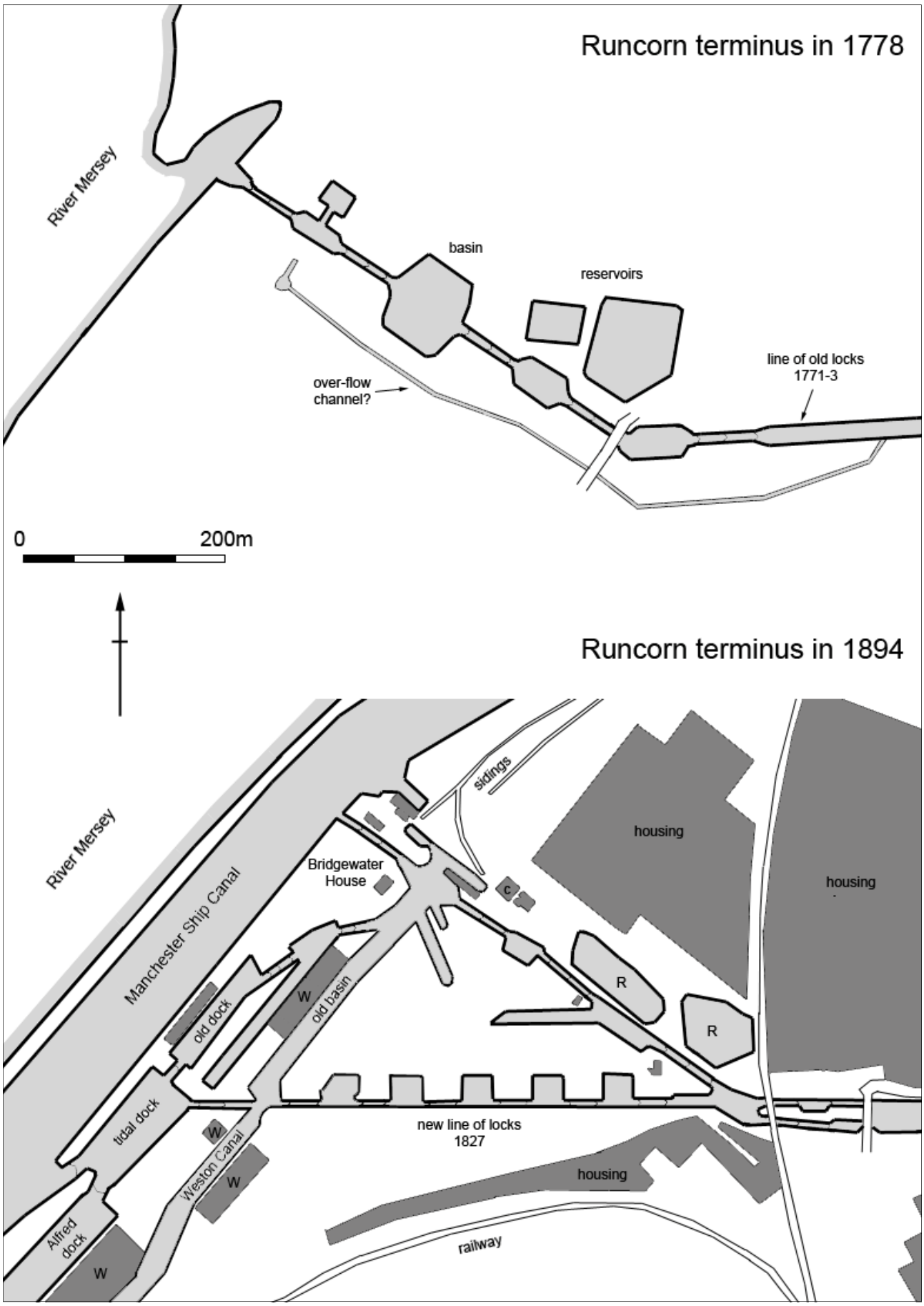


Fig 10.13: The Runcorn terminus in 1778 (top), according to Hogrewe's sketch plan, and in 1894 (bottom), according to the Ordnance Survey. The landscape changes between 1778 and 1894 reflect more than 100 years of continual expansion of the Runcorn Terminus. Key: C - Custom's House; R - reservoir; W - warehouse.

Fig 10.14: The Runcorn terminus in 1785 according to Foulkes' survey, showing the line of the old locks with its tidal lock to the River Mersey and the original dry dock to the north. This map has been annotated to show the addition of the old tidal basin to the south-west. To the right of this is the middle or coal basin, and east of that is the old basin. Since the line of the new locks are not shown these additions much pre-dated the mid-1820s. (Courtesy of Salford City Archive, Bridgewater Collection).

the northern side of Bridgewater House, a drop of 70 feet (Figs 10.11 & 10.12).

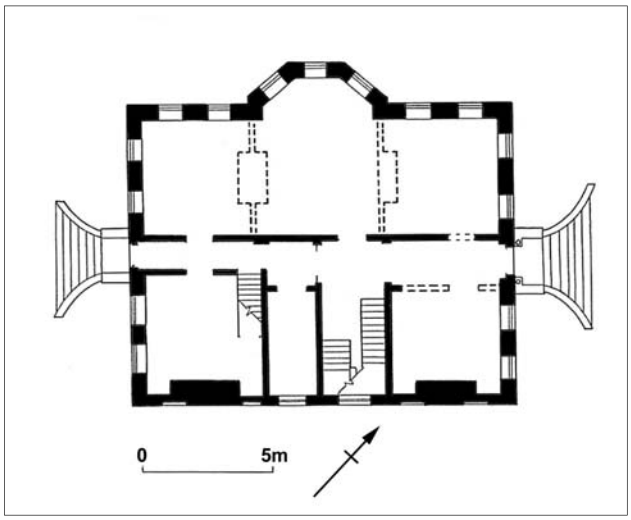
The speed of development of the original terminus can be seen by comparing Hogrewe's sketch plan of 1778 (Fig 10.13) and Foulkes' more detailed plan of 1785 (Fig 10.14). The latter shows that the line of ten locks was interspersed with four pounds, the lowest one giving access to the Old Tidal Dock, Middle Basin and four further locks. The canal offices and Bridgewater House stood at the junction of the old line and access to the Old Dock on the northern side of canal. By 1825 the volume of trade on the canal necessitated the building of a new line of seven locks, with five pounds, (Fig 10.13) to the south of the old locks and ended in an extension to the tidal dock, with access to the river through a final pair of tidal gates. This new line was linked via a new coal basin to the old locks. The new line was opened in 1827 and a new dock (Francis Dock) built west of this in the early 1840s. The 1.25 mile Runcorn and Weston Canal was built by the Bridgewater in the years 1857-9 to link this new dock with the Weaver Navigation's docks at Weston Point.[29] Expansion continued into the latter half of the nineteenth century as the Bridgewater Canal trustees built new docks to the north of Francis Dock and at the eastern end of the Runcorn and Weston Canal (Alfred Dock, c. 1860 and Fenton Dock 1875; Fig 10.13). The success of the Bridgewater Canal in the mid-nineteenth century is shown by a trebling of the annual tonnage on the canal during the years 1833 to 1860, and the continuing profitability of the canal into the 1880s.[30]

This expansion came to an end with the sale of the Bridgewater Navigation Company Ltd (as it had become in 1874) to the Manchester Ship Canal Company in 1887 and the opening of the new ship canal in 1894.[31] This required the rebuilding of much of the river frontage and the addition of railway sidings

Fig 10.15: Bridgewater House, built 1771-3 at the Runcorn terminus (copyright Michael Nevell).

(Fig 10.13), but resulted in the loss of most of the Bridgewater's sea-borne trade.[32] The final form of the buildings at the terminus is captured in the 1943 warehouse survey which includes drawings of five structures at the terminus, such as the crate warehouses (Fig 101.10), and a further ten buildings erected between the Weston Canal and the Alfred and Fenton Docks to the south-west of the original terminus.[33] The line of the old locks fell into disuse in the late 1930s and the Ship Canal Act of 1966 permitted the closure and filling of the new line of locks.[34] By the 1970s most of the warehouses and offices had been demolished and Bridgewater House was left standing in splendid isolation.

Fig 10.16: Ground floor plan of Bridgewater House (courtesy of Peel Group plc).



Despite the archaeological work during the 1980s demonstrating a high level of survival for the below-ground remains (see above), further investigation had to await redevelopment work in the early 2000s. In 2002 ground works for a new college including bore-hole testing, over the lower basin, revealed evidence of hard-standing surfaces and walls buried up to 5m below the current ground surface.[35]

In 2003 Bridgewater House was studied.[36] This was built in the years 1771-3 and acted as an occasional residence for the Duke of Bridgewater, James Brindley and John Gilbert, and later as the canal offices. In 1894 they became offices for the Manchester Ship Canal Co Ltd, and remained so until the 2000s. The study revealed that much of the original 1770s building survived, including the grand four-storey elevations (including the central pedimented doorway in the eastern elevation with its two sets of sweeping steps), the original double-depth, central staircase, plan-form, and interior architectural detailing.

Finally, test-pitting work to the west of Bridgewater House in 2005 revealed the stone and brick foundations of the Old Basin from 1825 and extensive remains of part of the barrel-vaulted cellarage for the Crate Warehouses on the northern side of that basin.

Conclusion

The 28.5 miles of the Cheshire section of the canal contained some of the most difficult engineering challenges along the whole system, from the bridging of the wide river valleys of the Bollin and Mersey to the junction with the Trent and Mersey Canal, and the construction of the tidal docks at Runcorn. The Runcorn Terminus played an important role in internationalising the goods travelling along the Bridgewater from its partial opening in 1773 to the opening of the Manchester Ship Canal in 1894. Moreover, the development of the infrastructure in this area over more than a century reflects both the success of the canal in terms of increasing trade and its success in competing and ultimately taking over its long-term rival - the Mersey and Irwell Navigation Company.[37]

Notes

1) Hadfield & Biddle 1970, 100-103; Scola R, 1992 *Feeding the Victorian city. The food supply of Manchester, 1770-1870.* Manchester University Press, pp. 98-105.

2) Aldred 2011, pp. 28-31; Malet 1977.

3) Hadfield & Biddle 1970, pp. 32-3.

4) Hadfield & Biddle 1970, p. 31; Malet 1977.

5) It may, however, have been started since Hadfield & Biddle noted a report in *Prescott's Manchester Journal* for the 13 June 1772 that the Duke 'has already broke ground the length of two miles, from Sale Moor towards Stockport'. Another report in the *Derby Mercury* of 4 October 1776 noted that he intended in the following year 'to finish his Navigation to Stockport' (see also Swain 1987, p. 44). A map of the canals intended to be built or commissioned around Cheshire drawn by Llinos Thomas around 1780 still shows the line of the canal (Hertfordshire Archives and Local Studies DE/AH/1919). The intended Sale Moor junction with the Bridgewater Canal is unclear but the 1845 tithe map for Sale shows a straight section of fields running east of the canal for about half a mile mid-way along the present line of Hope Road, between Northenden Road to the north and Marsland Road to the south. This was also immediately south of the Sale Moor wharf where the canal does a strange twist which might be an alternative for the proposed junction. Sadly, the 1806 Enclosure map of Sale does not record any earthworks nor landownership by the Bridgewater Trustees in either of these areas (Sale Moor Enclosure Map By Edward Mason, 1806, Trafford Local Studies Library). The scheme was briefly revived in 1822-3 as a 13.875 mile canal from Sale Moor to Stockport and Poynton before being finally abandoned (Hadfield & Biddle 1970, 100). This part of Sale was built upon in the early twentieth century so there are no physical remains of any earthworks relating to the line of the canal.

6) This bridge was widened around 1800.

7) This road had a separate single span aqueduct.

8) Smiles S, 1861, *Lives of the Engineers, Vol 1: Vermuyden, Myddleton Perry, James Brindley* (republished by David & Charles, London), pp. 198-200.

9) The line of the old locks fell into disuse in the late 1930s and was closed under the Ship Canal Act of 1949. The Ship Canal Act of 1966 permitted the closure and filling of the new line of locks (Starkey H F, 1983, *Schooner Port: Two Centuries of Upper Mersey Sail.* G W & A Hesketh, Ormskirk, 206).

10) Palmer M, 2010, 'Industrial Archaeology and the Archaeological Community: Fifty Years On: The Beatrice de Cardi Lecture', *Industrial Archaeology Review 32.1*, pp. 5-20. Stammers M K, 1994, 'The archaeology of the Mersey Estuary: past work and future potential', *International Journal of Nautical Archaeology 23.1,* 30 -1 discusses the abandonment of Mersey flats in the basins at Runcorn in the years 1950-5.

11) Grealey S with Hill D H, Hyde E D and Jones G D B, 1976, *The Archaeology of Warrington's Past.* Lund Humphries, London, pp. 66-7.

12) Gifford 2002, p. 1.

13) McNeil R & George A D, 2002, *The Heritage Atlas 4: Manchester – Archetype City of the Industrial Revolution. A Proposed World Heritage Site.* University of Manchester Field Archaeology Centre. Unfortunately, neither the Bridgewater Canal nor the textile mills of Ancoats, Manchester, were named on the revised tentative list for Great Britain published in March 2011. This does not, of course, preclude the Bridgewater Canal from being nominated on its own at a future date.

14) McNeil R & Nevell M, 2000, *A Guide to the Industrial Archaeology of Greater Manchester.* Association for Industrial Archaeology, Redruth.

15) The field reports and archives of the Manchester Region Industrial Archaeology Society can be consulted at Chetham's Library, Manchester.

16) Smiles 1861, p. 200.

17) Butterworth D, Champness B, Champness J, Eastwood D, Hickson M, Mason A & Thwaite R, 2007, *A Survey of the Bridgewater Canal near Altrincham.* Manchester Region Industrial Archaeology Society unpublished report. Young has a somewhat perplexing description of the construction works across the Bollin Valley in which he mentions vast arches. Young A, *A Six Month Tour Through the North of England. Volume 3, Letter XIX.* London.

18) John Rylands Library Stamford Archive, EGR 3/7/2/1/58; '*An Account of lands belonging to the Countess of Stamford through which his Grace the Duke of Bridgewater's intended Canal is proposed to pass upon the lower level*'; Champness B & Bayliss D, 2003, *A report on a survey of the Bridgewater Canal Warehouse, Broadheath.* Unpublished report by Altrincham History Society.

19) Hadfield & Biddle 1970, p. 35.

20) University of Salford Bridgewater Archives, *MSC Bridgewater Warehouses 1943*, copy.

21) Bayliss D, ed., 1990, *Altrincham. A History.* Altrincham History Society, 83-4; McNeil R & Nevell M, 2000, *A Guide to the Industrial Archaeology of Greater Manchester.* Association for Indus trial Archaeology, Redruth, p. 64.

22) Young A, *A Six Months Tour Through the North of England. Voiume 3, Letter XIX.* London; Hadfield & Biddle 1970, p. 35.

23) Scola 1992, pp. 101-4. A large proportion of the goods carried in 1849 were recorded as potatoes. The quay at Preston Brook was another centre for the potato trade to both Liverpool and Manchester and there was a 'Potato Wharf' at Castlefield by the early nineteenth century.

24) Nevell M, 1997, *The Archaeology of Trafford. A Study of the Origins of Community in North West England before 1900.* Trafford Metropolitan Borough Council.

25) Trafford Local Studies Library, *Altrincham Local Board of Health Plan, 1852.*

26) University of Salford Bridgewater Archives, *MSC Bridgewater Warehouses 1943*, copy.

27) Trafford Local Studies Library, Altrincham Local Health Board map of 1852; Ordnance Survey Six Inch First Edition for Cheshire published in 1877.

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