Bath Quays Waterside

The Archaeology of Industry, Commerce and the Lives of the Poor in Bath's Lost Quayside District

Cai Mason



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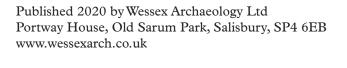
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Cai Mason

with contributions by Lorraine Mepham and Marek Lewcun

Illustrations by by Rob Goller



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View of the River Avon and Broad Quay from the east, taken by George Love Dafnis in 1892. Colourised by Rob Goller. Original image © B&NES Council

Back cover

18th-/early 19th-century bone gaming fish

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Contents

List of Figuresvi	Great Kingsmead
List of Platesix	South of the River
Acknowledgementsxii	Archaeological remains
Abstractxiii	Quarrying and pitting in Ambury 34
	Roads and quays
Chapter 1: Introduction	Artisan housing
Project background	Commercial development 4'
Organisation of this report	The development of Great Kingsmead 59
•	Discussion
Chapter 2: Bath, Kingsmead and the Ambury	
Meadows Prior to 1729	Chapter 5: 'All the Scum of Bath':
Topography and geology7	Industrialisation and the Poor, 1840–1930
Archaeological and historical background 8	Historical background 69
Prehistoric activity on the Avon floodplain 8	The Avon Street district
Roman Bath8	Railways70
The post-Roman and Saxon town 8	Industry70
The medieval city9	Archaeological remains
Ambury, Kingsmead and the Hospital	Industry and commerce
of St John	Housing99
The Dissolution and after	South of the River
Archaeological remains	Discussion
The Fosse Dyke	
Land use in Ambury and Kingsmead	Chapter 6: The End of the Avon
Discussion	Street District
Chapter 3: The Quay and the Spa: Building and	Chapter 7: Discussion and Conclusions
Provisioning Georgian Bath, 1729-60	Living with the River
Historical background	Bath and the Industrial Revolution 102
The Spa21	Development, use of space, and living conditions
The Avon Navigation	in the Avon Street 'slum'
Avon Street	Sanitation and water supply 100
Growth of the Georgian city24	Public washhouses: their origins, use, politics
Archaeological remains	and economics
The Quay	Religion, politics and the washhouse
Avon Street	movement
Discussion	Economics 109
	Material culture and identity 110
Chapter 4: 'The Nymphs of Avon Street': Social	Consumption habits and refuse 11
Decline and Urban Development, 1760–1839	Conclusions 112
Historical background31	
The Avon Street district31	Appendix 1 11
The Kennet and Avon Canal31	
Ambury and the New Quay 32	Bibliography11

List of Figures

Chapter 1		Figure 3.9	Plan of archaeological features around
Figure 1.1	Location plan showing places in the surrounding area referred to in the text		The Quay, c. 1729–60. Building outline based on excavated structures,
Figure 1.2	Site location and places in Bath referred to in the text		documentary evidence and 18th- century maps
Figure 1.3	Site plan, showing evaluation, excavation and watching brief areas, and extent of modern disturbance	Figure 3.10	Plan of archaeological features at the southern end of Avon Street, <i>c</i> . 1729–60. Building outlines based on excavated structures, documentary
Chapter 2			evidence and 18th-century maps
Figure 2.1	Surface geology of the Avon Valley at Bath	Figure 3.11	Detail of Thomas Robins' A South West Prospect of the City of Bath, 1754
Figure 2.2	Medieval Bath, showing site location and land ownership		(reissued 1757), including quayside at the southern end of Avon Street,
Figure 2.3	Henry Savile map, c. 1600		showing slipway S15 and two arched
Figure 2.4	Plan of medieval features		openings to the sides: the smaller of the
Figure 2.5	Section of the Fosse Dyke (S1), 18th-century culvert S19 and overlying deposits		two (to right) is the outfall for culvert S19; the larger arch (to left) may be a subterranean boathouse (S21) below
Figure 2.6	Plan of 13th–16th-century features		building B3
Figure 2.7	Detail from Joseph Gilmore map, 1694	Figure 3.12	Avon Street, Bath, early 20th-century watercolour by Katharine Kimball,
Figure 2.8	Plan of late 17th–early 18th-century features		showing the former Bath City Iron and Brass Foundry/Walker's Firewood Mill (B5; 46 Avon Street; left), and two late
Chapter 3			1730s or 40s houses (B4 and B6;
Figure 3.1	Aquae Solis July 21 1723. From the top of the Southern Hill, published in William Stukeley's Itinerarium Curiosum, 1724		47–48 Avon Street; centre and right) © Victoria Art Gallery, B&NES Council
Figure 3.2	Topography of the Avon Valley and	Chapter 4	
1 19410 3.2	major pre-18th century roads into Bath	Figure 4.1	Plan of a horse towpath constructed by
Figure 3.3	The Four Worthies of Bath, c. 1735.	8	the Kennet and Avon Canal Company
	Unknown artist, thought to depict from left to right: Richard Jones, Ralph Allen, Robert Gay and John Wood the Elder		in 1812. Warehouse B7 (left) and Quay House B25 (right) drawn individually © B&NES Council
	© B&NES Council	Figure 4.2	Plan of land ownership and
Figure 3.4	Detail from John Wood's A Plan of the City of Bath in the County of Somerset, 1735	C	archaeological features in Ambury, c. 1760
Figure 3.5	A detail from Thomas Thorpe's An	Figure 4.3	Detail from A New and Correct Plan
	Actual Survey of the City of Bath, in the		of the City of Bath and Places adjacent,
	County of Somerset, and of Five Miles		surveyed mid-/late 1760s; published
	Round, 1742		c. 1770. Although this plan depicts
Figure 3.6	A View of Bath, 1750 (BL		New Quay as fully built up,
	Maps.K.Top.37.25.h)		documentary evidence indicates that
Figure 3.7	Detail from A New and Correct Plan of		there were no substantial buildings
T' 00	the City of Bath and Places adjacent, 1750		along the street until 1764, and
Figure 3.8	Thomas Robins' A South West Prospect of		some plots remained vacant until
	the City of Bath, 1754 (reissued 1757),	F: 4 4	the 1770s
	showing quays and adjacent structures	Figure 4.4	Detail from A New and Correct Plan of
	around Broad Quay (right) and Avon Street (left). Apart from a walled		the City of Bath, published by J Basnett, 1771
	enclosure and a single low building,	Figure 4.5	Detail from Charles Harcourt Masters'
	Ambury is depicted as undeveloped	i iguic 4.J	Maps of the Bath Turnpike Roads, 1786

- Figure 4.6 Detail from Charles Harcourt Masters' Plan of the City of Bath, 1794
- Figure 4.7 Plan of c. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794
- Figure 4.8 Plan of c. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794
- Figure 4.9 Plan of *c*. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794
- Figure 4.10 Plan of c. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794
- Figure 4.11 Buff Club at the Pig and Whistle, Avon Street, Bath, by Robert Cruikshank, published in Blackmantle (1826, 386) © B&NES Council
- Figure 4.12 Late 18th-century deed plan (BRO BC/6/2/9/2108) of 1–2 New Quay, depicting B22, courtesy of Bath Records Office
- Figure 4.13 Plan of mid-/late 18th-century archaeological features in Great Kingsmead
- Figure 4.14 Plan of archaeological features to the west of Milk Street, *c.* 1780–95.

 Building outlines based on Harcourt Master's plan of 1794
- Figure 4.15 Early 19th-century *View on the Avon*, by Benjamin Barker (1776–1838), looking south-east from the western end of New Quay towards Beechen Cliff © Victoria Art Gallery, B&NES Council
- Figure 4.16 Plan of archaeological features along New Quay, c. 1800–39. Building outlines based on Cotterell's plan of 1852
- Figure 4.17 Plan of archaeological features along New Quay, c. 1800–39: west end. Building outlines based on Cotterell's plan of 1852
- Figure 4.18 Plan of archaeological features along New Quay, *c*. 1800–39: central area. Building outlines based on Cotterell's plan of 1852
- Figure 4.19 Plan of archaeological features along New Quay, *c.* 1800–39: east end. Building outlines based on Cotterell's plan of 1852

Chapter 5

Figure 5.1 Detail of Jacob Henry Cotterell's *Plan of the City and Borough of Bath*, 1852

- Figure 5.2 Detail of Jacob Henry Cotterell's *Plan* of the City and Borough of Bath, and its suburbs, 1852
- Figure 5.3 Detail of 1885 Ordnance Survey 1:500 Town Plan
- Figure 5.4 Detail of 1904 Ordnance Survey 1:2500 map
- Figure 5.5 Detail of 1932 Ordnance Survey 1:2500 map
- Figure 5.6 Plan of Sants' pottery and tobacco pipe factory, 1847–1916. Building outlines based on 1885 OS plan
- Figure 5.7 Advertisement for Marshall, Banks and Son's New Quay dye works and laundry, published in the *Post Office Bath Directory* (1888–9, 87), courtesy of Bath Records Office. The image of the dye works is idealised and perhaps aspirational: the real building was half the size (see Pl. 4.17)
- Figure 5.8 Advertisement for aerated water bottling equipment manufactured by N G
 Wilcocks', published in *The Chemist and Druggist*, 15 January 1885
- Figure 5.9 Plan of archaeological features, 1870– 1930. Building outlines based on 1904 OS plan
- Figure 5.10 Plan of archaeological features, 1870–1930: west end. Building outlines based on 1904 OS plan
- Figure 5.11 Plan of archaeological features, 1870–1930: central area. Building outlines based on 1904 OS plan
- Figure 5.12 Plan of archaeological features, 1870–1930: east end. Building outlines based on 1904 OS plan
- Figure 5.13 Plan of Narrow Quay Garage, 1920s–40s. Building outlines based on 1932 OS plan
- Figure 5.14 'Inferior bath', extract from an engraving of St Pancras Baths and Washhouse, *The Illustrated London News*, 3 January 1846 © Mary Evans Picture Library
- Figure 5.15 'Superior bath', extract from an engraving of St Pancras Baths and Washhouse, in *The Illustrated London News*, 3 January 1846 © Mary Evans Picture Library
- Figure 5.16 'Washing room', extract from an engraving of St Pancras Baths and Washhouse, in *The Illustrated London News*, 3 January 1846 © Mary Evans Picture Library
- Figure 5.17 'Ironing and drying room', extract from an engraving of St Pancras Baths and Washhouse, in *The Illustrated London*

- *News*, 3 January 1846 © Mary Evans Picture Library
- Figure 5.18 'Wringing machine' and 'hot air machine', extract from an engraving of St Pancras Baths and Washhouse, in *The Illustrated London News*, 3 January 1846 © Mary Evans Picture Library
- Figure 5.19 Drawing showing a washing and drying compartment with women at work, published in Baly (1852, pl. 5)
- Figure 5.20 Plan showing the development of the Milk Street Baths, 1847–52. Building outlines based on Cotterell's plan of 1852
- Figure 5.21 Plan showing the development of the Milk Street Baths, 1853–73. Building outlines based on 1885 OS Town Plan
- Figure 5.22 Plan showing the development of the Milk Street Baths, 1874–1930.

- Building outlines based on 1885 OS Town Plan
- Figure 5.23 Plan of archaeological features on the south side of the river, *c.* 1830–90.

 Building outlines based on the 1885

 OS plan
- Figure 5.24 Plan of archaeological features on the south side of the river, *c.* 1890–1930.

 Building outlines based on the 1932

 OS plan

Chapter 6

Figure 6.1 Detail of City of Bath, Air Raid Damage, April 26, 27 and 28 1942

Chapter 7

Figure 7.1 A public washhouse (Marylebone Road): washing, published in Brook-Alder (1902, 364)

List of Plates

Chapter 1		Plate 3.2	Late 1730s building B2 (centre), and
Plate 1.1	The River Avon from Churchill Bridge, viewed from the south-east, showing Bath Quays Waterside prior		mid-18th-century houses B6 (left) and B12 (background), from the north-west
	to the excavation on the right, and the Camden Malthouse and Silo, Camden	Plate 3.3	Late 1730s culvert S19, from the south-west
	Mill and the Albion Stay Factory on the left	Plate 3.4	Late 1730s cobbled surfaces OA7 and drain S20, from the north-west
Plate 1.2	Evaluation trench along Green Park Road, from the north-west, showing	Plate 3.5	Cellar of 1740s building B3, from the south-west
	archaeological remains of 18th-century buildings beneath modern made ground	Plate 3.6	Mechanically-excavated slot at north- eastern end of possible 1740s boathouse
Plate 1.3	Excavation area from the west, showing the excavated remains of buildings		dock S21, from the west
	along Avon Street and New Quay, with	Chapter 4	
	Avon Street multi-storey carpark in the	Plate 4.1	Little Corn Street, from the south
Plate 1.4	background Excavation area from the south-east,	Plate 4.2	Pipes of Thomas Clarke and Richard Ward, and kiln furniture
	showing the excavated remains of	Plate 4.3	Clay pipes and kiln furniture
	buildings along New Quay and Milk	Plate 4.4	Pipeclay figurine
	Street, with Kingsmead Flats in the	Plate 4.5	Pottery from the slipway
701 4 5	background	Plate 4.6	c. 1930 view from the same position as
Plate 1.5	Avon Street, viewed from the north- east, with Camden Mill and Albion Stay Factory in the background		Pl. 4.1, showing 8–9 New Quay (B8) and 1–4 Little Corn Street (B9) from the south © B&NES Council
Plate 1.6	Excavation of stone-lined liming pits within an 18th-century fellmongers and parchment works at 3 New Quay (view from the north-east), with	Plate 4.7	8–9 New Quay (B8) and 1 Little Corn Street (B9), from the north-east. Note the uneven and subsiding floor surface caused by leaking drains
Cl 2	Camden Malthouse, Camden Mill and the Albion Stay Factory in the background	Plate 4.8	8–15 New Quay (B8 and B10–B12) and 1–4 Little Corn Street (B9), from the south, taken between 1880 and 1885. Note the roof of Hucklebridge's Court
Chapter 2 Plate 2.1	Carting and the madis-15		and the Bath City Brass and
Plate 2.1	Section across the medieval 'Fosse Dyke' (S1), culvert S19 and wall S2, from the west		Iron Foundry (large barn-like building to the rear of 14–15 New Quay) © B&NES Council
Plate 2.2	Late medieval/early post-medieval wall S2, from the south-west	Plate 4.9	10–13 New Quay (B10–B11), from the north
Plate 2.3	Late medieval/early post-medieval wall S2, from the west	Plate 4.10	c. 1930 view of 1–11 New Quay, from the west, showing (left to right) B11,
Plate 2.4	Clay tobacco pipes from cart ruts S9		B10, B9, B15, B16. B18, B19, B35
Plate 2.5	Pottery from cart ruts S9		and B37. The women and dog are
Plate 2.6	c. 1685–1735 bridge S6, from the west		standing at the entrance to the
Plate 2.7	Post-medieval quarrying (S7) in St John's Mead/Little Kingsmead, from		covered way through B10 © B&NES Council
	the north-east	Plate 4.11	Late 18th/early 19th-century drain to the rear of 13 New Quay (B11),
Chapter 3			incorporating a sewer gas trap, view
Plate 3.1	Late 1730s slipway S15 at the		from the west
	southern end of Avon Street, cut by	Plate 4.12	Foundations of 1–2 Hucklebridge's
	19th-century stone-lined drain, from		Court/14–15 New Quay (B12), from
	the south-east		the north, with partially excavated

	foundations of 3-4 Hucklebridge's	Plate 4.29	Liming pits (S44) within a late 18th-
	Court (B13) and drain S35 in		century fellmongers' yard, leather-
	the foreground		dressers and parchment works (B21)
Plate 4.13	1-2 Hucklebridge's Court/14-15 New		at 3 New Quay, from the north-east,
	Quay (B12) and 3-4 Hucklebridge's		showing late 19th-century drains (S72)
	Court (B13), from the north. Note		and walls of Marshall and Banks' Steam
	the inserted pillar bases for an 1893		Dye works (left) and early 20th-century
	extension to Walker's Firewood Mill		forge of N S G Wilcock's engineering
Plate 4.14	Decorated bone knife handle, thimble		works (right)
	and small stone mortar	Plate 4.30	Infilled and partially robbed late 18th-
Plate 4.15	Bone gaming fish		century stone-lined tank S45 within
Plate 4.16	Pottery from underfloor deposits		B21, from the south-west
Plate 4.17	View from the south, showing 3–7 New	Plate 4.31	Late 18th-century non-domestic
	Quay (right to left B35, B16, B19, B18	11000 1101	building (B22) at 1 New Quay, from the
	and B15), taken between 1880 and 1885		east, with Camden Malthouse and Silo
	© B&NES Council		in the background
Plate 4.18	7 New Quay (B15), from the north, with	Plate 4.32	7 Broad Quay and 1–3 New Quay (right
11410 1110	Little Corn Street in the foreground	11410 1.32	to left B25, B22, B24, B23 and B35),
Plate 4.19	Foundations, yard surface (OA14),		from the south, taken between 1880 and
	drains (S36 and S70) and wells (S37		1885 © B&NES Council
	and S38) to the rear of 7 New Quay	Plate 4.33	Late 18th-century non-domestic
	(B15), from the north-west		building (B23) at 2 New Quay, from the
Plate 4.20	c. 1930 view of 5–6 New Quay, from the		north-east
	north © B&NES Council	Plate 4.34	Tin-glazed wall tiles
Plate 4.21	5-6 New Quay (B18-B19), from	Plate 4.35	1937 view of Quay House (B25), from
	the north		the south-east, showing the level of a
Plate 4.22	Heavily truncated foundations of		recent flood © B&NES Council
	Lockyer's Court (B26), from the	Plate 4.36	18th-century buildings along New
	north-west		Quay and Avon Street, from the
Plate 4.23	Early 19th-century cottage (B28) to		north, showing 14–15 New Quay/1–2
	the rear of 49 Avon Street, from the		Hucklebridge's Court (B12), 3-4
	north-west		Hucklebridge's Court (B13), and 48
Plate 4.24	The Duke of York public house, 4 New		Avon Street (B2/B6).
	Quay (B16), from the north	Plate 4.37	c. 1930 view of New Quay, from the
Plate 4.25	Working sheepskins on a 'beam' to		north-west, showing late 18th-century
	remove fat and lime. Image of the		warehouse B7 (centre) and c. 1874
	Homewell Parchment Works,		stable B33 (left) © B&NES Council
	Havant, published in The Sphere, 28	Plate 4.38	18th-century culvert S49, from the
	September 1928, 208 © Mary Evans		south-west
	Picture Library	Plate 4.39	Selection of pottery from dumping
Plate 4.26	Soaking sheepskins in liming pits to		layers
	arrest putrefaction and remove fat.	Plate 4.40	Cesspit S52, from the south-west
	Image of the Homewell Parchment	Plate 4.41	Clay pipes and pipeclay strips from
	Works, Havant, published in The Sphere,		cesspit S51
	28 September 1928, 208 © Mary Evans	Plate 4.42	Pottery from cesspit S51
	Picture Library		
Plate 4.27	Worked sheepskins fixed to a frame	Chapter 5	
	then scraped with a half-moon knife	Plate 5.1	Panorama of the Avon Street district,
	to remove excess flesh, dirt and slime		from the south, taken between 1880 and
	after soaking in liming pits. Image of the		1885 © B&NES Council
	Homewell Parchment Works, Havant,	Plate 5.2	Bath and West of England Steam Power
	published in <i>The Sphere</i> , 28 September		Dye Works (B35), from the north-west.
	1928, 208 © Mary Evans Picture Library		Converted for use as N S G Wilcocks'
Plate 4.28	Finished parchment being cut from		Bath City Foundry and Engineering
	a frame. Image of the Homewell		Works in 1898
	Parchment Works, Havant, published in	Plate 5.3	Detail of possible forge base within B35
	The Sphere, 28 September 1928, 208	Plate 5.4	Commercial stables (B33, B34 and
	© Mary Evans Picture Library		OA28) at the southern end of Avon

Plate 5.5	Street, view from the north-east, with the Albion Stay Factory and the Newark Works in the background Commercial stables (B33, B34 and OA28) at the southern end of Avon Street, from the north-west Commercial stables (B33, B34 and	Plate 5.17 Plate 5.18 Plate 5.19	Clay pipes and kiln debris Pottery from ground-raising deposits Mid-19th century wharf (S79), from the north-west, with the remains of the Newark Works foundry in the background
Trate 3.0	OA28) and 49 Avon Street, from the south, taken between 1880 and 1885	Chapter 7 Plate 7.1	Flooding at the southern end of Avon
	© B&NES Council		Street on 27 February 1937, from
Plate 5.7	Mid-/late 1930s view of Quay House (B25) and 1–6 New Quay (B35, B37, B16 and B18–B19) from the south-east © B&NES Council		the east, showing 49 Avon Street (constructed in the 1730s) and adjacent stables (B34), which were constructed <i>c.</i> 1874 © B&NES Council
Plate 5.8	c. 1930 view of 14-15 New Quay (B12),	Plate 7.2	Drug jars with the marks of William
	which was incorporated into Walker's		Singleton and Gervais Chardin
	Firewood Mill (B38) in 1893	Plate 7.3	Drugs jars of various forms
	© B&NES Council	Plate 7.4	Glass phials
Plate 5.9	c. 1930 view of the Milk Street Baths	Plate 7.5	Glass bottle with the seal of Madame
	and Laundry, from the south-east	D1 = 4	Rosalie Bode
D1 . 5.10	© B&NES Council	Plate 7.6	Anthony Ashley-Cooper, 7th Earl
Plate 5.10	c. 1930 view of the Milk Street Baths		of Shaftesbury, mid–late 1850s
	and Laundry, from the north-east,		albumen print, probably by Maull &
	with the Albion Stay Factory in the		Polyblank © National Portrait
Plate 5.11	background © B&NES Council Henry and Elizabeth Cox and family,	Plate 7.7	Gallery, London Charles Brodrick, 6th Viscount
Plate 5.11	c. 1880, image courtesy of their family	Plate 1.1	Midleton, albumen print by Camille
Plate 5.12	The Milk Street Baths and Laundry,		Silvy, 14 June 1861 © National Portrait
Tiate J.12	from the east, with the Newark Works		Gallery, London
	foundry in the background	Plate 7.8	Irish-themed clay tobacco pipe with a
Plate 5.13	'Well' for pump and filter within the	Tiute 7.0	factitious maker's mark
11410 3.13	Milk Street Baths and Laundry pump	Plate 7.9	Creamware pottery with part of motto
	room, from the east		"en Vaderland"
Plate 5.14	1853 laundry block, from the west	Plate 7.10	1960s view of Broad Quay, from the
Plate 5.15	1853 Lancashire boiler bases S61 and		south, showing Quay House (B25)
	S62, from the north		and J A Bladwell & Co's c. 1889
Plate 5.16	30 Kingsmead Terrace (B32), from		warehouse and showroom (B37)
	the east, with kitchen and garden in		shortly before their demolition
	the foreground		© B&NES Council

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Abstract

Archaeological excavation at Bath Quays Waterside in 2016–17 uncovered a substantial part of the former Avon Street district – a notorious area, constructed in the 18th century and demolished in the 1930s, that was once synonymous with crime, disease and poverty.

The earliest excavated remains comprised a substantial artificial watercourse that drained the outfall from the city's western geothermal springs and marked the extents of city jurisdiction prior to 1590. It is uncertain when the ditch was dug, but it certainly existed by the 13th century, when it formed the boundary between the lands of Bath Abbey and a meadow they granted to the Hospital of St John. The east bank of the ditch was defined by a stone wall, which is depicted on maps dating from *c*. 1600 onwards as a crenellated structure. Archaeological evidence suggests that the wall was constructed between the 13th and 16th centuries.

Apart from small-scale quarrying for gravel, sand and clay, the riverside meadows of Ambury and Kingsmead remained largely undeveloped until the early 18th century. Development began in earnest in the late 1720s with the laying out of Avon Street and the construction of Broad Quay, which formed a terminus for the newly-opened Avon Navigation. The houses along Avon Street were designed as lodgings for wealthy visitors to the spa, whereas the buildings along the waterfront were predominantly warehouses and commercial premises. The remaining parts of Ambury and Kingsmead were developed between 1760 and 1795. The new buildings comprised a mixture of artisan housing and commercial premises, which included warehouses, stone yards, slaughterhouses, and light leather and parchment manufacturers.

There were numerous public houses in the Avon Street district, many of which also functioned as brothels, and by the 1760s wealthy visitors to the spa had begun to shun the area in favour of more fashionable districts to the north and east of the

city. In their place, came the artisans, labourers and servants that made the Georgian city function. To maximise rental income, landlords subdivided houses and erected new houses, which included examples of blind-back and back-to-back court dwellings, for lower income tenants. The houses were of simple but solid construction, but some elements were poorly designed: ground-level suspended wooden floors in a flood-prone area were susceptible to decay, whilst poorly constructed drains caused localised subsidence and contamination of well water.

From the 1840s onwards, new industrial businesses were established in the Avon Street district. These included clay tobacco pipe manufacturers, a pottery, dye works, sawmills, and several innovative foundries and engineering works. These provided skilled work for many, but at the expense of an increasingly polluted environment.

Mid-19th-century concern about living conditions in Britain's cities, and a fear of social disorder and epidemic disease, prompted a range of reforms that were designed to improve the health of the urban population. These included improvements to water supply and sanitation, and the provision of public washhouses for the poor. The Milk Street Baths, a steam-powered public washhouse that was constructed in 1846–7, is the earliest well-preserved example of this type of institution to have been archaeologically excavated.

The archaeological work has shown how the river was instrumental to the development of Bath in the 18th and 19th centuries, and how early 20th-century redevelopment plans, which included a large riverside park, were halted by the outbreak of World War II. The flood mitigation and development enabling works at Bath Quays Waterside have now created a scenic riverside park, which will help reconnect the city with its river and start the long-planned redevelopment of the former Avon Street district.

Chapter 1 Introduction

Project Background

Bath Quays Waterside forms part of a major mixed-use development of under-utilised land close to Bath city centre (Figs 1.1, 1.2 and 1.3; Pl. 1.1). Proposals for the redevelopment of the area, beginning with flood defence and development-enabling works, prompted a major archaeological excavation of Bath's historic quayside on the north bank of the River Avon. The archaeological work was undertaken in parallel with the construction works in 2016–17.

Traditionally known as the Avon Street district, the area between the city walls and the River Avon was developed from the late 1720s onwards. It was initially a respectable area where rich visitors to the spa could find lodgings. However, rapid and intensive development from the 1760s onwards soon led to overcrowded and insanitary conditions, and by the mid-19th century it was widely considered to have become a 'slum district'.

The buildings of Bath's wealthy 18th- and 19th-century inhabitants are, quite rightly, world-famous for their architecture, but those of the city's poorer inhabitants – the workers who built and provided the basic needs of the city – are less well known. This is largely due to the extensive and deliberate demolition

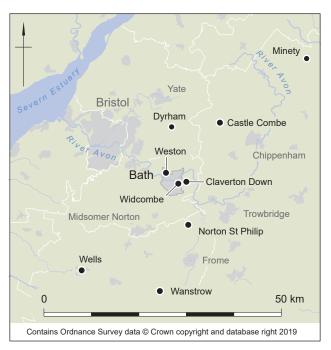


Figure 1.1 Location plan showing places in the surrounding area referred to in the text



Plate 1.1 The River Avon from Churchill Bridge, viewed from the south-east, showing Bath Quays Waterside prior to the excavation on the right, and the Camden Malthouse and Silo, Camden Mill and the Albion Stay Factory on the left

of much of Bath's 18th-century artisan housing in the mid-20th century (Furgusson 1973, 11–12), the result of which is that the visible history of Bath's 18th- and 19th-century working population has, to a large extent, been physically erased. Archaeological remains of their homes and workplaces do however survive, and understanding 'the nature of working class housing of the 18th and 19th century and the impact of industrialisation' has been listed as a key archaeological research question in *The City of Bath World Heritage Site Management Plan* (B&NESC 2010 and 2016).

Part of the new flood-defence works, along a 0.7 km stretch of the river between Churchill Bridge and Midland Road Bridge entailed lowering the ground level along the north bank of the River Avon by up to 3 m. The aim of this work was to allow the river to flow more freely and safely through the city during flood conditions. This construction project, which also included diverting Green Park Road through an adjacent coach park and constructing flood-defence walls on the south side of the river, also provided an opportunity to create a new riverside park.

The potential impact of these works on buried archaeological remains, particularly those on the north bank of the river, was highlighted in a desk-based assessment (DBA) (Wessex Archaeology 2013) and confirmed by an archaeological trial trench evaluation (Pl. 1.2) undertaken in 2016 (Wessex Archaeology 2016). The evaluation showed that substantial and well-preserved 18th- and 19th-century structural

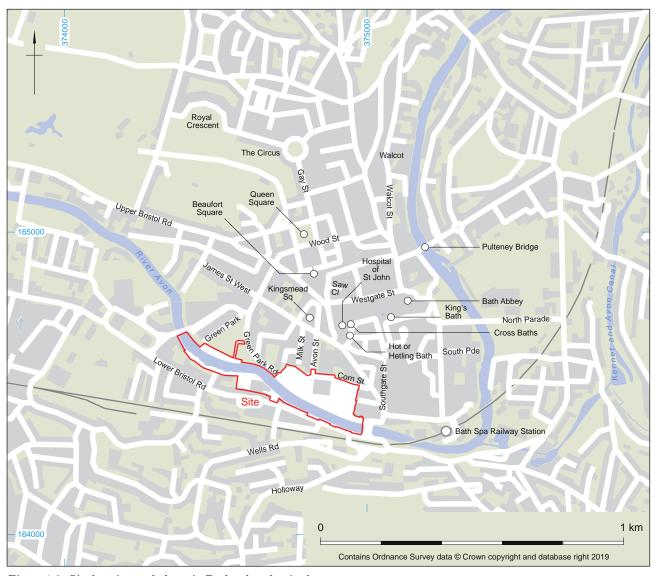


Figure 1.2 Site location and places in Bath referred to in the text



Plate 1.2 Evaluation trench along Green Park Road, from the north-west, showing archaeological remains of 18th-century buildings beneath modern made ground

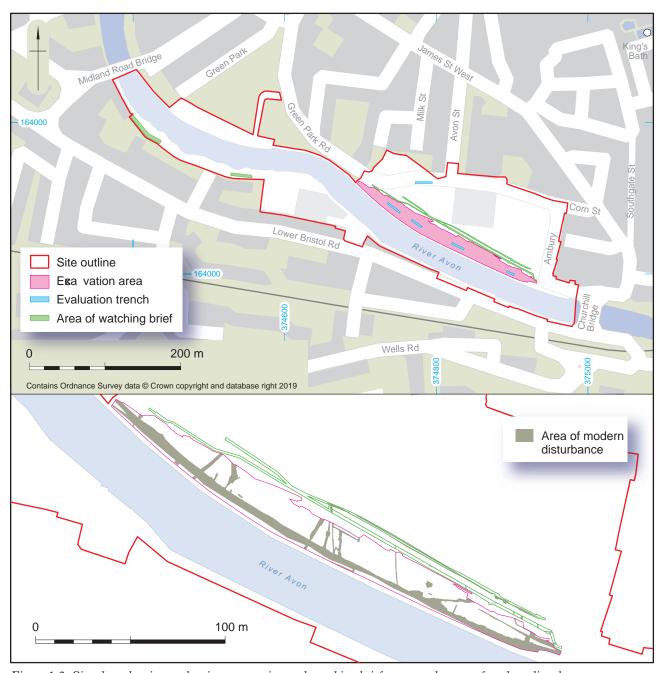


Figure 1.3 Site plan, showing evaluation, excavation and watching brief areas, and extent of modern disturbance

remains survived at depths of between 0.3 m and 1.5 m below ground level. To mitigate the impact of the development on these remains, a 273 m long by 20 m wide strip on the north bank of the river was archaeologically excavated (Fig. 1.3; Pls 1.3–1.6). Other construction works, such as flood-wall construction on the south side of the river and various service diversions, were monitored by means of an archaeological watching brief.

Organisation of this Report

The results of the archaeological work are presented by period, with the relevant historical background outlined at the beginning of each chapter and, where relevant, integrated into the chronological narrative (Chapters 2–6). Each chapter concludes with a period-specific discussion. The final chapter presents a discussion and conclusions of the broad themes investigated by the project. Specialist finds reports (Lewcun 2019 and Mepham 2019a–b) are available in the site archive and online (https://www.wessexarch.co.uk/our-work/bath-quays-waterside).

The historical research is drawn from primary records held by the Bath Record Office (BRO), South West Heritage Trust (SWHT), Bath Library (BL) and contemporary periodicals, primarily the *Bath Chronicle and Weekly Gazette* (BCWG). This publication also draws heavily from the extensive



Plate 1.3 Excavation area from the west, showing the excavated remains of buildings along Avon Street and New Quay, with Avon Street multi-storey carpark in the background



Plate 1.4 Excavation area from the south-east, showing the excavated remains of buildings along New Quay and Milk Street, with Kingsmead Flats in the background



Plate 1.5 Avon Street, viewed from the north-east, with Camden Mill and the Albion Stay Factory in the background

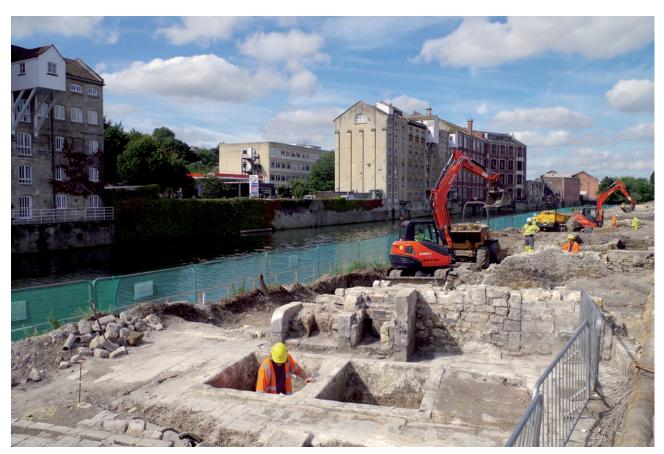


Plate 1.6 Excavation of stone-lined liming pits within an 18th-century fellmongers and parchment works at 3 New Quay (view from the north-east), with Camden Malthouse, Camden Mill and the Albion Stay Factory in the background

research undertaken by Dr Graham Davis and other local historians.

The archaeological features are described and illustrated by chronological period. The extent of modern disturbance is shown in Figure 1.3, but for clarity it has been omitted from the historic phase plans.

The basic unit of reference throughout the archaeological archive is the context number. This is a unique number given to each archaeological event (eg, layer, cut, fill, wall etc.). In this report, archaeological features (groups of contexts) are described by land use type, which are abbreviated as follows:

В	Building
OA	Open area (ie, yard, garden or quayside)
S	Structure. This category includes all
	other man-made features, such as
	free-standing walls, wells, drains,
	ditches, quarries and pits

Other abbreviations used in plans and text of this report:

OD	above Ordnance Datum
B&NESC	Bath and North East Somerset Council
BCWG	Bath Chronicle and Weekly Gazette
BL	Bath Library

BLSCB	Baths and Laundries Society for the
	City of Bath
BM	Bristol Mercury
BP	Before Present
BRO	Bath Records Office
DP	Deed Packet
D	Doorway
F	Fireplace
L	Lavatory/Latrine
LMA	London Metropolitan Archives
SWDP	South Wales Daily Press
SWHT	South West Heritage Trust
TNA	The National Archive
UGLEMR	United Grand Lodge of England
	Membership Records
WC	Water closet
WSHC	Wiltshire and Swindon History Centre

Many of the excavated buildings can be related to numbered properties, which are recorded on various 19th-century and early 20th-century documents and maps. The earliest identified use of the street numbers in this part of Bath dates from 1818 (BRO BC/5/70/79), and the numbers appear to have been used consistently until the area was cleared in the 1930s. Where relevant, buildings are identified by their historic street number. Some commercial properties were never given a street number.

Chapter 2

Bath, Kingsmead and the Ambury Meadows Prior to 1729

Topography and Geology

The City of Bath is situated in the Avon Valley, which cuts through the southern end of the Cotswold hills, revealing a sequence of Jurassic Limestones, Mudstones, Sandstones and Clays in the valley sides. The solid geology in the valley floor comprises Jurassic Mudstone of the Charmouth Mudstone Formation, which is overlain by Late Devensian gravels of the Bathampton Member, sealed by deep deposits of Holocene alluvium (Fig. 2.1). The upper surface of the alluvial sequence was recorded at a height of approximately 17 m OD.

Natural deposits were overlain by approximately 2 m of anthropogenic 'made ground', which raised the level of the bank along the north side of the river to a height of approximately 19 m OD. The 'made ground' comprised archaeological remains of 18th- to early 20th-century occupation, overlain by mid-20th-century soil and rubble derived from demolition and ground-raising activity.

Geoarchaeological investigations at the SouthGate shopping centre showed that this part of the Avon floodplain contains a complex sequence of Late Pleistocene gravel terraces, intercut by sand, silt and gravel-filled channels dating from *c.* 136,000–

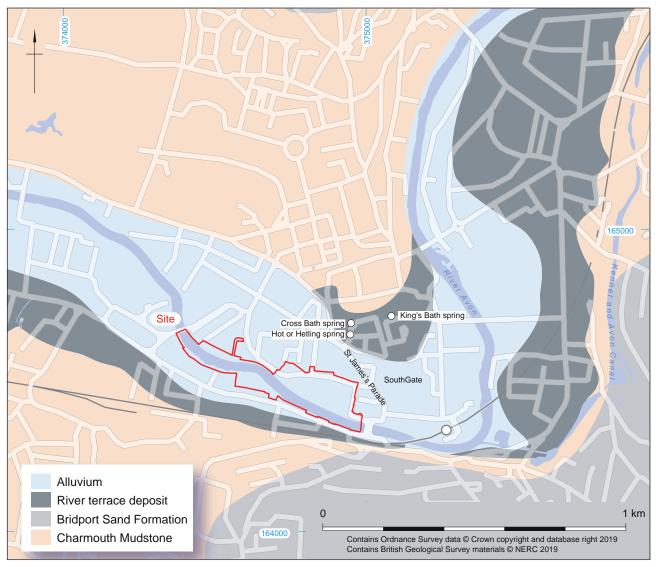


Figure 2.1 Surface geology of the Avon Valley at Bath

91,000 BP onwards. A deep Late Glacial river channel, dating from c. 15,000-13,000 BP, crossed the centre of the SouthGate site. The alignment of the channel suggests that it would have flowed westwards along approximately the same line as St James's Parade, 150 m to the north of Bath Quays Waterside. By the early Holocene, the main channel of the river is likely to have migrated slightly to the south of St James Parade (Halsey et al. 2015, 24, 33, figs 15, 21-23), which suggests that at this date the Bath Quays Waterside site would have lain within, or to the south of, an active river channel. It is uncertain exactly when the River Avon assumed its present course, but it is unlikely to have occurred much before the medieval period, thereby negating the likelihood of finding earlier remains in this part of the floodplain.

Archaeological and Historical Background

Prehistoric Activity on the Avon Floodplain

SouthGate shopping centre excavations uncovered an extensive Early-Late Mesolithic flint scatter spread across a low rise to the north of an early Holocene river channel (Brooks 2015, 178-79). Mesolithic worked flint has also been found in various city-centre locations, with particularly large quantities occurring near the geothermal springs, which suggests that they were a focus of significant activity at this date, though it is unclear if these remains represent seasonal campsites, or longer term occupation. Neolithic arrowheads have also been found near the springs, indicating their continued importance in the later prehistoric period (La Trobe-Bateman and Niblett 2016, 33). There is extensive evidence for Bronze Age activity on the downs above Bath, but within the valley it is largely restricted to chance finds of metalwork (ibid., 31-33). By the Iron Age, small farmsteads had been established on the gravel terraces of the Avon Valley, though the area around the hot springs appears to have been wooded during this period (ibid., 33).

Roman Bath

The origin of the Roman town, named *Aquae Sulis* after the native goddess *Sulis*, is thought to stem from the foundation of the temple of *Sulis Minerva* in the 1st century AD (La Trobe-Bateman and Niblett 2016, 44). Bath's Roman archaeology, especially the Temple of *Sulis Minerva* and the baths complex, are amongst the most famous and important Roman remains north of the Alps, and marked the beginning of Bath's history as an urban settlement (B&NESC 2010 and 2016).

Aquae Sulis was enclosed by a wall, probably constructed during the later Romano-British period, which encompassed an area of approximately 10 hectares. Cunliffe and Davenport (1985) suggest that rather than being a conventional defensive wall, it may have been a temenos boundary, constructed to define a sacred area or, alternatively, to enclose the principal buildings within the town centre, rather than the entire urban area, which extended northwards along Walcot Street.

Bath Quays Waterside lies approximately 100 m to the south of the town wall, and as noted above, the present course of the River Avon may differ substantially from its position during the Romano-British period. It is therefore probable that the Bath Quays Waterside site would have lain, at least partially, within an active watercourse during this period.

There are currently three geothermal springs in the centre of Bath, though others, now blocked, may have risen from the valley floor at various times. The largest, known as the King's Bath spring, formed the heart of the temple complex. The Hot or Hetling spring and Cross Bath spring were also utilised during the Romano-British period, and their outfall, which flowed in a south-westerly direction, may have had a confluence with the River Avon within or close to the Bath Quays Waterside site.

The Post-Roman and Saxon Town

The collapse of Roman Imperial authority following the withdrawal of the army in AD 410 has traditionally been viewed as coinciding with the rapid abandonment and dereliction of *Aquae Sulis*. However, more recent archaeological work has shown that although many buildings became derelict, there is evidence of activity within the settlement in the 5th–7th century AD, though on a reduced scale (La Trobe-Bateman and Niblett 2016, 107–11).

Though disputed, 'The Ruine', an evocative 8th-century poem, written in Old English, is considered to refer to Bath:

Wondrous masonry, shattered by fate. The stronghold has burst open; the handiwork of giants is mouldering. The roofs have fallen, the towers are in ruins... (translation by Manco 1998a, 34, 39).

Excavations in and around the Roman Baths have uncovered tumbled stonework and collapsed roofs of strikingly similar appearance to the descriptions in the poem. These remains include the Temple of *Sulis Minerva*, which appears to have been demolished sometime after the mid-5th century AD, possibly at the instigation of Christian iconoclasts, though this has not been proven (La Trobe-Bateman and Niblett 2016, 108, 111). The adjacent Great Bath probably

went out of use in the late Romano-British period, or soon after, but the west, and possibly east, baths may have remained in use during the Saxon period (La Trobe-Bateman and Niblett 2016, 110; Cunliffe and Davenport 1985, 78; Manco 1998a, 34–5).

The Anglo-Saxon Chronicle, which was compiled in the 9th century AD, states that Bath was captured by the West Saxon Kings Cuthwine and Ceawlin following the Battle of Deorham (or Dyrham) in AD 577 (Sims-Williams 1990, 23). According to a 12th-century copy of the foundation charter for Bath monastery, King Osric of the Hwicce established a convent with 100 hides of land at Bath in AD 675 (La Trobe-Bateman and Niblett 2016, 112; Sims-Williams 1974, 2), though it has been suggested that this may have been a re-founding of an existing late Roman church (Davenport 2004, 32). The convent was granted further lands in AD 681, but a charter of AD 757 records land granted to 'the brethren of the monastery of St Peter', implying that it was a male institution by this date (La Trobe-Bateman and Niblett 2016, 112; Sims-Williams 1974, 8).

Following King Alfred's defeat of the Danes in AD 878, a system of fortified towns or forts, known as *burghs*, were constructed to defend the Kingdom of Wessex against renewed attack, one of which was Bath. To improve the town's defences, the Roman town wall was refurbished and a new street pattern was laid out to facilitate rapid access to the defences. A defensive ditch outside the town wall was probably dug or cleaned out at this date (La Trobe-Bateman and Niblett 2016, 118–22).

Towns in the south-west of England are largely aceramic between the end of the Romano-British period and the 9th century AD. Consequently, archaeological remains of this date can be hard to detect, particularly in places such as Bath where residual Roman pottery is abundant. By contrast, evidence of 10th-century occupation, dated by pottery and other finds, is widespread in the town, indicating that it had attained a significant size by this date. Its status was confirmed by the holding of the Witan (an assembly of the king's council, comprising the most important secular and ecclesiastical noblemen of the kingdom) in the town in AD 901, and the coronation in AD 973 of Edgar, first King of all England, at the monastery. King Edgar encouraged monks to follow the Rule of Benedict, and as a result the monastery became an abbey. The Domesday Survey of AD 1086 records 178 burgesses in Bath, and it has been estimated to have had a population of approximately 1,100 (La Trobe-Bateman and Niblett 2016, 2, 123).

In contrast to the central area, the evidence for pre-13th-century activity outside the town walls is sparse. Saxo-Norman remains, comprising field ditches and pitting, have been recorded on the Ham meadow at SouthGate. The interpretation of these features is uncertain, but it may indicate that there was some form of extramural occupation by this date. A Saxo-Norman causeway crossing the burghal ditch was recorded immediately outside the South Gate, but it is unknown if this was a pre- or post-Conquest feature (Barber *et al.* 2015, 90).

The Medieval City

In AD 1088, King William II appointed John of Tours (also known as John de Villula) as Bishop of Wells. Two years later he was appointed as Bishop of Bath, and was granted the royal estate of Bath, which included the town and abbey. The Bishop immediately moved the episcopal seat to Bath and started rebuilding the town and abbey, which had been ransacked and burned during the Rebellion of AD 1088. As the seat of a bishop, the abbey became a cathedral priory, thereby changing the settlement's status from town to city.

Bath's new status boosted the local economy and population, leading to the growth of suburbs outside the city gates (Fig. 2.2). The largest suburb lay to the north of the town, along Walcot Street and Broad Street. The southern suburb was focused along a single road, Southgate Street, which was occupied by the early 13th century, but may have been established in the late 11th or 12th century, possibly at the instigation of John of Tours. At the southern end of the street there was an early 13th-century five-arched stone bridge over the river. Named St Lawrence's Bridge after a chapel perched on one of its central piers, the structure incorporated a gatehouse that defended the only access to the city from the south (Barber et al. 2015, 49, 91). Twelfth-century pitting has been recorded outside the West Gate, suggesting that there may also have been some development in this location (La Trobe-Bateman and Niblett 2016, 150).

The east side of Southgate Street was probably lined with houses by the end of the 13th century, but the west side developed more slowly, and there were undeveloped garden plots along the southern half of the street as late as the 17th century.

In the 14th and 15th centuries, Bath was a thriving centre of the wool trade. However, the decision to relocate the Bishop's seat to Wells in the early 13th century led to a gradual decline of the priory, and by the 15th century the church and cloistral buildings were in a semi-ruinous condition (La Trobe-Bateman and Niblett 2016, 2). Rebuilding of the priory commenced in the early 1480s, though the appearance of the present church owes much to the involvement of Bishop King between *c*. 1500 and 1503. The church, subsequently known as Bath Abbey, was largely, though not entirely, complete by the time of the Dissolution (Monckton 2008, 9–14).

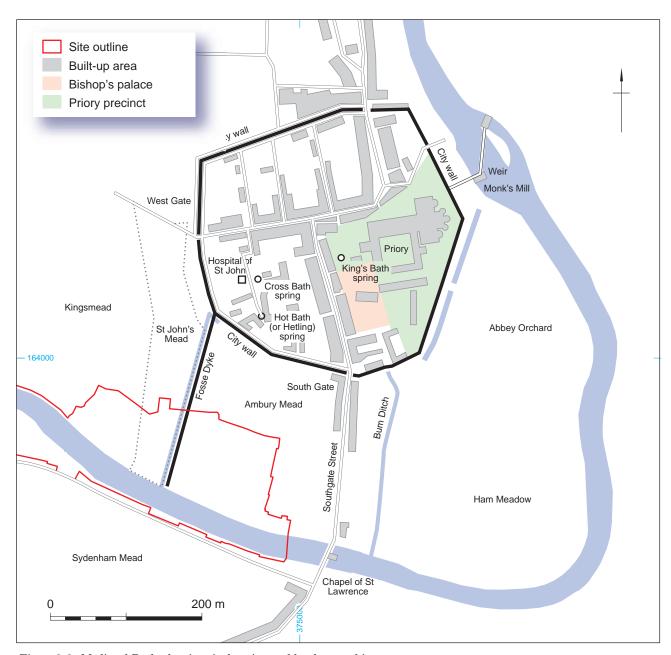


Figure 2.2 Medieval Bath, showing site location and land ownership

Ambury, Kingsmead and the Hospital of St John

Ambury Mead, also simply known as Ambury, lay immediately to the west of Southgate Street. This meadow was managed by, and named after, the almoner of the priory, whose house was located at the northern end of Southgate Street. The western boundary of Ambury was defined by a large ditch, sometimes referred to as the 'Fosse Dyke', which carried the outfall of the Hot (or Hetling) and Cross Baths to the river (Barber *et al.* 2015, 49; Chapman 1997, 3; La Trobe-Bateman and Niblett 2016, 150). This ditch defined the boundary between St James's

parish in the hundred of Bath and Walcot parish in the hundred of Bathforum. It also delineated the extent of Corporation jurisdiction prior to 1590. The land to the west of the dyke was known as Kingsmead (Kevil 1996, 26; Davenport 2002, 96).

In about 1180, Bishop Reginald founded the Hospital of St John for the 'support of the poor of Bath' on a small plot between the Hot Bath and the intramural road. He also granted the hospital a meadow outside the city's West Gate where they constructed the hospital's barn. In the 13th century, the hospital was granted a further parcel of land to the west of the Fosse Dyke; this land became known as St John's Mead and later as Little Kingsmead

(Manco 1998b, 16, 31, 34, 108); the remaining part of Kingsmead gained the epithet 'Great'.

Great Kingsmead formed part of the priory's Barton Grange which, along with its flock of 360 sheep, was leased to Henry Bewshin and his descendants from at least 1518 until after the Dissolution (Kevil 1996, 34–5).

The Dissolution and After

Bath Priory was suppressed in 1539 and its property was seized by the Crown (Davenport 2002, 168). St John's Hospital survived the Dissolution because it had a secular master, and was therefore not considered to be a religious institution (Manco 1998b, 53).

In 1543, 'Ambyre Meade', along with the priory and Ham meadow, was granted to Matthew Colthurst, auditor of Henry VIII's newly acquired monastic lands and MP for Bath in 1545. Barton Grange, which included Kingsmead, was retained by the crown until 1547, when it was granted to Sir William Herbert, guardian to the 10-year-old king, Edward VI. Herbert renewed Henry Bewshin's lease of the grange and its ewe flock, then sold the property to Matthew Colthurst the following year. Colthurst died in 1559 and the Grange passed to his 15-year-old son Edmund (Kevil 1996, 36; Bindoff 1982). In 1572, Edmund Colthurst gave the shell of the priory church, by then referred to as the Abbey Church, to the city (Davenport 2002, 169).

In 1580, a mason was paid 6s to 'make the wall between St James's Ground and Kingsmead' (Barber et al. 2015, 49; Wardle 1923, 49). Savile's map of c. 1600 (Fig. 2.3), which is the earliest accurate plan of the city, and Speede's map of c. 1610, both show the Fosse Dyke as a watercourse flanked by a crenellated wall.

In 1591, Edmund Colthurst sold the Barton Grange to the Bristol MP Sir George Snigg (or Snigge). By this date, the grange was tenanted by Henry Bewshin's grandson-in-law, William Sherston (or Shareston). Sherston was a prominent local politician who served as the city's chamberlain in 1579-80, mayor on seven occasions between 1581 and 1608, and MP for Bath between 1584 and 1604. In 1590, Bath's status as a city was confirmed by Royal charter and Sherston was reputedly responsible for extending the city's jurisdiction to include the whole of Bathforum hundred. George Snigg died in 1617. The estate then passed to his son William, who was involved in a legal battle with Sherston over the rights of the Bath citizens to graze their animals on the Barton Grange. The upshot of the case, which was arbitrated by Nicholas Hyde, recorder of Bath, was that some of the land was granted to the city for use as a common; the remainder was retained by Snigg and his



Plate 2.1 Section across the medieval 'Fosse Dyke' (S1), culvert S19 and wall S2, from the west

heirs. In 1635, Snigg assigned the remaining portion of Barton Grange, including Great Kingsmead, which is specifically mentioned, to his sister Mary Jackson for a term of 80 years, on the condition that she paid off his debts (Kevil 1996, 35–7; Hasler 1982a; 1982b).

By 1656, Walcot Manor (including Barton Grange) was held by Thomas Saunders the Elder, who may have inherited it via Mary Jackson (Kevil 1996, 38). In 1687 the manor was held by William Saunders, probably a descendant of Thomas Saunders, who conveyed the property to his son-in-law Robert Gay in 1699 (Kevil 1996, 38).

Archaeological Remains

The Fosse Dyke

Ditch, wall and bank

The earliest archaeological feature on the site was a 7.3 m wide ditch (S1; Figs 2.4 and 2.5; Pls 2.1–2.3). This feature, known as the Fosse Dyke, formed the boundary between St John's Mead/Little Kingsmead (OA1) and Ambury (OA2). The top of the ditch was recorded at 16.6 m OD and it was hand-excavated to a maximum depth of 1.2 m. Hand-augering below this level showed that the ditch was over 2.4 m deep. The lower fills were not excavated, as they were deep enough to be preserved in situ. The ditch had steep or undercutting sides and the lower fills (seen during hand-augering) contained organic remains, indicating that the ditch was water-filled when in use. This is consistent with the dyke's documented use as an outfall from the Hot and Cross Bath springs. The upper ditch fills contained charred grains of wheat (Triticum aestivum/turgidum) and barley (Hordeum vulgare) derived from domestic crop-processing activities, and the seeds of docks (Rumex sp.), trefoil (Trifoliae), and

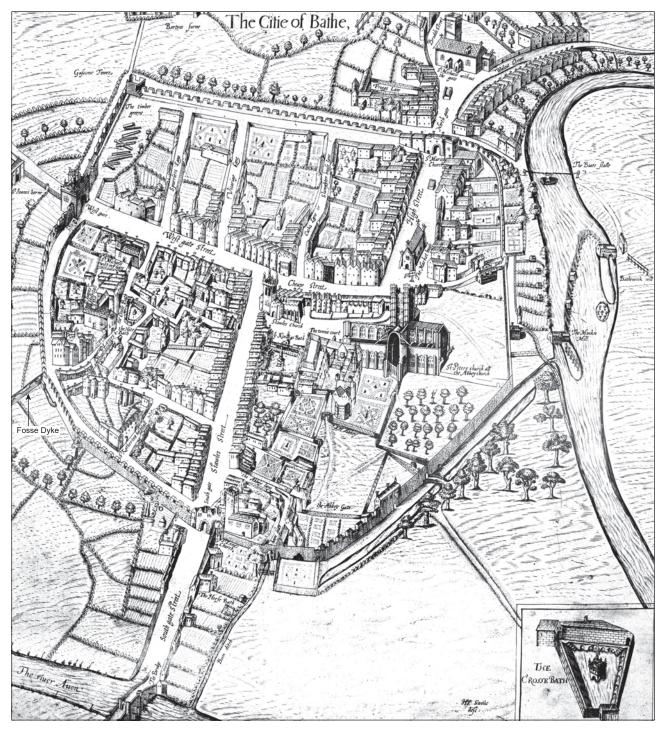


Figure 2.3 Henry Savile's map, c. 1600

grasses (*Lolium* and *Festuca*) as well as hazelnut shells (*Corylus avellana*) (Wessex Archaeology 2017, 57–8). No datable finds were recovered from the ditch, but given that it followed the line of a documented 13th-century boundary, it seems probable that it dates from the medieval period, if not earlier, though it is likely to have been periodically cleared out in later periods.

The east side of the ditch cut natural alluvial silts, which were found to overlay a low (up to 0.3 m thick), 6.5 m wide, earth bank (S3; Fig. 2.6), the

upper surface of which was recorded at 16.4 m OD. The bank material comprised mid-brown silt that contained occasional fragments of limestone, a sherd of Roman pottery, and nine sherds of medieval pottery, including 13th–15th-century glazed wares; all sherds are heavily abraded. Charred grains of wheat (*Triticum aestivum/turgidum*) and oat (*Avena* sp.) and grass (Poaceae) seeds were also recovered (Wessex Archaeology 2017, 57–8), which suggests that the bank material contained a domestic refuse component.



Figure 2.4 Plan of medieval features

The riverside location would have made the bank very susceptible to erosion by seasonal flooding and, as a result, only a fraction of its original height survived.

Limited excavations immediately to the east of the Fosse Dyke showed that bank S3 overlay a 0.21 m thick dump of pale brown silt mixed with angular Bath Stone rubble, the upper surface of which was recorded at 16.2 m OD. Below this, there was a further 0.17 m thick deposit of greyish-brown sandy silt that contained fewer Bath Stone fragments. Only a very small area of these deposits was exposed (most lay beneath the level of construction formation), however, their composition indicates that they were deliberately dumped and may represent part of an earlier bank. Given that these bank deposits were stratigraphically earlier than ditch S1, it seems probable that an earlier cut of the Fosse Dyke may exist below the level of excavation.

Bank S3 (1867) was overlain by a 0.3 m thick layer of alluvial silt (1201), which was cut by the foundations

of a revetment wall (S2) on the east side of ditch S1 (Figs 2.4 and 2.6; Pls 2.1–2.3). Wall S2 was 0.8 m wide, 0.6 m high and constructed of rough-hewn Bath Stone blocks bonded with clay. This structure is likely to be the foundations of the crenellated 'wall between St James's Ground and Kingsmead' that was constructed or repaired in 1580.

Cart ruts and bridge

Wall S3 is also depicted on Gilmore's map of 1694 (surveyed 1692), which in contrast to earlier maps does not show crenellations. Gilmore's map also shows a trackway that crossed the southern end of the Fosse Dyke in two places (Fig. 2.7).

Archaeological remains of the southern trackway comprised cart ruts and erosion hollows where it crossed the Fosse Dyke (Fig. 2.8). The ruts (S9) were infilled with dumps of clinker and ash that contained 74 late 17th-/early 18th-century potsherds and 33 clay tobacco pipes stamped with makers' marks. Most

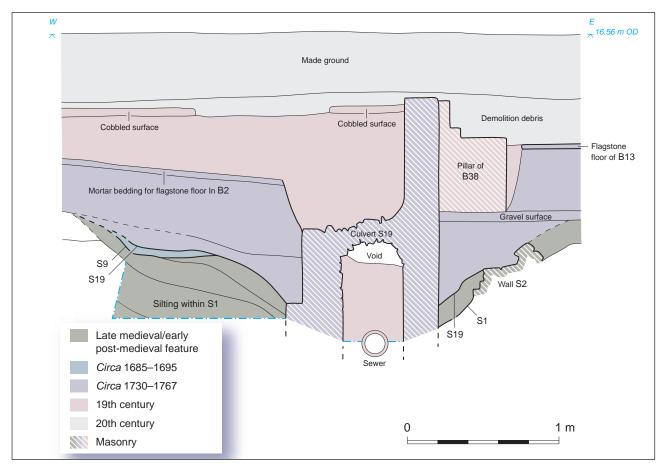


Figure 2.5 Section of the Fosse Dyke (S1), 18th-century culvert S19 and overlying deposits



Plate 2.2 Late medieval/early post-medieval wall S2, from the south-west



Plate 2.3 Late medieval/early post-medieval wall S2, from the west

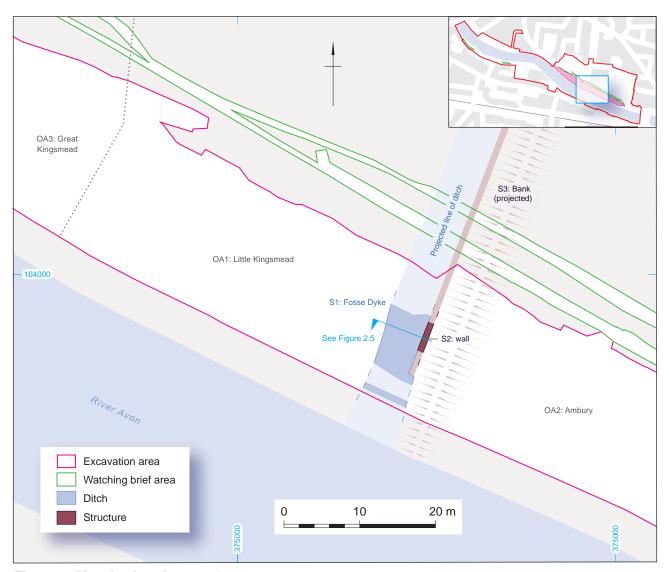


Figure 2.6 Plan of 13th-16th-century features

of the pipes date from 1664–1710, three were made 1685–1737, and one dates from 1675–1710. The absence of certain commonly found marked pipes of later date suggests that the ruts were infilled c. 1685–95 (Lewcun 2019, 5–6; see *Finds from the Cart Ruts Under the Footbridge*; Pls 2.4–2.5).

To the north of the cart ruts there was a line of postholes (S4), indicating a former fence line. Marked clay tobacco pipes were recovered from two of the postholes, one dated to 1654–95; the other to 1664–1710. The fence line is depicted on Gilmore's plan, suggesting that it was constructed before 1692, and is therefore contemporary with the cart ruts.

The clinker-filled cart ruts were cut by the foundations of a small stone footbridge (S6; Fig. 2.8; Pl. 2.6), which was constructed of roughly-hewn Bath Stone blocks, with cut-stone voussoirs forming a neat, round, 1 m wide arch, with a cobbled footway above. The bridge was 4.7 m long, 2.4 m wide at its

western abutment, narrowing to 1.5 m above the arch. Given that the earlier track (indicated by the cart ruts) would have traversed the water-filled Fosse Dyke, it seems probable that there was an earlier, possibly wooden, bridge in this location. A single stone-packed posthole (S5) recorded adjacent to, and partially below, the bridge's eastern abutment could potentially have been associated with an earlier bridge, but this could not be confirmed. No direct dating was recovered from the bridge structure itself, but the fact that it truncated the clinker-filled cart ruts indicates that it certainly post-dates 1685. The bridge is not shown on Gilmore's plan, which may indicate that it was built after 1692, but this is uncertain, as the cartographer may simply have omitted this detail. Bridge S6 was abutted by stone culvert S19, which was probably constructed in the late 1730s, giving the bridge a potential construction date of c. 1685–1735.

Plate 2.4 Clay tobacco pipes from cart ruts S9

Finds from the Cart Ruts Under the Footbridge

Clay Tobacco Pipes

Clay tobacco pipes have provided close dating for several key deposits at Bath Quays, including the dumps of clinker and ash infilling the cart ruts (S9, Pl. 2.4). This deposit not only contained a large number of clay pipes, but it also produced a tight date bracket for the construction of the bridge itself, as the ashy deposit extended below the structure. Ninety-two fragments of pipe were recovered from this deposit, and the products of three pipemakers were present. All of the bowls are of the spurred variety and thus date to after c. 1685, and the makers' marks are all on stems. Twelve of the pipes are marked with the name of Richard Greenland of Norton St Philip, who died in 1710 (Lewcun 1994, 129), while an additional 12 bowls and spurs are from his moulds. Two stems bear the name and initials of James Pobjay of Norton St Philip, who was working no earlier than 1685, while there is a single stem marked with the name of John Ducy, who worked in nearby Tellisford from around 1675 until his death in 1710

Continues next page



Plate 2.5 Pottery from cart ruts S9

(Lewcun in prep.). These pipes alone date the deposit to sometime between 1685 and 1710. It is the absence of any pipes by Robert Carpenter in the deposit which tightens the date of both the other pipes and bridge even further. Born in 1674, Carpenter would not have been making pipes under his own name until around 1695, bringing the date bracket for the deposit down to 1685–95. This tighter bracket is supported by the absence of any pipes by the brothers John and Robert Tylee, working from after 1694, whose workshops were just a stone's throw away in Widcombe, on the opposite bank of the River Avon (Lewcun 1994, 127).

Pottery

The dating provided by the clay pipes is supported by the pottery. Eighty-five sherds came from the ashy deposit (Pl. 2.5). This group is dominated by redwares (74 sherds), including trailed and sgraffito slipwares in various utilitarian forms, but also including some tablewares (flanged bowls and dishes for eating, convex and flared bowls for food preparation, jugs for serving drink, jars

for food storage, a chamberpot). The smattering of other wares includes German stonewares (two Frechen jugs and a Westerwald tankard), yellow slipware (cup or chamberpot) and tin-glazed earthenware. Of interest are two sherds of possible biscuit ware, waste from the manufacture of tinglazed earthenware (this is known to have been made in Bristol, but there is no evidence of its manufacture in Bath), but these could just be very abraded tin-glazed sherds. The absence of white salt glaze (c. 1720-80) and any other later refined wares suggests a date no later than the first two decades of the 18th century, and in fact the only sherd which is unlikely to be earlier than 18th century is an iron-dipped English stoneware; the remainder could be accommodated within the second half of the 17th century.

Glass

Three fragments of glass from the dump deposit all belong to free-blown green wine bottles of 'onion' form and comprise two bases and one string rim. These can be dated c. 1680-1730.



Plate 2.6 c. 1685–1735 bridge S6, from the west

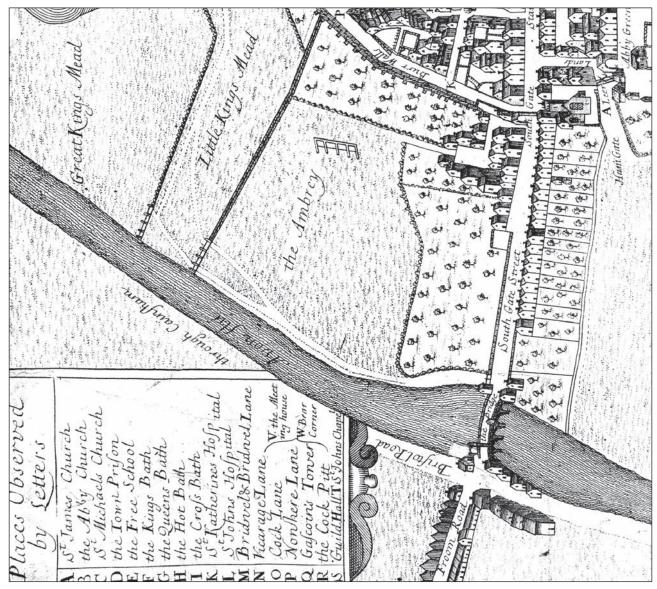


Figure 2.7 Detail from Joseph Gilmore's map, 1694



Plate 2.7 Post-medieval quarrying (S7) in St John's Mead/Little Kingsmead, from the north-east



Figure 2.8 Plan of late 17th-early 18th-century features

Land Use in Ambury and Kingsmead

Prior to the 18th century, Ambury and Kingsmead were undeveloped meadows, predominantly used as pasturage. Gradual accretion of alluvial silts derived from episodic seasonal flooding continued to raise the level of the floodplain, and by the early 18th century the surface of the meadow lay between 16.9 m and 17.3 m OD.

Ambury (OA2) was a single large enclosure. Kingsmead was split into two parcels of land; Great Kingsmead (OA3) and St John's Mead/Little Kingsmead (OA1). The boundary between the two was defined by a 2 m wide ditch (S8; Fig. 2.8), the upper 0.3 m of which was excavated. The uppermost fill of the ditch contained a clay tobacco pipe bowl dated to 1694–1739 and another of 1700–10, which indicates that it was probably infilled in the early 18th century. This ditch formed the eastern boundary of the lands of the Hospital of St John, perhaps indicating that it is likely to have earlier, probably medieval, origins.

The southern end of Little Kingsmead was heavily quarried in the post-medieval period. The quarries were irregularly shaped and ranged between 3 m and 14 m across. Quarry S7 (Pl. 2.7) was fully excavated to a depth of 0.8 m. The other quarries were all deeper, but their bases lay below the level impacted by the development and were therefore not fully excavated. The date of the quarries is uncertain, but the fact that the cart ruts crossing the Fosse Dyke appear to have respected them suggests that they remained open at the end of the 17th century. Finds from their infill indicate that they were finally backfilled shortly before Avon Street was laid out in the late 1720s (see Chapter 3). A further isolated quarry (S10) in Great Kingsmead contained late 17th-/18th-century pottery and is therefore broadly contemporary with the quarries in Little Kingsmead. Quarries were also recorded in Ambury, but these respected the lines of 1760s property boundaries, indicating they are later features (see Chapter 3).

Discussion

The excavation confirmed that the boundary between Kingsmead (in Walcot parish) and Ambury (in St James' parish) was defined by a substantial artificial watercourse - the Fosse Dyke - which served as an outfall for the Hot and Cold Baths. This feature, which also defined the extents of city jurisdiction prior to 1590, is likely to have existed by the 13th century, when part of Kingsmead was granted to the Hospital of St John, but its origin remains uncertain. It has been postulated (B&NESC 2014) that the Fosse Dyke originated as a defensive outwork constructed by King Stephen during a civil war known as The Anarchy (AD 1135-53), but there are other, more prosaic, explanations. The dyke may have been dug to demarcate the western boundary of the Southgate suburb. Although the date of the suburb's creation is uncertain, it is probable that it was laid out during John of Tours' tenure as Bishop of Bath (AD 1090-1122). The dyke also had a very practical function: it was the main drain for the geothermal springs on the west side of the town, and the possibility that it had much earlier, possibly Roman, origins cannot be discounted.

The crenellated wall depicted on the earliest maps of Bath appears to have been constructed between the 13th and 16th centuries. A 1580 documentary reference to the building of a wall in this location provides a plausible date for its construction, though

this could refer to a repair of an existing structure; this work is likely to have been funded by the owner of Ambury, Edmund Colthurst. Although the crenellations could have had a practical use as a defence, it is perhaps more likely that they were a decorative feature, designed to match the existing city wall and demarcate the extents of Corporation jurisdiction.

The purpose of the post-medieval quarries in Little Kingsmead is uncertain. The deeper ones could potentially have been dug to extract gravel (which occurs in this location at approximately 14 m OD), but quarry S7 was only deep enough (15.9 m OD) to reach alluvial sandy clays. The latter could have been used in brick- or tile-making, but there was no archaeological or historical evidence for this on or near the site.

The pathway along the north bank of the river was certainly in use by the 1690s, though it probably existed before this date. If so, then there is likely to have been a bridge over the Fosse Dyke for as long as the pathway had existed. The excavated stone footbridge, which was constructed c. 1685–1735, straddles two landholdings: the land to the west was owned by the Hospital of St John; while the land to the east formed part of the Gay estate. The bridge could therefore have been built by either landowner, or potentially by the lessees of the Hospital of St John's as part of the development of Little Kingsmead in the late 1720s (see Chapter 3).

Chapter 3 The Quay and the Spa: Building and Provisioning Georgian Bath, 1729–60

Historical Background

The Spa

In the mid-16th century, there was a spate of medical writings extolling the benefits of mineral waters, one of which specifically recommended the curative powers of the hydrothermal waters at Bath (Davis and Bonsall 2006, 67). This led to a gradual increase in wealthy visitors to the city, including royalty, and it was the latter, beginning with Queen Elizabeth I in 1574, and continued by the early 17th-century Stuart kings, that helped popularise the city amongst the aristocracy. Following the interregnum of the English Civil War and Commonwealth (1642–60), royal visits were resumed by King Charles II in 1663, and there were frequent visits by Princess Anne of Denmark, the future queen of England, who came in search of a cure for gout and dropsy in the 1690s (Davis and

Bonsall 2006, 75). Recognising the potential value of aristocratic patronage, Bath Corporation began laying on public celebrations of the royal visits. Private entrepreneurs and the Corporation also provided other entertainments, including theatrical performances, games courts and tree-lined walks (*ibid.*, 75–6).

Despite the increasing numbers of wealthy visitors, Bath at the end of the 17th century was still a small settlement of just under 3000 inhabitants, most of whom lived within its medieval walls (Davis and Bonsall 2006, 77). Little changed in the first two decades of the 18th century and the pace of development remained slow (Fig. 3.1). This was due in part to the city's abysmal transport links; poorly maintained roads across the steep surrounding hills were the only means of access to the city (Fig. 3.2). Although there had been some improvements following the formation of the Bath Turnpike Trust in 1707, transporting heavy goods remained difficult

Aquæ Solis Iuly 21.1723. From the top of the Southern hill.

Figure 3.1 Aquae Solis July 21 1723. From the top of the Southern Hill, published in William Stukeley's Itinerarium Curiosum, 1724

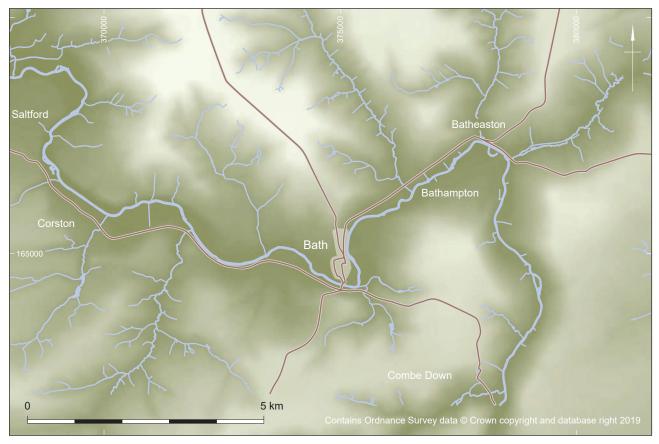


Figure 3.2 Topography of the Avon Valley and major pre-18th century roads into Bath

and expensive. This had not always been the case: in the medieval period, the River Avon was navigable between Bath and the Port of Bristol, but by the 14th century, mills and weirs were beginning to obstruct the river, and by the post-medieval period, it was impassable to cargo vessels (Buchanan 1996, 63; Boyes 1987). By the 17th century, it was becoming clear that for the city to thrive, transport improvements were needed.

The Avon Navigation

In 1619, the Mayor and Corporation of Bath obtained a Letters Patent that secured the right to make the river navigable between Bristol and Bath, but nothing further was done. Plans for a river navigation were mooted again in the 1650s and 60s, but again to no avail. During the 1690s, the Corporation made a sustained effort to obtain an Act of Parliament to make the river navigable, but it was defeated by their opponents; principally the owners of six mills, and some of the local farmers and gentry who feared for the value of their land and goods at market (Buchanan 1996, 64; Latimer 1900, 71; Willan 1936, 11-15). In 1712, the Corporation finally succeeded in obtaining an Act of Parliament to allow the creation of a river navigation. The Act stated that the navigation would be:

very beneficial to trade, commodious and convenient for the persons of quality and strangers (whose resort thither is the principal support of the said City of Bath), advantageous to the poor and convenient for the carriage of free-stone, wood, timber, and other goods and merchandise, to and from the said cities and ports adjacent, and will very much tend to the employing and increase of watermen and seamen, and be a means to preserve the highways near and leading to the said City of Bath (which formerly being made ruinous and almost impassable are now repairing at a very great charge).

Despite the clear benefits to the city, local vested interests were still able to block the Corporation from exercising its rights, and eventually it was decided that the best way to progress the scheme would be to transfer the rights to a private consortium. These rights were granted on 17 July 1724 to a group of local businessmen and politicians who styled themselves the 'Proprietors of Navigation' (Buchanan 1996, 67; TNA RAIL 805). The Proprietors met on 31 December 1724 to appoint three treasurers and open a subscription for the construction of a river navigation. Although nominally headed by 17-year-old Henry Scudamore, 3rd Duke of Beaufort, the Proprietor's chief treasurer, Ralph Allen (Fig. 3.3), became the dominant member of the group (Buchanan 1996, 66-67). A Cornishman by birth, Allen made his first fortune through his



Figure 3.3 The Four Worthies of Bath, c. 1735. Unknown artist, thought to depict from left to right: Richard Jones, Ralph Allen, Robert Gay and John Wood the Elder © B&NES Council

appointment, in 1719, as Postmaster of Bath, and the control of the lucrative cross and bye post (post between towns outside London) that it afforded (Peach 1895, 58–9). He used this wealth to acquire stone mines on the downs to the south of Bath, and therefore had a personal interest making heavy goods transportation as cost-effective as possible. The other treasurers were the physician Dr Charles Bave and Thomas Attwood, a plumber and glazier. Their assistants were Thomas Tyndall, a wealthy Bristol merchant and ship owner whose family business included interests in the transatlantic slave trade; Milo Smith, quarry owner; Francis Bave, apothecary; and John Hobbs, a timber merchant and sail-maker from Bristol (Buchanan 1996, 65-67; BRO Bath Council Minute Book, 17 July 1724; PRO Minute Book of the Proprietors of the Avon Navigation, 31 December 1724). The other Bristol proprietors included two copper manufacturers, two lawyers, and John Hickes, another 'African trader' (Buchanan 1996, 66). The interests of the City of Bath were represented by Lord Noel Somerset and the Bath MPs Field Marshall Wade and John Codrington (Buchanan 1996, 66).

In 1725, the Proprietors appointed the engineer John Hoare, who had successfully completed the Kennet Navigation in 1723, to survey the River Avon and manage the construction programme. Hoare's survey revealed that making the river navigable would require the construction of five locks and a 600-yard cutting at Weston to overcome changes in water levels at mill weirs. Work on the Avon Navigation took two years to complete, and the first barge, loaded with timber and lead for construction, arrived in December 1727 (Neale 1981, 119). Lord Falmouth undertook the first passenger journey on 3 January 1728, followed a few months later by the Princess Amelia, daughter of George III, who described her means of transport as a 'roomy wherry' (Buchanan 1996, 83). By 1740, there were two daily passenger boats running each way between Bristol and Bath (Price 1967, 25).

All that was needed to complete the navigation was a quay at the Bath end. Although a possible site for a town quay had been reserved on the east (upstream) side of St Lawrence's Bridge since 1629, it was eventually decided that a location downstream of the low medieval bridge would be more practical.

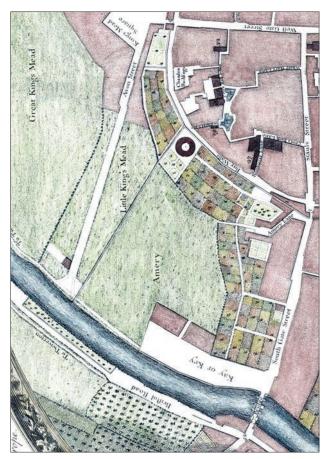


Figure 3.4 Detail from John Wood's A Plan of the City of Bath in the County of Somerset, 1735

Land for the quay, which comprised a 483 by 97 ft (147.2 m by 29.6 m) plot in Ambury meadow, was provided by Robert Gay (Fig. 3.3), surgeon and Tory MP for Bath in 1720–2 and 1727–34, who sold the land to the Proprietors of Navigation for £159 2s 8d on the 8 October 1729 (Buchanan 1996, 76; BRO DP0280/1; Sedgewick 1970). The following year, the proprietors leased two building plots on the north side of the quay to the mercer John Sherbourne and the mason Edward Marchant (BRO DP0280/2-3). The buildings they constructed are shown on John Wood's plan of 1735 (Fig 3.4); Wood later described them as 'eleven houses' (Buchanan 1996, 76; Wood 1749, 331), though most were in fact warehouses.

Construction of the quay and an inclined tramway from Ralph Allen's Coombe Down stone mines in the early 1730s drastically reduced the cost of building materials, and helped fuel a speculative construction boom that transformed the medieval city into today's world-famous 'Georgian City'.

Avon Street

Little Kingsmead meadow and the area immediately outside the city's West Gate were amongst the earliest areas outside the medieval core to be developed. The meadow, along with the rest of St John's Farm, was



Figure 3.5 A detail from Thomas Thorpe's An Actual Survey of the City of Bath, in the County of Somerset, and of Five Miles Round, 1742

leased by John Hobbs (one of the proprietors of Avon Navigation) from the Hospital of St John in 1717 for £410. In 1726, Hobbs commissioned the architect John Strahan (or Strachan), whom he had previously employed in Bristol, to set out streets (Kingsmead Square, Beaufort Square and Avon Street) for building (Wood 1749, 242; Manco 1998b, 108). Kingsmead Square, Beaufort Square and the northern end of Avon Street were constructed in the late 1720s and early 1730s as terraces of fine townhouses, designed to accommodate middle-income visitors to the spa (Manco 1998b, 148; Davis 1990, 147). Strahan's main competitor, John Wood the Elder, was unimpressed: in his opinion, the houses in Kingsmead Square had 'nothing, save ornaments without taste, to please the eye' (Swift and Elliot 2005, 280).

Development of the southern end of Avon Street began in the 1730s, but it was incomplete at the time of Strahan's death c. 1740 (Fig. 3.5). In 1749, John Wood the Elder stated that Avon Street 'contains fifty-one houses; which, from a regular and tolerable beginning, have fallen into an irregularity and meanness not worth describing' (Wood 1749, 336). This suggests that more than half the street was built up by this date, and that the social decline that would define the character of the area in the following decades had already begun.

Growth of the Georgian City

In 1728, the architect John Wood the Elder leased land to the north of Beaufort Square from Robert Gay for a new speculative development, subsequently named Queen Square. Constructed between 1728 and 1736 in a monumental Palladian style, Queen Square was an ambitious project on a much grander scale than Strahan's Kingsmead development. Wood went on to design similarly grand buildings along North and South Parades (1740–8) and The Circus (1754–69)



Figure 3.6 AView of Bath, 1750 (BL Maps.K. Top. 37.25.h)

(Fig. 3.6), and within a generation the lodging houses along Avon Street and Kingsmead Square had lost their fashionable clientele to the newly developed areas to the north and west of the city (Davis 1990, 147; Davis and Bonsall 2006, 88–89). The extent of development by this date is depicted in a plan of 1750 (Fig. 3.7) and Robins' Prospect of 1754 (Fig. 3.8).

Archaeological Remains

The Quay

The eastern end of the excavation (Fig. 3.9) was heavily impacted by modern disturbance and there were no surviving surfaces of the 1729 quay (OA4). Archaeological remains of the quay's western boundary, which was defined by a 0.8 m thick Bath Stone rubble wall (S11) did however survive. A stone-lined drain to the east of this wall (S12) may be contemporary with the warehouses on the north side of the quay (constructed c. 1730), but this could not be confirmed.

Avon Street

Avon Street (Fig. 3.10) was laid out in 1726 and the quarries (S7) at the southern end of Little Kingsmead

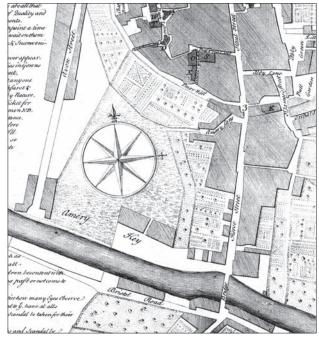


Figure 3.7 Detail from A New and Correct Plan of the City of Bath and Places adjacent, 1750

were filled in soon after. Finds from the backfills of the quarries include marked clay tobacco pipes dated to 1726–63. The quarry infill deposits were cut by a construction trench for the stone culvert of the Avon Street sewer (S13). The sewer was constructed of

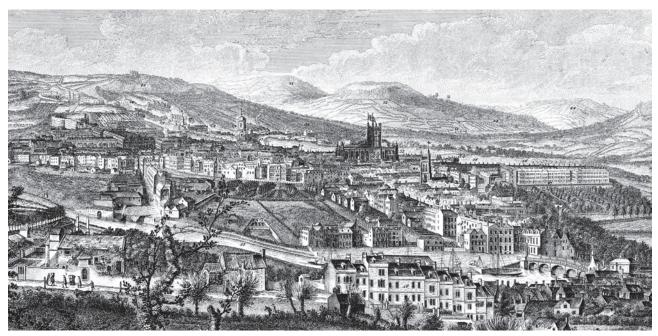


Figure 3.8 Thomas Robins' A South West Prospect of the City of Bath, 1754 (reissued 1757), showing quays and adjacent structures around Broad Quay (right) and Avon Street (left). Apart from a walled enclosure and a single low building, Ambury is depicted as undeveloped

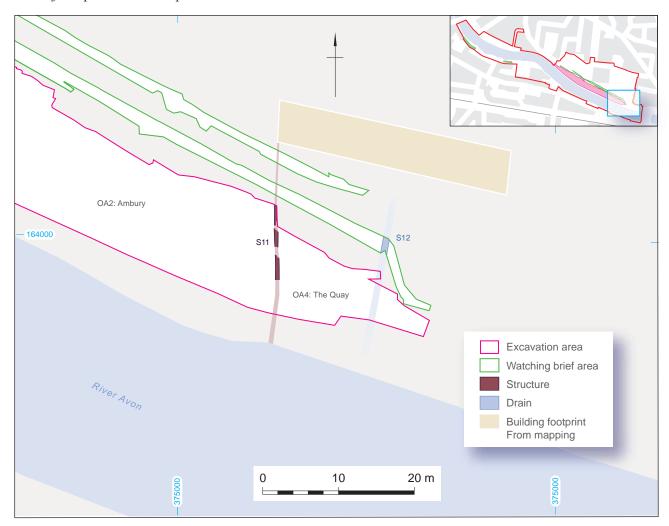


Figure 3.9 Plan of archaeological features around The Quay, c. 1729–60. Building outline based on excavated structures, documentary evidence and 18th-century maps

rough-hewn Bath Stone blocks, and had an inverted egg-shaped internal profile that measured 1.4 m high by 0.9 m wide. The crown of the sewer was sealed by a 0.8–1 m thick layer of made ground that formed a base for the new road and adjacent buildings. This deposit contained clay tobacco pipes dated to 1694–1739 and a mixture of Roman and 18th-century pottery. The presence of Roman pottery suggests that some of the soil originated from contemporary construction works within the city walls.

The southern end of Avon Street was paved with sandstone setts. These were probably first laid in the late 1720s or early 1730s, though in this location they had clearly been lifted and re-laid following a reconfiguration of the quayside in the late 19th century (see Chapter 5). Fragmentary remains of cobbled surfaces were recorded in a few locations around the quayside (OA5), but in most locations the original 18th-century surfaces had been truncated by later activity. Stone-lined

drain S14 was probably contemporary with the adjacent quay.

There was a small dock (S15; Pl. 3.1) with an inclined slipway at the southern end of Avon Street. This structure is depicted on a 1757 engraving by Thomas Robins (Fig. 3.11) and Charles Harcourt Masters' plans of 1786 and 1794 (see Figs 4.5 and 4.6). The dock walls were of Bath Stone rubble construction and the slipway was paved with rounded pebbles set on edge, which incorporated a series of raised ridges set 0.9 m apart; these would have provided additional traction for people and draft horses accessing the dock.

OA6: Garden of 49 Avon Street

The earliest building at the southern end of Avon Street was probably No. 49, which is likely to have been built in the early 1730s. Its rear garden (OA6) fell within the excavation area, but the building itself was located slightly to the north. A 1937 photograph

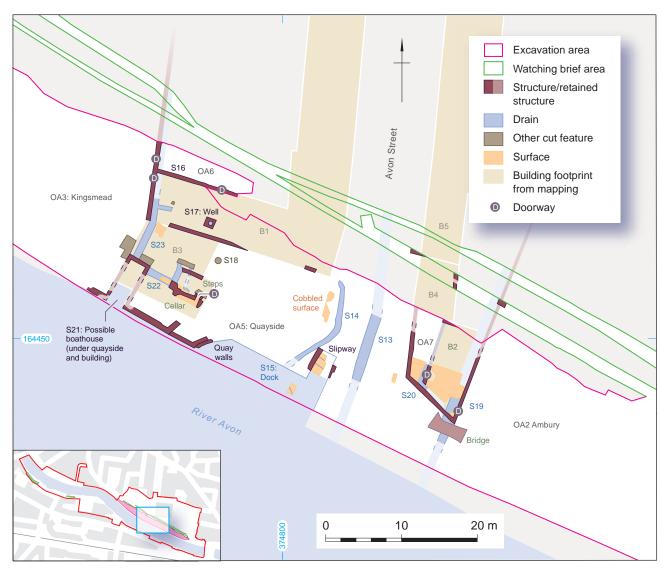


Figure 3.10 Plan of archaeological features at the southern end of Avon Street, c. 1729–60. Building outlines based on excavated structures, documentary evidence and 18th-century maps



Plate 3.1 Late 1730s slipway S15 at the southern end of Avon Street, cut by 19th-century stone-lined drain, from the south-east



Plate 3.2 Late 1730s building B2 (centre), and mid-18th-century houses B6 (left) and B12 (background), from the north-west



Plate 3.3 Late 1730s culvert S19, from the south-west

(see Pl. 7.1) shows this building and an adjacent 19th-century stable (B34; see Chapter 5) shortly before they were demolished. Garden OA6 was bounded by Bath Stone rubble wall S16, which incorporated a doorway that provided access to Kingsmead.

B1: Non-domestic building, Avon Street

Building B1 was a 26.5 m long by 7 m wide structure, constructed of Bath Stone rubble bonded with ashy lime mortar. There were two recorded doorways, both of which were later blocked: one door providing

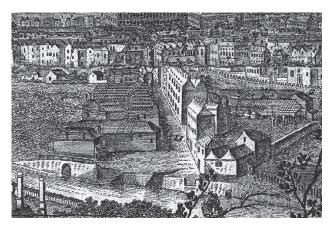


Figure 3.11 Detail of Thomas Robins' A South West Prospect of the City of Bath, 1754 (reissued 1757), including quayside at the southern end of Avon Street, showing slipway S15 and two arched openings to the sides: the smaller of the two (to right) is the outfall for culvert S19; the larger arch (to left) may be a subterranean boathouse (S21) below building B3

access onto the Kingsmead meadow, the other linking B1 to the garden of the house to the north, perhaps suggesting that these properties were related. No internal partitions were evident and there were no surviving floor surfaces. B1 is depicted on Robins' Prospect of 1754 (Fig. 3.11) as a one- or two-storey structure with a hipped roof. This building, which was demolished in 1874, was never given a street number, which suggests that it was probably a non-domestic structure. Stone-lined well S17 was probably contemporary with B1, though the well remained in use long after the building was demolished. A mortar-mixing pit S17, located to the south of B1, was probably associated with the construction of B1, or possibly B3, immediately to the west.

B2: Non-domestic building, Avon Street

Building B2 (Pl. 3.2) was constructed over the Fosse Dyke. Its foundations incorporated a contemporary culvert (S19; Figs. 2.6 and 3.10; Pl. 3.3), which abutted bridge S6, and served as a sewer for the adjacent properties. B2 and S19 were constructed using Bath Stone rubble bonded with ashy lime mortar; the quoins on the southern corner of B2 were of Bath Stone ashlar. Culvert S19 was a substantial arched structure, 0.8 m wide by over 2.85 m deep internally (Pl. 3.3).

B2 had doorways on its south-west and north-west sides. Internally, the building had a Pennant Sandstone flagged floor bedded on lime mortar, though most of the flags were robbed during the 19th century. The floor sagged significantly towards the centre of the room. This was undoubtedly due to subsidence into the soft underlying fills of the Fosse Dyke. There was a small cobbled yard (OA7; Pl. 3.4) to the west of the building, which incorporated a shallow surface drain (S20). The northern end of the building was truncated by house B6 (see Chapter 4).

Building B2 is depicted on Robins' 1754 Prospect (Fig. 3.8), and may have been one of the buildings shown on Thorpe's plan of 1742 (Fig. 3.5), though it is clearly absent from John Wood's plan of 1735 (Fig. 3.4), which suggest that it was probably erected in the late 1730s. Robins' Prospect shows a double-pile, one- or two-storey, building with gables to the south. It was probably a non-domestic structure.

B3: 23–25 New Quay

Building B3 (Pl. 3.5) was heavily truncated by later activity. Surviving elements included part of a cellar and a probable subterranean boathouse dock (S21; Pl. 3.6). The cellar was paved with Pennant Sandstone flags, which were recorded at 16.3 m OD. This is only slightly higher than the 'normal' level of the river; as a result, it would have been subject to regular inundation by seasonal floodwater. Structure S21 was at least 2.5 m deep and measured 6.2 m by 2.2 m internally, indicating that it could only have been used by small vessels. Two drains (S22 and S23) emptied into the northern end of S21, one of which (S23) subsequently became a sewer for properties fronting Avon Street and Milk Street.

Robins' Prospect of 1754 (Fig. 3.11) shows a large arched opening in the quayside: this appears to have been the entrance to S21. B3 is depicted as a relatively small structure, one or possibly two storeys in height, with a hipped roof. Modern truncation had removed any direct association between S21 and the adjacent cellar, though it seems likely that the two were originally linked: the doorway and steps on the north side of the cellar being the only obvious landward means of accessing the subterranean parts of the building. The original purpose of B3 is uncertain, but by 1852 it was divided into three houses, numbered 23–25 New Quay, all of which were demolished in 1874 (see Chapter 5).

B4-5: 46-47 Avon Street

Short lengths of wall related to buildings B4 and B5 were recorded during the watching brief. Both structures, which were probably constructed in the late 1730s or 40s, are depicted in an early 20th-century drawing (Fig. 3.12), which shows B4 (47 Avon Street) as a two-storey house, and B5 (46 Avon Street) as a three-storey double-pile warehouse or corn loft. B5 was later converted for use as a brass and iron foundry (see Chapter 5).

Discussion

Kingsmead Square and Avon Street were laid out in 1726 and by the late 1720s well-built townhouses designed to accommodate wealthy visitors to the spa were being constructed along the new streets. The opening of the Avon Navigation in 1729 led to



Plate 3.4 Late 1730s cobbled surfaces OA7 and drain S20, from the north-west



Plate 3.5 Cellar of 1740s building B3, from the south-west



Plate 3.6 Mechanically-excavated slot at north-eastern end of possible 1740s boathouse dock S21, from the west

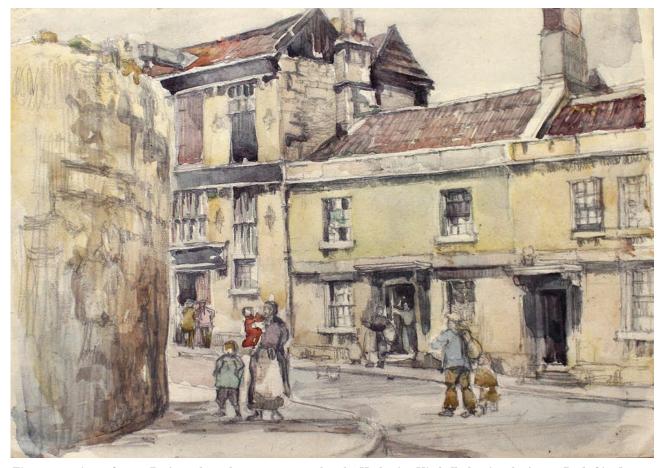


Figure 3.12 Avon Street, Bath, early 20th-century watercolour by Katharine Kimball, showing the former Bath City Iron and Brass Foundry/Walker's Firewood Mill (B5; 46 Avon Street; left), and two late 1730s or 40s houses (B4 and B6; 47–48 Avon Street; centre and right) © Victoria Art Gallery, B&NES Council

rapid commercial development around the newly constructed quay to the west of St Lawrence's Bridge. A second quay and slipway, constructed in the late 1730s or 40s, encouraged further commercial development at the southern end of Avon Street. The majority of buildings around the Avon Street quay were non-domestic structures, probably warehouses or stables, though late 18th-century references to a malthouse and brewhouse in this location (*BCWG*, 31 December 1789; 30 September 1790) suggest that some had other uses.

In contrast to the genteel riverside walks around the west side of the city, the riverbank to the west of St Lawrence's Bridge appears to have been an active commercial zone from the late 1720s onwards. This, coupled with the gradual loss of fashionable visitors to John Wood's new developments in the north (Queen Square and The Circus) and east (North and South Parade) of the city, helped fuel a social decline that would define the character of the Avon Street district in later periods.

Chapter 4

'The Nymphs of Avon Street': Social Decline and Urban Development 1760–1839

Historical Background

The Avon Street District

By the 1760s, Avon Street had acquired a fame of sorts, though not for the reason its architect had intended: it had become the city's principal red-light district. By 1776, one in eight of the buildings on Avon Street was a public house, and many of their publicans supplemented their income by providing rooms for women who worked as prostitutes to practise their trade (Davis 1990, 147, 159).

Early references to brothels on the street include letters from the Whig politician Henry Penruddocke Wyndham, recalling his visits to 'Mother Adams's' in 1762 (Eglin 2005, 96; TNA 44M69/F8/15/5), and a 1766 letter from Rev. John Penrose describing how he and his family took pains to avoid the 'street of ill fame' (*ibid.*, 96; Mitchell and Penrose 1983, 103). The 'nymphs of Avon Street' are also mentioned in Tobias Smollett's (1771) picaresque novel, *The Expedition of Humphrey Clinker*, written between 1768–70.

Part of the reason for the proliferation of public houses along Avon Street was the fact that the slipway at the bottom end of the street was the main watering place for the teams of cart and carriage horses that brought visitors and goods to the city. Pubs and lodging houses, sometimes one and the same, provided refreshment and accommodation for both the drivers and the army of artisans and labourers attracted by the city's construction boom (Davis 1990, 147).

By the later 18th century, Avon Street was becoming seriously overcrowded, as houses were subdivided into multi-occupancy tenements and back yards were infilled with extensions and cramped court dwellings. This created an increasingly unwholesome environment, vividly described in a 1786 letter to the Improvement Commissioners:

I am sorry that the present circumstances makes your attention necessary in Avon Street, which with large quantities of nastiness thrown out by its inhabitants for a whole week together and interspersion of here and there a group of pigs make a perfect dung muckson [sic] from one end to the other. Because tis' Avon Street once a week is thought sufficient for the scavenger to cleanse it, but from the disorderly practices of most of

its inhabitants makes it necessary be swept etc. every day (Davis 1990, 147; Neale 1981, 217).

As the population grew, so too did the prevalence of crime and prostitution. In the early 19th century, Avon Street was described as a 'receptacle for unfortunate women' (Egan 1819, 171–2), where 'at least 300 persons who obtain a living by begging, thieving or the miserable wages of prostitution' lived (Davis 1990, 158; Bath and Cheltenham Gazette, 20 November 1821).

In the 18th century, the city authorities appear to have largely turned a blind eye to the activities of the street's numerous brothel-keepers and petty criminals, but by the early 19th century, attitudes had begun to harden: in 1820 six residents were jailed for brothel-keeping; the following year seven juveniles from Avon Street were sentenced to death for assault and robbery (Davis 1990, 158).

The Kennet and Avon Canal

The Avon Navigation (Fig 4.1) was constructed to meet the needs of local businessmen. It did, however, also happen to follow the line of a long-proposed east—west waterway linking Bristol and London. The idea for this long-distance waterway was first mooted in the late 16th century, but there was no serious effort to build it until the 18th century (Clew 1985, 15–18).

The completion of the Kennet Navigation in 1723 and the Avon Navigation in 1729 (Skempton *et al.*, 2002, 339–40) opened the rivers at either end of the proposed east-west route to trade, but work on the central section, which entailed constructing an entirely new artificial waterway between Bath and Newbury, did not start until the *Kennet and Avon Canal Act* was passed in 1794. By 1801, barges from Bristol and Bath could travel as far as Foxhangers in Wiltshire. The through route to London opened following the completion of Caen Hill Locks in 1810 (Clew 1985, 79–80).

The opening of the Kennet and Avon Canal had an immediate and dramatic impact on transport costs: by 1812, goods could be moved along the canal for less than half the price of road haulage. Reduced transport costs provided an economic boost to towns along the canal, and was of particular benefit to the owners of stone and coal mines in Somerset (Clew 1985, 79–80, 82).

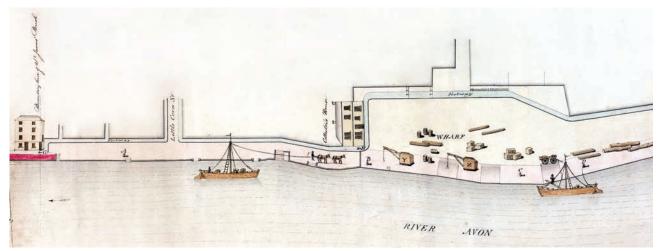


Figure 4.1 Plan of a horse towpath constructed by the Kennet and Avon Canal Company in 1812. Warehouse B7 (left) and Quay House B25 (right) drawn individually © B&NES Council

Most of the goods entering or leaving Bath via the canal would have passed through Broad Quay (formerly known as The Quay), which encouraged further commercial development around the quayside. In 1816, the Kennet and Avon Canal Company purchased a majority shareholding in the Avon Navigation and undertook works to improve the waterway (Clew 1985, 79–80).

Ambury and the New Quay

Following Robert Gay's death in 1738, the Walcot Estate passed to his daughter Margaret, who married a London lawyer named Thomas Garrard in 1739 (BRO 0810/6/1). In 1757, the Garrards divided the southern half of Ambury into five plots that were leased out for development (Fig. 4.2). The central plot was leased to the rough-mason William Selden, who was obliged to finance, construct and maintain a quay wall along the riverfront between The Quay (Broad Quay) and Avon Street. The remaining plots were leased to Thomas Harris, ironmonger, George Clark, carpenter, and two masons named John Ford and Henry Fisher; the latter subsequently sold part of his plot to Charles Milsom. Robins' Prospect of 1754 (see Fig. 3.8) shows some form of structure, possibly a building, and a walled yard to the north of a riverside pathway between Broad Quay and Avon Street. Garrard's lessees were also obliged to pay for the maintenance of a 6 m wide road along the 'New Quay' (BRO DP 665-669).

George Clark and William Selden's plots were separated by a street, which was initially named 'Clement's Buildings' after the mason Thomas Clement, who constructed a row of houses there c. 1765. The name 'Clement's Buildings' was used until 1781, but the street is also variously described as Clark's Lane (c. 1770–1817), Clark's Buildings (1782–1826), Clark's Row (1786–1806) and, from

1819 onwards, Little Corn Street (BRO BC/5/70/1–75; Egan 1819, 171–2). For consistency, the name Little Corn Street will be used throughout this publication.

The buildings on the west side of Little Corn Street were constructed in 1765, the New Quay frontage to the west of Little Corn Street was constructed in 1765-8, and the section between Little Corn Street and Broad Quay to the east was developed in a piecemeal fashion between 1769 and 1779. The buildings on the east side of Little Corn Street were developed in a similarly disjointed manner from the mid-1760s onwards. The histories of the individual properties along these streets are discussed separately below (see Archaeological Remains). A mid-/late 1760s plan (Fig. 4.3) depicts New Quay as fully built up before Little Corn Street was laid out, which is at odds with the documentary and archaeological evidence that the two streets were developed at the same time. Basnett's plan (Fig. 4.4), though lacking in detail, is a more accurate depiction of the extent of development at the start of the 1770s.

Margaret Garrard died in 1765 and the estate passed to her brother-in-law, the Tory MP for Amersham, Sir Bennet Garrard (Namier and Brooke 1964), who promptly leased the northern half of Ambury to speculative builders. By the mid-1770s the northern half of Ambury was fully developed with new streets, namely: Corn Street, Back Street, Lower Queen Street (later Peter Street), and Garrard Street (later Somerset Street) (Hembry 1990, 126; B&NESC 2014).

Great Kingsmead

Sir Bennet Garrard died in 1767 and Great Kingsmead was inherited by Sir Peter Rivers-Gay (BRO 0270/29), who immediately set about leasing out the remaining undeveloped land for construction.

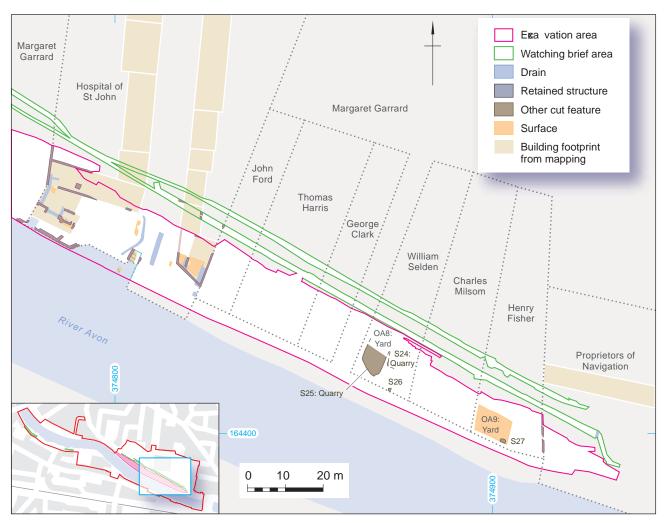


Figure 4.2 Plan of land ownership and archaeological features in Ambury, c. 1760

Milk Street was laid out in the late 1760s and by the mid-1770s the east side of the street was largely built up. Harcourt Masters' *Maps of the Bath Turnpike Roads* (Fig. 4.5) depicts the extent of development by 1786. The area to the west of Milk Street, which remained undeveloped until the 1790s, featured in Richard Brinsley Sheridan's 1775 comedy of manners *The Rivals* as the scene of a farcical duel.

Peter Rivers-Gay died in 1790 (TNA PROB 11/1199/108). His heir, Sir Thomas Rivers-Gay, continued the development of Great Kingsmead by laying out Kingsmead Terrace, Green Park Place and Green Park Buildings, all of which were completed by 1794 (Fig. 4.6). Kingsmead Terrace was constructed on an elevated roadway, with tall houses along the east side only: these formed a visual barrier that demarcated the more genteel areas to the west from the poorer areas to the east (see Pl. 5.1). The area immediately to the west of Kingsmead Terrace was laid out as gardens. To the west of the gardens, there were two minor streets (Dog Lane and Cat Lane), which defined an area of open ground; this plot remained undeveloped until the mid-19th century.

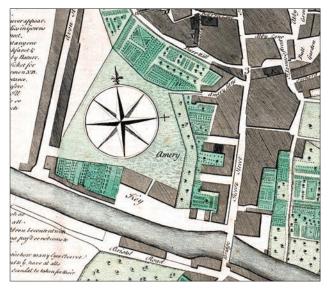


Figure 4.3 Detail from A New and Correct Plan of the City of Bath and Places adjacent, surveyed mid-/late 1760s; published c. 1770. Although this plan depicts New Quay as fully built up, documentary evidence indicates that there were no substantial buildings along the street until 1764, and some plots remained vacant until the 1770s

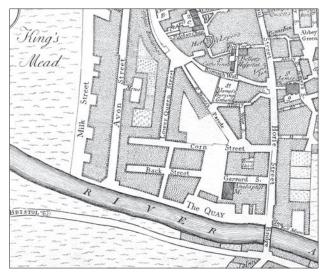


Figure 4.4 Detail from A New and Correct Plan of the City of Bath, published by J Basnett, 1771

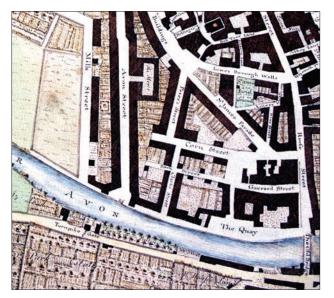


Figure 4.5 Detail from Charles Harcourt Masters' Maps of the Bath Turnpike Roads, 1786

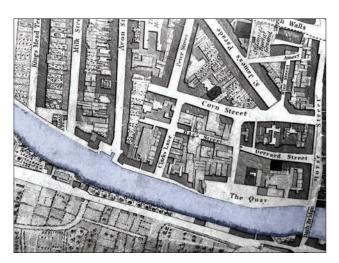


Figure 4.6 Detail from Charles Harcourt Masters' Plan of the City of Bath, 1794

South of the River

In the 18th century, development on the south side of the river was concentrated around St Lawrence's Bridge and opposite Broad Quay, but by the early 19th century the built-up area had begun to expand westwards along the Lower Bristol Road. Most of the buildings directly opposite Broad Quay were industrial (warehouses, a malthouse and an oil cake mill). Further to the west, in Sydenham Mead, there were high-status residential villas (see Chapter 5).

Archaeological Remains

Between 1760 and 1794, the whole of Ambury and the majority of Great Kingsmead were parcelled up and developed as streets of new houses and business premises (Figs 4.7–4.10). The new buildings were all constructed in a similar manner: party walls and foundations were of roughly-squared Bath Stone rubble, either constructed in trenches, or built on rafts of compacted rubble and gravel; external walls and internal partitions were constructed using one or two skins of Bath Stone ashlars. Most of the stonework was bonded using ashy lime mortar, but several of the wells were of dry-stone construction. Most buildings had flagstone floors, though some were originally fitted with suspended wooden floors. External yards were surfaced with rammed gravel or Pennant Sandstone flags or setts.

Quarrying and Pitting in Ambury

There were two steep-sided quarry pits (S24 and S25) within OA8 (Fig. 4.2), both of which were backfilled with re-deposited natural bluish-grey clay. Neither quarry was fully excavated, as they were both deeper than the maximum depth of the construction works, and the only direct dating evidence was two sherds of 17th-/18th-century pottery that were recovered from the upper fill of quarry S25. The quarries respected the alignment of a property boundary between 6 and 7 New Quay, but pre-date the earliest buildings (B15 and B18–B20) on these plots. This suggests that the quarries were excavated after the land was parcelled up c. 1757, but before the buildings were erected c. 1771. The quarries were probably dug to extract sand or gravel for nearby construction works.

There were two other pits (S26 and S27) in Ambury (Fig. 4.2), both of which pre-date the construction of buildings in the 1770s. Pit S26 was a small (0.8 m wide by 0.2 m deep) sub-circular feature that contained two sherds of late 17th-/18th-century pottery. The pit was truncated by the foundations of B18, indicating that it was infilled before 1771.

Sub-rectangular pit S27, which was located within OA9, was 1.5 m wide, 0.8 m deep, and had vertical

sides and a flat base. The pit was backfilled with a mixture of stone rubble and dark loamy soil that contained a small quantity of late 18th-century bottle glass and late 17th-/18th-century pottery. The pit's morphology is suggestive of a latrine, but there were no obvious deposits of cess in its base. The pit was sealed by a compacted surface of crushed Bath Stone gravel, which extended across the whole of OA9.

Roads and Quays

New Quay

The road and river wall along New Quay were built by William Selden c. 1760–4; both structures were completely destroyed by the construction of a new sewer and river wall in the late 1960s. Historic photographs (see Pls 4.37 and 5.7) do, however, show that the river wall was constructed in the same manner as Broad Quay (part of which survives near Churchill Bridge); the road was probably paved with setts.

Broad Quay

Broad Quay (OA4) was surfaced with grey sandstone setts. It is uncertain when these and an adjacent kerbed footway were laid, but the fact that they respected B25 suggests that they were later than this building.

Little Corn Street

Little Corn Street was laid out in 1764. The road was paved with setts and edged with kerbs, and there were flagstone-surfaced pavements on both sides



Plate 4. 1 Little Corn Street, from the south

(Pl. 4.1). Parts of these surfaces had been lifted to allow the insertion of later services (eg, water, gas and drains), but there was no indication that the street was ever completely re-paved. A stone-lined drain (S36) along the east side of the street appears to have been contemporary with the construction of the road.

Milk Street

Milk Street was laid out in the late 1760s and was probably originally paved with setts, though these were removed and replaced with tarmac in the early 20th century. The footway on the west side of the street was paved with flagstones bedded on clinker that contained a dump of c. 1790–1811 clay tobacco pipe manufacturing waste (Lewcun 2019, 5; see Clay Pipemaking Waste from Milk Street). The pavement was probably laid or re-laid during the construction of

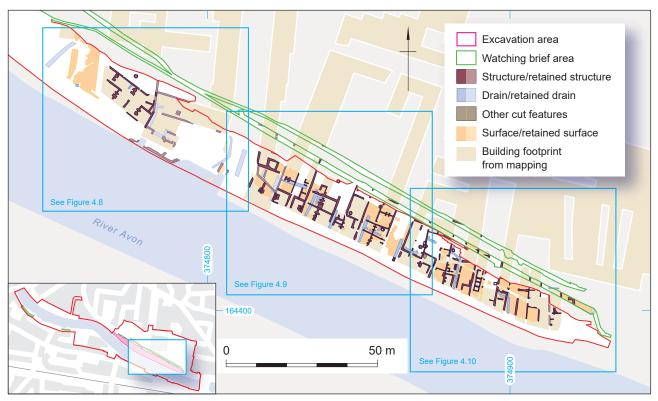


Figure 4.7 Plan of c. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794



Figure 4.8 Plan of c. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794

the Milk Street Baths in 1846–7 (see Chapter 5). The footway on the east side of the street was re-surfaced with tarmac in the early 20th century.

Avon Street

Apart from the construction of a large warehouse (B7), the pattern of development around the Avon Street quayside remained largely static between the mid-18th and early 19th centuries. In addition to providing a means of accessing barges, the Avon Street slipway was a convenient place for watering horses. Unfortunately, it was also extremely treacherous, and several people are known to have drowned leading their horses down to the river (*The General Evening Post (London)*, 30 January 1755; *BCWG*, 22 January 1807).

After these accidents, and perhaps in response to them, the dock was infilled and a new river wall was constructed further to the south: this straightened the alignment of New Quay and created a large open area at the southern end of Avon Street. The infill of the dock comprised a mixture of grey sandy silt, ash and clinker that contained a significant quantity of broken pottery and clay tobacco pipemaking waste (see *Finds from the Infilling of the Avon Street Slipway*). The date of the finds suggest that the dock was infilled in the 1830s.

Artisan Housing

B8-B9: 8-9 New Quay and 1-2 Little Corn Street

In December 1764, Thomas Clement purchased a plot on the west side of Little Corn Street and constructed a terrace of four two-storey houses there (BRO DP 662); two facing Little Corn Street (B8) and two (B9) fronting onto New Quay (Fig. 4.9; Pls 4.6–4.9). These houses were occupied by June 1766 (BRO BC/5/70/1), which suggests that they were built in 1765.

The buildings had trench-built rubble foundations, single-skin ashlar walls and flagstone floors. Mortar-

Clay Pipemaking Waste from Milk Street

The clinker deposit on which the flagstones of Milk Street's western pavement were bedded contained a dump of clay tobacco pipemaking waste (Pl. 4.2). This is workshop kiln waste from the factory operated under a partnership between Thomas Clarke and Richard Ward at 86 Avon Street between c. 1790 and 1806, though their moulds continued to be used until at least 1811 (Lewcun in prep.). Pipes have been found with their surname initials arranged in the form of either C/W or W/C on the sides of the spur, but this is the first time that the two forms have appeared together in a sealed deposit, and the circumstances conclusively confirm that both types were produced in the same factory. Five mould forms were identified amongst the 46 bowls, four with the initials embossed as C/W and one as W/C. Three items of kiln furniture were recovered: two rolls and one fragment of wad, each made of pipeclay. Rolls were used to separate groups of pipes in the firing chamber, while wads cemented together the series of props which formed the central spine of the kiln (Peacey 1996, 68-70).



Plate 4.2 Pipes of Thomas Clarke and Richard Ward, and kiln furniture



Plate 4.3 Clay pipes and kiln furniture

Finds from the Infilling of the Avon Street Slipway

Clay Tobacco Pipes

The ash-rich deposit used to infill the dock probably derived from kiln flue rakings and produced 69 clay pipe bowls from six moulds dating to somewhere between 1810 and 1840 (Pl. 4.3). The pipe bowls are all plain, and none of the mouthpieces or tips of the stems are glazed. Only one pipe is marked, with the initials W/C of Clarke and Ward (see above Clay Pipemaking Waste from Milk Street), but this is earlier in date. In the absence of the marks of any other makers, the remainder of the pipes are probably products of John Laffar, who is documented as having taken over the factory and purchased the working tools and moulds, probably including that for the W/C pipe, from the Clarke family in 1811 (Lewcun 1994, 135), in which case this is the first group of pipes in the city which can be attributed to him. Among the pipes were 41 items of kiln structure and furniture, as well as a small finger-ring and a fragment of greenglazed figurine, both made of pipeclay.

Continues next page



Plate 4.4 Pipeclay figurine

The fragment of pipeclay figurine is of particular interest, as no parallel has been found in published literature (Pl. 4.4). The example from Bath Quays is incomplete, and consists only of the legs and feet, hand-made rather than in a mould, and is coated with a pale green glaze. There is a conical indentation at the top of the fragment, but in the absence of the other remains of the figurine the purpose of this is unclear. The size and simplicity of the figurine suggest that this particular example was a child's toy, which presumably broke during the manufacturing process. In the 19th century there was a big growth in the mass production of toys for children, with many items being imported from Germany, but this did not gain much momentum until after 1850. The manufacture

of dolls in Britain created a sideline for pipemakers, who made legs and arms, each perforated at the top, to provide moveable limbs. The Bath Quays figurine was probably a precursor for the mass-produced lead figures of the later 19th century.

Pottery

The pottery assemblage from the infilling of the dock (132 sherds) contained a mixture of tea-/tablewares in creamware, developed creamware, pearlware, whiteware and porcelain, as well as kitchen/ household utilitarian wares (kitchen vessels and chamberpots in redware and yellow ware, stoneware bottles for beverages and blacking) (Pl. 4.5). There is a possible 'nursery' motto on one of the transfer-printed pearlware mugs. It is likely that this group contains vessels spanning a fairly wide date range, and also a mix of quality - the creamware vessels include a hand-painted tea bowl which would have been more at home in the more genteel Bath homes of the mid-18th century, as would the porcelain, rather than the lower-class housing around Avon Street in the early 19th century. The refuse included in the infilling deposit could, of course, have come from anywhere in Bath, although the clay pipemaking waste was clearly local. The latest vessels belong to the early-mid-19th century, and three stoneware bottles date no earlier than the 1830s.

Glass

Four fragments of vessel glass were included in the infill deposit. These comprise a wide-mouthed green bottle with a string rim, probably a preserve jar from the mid-18th century (Dumbrell 1983, 146–7); a green wine bottle base, late 18th or early 19th century; and the base from a bottle or jar in pale greenish glass, broadly dated as 18th/19th century.



Plate 4.5 Pottery from the slipway

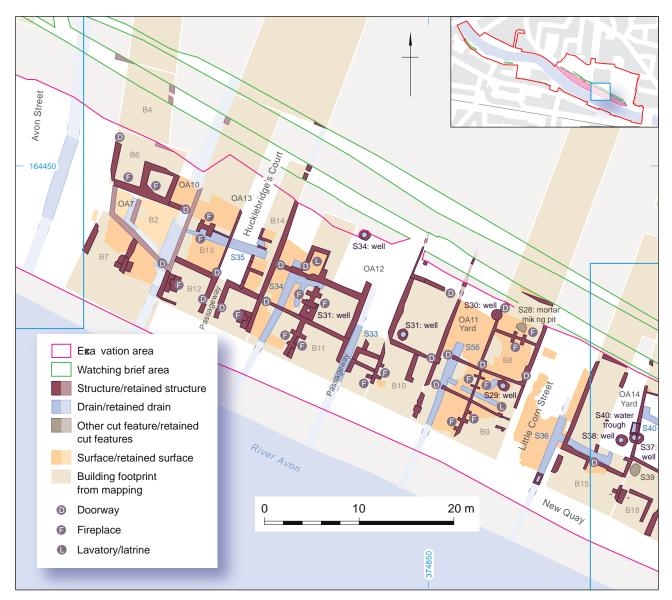


Figure 4.9 Plan of c. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794

mixing pit S28 is likely to have been associated with the building's construction.

B8 comprised the southernmost two of a row of four houses that appear to have been built as a single structure. B9 was divided into two houses. All four houses were two storeys high with second-floor garrets under tiled mansard roofs. The buildings were of plain construction, with a doorway to the front and rear and a single sash window on each floor. The only architectural embellishment was a string course at first floor level on B9.

These houses had a single room on each floor, measuring approximately 4.6 m by 3.6 m internally, with fireplaces against the party walls. A corridor from the front door provided access to a stair to the upper floors and a paved rear yard (OA11). Each pair of houses had access to a shared stone-lined well (S29 and S30), privy and washhouse/coal store. Well S29 had a corbelled cover with a small central hole for a



Plate 4.6 c. 1930 view from the same position as Pl. 4.1, showing 8–9 New Quay (B8) and 1–4 Little Corn Street (B9) from the south © B&NES Council



Plate 4.7 8–9 New Quay (B8) and 1 Little Corn Street (B9), from the north-east. Note the uneven and subsiding floor surface caused by leaking drains



Plate 4.8 8–15 New Quay (B8 and B10–B12) and 1–4 Little Corn Street (B9), from the south, taken between 1880 and 1885. Note the roof of Hucklebridge's Court and the Bath City Brass and Iron Foundry (large barn-like building to the rear of 14–15 New Quay) © B&NES Council



Plate 4.9 10-13 New Quay (B10-B11), from the north

pipe, whereas S30 was capped with stone slabs; both would have been fitted with hand pumps. By 1794 the yard to the rear of B9 had been completely infilled with a three-storey extension. This doubled the living area within the building, but left the inhabitants with

no external space. As a result, sanitary facilities and fuel storage would have had to be accommodated within the building.

In the late 18th century, a stone-lined drain (S56) was laid through the rear yards of the houses fronting Little Corn Street, with a spur serving a lavatory within B9. The paved floor (Pl. 4.7) within the extension to 8 New Quay was extremely uneven due to subsidence caused by leaking drains.

B10-B11: 10-13 New Quay

In 1757 Thomas Harris' plot was used 'as a yard', and the property appears to have remained undeveloped until 1765, when his 'buildings now being erected' were used as security against a loan from Edward Bally (BRO DP 668A). In 1768, Harris, together with William Archer, used his property as security against an additional £600 loan from William and John Harrington (BRO DP 668C), probably to fund additional building on the plot.

The houses they built (Fig. 4.9; Pl. 4.9) comprised two structures: B10 (10 New Quay), which was the earlier of the two, and B11 consisting of three houses (11–13 New Quay) that incorporated a covered passageway from New Quay to a large rear yard (OA12). B10 was a double-pile structure of two rooms, with a walled yard to the rear, whereas B11 appears to have had initially only a single room on each floor.

The foundations of the party wall between 12 and 13 New Quay were built at a slightly skewed angle. This appears to have been a construction error, which was corrected by adding a 'wedge' of stonework to square the line of the wall; the foundations of the fireplace remained skewed. Historic photographs (Pls 4.8, 4.10 and 5.8) show that B10 and B11 were three storeys high, with pitched tile-covered roofs. The buildings had relatively plain façades, with minor architectural embellishments: the windows were framed with raised bands of stonework; there were string courses between the floors; and the first-floor rooms were fitted with Venetian windows.

Each house measured approximately 4.5 m square internally, though the living space would have been smaller, due to corridors and stairwells. This part of the site was heavily truncated by modern disturbance; consequently, floor levels only survived in one of the houses (13 New Quay). This building had sockets for floor joists around the edge of the ground floor room, indicating that it originally had a suspended wooden floor.

In 1774, 10–13 New Quay were sold to the victualler Michael Parys, and by 1794 the property was jointly owned by Parys, Anthony Marcellis and John Wall. They subsequently sold it to a London-based hatter named John Francis Bell (BRO DP 668C). During this period, additional rooms were added to the rear of B11, effectively turning it into a double-pile

structure. Late 19th-century photographs show that the extension was no more than two storeys high.

B10 had a private water supply provided by well S31, whereas the inhabitants of B11 had access to a shared well (S32). There was a further well (S34) within a large yard to the rear of the houses; this is likely to have provided the water for commercial users of the yard. All three wells were stone-lined with corbelled covers, with a small central hole in the top, indicating that they would originally have been fitted with hand pumps.

A stone-lined drain (S33), which ran beneath the passageway through B11, appears to have been contemporary with the construction of the building, whereas drain S34, which incorporated a complex sewer-gas trap (Pl. 4.11), was a later addition. Finds from the backfill of the drain's construction trench include post-1780 ceramics, marked clay tobacco pipes of 1780–1810 and a coin of 1744.

In the early 19th century, further extensions were constructed over the yards and gardens to the rear of B10 and B11, and by 1852 each property had a private external lavatory.

B12-B14: Hucklebridge's Court

In 1766, the mason John Ford sold his Ambury lease to a corn-merchant named John Hucklebridge, who used the property as security against a loan of £150 from Thomas Taff. The loan was probably used to finance the construction of B12 (1–2 Hucklebridge's Court, later renamed as 14–15 New Quay). In 1767, Hucklebridge borrowed an additional £200 from Taff (BRO BC/6/2/9/665). This loan was probably to finance the construction of a blind-back court with an associated washhouse, coal store and lavatory block (B13–B14; 3–6 Hucklebridge's Court). The houses within B12 and B13 (Fig. 4.9) were all occupied by December 1767 (BRO BC/5/70/3).

The earliest feature in this part of the site was a compacted gravel surface (Fig. 2.5; Pl. 4.12) that extended across the whole plot. The surface was recorded at a height of 17.1 m OD, and was either a mid-18th-century yard-surface, or a construction pad for the foundations of B12–B14.

Late 19th-century photographs show that B12 (Pls 4.8 and 5.8) was a three-storey structure with a mansard roof over a fourth-floor garret. Apart from the roof, the building was built in the same style as the near-contemporary houses (B10–B11) to the east.

B12 (Pls 4.12 and 4.13) was divided into two houses. Each property had a single 4.3 m square room on each floor, though the living space would have been smaller due to the presence of a stair, which was probably located against the rear (north-east) wall. Usable space within 14 New Quay was further reduced by a passageway that provided access to the rear yard. Both houses had fireplaces against the party walls and doorways opening onto the passageway;



Plate 4.10 c. 1930 view of 1–11 New Quay, from the west, showing (left to right) B11, B10, B9, B15, B16. B18, B19, B35 and B37. The women and dog are standing at the entrance to the covered way through B10 © B&NES Council



Plate 4.11 Late 18th-/early 19th-century drain to the rear of 13 New Quay (B11), incorporating a sewer gas trap, view from the west



Plate 4.12 Foundations of 1–2 Hucklebridge's Court/14–15 New Quay (B12), from the north, with partially excavated foundations of 3–4 Hucklebridge's Court (B13) and drain S35 in the foreground



Plate 4.13 1–2 Hucklebridge's Court/14–15 New Quay (B12) and 3–4 Hucklebridge's Court (B13), from the north. Note the inserted pillar bases for an 1893 extension to Walker's Firewood Mill

15 New Quay had an additional street-front door. Carved joist-sockets around the edge of the ground floor rooms indicate that they were originally fitted with suspended wooden floors. The floor level would

have been at approximately 17.9 m OD, leaving a 0.8 m void between it and the yard surface on which the building was founded. The silts in the base of this void contained numerous small objects that probably represent an accumulation of items that dropped through gaps in the floorboards in the first decades of the 19th century (see below *Finds from Beneath the Floor of 14–15 New Quay (B12)*).

The riverfront properties along New Quay were frequently flooded, and with hindsight, the decision to install suspended wooden floors on the ground floor was a poor choice. Eventually the wooden floors had to be replaced; this entailed infilling the floor voids with earth and paving the ground floors with flagstones. This probably occurred in the late 1830s or 40s.

B13 (Pl. 4.13) was a row of four blind-back tenements (3–6 Hucklebridge's Court). B14 was a contemporary service block, which was divided into nine rooms. Prior to the construction of B13 and B14, ground levels within the rear yard were raised by approximately 0.8 m, to match the floor level within B12. Each dwelling within B13 had a single 4.5 m

Finds from Beneath the Floor of 14–15 New Quay (B12)

In the void beneath the suspended wooden floor of B12 a number of small objects collected, presumably including items lost through the gaps in the floorboards. These included six coins and tokens, eight metal buttons (one with an incised 'sunburst' design), a decorated scale-tang knife handle, a machine-stamped thimble, a small spoon possibly for condiments, two stone marbles and a stone mortar (Pl. 4.14). The most closely datable objects are three coins of George III (1799–1806) and a token from the Anglesey Mines Company (1791). Seven marked clay tobacco pipe fragments were also recovered. Most date from the period 1780–1835, but the presence of a Joseph Sants pipe dating from 1835–60 suggests a slightly later date for the infilling of the floor void.

One object from a related backfill layer in B12 provides an interesting link to Jane Austen's Bath: this is a bone gaming piece in the form of a fish,



Plate 4.15 Bone gaming fish



Plate 4.14 Decorated bone knife handle, thimble and small stone mortar

with mouth and eye incised (Pl. 4.15). 'Lydia talked incessantly of lottery tickets, and of the fish she had lost and the fish she had won' (Jane Austen, Pride and Prejudice, chapter 16). Gaming fish were used as tokens of account when playing card games; they were just one of a variety of shapes in which these tokens appeared, but there are at least two possible explanations for this piscine form. One relies on the Anglicising of the French term fiche for a token of account (Brown 1990, 697); alternatively, the shape could have been influenced by the fact that the fish is a Chinese symbol for luck. Fish and other gaming counters made of bone, ivory or mother-ofpearl were imported into Europe from China from the early 18th century, but they were also made in this country - examples have been found, for example, on Napoleonic prisoner-of-war camps in Cambridgeshire and Portchester, Hampshire,

Continues next page

amongst items manufactured by the inmates for sale to the local community (Brennan 2016, fig. 5; Brown 1990, 697). Other examples of gaming fish in 18th-and 19th-century archaeological contexts are known from Birmingham (Bevan *et al.* 2009, 182, fig. 8.10, no. 2), Winchester (Brown 1990, 697, 705, fig. 196, 2241) and Avebury Manor, Wiltshire (R. Cleal pers. comm.).

Pottery

The under-floor deposits contained 116 sherds of pottery, dominated by tea- and tablewares in porcelain and bone china, and in pearlware and whiteware, including both hand-painted and transferprinted decoration (Pl. 4.16). The transfer-printed wares include one pearlware 'nursery' plate with the words of an Isaac Watts hymn ('Oh what a lovely thing for youth'), and one other possible nursery motto in whiteware. These two vessels fall into the category of 'moralising china', carrying maxims, religious inscriptions and children's rhymes, which were popular during the Victorian period (Jeffries et al. 2008, 336-9). There are also slip-decorated creamwares, and teapots in Jackfield and basalt wares. These would place the group in the late 18th or 19th century (there are a few earlier wares, eg, yellow slipware and tin-glazed earthenware, which are presumably residual here). There are also sherds from three cylindrical stoneware jars and one bottle, dating no earlier than the 1830s, although on the whole there are few kitchen wares of any sort

(redwares, yellow wares, etc), presumably because this room was not used for kitchen activities.

One other sherd, from a bedding layer directly below the flagstone floor laid when the under-floor void was infilled, is of interest. This is a sherd of creamware with black overglaze printing with the words 'en Vaderland' (see Chapter 7; Pl. 7.9). This is part of the patriotic motto 'Voor Vryheid en Vaderland' (For Liberty and Fatherland), which appears on vessels produced in England for the Dutch export market during the late 18th and early 19th centuries. The appreciation of these English imports in the Netherlands was not universal, as the local delftware pottery industry was badly affected - one 1780 pamphlet entitled The Delft stick pulverizing the disgusting yellow and hideous red English earthenware recommended that English china should be used only by prison convicts (which would then give it a bad name); in 1798 English goods were officially boycotted. This was at a time when a strong anti-British and revolutionary Patriot Movement rose in the Netherlands. Unfortunately for the delftware industry, the demand for English high-quality tea- and coffee-drinking ceramics outweighed patriotic considerations - Dutch citizens were not willing to sacrifice their pretensions to gentility for the sake of lower quality ceramics, and English potters had no objection to making products incorporating slogans unfavourable to themselves in the cause of good business (Stellingwerf 2018). The question remains, of course, as to what this vessel was doing in Bath - did one of the tenants have Dutch connections?



Plate 4.16 Pottery from underfloor deposits

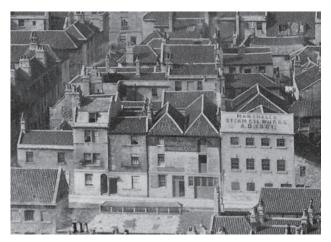


Plate 4.17 View from the south, showing 3–7 New Quay (right to left B35, B16, B19, B18 and B15), taken between 1880 and 1885 \bigcirc B&NES Council



Plate 4.18 7 New Quay (B15), from the north, with Little Corn Street in the foreground



Plate 4.19 Foundations, yard surface (OA14), drains (S36 and S70) and wells (S37 and S38) to the rear of 7 New Quay (B15), from the north-west

by 4.1 m room on each floor, with a fireplace against the party wall, though living space would have been smaller due to the presence of a stair. The height of the roofline, which is just visible on some historic photographs (Pl. 4.8), suggests that the building was probably three storeys high. The ground floor rooms were paved with Pennant Sandstone flags; the adjacent yard (OA13) was surfaced with compacted gravel.

Each of the tenements had its own flagstone-paved washhouse and there were two lavatories shared between six dwellings, one of which lay within the excavation area. The lavatory was constructed over a stone-lined drain (S35) that appears to have been contemporary with the adjacent houses (it ran beneath the foundations of one of the fireplaces). The fact that the lavatory was situated over a drain suggests that it was a water-flushed system that utilised rain and/or waste-water to flush effluent into the nearby sewer.

In 1774, John Hucklebridge sold the court to a corn merchant named Thomas Lewis. Lewis promptly resold the property to Elizabeth Rainstorp, who retained ownership of the buildings until her death in 1816. The property then passed to her trustees, who retained ownership until 1844 (BRO BC/6/2/9/665; TNA PROB 11/1582 /256).

B15: 7 New Quay

B15 (see Figs 4.9 and 4.18) was a house with a large, probably non-domestic, wing fronting Little Corn Street. The building was probably constructed soon after the laying out of Little Corn Street c. 1764, and appears to have been occupied by 1766 (BRO BC/5/70/1), suggesting that B15 was probably constructed c. 1764–6.

Historic photographs (Pls 4.10 and 4.17) show that the house was two storeys high with a pitched roof and parapet on the New Quay elevation. The southern half of the house and the Little Corn Street wing were both heavily truncated by later disturbance. The surviving remains show that the ground floor (Pls 4.18 and 4.19) was divided into two rooms set either side of an axial corridor, with a small ancillary room, probably a scullery, to the rear. The building had flagstone paving throughout. The probable scullery had a stone-lined drain beneath the floor, which fed into a contemporary drain beneath Little Corn Street (S36). The rear yard (OA14) and the Little Corn Street wing were both surfaced with compacted gravel.

Water was supplied from a stone-lined well (S37; Pl. 4.19), which was shared by the adjacent property (5–6 New Quay). By 1794, the western half of the well had been capped and bridged by a boundary wall, while the east side was partially reconstructed and retained for use by the occupants of 5–6 New Quay; rebuilding of the well may have coincided with a change of ownership. Once the boundary wall had been constructed, OA14 was re-surfaced with compacted gravel and a new well (S38) was sunk for the sole use of 7 New Quay. A stone trough (S40) was also incorporated into the boundary wall; this was probably used to provide drinking water for stabled horses.

The Little Corn Street wing of B15 was demolished in the early 19th century to create a large gravel- and clinker-surfaced yard (OA24), which had a wide gateway with a small open-side stable (B29) to the



Figure 4.10 Plan of c. 1760–1800 archaeological features along New Quay. Building outlines based on Harcourt Master's plan of 1794

north. A new kitchen and lavatory were also added on the north side of B15. Finds from the make-up layer below the new yard surface include 80 sherds of 19th-century pottery (predominantly creamware, pearlware and whiteware) and part of a free-blown dark green bottle with an applied seal embossed with the name 'Md. Rosalie Bode, Bath' – a well-known French milliner who traded in Bath between 1815 and 1842 (see Chapter 7; Pl. 7.5). Some of the transfer-printed pottery from the make-up layer has green print, indicating a post-1825 date. Stable B15 is depicted on Cotterell's plan of 1852 (see Fig. 5.1), which suggests that the reordering of the buildings and yard to the north of B15 occurred between *c.* 1825 and 1852.

B18-B20: 5-6 New Quay

In 1771, William Selden leased part of his yard to the carpenter George Wheeler, who constructed a house and shop (6 New Quay; B18; Figs 4.9 and 4.10) on

the property; the building was occupied by the end of the year (BRO DP 667; BC/5/70/8). Historic photographs (Pls 4.17 and 4.20) show that B18 was a three-storey double-pile house with a garret. The ground floor measured 7 m by 4.8 m externally and was divided into two rooms (Pl. 4.21). The front room had a fireplace against the north-west party wall. Later modifications and modern truncation had removed all traces of the original floor surfaces.

B19 (5 New Quay; Fig. 4.10) was a house that infilled the gap between B16 and B18. Historic photographs (Pl. 4.17) show that B19 abutted B18, and was therefore later. This is confirmed by documentary evidence, which indicates that the plot was vacant until 1773 (BRO BC/5/70/10). B19 was a simple three-storey structure with a pitched roof. A ground floor had a passageway providing access to a shared rear yard (OA15), with a single 4 m by 3 m wide room to the south-east (Pl. 4.21). The room

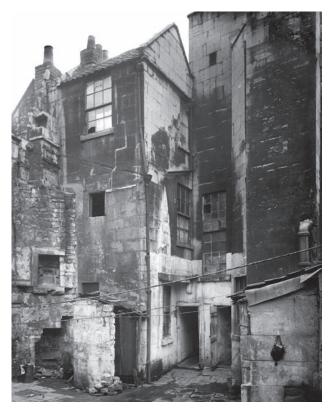


Plate 4.20 c. 1930 view of 5–6 New Quay, from the north © B&NES Council



Plate 4.21 5-6 New Quay (B18-B19), from the north



Plate 4.22 Heavily truncated foundations of Lockyer's Court (B26), from the north-west

had a fireplace against the south-east party wall. At some point before 1794, an irregular, 6.8 m by 2.9 m wide extension was added to the rear of the building. The ground floor rooms were paved with flagstones, some of which had been lifted and re-laid in the early 19th century to allow the insertion of a drain.

There was a sub-circular pit (S39) in the north corner of B18. The pit was dug after the building had been erected, but there were no obvious clues as to its function. The few sherds of pottery date its backfilling to c. 1760–1830.

B20 (Fig. 4.10) comprised fragmentary remains of a large, probably non-domestic, structure to the rear of 5–6 New Quay. The building measured 9 m by 5.6 m externally and is likely to have been accessed via OA15. The upstanding walls were ashlar; the floor was surfaced with Bath Stone flags. The date of the building's construction is uncertain, but it probably dates from c. 1771–95.

Well S37 (Pl. 4.19; Fig. 4.10) provided water for the occupants of the three buildings (B18–B20) ranged around yard OA15. There was no evidence as to the sanitary arrangements of these properties during the 18th century, however Cotterell's plan of 1852 (see Fig. 5.1) does show two lavatories: one in the north-west corner of the yard and another towards the rear of 5 New Quay, and it is probable that similar arrangements existed in the 18th century. A drain (S41) from the rear yard was probably used to channel waste-water, though it may have been utilised as a sewer in the 19th century.

Between 1794 and 1852, several small extensions were added to the rear of B18 and B19 (see Figs 4.18 and 4.19), one of which (to the rear of B18) appears to have been for a bay window. A c. 1930 photograph (Pl. 4.20), taken from the rear yard, shows that the first extension to the rear of B18 was three storeys high; later additions were one or two storeys high. The extensions and yard (OA25) were all paved with flagstones.

In the mid-19th–early 20th century, 5–6 New Quay were used as lodging houses that also functioned as a brothel (see Chapter 5). It is unknown if the property had similar uses in the late 18th and early 19th centuries but, given the proliferation of common lodging houses and prostitution during this period, it is not unlikely.

B26: 1-2 Lockyer's Court and 34-37 Milk Street

B26 (Fig. 4.8; Pl. 4.22) was a slightly irregular three-storey blind-back tenement block, which was constructed in the late 1760s or early 1770s. The building was divided into six dwellings: four faced the river (34–37 Milk Street) and two (1–2 Lockyer's Court) opened onto the rear yard. The north side of the building was possibly constructed after the south side, but this could not be confirmed.

The remains of B26 were heavily disturbed by later activity; as a result, apart from a small patch of rough cobbling at the eastern end of the building, there were no surviving internal floor surfaces. The tenements on the south side of the building had a single room on each floor, most of which were approximately 4 m square, though available living space would have been reduced by the presence of a stair. Each room had a fireplace against the party wall. The tenements on the north side of the building appear to have been twice the size of those on the south side, though some of this space may have been used for business purposes.

The yard (OA19) to the north of B26 contained an undated, but probably contemporary well (S51). The well was constructed of Bath Stone rubble with a corbelled top, indicating that it was fitted with a hand pump.

B28: Cottage to the rear of 49 Avon Street

B28 (see Figs 4.16 and Fig. 4.17; Pl. 4.23) was a small one-up one-down two-storey cottage, which was constructed in the rear garden of 49 Avon Street between 1808 and 1852. The cottage had a small paved yard to the rear (OA22) and a garden and paved path to the east (OA23). There were three parallel brickbuilt dwarf walls in the ground-floor room, indicating that it had a suspended wooden floor.

Commercial Development

B16–B17: Ward's Warehouse and the *Duke of York* public house and brewery, 4 New Quay

In 1769, the barge master and corn factor Samuel Ward constructed a warehouse (B16; Fig. 4.10) and house (B17), using money loaned by from Sir Thomas Foley (BRO DP 669). Ward died in 1771, but the property was occupied by a barge master of the same name until 1809 (*BCWG*, 14 March 1771; BRO BC/5/70/7–55). This individual was almost certainly a relative, most likely his son.

In 1794, Ward sublet the ground floor of the warehouse to William Hunt for a term of 21 years, and in 1801 the property was described as a 'well-known and established public house, with brewhouse and offices, now and for several years past occupied by William Hunt' (*BCWG*, 22 Jan 1801). The public house was named the *Duke of York*, after the commander of Britain's forces during the War of the First Coalition, 1792–7.

In 1814, the sublease on the *Duke of York* was purchased by George Simms in partnership with the brewers Henry Solomon, Job Price and William Clark, and in 1825, John Davis and others assigned the lease on the whole property to John Smith, brewer. At some point after the passing of the 1830 *Beerhouse Act*, the *Duke of York* became a beerhouse. In 1841, John Davis, Henry Godwin and another sold the lease to Edward Lee Baldwin and William Tanner, who traded in



Plate 4.23 Early 19th-century cottage (B28) to the rear of 49 Avon Street, from the north-west

partnership as brewers and maltsters until 1846 (BRO DP 669; *London Gazette*, 23 October 1846, 4233).

In addition to selling beer, the Duke of York provided lodgings, and in 1841 its occupants included the publican George Dowling, his wife and daughter, and 13 male guests (census 1841). During the 1840s and early 1850s, local newspapers record frequent episodes of violence and criminality at the *Duke of York*. These included stabbings, bar brawls, and reports of street-thieves and burglars congregating at the bar (BCWG, 7 December 1843; 14 September 1848; 28 December 1848; 12 April 1849; 7 June 1849). In 1850, the landlord, Charles Tilly, was also fined for allowing women who worked as prostitutes to drink there late at night, and for opening on Sunday mornings. Although the attending police officer noted that Tilly kept the pub 'more orderly than previous landlords', his beerselling licence was subsequently revoked (BCWG, 16 January 1850; 29 Aug 1850). The Duke of York did not remain closed for long, and in 1851 a notorious gang of pickpockets, John Skeates, John Curtis, Ann Harris and Martha Green, were captured sleeping in a room there (BCWG, 6 March 1851). The 1851 census lists far fewer lodgers than the previous decade: in addition to the publican and his wife, there were only two male guests (census 1851). During the later 1850s, the publicans of the Duke of York were occasionally reprimanded for misdemeanours, but the disorder of



Plate 4.24 The Duke of York public house, 4 New Quay (B16), from the north

the previous decade appears to have abated. In 1861 the property is recorded as unoccupied (census 1861), though it continued trading as a beerhouse. There was a serious fire at the *Duke of York* in 1862, which was then owned by the brewers Baldwin & Co. (*BCWG*, 2 October 1862), but it reopened soon after the damage was repaired. The *Duke of York* ceased trading in 1869, and after a short period of use by the Bath Board of Guardians as a vagrant ward (*BCWG*, 22 July 1869), the building reverted to its original function as a warehouse.

B16 (Pl. 4.24), the building that became the *Duke of York*, measured 11.5 m by 9.5 m externally, and had upstanding walls that survived up to a metre high, with largely intact flagstone floors throughout. Historic photographs (Pl. 4.17) show that B16 was

a three-storey double-pile structure with hipped roofs. The form of the building could indicate that it originated as two separate warehouses, but there was no conclusive evidence to confirm or refute this.

The ground floor was divided in two by a central north-east/south-west aligned partition, with a corridor and a series of small rooms to the northwest. The south-eastern half of B16 had a single large room that measured 10 m by 4 m internally. An L-shaped foundation recorded below the floor of this room could have been an early internal partition, or possibly part of an earlier structure that pre-dated the main building. This room was heated by a single large fireplace against the party wall. To the west of the central corridor, B16 was divided into a series of small rooms, with the foundations of a stairwell located mid-way along the party wall. The southernmost room contained a fireplace and was the only ground floor room without paving, possibly indicating that it had a suspended wooden floor. There are no surviving descriptions of the interior of the Duke of York; however, an 1826 illustration of the nearby Pig and Whistle (Fig. 4.11) provides a vivid depiction of a busy night in one of the Avon Street district's numerous public houses.

To the rear of B16, there was a brick-lined well (S42) and a brick-lined drain (S43) that flowed southwards through the central corridor. There was no direct dating for either feature, but the drain's construction appears to have been contemporary with B16.

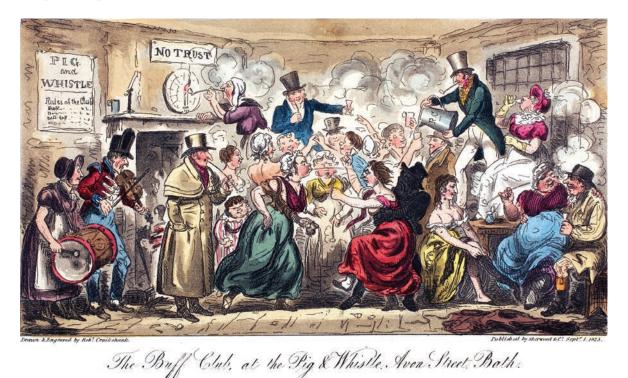


Figure 4.11 Buff Club at the Pig and Whistle, Avon Street, Bath, by Robert Cruikshank, published in Blackmantle (1826, 386) © B&NES Council

Fellmongers, Leather-dressers and Parchment Makers at 2 and 3 New Quay, c. 1774–1869

History

3 New Quay

In about 1774, Charles Milsom sold an undeveloped plot in Ambury (later 3 New Quay) to William Butler, who established a fellmongers' yard on the premises (BRO BC/5/70/1-11). Two years later, the property was advertised for sale as a 'very commodious yard and work-house for manufacturing of leather, with pits, a convenient stove, drying lofts, and wool lofts' and the 'stock in trade, and all the implements etc belonging to the same' (BCWG, 11 April 1776). The 'convenient and spacious skin-yard', containing 'workshops, wool lofts, sheds, lime pits, and every necessity for carrying on the business of fellmonger and leather dresser' was advertised for sale again in 1779 (BCWG, 18 February 1779). The property does not appear to have been sold on either occasion. The history of the property under its various lessees is outlined below:

William Butler I and II, lessees c. 1774-1829

William Butler was a wealthy businessman who owned several properties in Holloway and James Street and held the lease on the Full Moon public house, Southgate Street (BRO BC153/2733/6; BC153/2733/9; BC153/705/2-3; BC153/2551/14; Guy's Directory 1819; BCWG 19 October 1820). The fellmongers' workshop is depicted on Harcourt Masters' plans of 1786 and 1794, which shows the New Quay frontage of the property as fully built up (Figs 4.5 and 4.6). Following Butler's death in 1824, the lease passed to another William Butler, probably his son. His company, Butler & Co., are listed as fellmongers and leatherdressers at the New Quay yard in 1826. William Butler Il lived in a large semi-detached villa at 29 Claverton Street, Widcombe (The Bath Directory 1826; BRO BC153/2552/6).

Butler & England, lessees c. 1829-32

By 1829, William Butler II had entered into a partnership with James England. Their company, which for the first time included parchment in its list of products, traded until their partnership was dissolved by mutual consent in 1832. Butler lived at Prior Park Cottages, whilst England lived at 2 Lyncombe Terrace, both in nearby Widcombe (Keene's Bath Directory 1829; Pigot's Directory 1830; Morning Chronicle, 24 October 1832).

John Edward Stringfield, lessee c. 1832-9

John Edward Stringfield was born in 1794 in Marylebone, London, and moved to Bath following his marriage to Eliza Leborn in 1813 (census 1851; LMO DL/T/090/006). He initially worked as a porter and labourer, and later as a book-keeper and, from 1824 onwards, as a draper, tailor and salesman with a shop on Stall Street (SWHT D\P\ba.mi/2/1/9; BCWG 18 April 1839). The business was a success and in 1834 he became a Freemason (UGLEMR 1813–36). By 1837, Stringfield had also become the proprietor of the New Quay fellmongers' yard (*The Bath Directory* 1837). It is uncertain exactly when he acquired the business, but he may have held the lease since Butler & England's partnership was dissolved in 1832.

By the late 1830s, Stringfield had amassed a considerable property portfolio, including two freehold properties in Twerton, and nine leasehold properties in Bath. He was however suffering mounting financial difficulties, and in 1838 his membership of the Freemasons was terminated. The following spring, he transferred ownership of his tailoring business to his son-in-law and was declared bankrupt in September 1839. His remaining businesses and properties were sold to pay his debts. The fellmongers' yard was purchased by a local currier named Henry Skeate (BCWG, 18 April 1839; 5 September 1839; 21 November 1839). Springfield subsequently moved to Bristol, before returning to Bath to live as an inmate of St John's Hospital, where he died following a night of heavy drinking in 1862 (census 1851-61; BCWG, 22 May 1862).

Henry Skeate, lessee 1839-c. 1841

Henry Skeate was born in 1790 in Timsbury, Somerset, then moved to Bath, where he married Elizabeth Jane Nott in 1809 (census 1841–51; Pallot's Marriage Index). Skeate initially lived in the Bathwick area, then moved to 28 Peter Street, where he traded as a currier and horse-harness maker. After his purchase of the fellmongers' yard in 1839, he began trading as a fellmonger, parchment maker and leather-dresser (SWHT D\P\batw.m/2/1/6; Pigot's Directory 1839; BCWG, 9 January 1840), though the 1841 census simply lists him as a leather seller (census 1841), which suggests that he may have quit the fellmongers' yard by this date. Henry Skeate died in 1857.

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Miles & Simmonds, lessees c. 1841-63

By 1842, the fellmongers' yard was being run as a partnership between John Simmonds and John Miles. Simmonds was born in 1799 in Castle Combe, Wiltshire, and moved to Bath before 1826. Miles was born in 1792 in Batheaston. Both men, who lived in modest houses in nearby Widcombe and Dolemeads, were fellmongers by trade and may have been employees of one or more of the previous leaseholders at New Quay (WSHC 2234/4; SWHT D\P\wal.sw/2/1/23; Principal Probate Registry; census 1841–71; Pigot's Directory 1842–6; The Bath Directory 1846; Hunt's Directory 1848; Bath Annual Directory 1849–51; The Post Office Bath Directory 1856–63).

Miles and Simmonds' yard is depicted on Cotterell's plan of 1852 (see Fig. 5.2) by which date the original workshop had been extended northwards, creating a long building with a narrow yard to the east. In 1841, the partners employed eight men, but by 1851 there were only five men working at the yard (census 1841-51). During their tenure, the street outside their premises was described as the 'offensive portion of the quay where sheep skins for parchment were drying' (BCWG, 24 December 1848). They were also reprimanded by the police for buying stolen sheepskins on at least three occasions (BCWG, 26 November 1846; 6 October 1849; 16 October 1856). Miles retired c. 1863 and died in 1865, but the business was continued by the remaining partner and his son Alfred.

Simmonds & Son, lessees 1864-9

John and Alfred Simmonds continued operating the fellmongers' yard in the same manner as the previous partnership and were again reprimanded by the authorities for buying stolen sheepskins (BCWG, 15 November 1866). Despite the noxious nature of their trade, a visit by the Medical Officer of Health in 1867 concluded that the yard was 'well managed' and that the 'effluvia from it were not greater than was compatible with the carrying on of the business' (BCWG, 14 February 1867). The same year, there was a serious fire at the yard, but the yard reopened soon after and they continued trading until c. 1869 (BCWG, 11 July 1867; The Post Office Bath Directory 1864–9). The fellmongers' yard was subsequently demolished and a dye works was built in its place (see Chapter 5). Following the yard's closure, John Simmonds retired and his son moved to Salford, where he continued to work as a fellmonger (census 1871-81).

2 New Quay

Between c. 1779 and 1781, 2 New Quay was used as a fellmongers' yard by a local hatter and hosier named

Thomas Ettricke Cary. Cary was born in Bath c. 1735 and initially worked in his father's hat and hosiery shop on Cheap Street, which he inherited in 1760. He served as town councilman (1777–82), town constable (1778–9) and town bailiff (1780–1), but in 1781 he was declared bankrupt and forced to resign his official positions and sell his properties. A year later, he become the 'pumper' at the Pump Room, a position he held until the Master of Ceremonies dismissed him for unspecified misbehaviour in 1783. He subsequently moved to Wales, where he died in 1786 (Fawcett 2017; BCWG 20 September 1781; 9 November 1786). After Cary's bankruptcy, 2 New Quay was used as a stonemasons' yard.

Fellmongery, Leather-dressing and Parchment Making

A fellmonger is a dealer in 'fells' or sheepskins, who separate wool from pelts, prior to processing into light leather or parchment. All three processes were undertaken in the workshop at 3 New Quay.

The methods used by fellmongers, leather-dressers (also known as tawers, tawyers and whittawyers) and parchment makers is described by Tomlinson's *Cyclopedia of Useful Arts and Manufactures* (1853, 138–40, 377):

Unhairing and degreasing

Wool is usually detached from sheep-skins before they arrive at the tawers. This is done by the great dealers in sheep-skins, called fellmongers; they receive the skins from certain factors, or salesmen, in the skinmarket, by whom they are procured from the butchers. The lamb-skins of Italy are imported in casks with the wool on, so that the tawer adopts a process for removing it similar to that employed by the fellmonger. They are first cleansed in water, then scraped on the flesh side, and next hung up in considerable numbers, in the smokehouse already alluded to, where they are sweated, that is, putrefactive fermentation soon commences, a thick filthy slime appears on the surface, and the effect of this is so to loosen the wool, that it can be pulled off easily. Care and judgment are required in regulating the fermentation of the skins, so that their texture be not destroyed. When the wool is removed, the fatty matters are got rid of by a hydrostatic press; a large number of skins being piled up, a considerable quantity of fat is expressed. The skins are then worked

at the beam (Pl. 4.25); projecting flaps and rough edges are pared off, and putrefaction is arrested by immersion in lime (Pl. 4.26).

They are first put into a nearly exhausted lime-pit, and afterwards into a stronger one, and are frequently worked about with poles. When taken out they are well worked at the beam to get rid of a portion of the lime; and are then immersed in a fermenting mixture of dog's or pigeon's dung, if the skins are to be tanned, and of bran and water if they are to be tawed. During the time that the skins remain in this mixture, they are occasionally taken out and worked at the beam, and are lastly washed in pure water. By such means the pelt becomes a thin extensible white membrane, and is fit for tanning, tawing, dyeing, oil-dressing, or shamoying.

Tawing

The preservation of an animal skin, by means of alum and salt, is called tawing; and the object is to employ such materials as will not interfere with the production of a pure white leather. In all the finer kinds of leather-dressing, the perfect purity of the pelt is of the utmost importance, for every particle of dirt, or lime, which is allowed to remain would appear as a speck or a flaw. The purity of the water used for rinsing the skins, is also a point of great importance. At some works, a supply of distilled water is obtained from the boiler to the steam-engine, which is made larger than usual for the purpose.

Oil dressing

Dressing in Oil, consists in first soaking the skin in water, and then, by continued hard rubbing, forcing oil or grease into its pores. As the water evaporates, the oily matter combines in some way with the fibres of the skin; renders it permanently soft, and by keeping out the water prevents it from decay.

Parchment making

The skins of most animals are adapted to the manufacture of parchment, but as the better kinds of skins are much in demand for making leather, sheep skins are commonly used. The finer kind of parchment, called vellum, is made from the skins of calves, kids and dead born lambs: the stout parchment used for drum heads is made from the skins of asses, calves or wolves, the latter being preferred; the parchment of battledores is from asses skin, and for sieves the skin of the he-goat is preferred. The skins of all are prepared in a similar manner. When the hair or wool is got



Plate 4.25 Working sheepskins on a 'beam' to remove fat and lime. Image of the Homewell Parchment Works, Havant, published in The Sphere, 28 September 1928, 208 © Mary Evans Picture Library



Plate 4.26 Soaking sheepskins in liming pits to arrest putrefaction and remove fat. Image of the Homewell Parchment Works, Havant, published in The Sphere, 28 September 1928, 208 © Mary Evans Picture Library

off by some of the processes described under leather [see above], the skin is put into a lime pit, and when the fat has completely combined with the lime, the skin is stretched upon a stout wooden frame or horse, consisting of 4 bars perforated with holes, each of which is occupied by a peg. By means of these pegs the skin is stretched in the frame, for which purpose a number of pieces of twine are tied firmly to the edges of the skin, and to prevent



Plate 4.27 Worked sheepskins fixed to a frame then scraped with a half-moon knife to remove excess flesh, dirt and slime after soaking in liming pits. Image of the Homewell Parchment Works, Havant, published in The Sphere, 28 September 1928, 208 © Mary Evans Picture Library

the skin from slipping when strained tightly, each string is tied round a small wad or ball, formed by making a small fold at the side of the skin, and rolling up a shred of skin in this fold. In some cases skewers are stuck into the edges of the skin and the string is tied to them. In either case the other end of the string is passed through a hole in the side of the peg, and in turning this the string is wound round it, and thus the skin is gradually and equally strained, great care being taken to prevent the formation of wrinkles. The horse is then set up against a wall, and the surface is scraped with a double edged knife, (called from its shape a half moon knife) attached to a double handle (Pl. 4.27). The skinner uses this knife with both hands, and pressing the edge against the skin, first on the flesh side and then on the grain side, thus gets rid of fleshy substances, dirt, slime, &c.

In the next process called grinding, the frame is placed on trestles; the skin is sprinkled on the flesh side with finely powdered chalk or slaked lime, and then rubbed in all directions with a flat surface of pumice stone. The grain side is ground with pumice only. The knife is again passed over the skin, the scouring with chalk and pumice repeated. This scraping with the knife is called draining, and serves to whiten the skin. Fine chalk is then rubbed over both sides of the skin with a piece of lamb skin with the wool on; this serves to whiten the skin and give it a white down or nap. The skin still on the horse

is then removed to a covered shed to dry, and in warm weather a wet cloth is occasionally applied to it and the pegs tightened. When it is quite dry it is well rubbed with the woolly side of a lamb skin to get rid of the chalk. Should any greasy matter now be detected in the skin, it is removed from the horse and steeped in the lime pit for several days; otherwise it is cut all round to get rid of the wads, and transferred to the man known as the parchment maker, who stretches it tail downwards upon a machine called the sumner, consisting of a calf skin mounted on a frame. He then passes a sharp circular knife over the grain surface of the skin in an oblique direction, and pares off about half the thickness of the skin, leaving a perfectly smooth surface, an operation requiring a flexible wrist and considerable skill. The skin is scraped on the grain side only: should any roughness appear it is removed by rubbing with a pumice stone, for which purpose it is placed upon a form or bench covered with parchment and stuffed with flock. After this the parchment is fit for writing on (Pl. 4.28). If any small holes appear in the skin they are stopped by cutting the edges thin and laying on small pieces of parchment with gum water.

The green colour given to the parchment used for bookbinding is given by boiling in 500 parts of distilled water, 8 parts cream of tartar and 30 parts of crystallised verdigris; adding 4 parts of nitric acid when the solution



Plate 4.28 Finished parchment being cut from a frame. Image of the Homewell Parchment Works, Havant, published in The Sphere, 28 September 1928, 208 © Mary Evans Picture Library



Plate 4.29 Liming pits (S44) within a late 18th-century fellmongers' yard, leather-dressers and parchment works (B21) at 3 New Quay, from the north-east, showing late 19th-century drains (S72) and walls of Marshall and Banks' Steam Dye works (left) and early 20th-century forge of N S G Wilcock's engineering works (right)

is cold. The parchment having been moistened with a brush the colour is spread evenly over the surface. Polish is given by white of egg or mucilage of gum arabic.

Archaeological Remains

B21 (Fig. 4.10; Pl. 4.29) was a purpose-built fellmongers' workshop, constructed c. 1774. The building was open-sided to the east, with small square pillar bases that supported a wool loft on the floor(s) above. By 1794, part of the building had been extended eastwards.

The workshop was floored with Bath Stone setts that abutted a row of four or more rectangular stonelined pits (S44), two of which were fully excavated. The pits were lined with Bath Stone ashlar blocks, which were coated with thick concretions of lime. The excavated pits measured 1.8 m by 1.5 m and were 1.15 m deep. One of the unexcavated pits was slightly smaller (1.5 m by 1.15 m); the other was larger (2.75 m by 2.1 m), though it is uncertain if this was a single large pit or a pair of smaller pits. The top edges of the pits and the adjacent floors were all heavily worn, indicating a long period of use, which concurs with the documented 95-year use of the property as a fellmongers' yard. The pits would have been filled with limewater (calcium hydroxide), which was used to arrest putrefaction and de-grease sheepskins prior to processing into light leather or parchment.

There was another, partially robbed, 3.4 m long by 1.5 m wide and 1.1 m deep, stone-lined tank (S45; Pl. 4.30) on the east side of the workshop. There were no lime concretions or other residues within this structure, which suggests that it contained clean water. The tank was probably used to wash hides, either to clean them soon after they arrived, or to remove lime residue after they had been degreased in the adjacent liming pits.



Plate 4.30 Infilled and partially robbed late 18th-century stone-lined tank S45 within B21, from the south-west

Finds from the backfill of the lime pits include a few sherds of post-1835 pottery, two complete cat skeletons, and a moderate assemblage of ovicaprid (sheep or goat) foot bones. Sheep and goat bones are anatomically very similar and therefore hard to differentiate but, in this instance, the documentary evidence suggests that that many, if not all, of the hides processed at New Quay were sheepskins. Most of these animals are likely to have been slaughtered and skinned in one of the nearby abattoirs along Back Street. The sheepskins would have arrived at the fellmongers' yard with their feet still attached; these were removed after, serving as 'handles' to make moving the hides easier. Most of the sheep bones from the lime pits had fused epiphyses, indicating they were from animals over the age of 13 to 16 months (Silver 1969, 285; Higbee 2017, 57); that is, they were adult sheep, presumably reared for wool rather than meat. Although leather-dressers sometimes processed other small animal hides, including cats, it is more likely that the cat remains found in the lime pits were from animals that died after becoming trapped in the limewater-filled pits, or dead animals disposed of there when the complex was abandoned.

The yard (OA17) to the north of B21 contained two structures. One was an above-ground tank (S46) of Bath Stone ashlar construction, the other a well-defined rectangular area of Bath Stone setts (S47). Tank S46 was filled with a clean, white substance, probably lime, alum or chalk dust, all of which were used in the leather-and parchment-making processes described above. The interpretation of S47 is less certain; it may have been a base for another above-ground tank, or may simply have been a truncated area of flooring. The soil and rubble beneath these structures contained post-1780 pottery, indicating that they were later additions to the fellmongers' yard.

After Simmonds & Son ceased trading c. 1869, the workshop buildings were demolished to ground level, but the party walls were retained and incorporated into the dye works that was erected on the site. It is uncertain if the liming pits were infilled while the parchment works was in business, or immediately prior to the construction of the dye works (see Chapter 5).



Plate 4.31 Late 18th-century non-domestic building (B22) at 1 New Quay, from the east, with Camden Malthouse and Silo in the background

B17 comprised fragmentary remains of an 11.5 m by 4.5 m wide building. This may have been 'Ward's house', which was constructed at the same time as the warehouse (BRO BC/5/70/7). The excavated parts of B17 had flagstone floors throughout and upstanding ashlar walls. The internal layout of the building is unknown.

Between 1794 and 1852, a large flagstone-paved extension was constructed to the rear of B16. This structure may have been related to the building's use as a brewery.

B22: 1 New Quay

In 1757, the plot at the eastern end of New Quay was leased to Henry Fisher, and by 1766 'Fisher's yard' is listed along with 10 other rate-payers holding properties towards the eastern end of New Quay (later numbered 1–2 New Quay). 'William Smith's warehouse', 'John Bird's yard' and 'King's stables' are mentioned in the rate books (BRO BC/5/70/1), which suggests that there were at least two buildings on the plot by this date.

There were three late 18th-century non-domestic buildings (B22–B24; Fig. 4.10) within the excavated part of 1–2 New Quay. B22 (1 New Quay) was a two-storey double-pile warehouse that was occupied by the 'tenants of W R Liddard' in 1786–1809. Earlier references to William Smith's warehouse (c. 1766–75) and Miss Bleek's warehouse (c. 1779–81) may relate to this building, but this cannot be confirmed. In

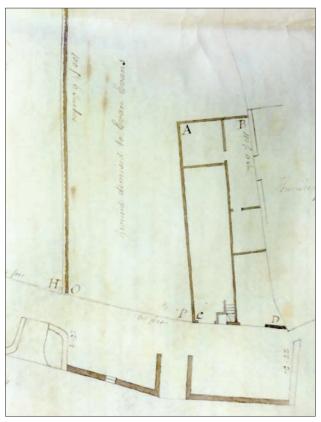


Figure 4.12 Late 18th-century deed plan (BRO BC/6/2/9/2108) of 1–2 New Quay, depicting B22, courtesy of Bath Records Office

1801, Robert Liddard leased B22 to Henry Fisher, owner of an adjacent stone, brick and tile yard (BRO BC/6/2/9/2108; BC/5/70/1–79; see B23–B24 below).

The walls of B22 (Pl. 4.31) were constructed using a single skin of Bath Stone ashlars, founded on a rammed-gravel surface, which was possibly an earlier yard surface, or a pad for the construction of the building. There were two internal partition walls in the western half of B22; these are absent from a late 18th-century plan of the building (Fig. 4.12), indicating that they are later additions to the building. A c. 1880 photograph of B22 (Pl. 4.32) shows that there were four doors on the New Quay frontage: a possible goods entrance, a small door that provided access to the first floor via an internal stair, and two stable doors, the latter perhaps indicating a use of the eastern half of the building.

B23-B24: 2 New Quay

B23 (2 New Quay; Fig. 4.10; Pl. 4.33) was the southernmost end of a long narrow L-shaped building, to the west of yard OA18. This building may have been King's and subsequently John Yeoman's stable, which is recorded in 1766 and 1767–75 respectively. In about 1779, the property was acquired by Thomas Ettrick Cary, who established a short-lived fellmongers' yard on the site (see Fellmongers, Leather-dressers and Parchment Makers at 2 and 3 New Quay, c. 1774–1869).



Plate 4.32 7 Broad Quay and 1–3 New Quay (right to left B25, B22, B24, B23 and B35), from the south, taken between 1880 and 1885 © B&NES Council



Plate 4.33 Late 18th-century non-domestic building (B23) at 2 New Quay, from the north-east

Cary was declared bankrupt in 1781, and the property was acquired by Evan Evans, stonemason. In 1794, Evans sold the business to Henry Fisher, who ran a stone, brick and tile yard from the premises until at least 1819 (BRO BC/6/2/9/2108; BC/5/70/1–79; BCWG, 2 October 1794; Guy's Bath Directory of 1819).

B23 was built in several phases, the earliest being adjacent to New Quay; this part of the building was 8 m long and 3.5 m wide. Historic photographs (Pl. 4.32) show that B23 was a low, two-storey building, with a lean-to roof. The walls were constructed using a mixture of Bath Stone blocks and re-used Pennant Sandstone setts, and the building was divided into three rooms. The floor of the southern room, which was at a slightly lower level than the other two, had a compacted earth surface; the middle room was paved with flagstones; and the northern room was paved with setts, a type of flooring commonly used in industrial buildings and stables.

The make-up layers within the southernmost room of B23 and the adjacent yard (OA18) contained a significant quantity of sheep/goat metapodial bones

Tin-glazed Wall Tiles from 2 New Quay (B23-B24)

Eight fragments of wall tile were found in a makeup layer below the floor of B23 and appear to date to the third quarter of the 18th century; two further fragments came from an underlying layer of made ground (Pl. 4.34). Four of them share the same octagonal Louis XV floral border with diaper corners and represent at least two tiles: two fragments show parts of the central design, both landscapes, one featuring a church spire, and the other a harbour scene. The border design is Dutch in origin, appearing in the first half of the 18th century, but was also used in the Liverpool tileries and at the Mortlake pothouse in London in the second half of the century; a good parallel for the simple diaper design seen here is provided by a Liverpool tile dated 1750–80 (Betts and Weinstein 2010, cat nos 288–9, 496). Two other possible Liverpool products are represented by a tile with a barbed medallion border, and another featuring a tamarisk tree; both are dated 1750–75 (*ibid.*, cat nos 499, 502). Another fragment is from the corner of a landscape scene in a circular medallion with barred ox-head corner motifs, probably English and again possibly from Liverpool (*ibid.*, cat nos 258–62).

It is known that Liverpool tiles were exported to Bristol (and also to London) from the mid-18th century (Ray 1973, 40), despite tile manufacture in both those cities. It is suggested that one reason may have been the variety of decorative schemes used by the Liverpool tilers, and they may have been seen as something of a status symbol (Betts and Weinstein 2010, 34).



Plate 4.34 Tin-glazed wall tiles

(Wessex Archaeology 2016, 23), no doubt derived from the property's use as a fellmongers' yard c. 1779–81. The deposits containing fellmongering waste abutted the walls of B23, which suggests that it was constructed before 1781. Finds from the makeup layer below the middle room include post-1760 pottery and 18th-century tin-glazed wall tiles (see above *Tin-glazed Wall Tiles from 2 New Quay (B23–B24)*). The bedding layer for the sandstone-sett floor in the northern room contained mid-18th-century pottery and a marked clay tobacco pipe of 1760–90, all of which suggests that B23 was constructed in the 1760s or 70s.

A brick and stone-lined drain (S48) beneath the floor and adjacent alleyway post-dated the deposit that contained fellmongering waste, which suggests that the drain was constructed after *c*. 1781. This is supported by the presence of post-1770 pottery in the backfill of the drain's construction cut.

On the east side of OA18, there was a small building (B24) that abutted B22. B24 is depicted on Harcourt Masters' 1794 plan (Fig. 4.6) and a late 19th-century photograph (Pl. 4.32), which shows that it was a single-storey lean-to structure, with a doorway on the New Quay frontage. B24 had an entrance onto OA18, which suggests that B23 and B24 were part of

a single property. B24 was constructed using a single skin of Bath Stone ashlars founded on the underlying rammed-gravel surface. There was a compacted earth surface within the building, but it is uncertain if this was a floor, or the base for a paved surface that was removed when the building was demolished (see Chapter 5).

B25: Quay House, 7 Broad Quay

Number 7 Broad Quay (B25; Figs 4.1 and 4.10; Pls 4.35 and 7.10) was known as Quay House from at least 1797 onwards. The property was held by the owners of the Avon Navigation, initially the Proprietors of Navigation, then the Kennet and Avon Canal Company and from 1852 onwards, the Great Western Railway.

B25 is depicted on Harcourt Masters' plan of 1794 (Fig. 4.6), but its exact date of construction is uncertain. A 1774 reference to William Biggs, clerk of the proprietors, at the 'counting house on the quay' (BCWG 12 July 1774), may refer to this building. Between 1804 and 1824, Quay House was occupied by John Salmon, barge master and clerk of the Kennet and Avon Canal Company (BRO BC/5/70/33–79; Guy's Directory 1819 and 1824). The building was subsequently occupied by various wharfingers and their families, and from 1901 onwards, by railway porters for the GWR (census 1841–1911; BCWG 15 July 1886, 14 April 1928).

B25 was very heavily truncated by modern disturbance associated with the construction of a temporary bridge in the late 1960s. The surviving remains included a corner fireplace, a corridor and a small area of flagstone flooring. A narrow passage to the west of the fireplace may indicate the position of a stair. Historic photographs (Pls 4.32, 4.35 and 7.10) show that B25 was two-storey, slightly irregular structure with a hipped roof at the south end. The



Plate 4.35 1937 view of Quay House (B25), from the southeast, showing the level of a recent flood © B&NES Council

northern half of the building was at a slightly higher level than the south.

B2/B6: 48 Avon Street

Several alterations to B2 (see Chapter 3) were also undertaken: the original flagstones were removed, the floor level was raised by approximately 0.4 m, an internal wall and stone-lined drain (S55) were added, and a new wide entrance, surfaced with sandstone cobbles, was created, presumably to allow horses and/or wheeled vehicles to access the building. This episode of rebuilding coincides with a period when



Plate 4.36 18th-century buildings along New Quay and Avon Street, from the north, showing 14–15 New Quay/1–2 Hucklebridge's Court (B12), 3–4 Hucklebridge's Court (B13), and 48 Avon Street (B2/B6)



Plate 4.37 c. 1930 view of New Quay, from the north-west, showing late 18th-century warehouse B7 (centre) and c. 1874 stable B33 (left) © B&NES Council



Plate 4.38 18th-century culvert S49, from the south-west

47–48 Avon Street were occupied by the Baker family of blacksmiths, and suggests that B2 was probably used as a smithy in the 1810s–40s (*Guy's Directory* 1819 and 1824; *BCWG*, 1 May 1823 and 21 November 1839; *Pigot's Directory* 1846).

In the mid-18th century, the northern half of B2 was demolished and replaced by a modest two-storey house (B6; Fig. 4.9; Pl. 4.36), which is depicted in an early 20th-century drawing (Fig. 3.12). The ground floor of B6 was divided into three rooms: a hallway and stair, a parlour/living room and a kitchen. To the rear there was a small paved yard (OA10) at a slightly lower level than the house. The ground floor had suspended wooden floors throughout and there were fireplaces in the parlour and kitchen. A cast-iron grille in the rear wall provided ventilation to the underfloor void. Cotterell's plan of 1852 (see Fig. 5.1) shows a privy in the rear yard.

B7: Warehouse, Avon Street

B7 (Fig. 4.9) abutted the south side of B2 and was heavily truncated by a modern sewer trench. Historic illustrations and photographs (Fig. 4.1 and Pl. 4.37) show that this building was a substantial four-storey double-pile warehouse.

Historic plans (Figs 4.4 and 4.5) indicate that warehouse B7 was probably constructed between 1776 and 1786, and may have been the 'most capital newlybuilt and airy set of corn lofts' that was offered for sale in 1790, together with a range of other buildings including 'a good dwelling-house, offices, [...] malt-



Figure 4.13 Plan of mid-/late 18th-century archaeological features in Great Kingsmead

house, [...] stables, wagon-house and yard for the coal trade, [...] at the bottom of Avon Street, [...] formerly owned by the late Joseph Mansford, corn factor' (*BCWG*, 30 September 1790; BRO BC153/278/5). If this identification is correct, then it suggests that most, if not all, of the quayside buildings (B1–B6) were held by a single lessee.

Warehouse B7 was divided in two by a substantial wall that was abutted by further stone structures, possibly the foundations for a chimney or stair. Fragments of Pennant Sandstone paving survived in the east room; the other had a mortar floor. In 1900, the building was described as 'arranged on four floors and for many years used as a leather warehouse' (BCWG, 22 November 1900).

Commercial yard facing back street

Between 1794 and 1852, boundary wall S57 (see Fig. 4.18) was constructed to the rear of 10–13 New Quay. The area to the north was used as a commercial yard, with buildings ranged around its north, west and south

sides. Apart from wall S57, there were no surviving remains of these buildings, which suggests that they may have been of relatively insubstantial construction.

The Development of Great Kingsmead

Prior to the late 1760s, Great Kingsmead was a meadow that was predominantly used for grazing animals. The earliest features (Fig. 4.13) in this area were a large stone-lined culvert (S49; Pl. 4.38) and an adjacent ditch (S50), both of which pre-date an episode of shallow quarrying that probably occurred in the 1780s (see *Kingsmead Terrace*, below). The culvert was 0.5 m wide and 1.45 m deep internally and was set at right angles to the ditch. Finds from the infill of the ditch suggest that it went out of use after c. 1760. The culvert remained in use after the area was developed, but its original purpose and construction date remain uncertain; it may have been used to drain the meadow to improve it for agricultural use, or to prepare the land for construction.

Large-scale Dumping in Quarrying/ Pitting West of Milk Street

Pottery

This large group (896 sherds) is chronologically mixed, including some wares potentially as early as late 17th century, and extending into the 19th century (Pl. 4.39). The 19th-century wares, however, are relatively scarce, and the emphasis seems to be on the second half of the 18th century (with a significant proportion of plates). It may therefore represent continued refuse dumping over a period of time or (more likely given the cross-context joining and possible same-vessel sherds) the redeposition of an accumulation of material in a number of dumping episodes over a restricted timespan.

It is this group that gives the best cross-section through the post-medieval ceramic sequence of

Bath, although not necessarily pertaining directly to the Avon Street district. It is difficult to isolate any pre-18th-century wares, but these are likely to have consisted of redwares and slipwares, with some German stonewares, tinglazed earthenwares and yellow slipwares (see Finds from the Cart Ruts Under the Footbridge for a comparable group of this date). The first half of the 18th century saw the introduction of porcelain, white salt glaze and the earliest refined wares (eg, Whieldon-type ware and agate ware) and the continued use of yellow slipwares and tinglazed earthenwares, but again it is difficult to identify material of this date range within the overall deposit. The majority of the dumped waste is likely to belong to the second half of the 18th century, as demonstrated by the high proportion of creamware (just over 20% by sherd count), the prominence of plates, a form which achieved popularity from the 1770s, and the type of

Continues next page



Figure 4.14 Plan of archaeological features to the west of Milk Street, c. 1780–95. Building outlines based on Harcourt Master's plan of 1794

chamberpots seen in tinglazed earthenware and white salt glaze (taller profiles with slightly everted or rolled rims). This group also includes most of the examples of red stoneware coffee pots or teapots, a form common in the 1760s and early 1770s. Tea- and tablewares are well in evidence, but the chamberpots supply a more prosaic note, there is a significant proportion of tinglazed drug jars and ointment pots, and utilitarian redwares still make up the single largest group in the deposit (31% by sherd count).

Glass

The dumped deposits also contained vessel glass (40 fragments). This includes three complete small cylindrical phials and the kicked base from a fourth;

the remainder consists of free-blown and mould-blown green wine bottle fragments dating somewhere between c. 1700 and the first two decades of the 19th century, although none is definitively later than the 18th century.

Clay Tobacco Pipes

Clay pipes were not well represented amongst the dumped deposits; only 23 fragments were recovered. None carry makers' marks, although some of the bowls are comparable to types used by known makers, such as Robert Carpenter (1685–1710) and Richard Greenland (1694–1739). Overall the datable bowls give a potential date range of 1685–1800, but the focus is on the second half of the 18th century.



Plate 4.39 Selection of pottery from dumping layers

OA20: Quarrying, dumping and yard at 30 Kingsmead Terrace

There were a series of shallow quarries in OA20 (Fig. 4.14) that appear to have been dug to extract topsoil, presumably for horticultural use. The quarry pits were backfilled with an extensive dump of ash, clinker, silt and stone rubble that raised the ground level by approximately 0.5 m (to 17.7 m OD). Finds from this deposit (see *Large-scale Dumping in Quarrying/Pitting West of Milk Street*) suggest that dumping occurred in the 1780s or early 1790s.

The dump deposit in OA20 was cut by a small (1.35 m by 1.2 m wide and 1.05 m deep) stone-lined cesspit (S52; Fig. 4.14; Pl. 4.40), which was backfilled with a dump of sandy silt, ash and clinker. Finds from the infill of the cesspit (see *Fill of Cesspit (S52) at 30 Kingsmead Terrace*), suggest that it was probably backfilled in the 1780s or early 1790s. Stone-lined well S53 (Fig. 4.14) is likely to be broadly contemporary with the cesspit, but this could not be confirmed.

Cesspit S52 and well S53 were probably associated with a pair of small buildings depicted on Harcourt



Plate 4.40 Cesspit S52, from the south-west

Fill of Cesspit (S52) at 30 Kingsmead Terrace

Clay Tobacco Pipes

The group of pipes in the truncated fill of the cess pit are all early products by Joseph Smith of 10 Bridewell Lane, Bath, c. 1780-90 (Pl. 4.41). Very few of these have been found elsewhere, and certainly not in such numbers, and there is one previously unrecorded mould form among them. In addition to 174 stem fragments, 15 bowls and fragments of 10 others were recovered. Three mould forms are present, and in each case the S is embossed in reverse, an error on the part of the mould cutter. On two of the forms, the initials are arranged in the traditional way, by which the Christian name initial is on the left side of the spur, while on the third form the initials are embossed the other way around. Amongst the other material in the deposit were three thin strips or wires of what appeared to be pipeclay. In the absence of any identifiable kiln debris, these do not seem to indicate that the pipes were brought in as workshop waste, and they presumably relate to some other process or function.

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Plate 4.41 Clay pipes and pipeclay strips from cesspit S51

Pottery

A small group (44 sherds), this would appear solidly 18th century, with white salt glaze the most commonly occurring ware type (c. 1720-80), alongside porcelain, creamware, English stoneware, redware (including North Devon gravel-tempered ware and Verwood-type ware from East Dorset), yellow slipware and tin-glazed earthenware (Pl. 4.42). A later 18thcentury dating is supported by the predominance of tablewares (nine plates) over tea-wares (one cup, one mug, one possible tea bowl), a pattern which in Staffordshire emerges c. 1770 and which reflects both changing habits in dining (a greater formality in dining as food consumption became separated from its preparation) and the ability of the potteries to produce greater quantities of flatwares more cheaply due to technological advances (Barker 2010, 12-13). The single creamware chamberpot has a rolled rim, in a style characteristic of the last quarter of the 18th century (Noël Hume 1969, 148). This small group of pottery then probably dates to the late 1770s or 1780s.

Glass

The cesspit also produced a small collection of vessel glass, including parts of a minimum of seven free-blown green wine bottles. Rims and bases indicate a potential date range of c. 1700–1830.

Animal Bone

The single largest group of animal bone from the site came from this cesspit (385 bones). Of the bones identifiable to species (122), sheep/goat were most common (34%), followed by domestic fowl and goose (31%), cattle (23%) and pig (10%); there are also three rabbit bones. The cattle bone included a fragment of calf skull. Calves' heads were probably procured as cheap cuts from which the cheek meat could be used as well as the brain and tongue. The rabbit, too, would have been a cheap source of meat. Butchery techniques evident from the bones are consistent with the period, including the use of saws as butchery tools and the splitting of carcasses into sides.



Plate 4.42 Pottery from cesspit S51



Figure 4.15 Early 19th-century View on the Avon, by Benjamin Barker (1776–1838), looking south-east from the western end of New Quay towards Beechen Cliff © Victoria Art Gallery, B&NES Council

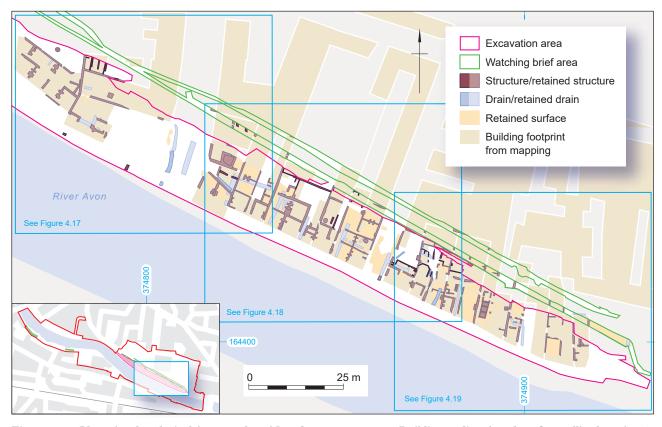


Figure 4.16 Plan of archaeological features along New Quay, c. 1800–39. Building outlines based on Cotterell's plan of 1852



Figure 4.17 Plan of archaeological features along New Quay, c. 1800–39: west end. Building outlines based on Cotterell's plan of 1852

Masters' plan of 1794 (Fig. 4.6) and a c. 1800–38 painting (Fig. 4.15). These buildings are absent from Harcourt Masters' plan of 1786 (Fig. 4.5), which suggests that they were constructed in the intervening period. In 1819–24, this property was occupied by J Brown, carpenter and builder (Guy's Directory, 1819 and 1824). Later records describe the property as a residence, cabinet factory and timber yard occupied by Richard Smith, cabinet maker (census 1841; BCWG 11 April 1844). In 1846, the property was acquired by the Baths and Laundries Society for the City of Bath, who erected a public washhouse on the site (see Chapter 5). Construction of the washhouse appears to have destroyed all remnants of the pre-1846 buildings.

B27: 28-29 Kingsmead Terrace

Numbers 28–29 Kingsmead Terrace (B27; Fig. 4.14) were constructed as a single structure by the plumber Peter Lidiard and mason Robert Simpkins in 1793 (BRO BC 6/2/9/400/3). Historic photographs (see

Pl. 5.1) show that the houses along Kingsmead Terrace were arranged over three storeys, with cellars below and garrets under mansard roofs above. Each house had two 5.1 m by 4.4 m wide rooms on each floor, with large (2.45 m wide) fireplaces against the party walls. The cellars were paved with flagstones throughout, and extended below an elevated roadway (Kingsmead Terrace) to the west. The cellars under the road were divided into two vaulted cells, which were probably used for coal storage. The houses had yards to the rear (east) and formal gardens to the west (OA21). The rear yards lay beyond the limits of excavation, but were probably level with the floors of the adjacent cellars.

Discussion

By the 1760s, the social make up of Avon Street had changed. Gone were the wealthy visitors to the spa, and in their place, an army of artisans, labourers



Figure 4.18 Plan of archaeological features along New Quay, c. 1800–39: central area. Building outlines based on Cotterell's plan of 1852

and servants had arrived: the people who made the Georgian city function. As the population grew, houses were subdivided and extended over backyard plots.

The houses along New Quay were constructed in the 1760s and early 1770s, and in contrast to the 1720s-50s townhouses along Avon Street, they appear to have been built specifically for lower income tenants and their families. The quayside houses, which included examples of blind-back and back-to-back tenements, were of simple but solid construction. Most had a single room on each floor and were provided with wells for drinking water, though these were frequently shared between two or more properties. Unusually for the period, many of the houses had access to stone-built water-flushed lavatories linked to nearby sewers. There was no piped water supply at this date, which suggest that the lavatories were flushed using waste-water or rainwater fed by downpipes from the roofs.

Broad Quay and the eastern end of New Quay had a more commercial character: the buildings here were constructed as warehouses and workshops, though most also contained some residential space. One of the excavated warehouses was converted into a public house in 1794. This establishment remained in business until 1869. This area also become a focus for animal processing industries: there were two fellmongers' yards along New Quay (both founded in the 1770s), and several slaughterhouses and a bone mill along Back Street.

Kingsmead Terrace, a row of three-storey townhouses, was constructed in 1792–4 for middle-income tenants, such as small business owners, clerks and the like. These houses formed a substantial visual barrier that separated the poor and semi-industrial Avon Street district from the more genteel residences of Green Park to the west.

In the early 19th century, the pattern of development within the Avon Street district remained largely



Figure 4.19 Plan of archaeological features along New Quay, c. 1800–39: east end. Building outlines based on Cotterell's plan of 1852

fixed, however, population pressure and a demand for commercial space led to additional development within backyard plots. An increasingly overcrowded environment led to deteriorating living conditions, in which disease and social disorder proliferated. Concern about these issues, which caused much anxiety to city officials and social reformers alike, eventually led to the sanitary and housing improvements that were implemented from the mid-19th century onwards.

Chapter 5 'All the scum of Bath': Industrialisation and the Poor, 1840–1930

Historical Background

The Avon Street District

In 1842, Edwin Chadwick published his seminal report, *The Sanitary Condition of the Labouring Population of Great Britain*. This publication detailed the investigations Chadwick and others made into the living conditions of the urban poor and the effects it had on their health. The report was damning and led directly to the passing of the *Public Health Act* 1848 – the first instance where the British Government took direct responsibility for the health of the Nation (Flinn 1965, 1; Hayes 2017, 278).

Chadwick's report included case studies written by local officials. The report on Bath was written by a 26-year-old clergyman named Whitwell Elwin, chaplain of Bath Union Workhouse. Elwin's work for the Poor Law Union made him intimately familiar with the lives of Bath's poor, the majority of whom lived in the Avon Street district. His description of living conditions in the district was both opinionated and shocking:

The deaths from fever and contagious diseases I found to be almost exclusively confined to the worst parts of the town. An epidemic smallpox raged at the end of the year 1831, and carried off upwards of 300 persons; yet of all this number I do not think there was a single gentleman, and not above two or three tradesmen. The residences of the labouring classes were pretty especially visited, disease showing here and there a predilection for particular spots, and settling with full virulence in Avon-street and its offsets. I went through the registers from the commencement, and observed that, whatever contagious or epidemic diseases prevailed – fever,

small-pox, influenza – this was the scene of its principal ravages; and it is the very place of which every person acquainted with Bath would have predicted this result.

Everything vile and offensive is congregated there. All the scum of Bath – its low prostitutes, its thieves, its beggars – are piled up in the dens rather than houses of which the street consists. Its population is the most disproportioned to the accommodation of any I have ever heard; and to aggravate the mischief, the refuse is commonly thrown under the staircase; and water more scarce than in any quarter of the town. It would hardly he a hyperbole to say that there is less water consumed than beer; and altogether it would be more difficult to exaggerate the description of this dreadful spot than to convey an adequate notion to those who have never seen it. (Rev. Whitwell Elwin in Chadwick 1842, 168–70).

Physically, the overall pattern of development within the Avon Street district (Pl. 5.1) remained largely static from the 1790s to the 1930s, and apart from the creation of a through-route linking Corn Street to Avon Street in 1882 (BCWG, 20 July 1882), the road layout remained unchanged throughout the period. The process of infilling back plots with new buildings and extensions did, however, continue, sometimes for additional housing, but more frequently for new or expanding industrial premises.

There were only a few civic buildings in the Avon Street district: a public washhouse, constructed in 1847, a school on Avon Street and a Sunday school on Milk Street. Religious institutions were similarly sparse: Cotterell's plan of 1852 (Figs 5.1–5.2) depicts two chapels of unknown denomination on Avon



Plate 5.1 Panorama of the Avon Street district, from the south, taken between 1880 and 1885 © B&NES Council



Figure 5.1 Detail of Jacob Henry Cotterell's Plan of the City and Borough of Bath, 1852

Street and Milk Street, an Anglican chapel (now The Mission Theatre) on Corn Street, and a Baptist chapel on Somerset Street. The chapels on Avon Street or Milk Street both closed before 1885 (Fig. 5.3). There was also a synagogue serving Bath's small Jewish community on Corn Street, which was dedicated c. 1841 and closed c. 1874 (JCR-UK 2017).

Railways

Between 1810 and 1840, the Kennet and Avon Canal Company's waterways were the principal means of transporting heavy goods in and out of the city. Most these goods would have been loaded or unloaded at Broad Quay, which, unsurprisingly, was a hub of commercial activity. The Kennet and Avon Canal Company's near monopoly on heavy goods transportation ended abruptly with the opening of the Great Western Railway's (GWR) Bath Spa station in 1840. The following decade was a period of intense competition between the canal and railway, which the GWR ultimately won when they acquired sole ownership of the canal company in 1852. The GWR promptly levied heavy tolls on all water traffic and slashed the canal's maintenance budget, with the

explicit aim of driving trade onto the railway (TNA RAIL 842; Clew 1985, 107). This led to a gradual, but inexorable, decline in trade along the waterways and associated quays.

Industry

At the beginning of the 19th century, most of the businesses within the Avon Street district were associated with either transportation (carriers, coach builders, farriers and commercial stables), storage (warehouses and corn lofts), hospitality (taverns and lodging houses), construction (timber and stone yards and builders' merchants), food and drink production (malthouses, breweries, flour mills and an oil cake mill), or animal-processing industries such as slaughterhouses, bone mills, fellmongers, leatherdressers and parchment makers (*Guy's Directory* 1819; *Bath Directory* 1846). Many of these businesses continued operating in the second half of 19th century, but from the late 1840s onwards they were joined by a host of new industrial firms.

One of the earliest was Joseph Sants, who established a redware pottery in a former corn loft between 29 and 30 Milk Street in 1847. Two years

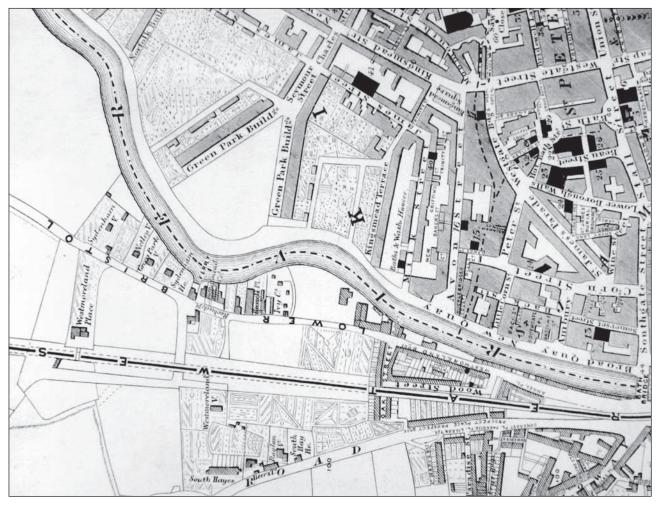


Figure 5.2 Detail of Jacob Henry Cotterell's Plan of the City and Borough of Bath, and its suburbs, 1852

later, Sants leased 27 Milk Street and converted it into a tobacco pipe factory, which operated until 1916 (Lewcun 1994, 140–4).

The next industrial concerns to establish themselves in the riverside districts were engineers and metal founders, the earliest of which was James Williams, steam engine and machinery manufacturer, who by 1855 had established the Pickwick Ironworks on Broad Quay (Paris Universal Exhibition 1855, 14). Williams retired in 1872 (*BM*, 3 August 1872), but his foundry, later known as Broad Quay Iron Works, briefly reopened under the tenure of Ernest Marriage in 1889–93 (*BM*, 6 May 1889; Benn, 1893, 162).

In 1857, the Bath-based heavy engineering firm Stothert and Pitt constructed the huge Newark Works foundry on the south side of the River Avon. Stothert and Pitt was established in 1785 and by the mid-19th century had become an internationally-renowned manufacturer of large dockside and offshore cranes. The company also produced water pumping engines, iron lighthouses, mini-submarines, concrete mixers, quarry crushing and screening plant, and provided much of the construction machinery used by the GWR. Stothert and Pitt remained in business until 1989 and the remains of their foundry, which is a

prominent landmark on the south side of the river, is protected as a Grade II listed building. Construction of the Newark Works was followed by further industrial development along the south side of the river (Figs 5.4–5.5), which by the late 19th century included four stone yards, the Camden (flour) Mill, constructed *c.* 1880, Charles Bayer's 1892 Albion Stay Factory, the Camden Malthouse (see Pls 1.5 and 4.31), the Midland Timber Yard and Cabinet Works, and the Westmoreland Sawmill and Cabinet Works (Wessex Archaeology 2013, 16–20, 54).

In 1865, another foundry, operated by NG Wilcocks, was established at 46 Avon Street and Back Street (see below), and in 1876, JB Bowler opened a brass foundry and aerated water factory on the corner of Corn Street and Ambury. Following the closure of the Bowler's factory in 1969, the entire contents of the building, including plant, tools and stock, were salvaged and now form the core collection of the Museum of Bath at Work.

In 1886, the N G Wilcocks' foundry was acquired by a firewood merchant named George Walker, who converted part of the building for use as a firewood mill (see below), though Wilcocks retained use of 46 Avon Street until at least 1889.

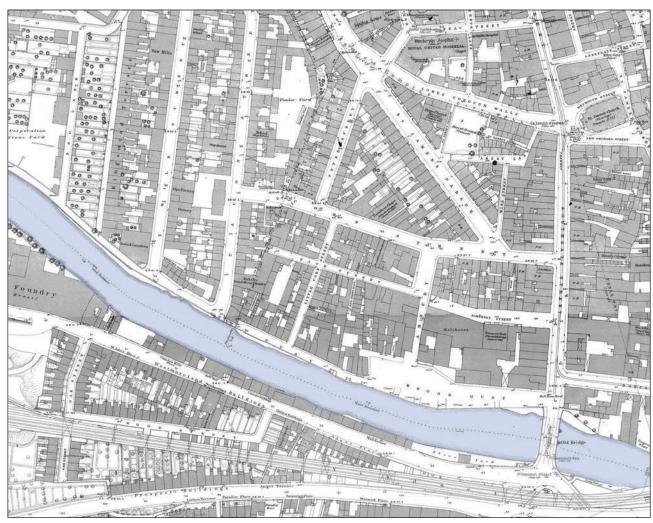


Figure 5.3 Detail of 1885 Ordnance Survey 1:500 Town Plan

Bath's numerous hotels, wealthy visitors and residents also supported a large service industry, which included several commercial launderers, one of whom, Marshall & Co., constructed a large dye works and laundry at 3 New Quay c. 1871 (see below).

Archaeological Remains

Industry and Commerce

B30: Sants' pottery and tobacco pipe factory, 27–30 Milk Street

Joseph Sants was a clay tobacco pipemaker and potter, who started business in 1835 at a tobacco pipe factory in Bridewell Lane. In 1847, Sants leased a former corn loft between 29 and 30 Milk Street and converted it for use as a pottery. Two years later, he took out a lease on an adjacent property (27–29 Milk Street) and converted it into tobacco pipe factory. The Bridewell Lane factory closed in 1851 due to complaints about smoke, and Sants' entire business was relocated to Milk Street. Joseph Sants died in 1877 and his business was divided between his two sons, Edwin and

Walter. The pipemaking business was given to Edwin and Walter inherited the pottery. Edwin Sants died in 1894 and the pipemaking business was then run by his wife Kate. Two years later, the pipemaking factory was handed over to Walter Sants, who managed both businesses until his retirement in 1916. A 1909 billhead describes the products of the Sants pottery as: 'brownware, chimney, rhubarb, seakale, garden pots & clay tobacco pipes' (Lewcun 1994, 139–44; Lewcun in prep).

Archaeological remains of the Sants' pottery (B30; Fig. 5.6) comprised part of a flagstone floor. The floor was probably laid in 1847, though it could potentially have been an 18th-century structure that was retained within the new pottery. The floor surface, which lies 1.5 m below present ground level, has been preserved *in situ* below the new alignment of Green Park Road.

B16: 4 New Quay, vagrant's ward, warehouse, workshop and sports club

After the *Duke of York* public house closed in 1869, the building was purchased by the Bath Board of Guardians, who carried out a number of modifications

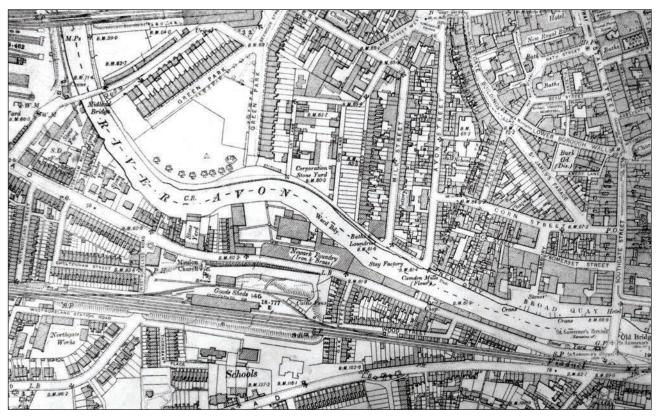


Figure 5.4 Detail of 1904 Ordnance Survey 1:2500 map

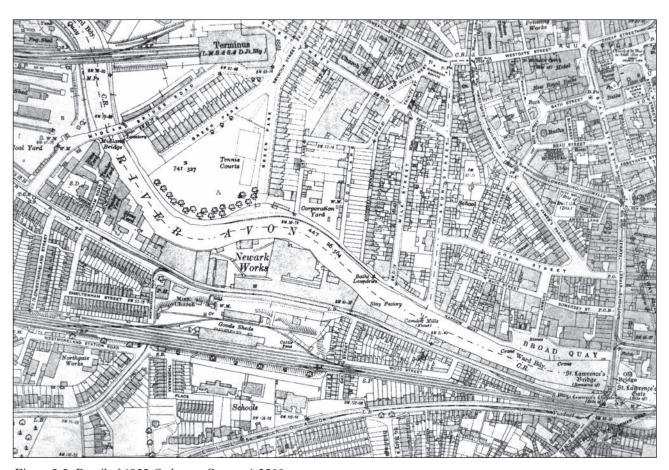


Figure 5.5 Detail of 1932 Ordnance Survey 1:2500 map



Figure 5.6 Plan of Sants' pottery and tobacco pipe factory, 1847–1916. Building outlines based on 1885 OS plan

to the internal layout to make it suitable for use as a 'vagrant ward'. This arrangement was short-lived, and by 1870 part of the building was being used as a workshop by a currier and leather seller named John Linsley, who lived at 30 Kingston Buildings. The rest of the building was occupied by the Bath Paper Mills Company and occasional residential tenants. In 1876 the property was purchased by Peter Marshall, owner of an adjacent dye works. Linsley's tenancy continued until 1891, and the West of England Agricultural Produce Company is briefly listed as an occupant in 1880. The building was uninhabited between 1881 and 1894, but from 1895 onwards there were various residential and commercial tenants, including Thomas Wheatley, carrier (1895-1901); J A Jewell, tinsmith, coppersmith, brazier and sheet metal worker (1920); the 'Nelson Men's Club' (1925); and the 'New Crusaders' Sports Club' (1926). In 1896, the property was sold to James Poulson, and in 1920 it was purchased by Philip Edwin James and Tom Arthur Walrond. Bath Corporation purchased the building in 1933 and it was demolished soon after (BRO DP 669; Bath Directory 1869-1933; BCWG, 22 July 1869, 18 December 1920, 28 May 1921, 10 October 1925 and 31 July 1926; census 1871-1911).

The only archaeological remains dating from the late 19th- and early 20th-century use of the building was a ceramic drain (S68; see Figs 5.9 and 5.12), which was probably installed when the building was converted for use as a vagrants' ward in 1869.

B35: Marshall's Steam Dye Works and the Bath City Foundry and Engineering Works, 3 New Quay

Marshall & Co was a dyeing and commercial laundering company that was established in 1861 by a 48-year-old Northumbrian named Peter Marshall. The company was initially based at 13 Philip Street. In about 1871, Marshall moved the company's receiving office to 4 Union Street, and acquired Simmonds & Sons' fellmongers' yard at 3 New Quay (see Chapter 4) as a site for a purpose-built dye works and laundry (B35; see Fig. 5.12), known as the 'Bath and West of England Steam Power Dye Works', or simply 'Marshall's Steam Dye Works'.

By 1874, Marshall had gone into business with a 35-year-old newspaper clerk named John Banks. The company subsequently traded as 'Marshall, Banks & Co.' (Fig. 5.7). Marshall died in 1880, but the company, which employed 30 people, continued trading under his name. Banks' son Charles joined the company in the late 1880s and the company briefly traded under the name 'Marshall and Banks and Son'. Charles Banks died in 1890, and in 1893, the company reverted to its previous name. The dye works closed in 1898 and the company relocated its offices to 6 Bath Street (census 1871 and 1881; BCWG 14 February 1874 and 22 April 1898; BRO DP 669; Bath Directory 1862–1908).

The dye works was a three-storey four-bay building of Bath Stone ashlar construction. An early

1880s photograph of the building (see Pl. 4.17) shows the legend 'MARSHALL'S STEAM DYE WORKS A.D. 1861.' carved or painted across the parapet; the date refers to the establishment of his business rather than the building, which was constructed c. 1871. The New Quay entrance, located on the east side of the building, opened onto a long corridor along the east side which provided access to the rest of the building and a stairwell to the upper floors. The internal floors were paved with Bath Stone and Pennant Sandstone (Pl. 5.2).

A dye works and laundry of this period would have been fitted with numerous tanks containing water and dye, linked to an extensive network of pipes for water supply and drainage. Overhead, there would have been a system of pulleys and shafts that transmitted power from the steam engine to washing, dyeing and drying machinery. There were no obvious remains of these fixtures within the excavated part of the works, which suggests that the majority of the machinery was located further to the north. The only feature that could be directly related to the use of the building as a dye works and laundry was a nine-inch ceramic drain (S72; see Fig. 5.12; Pl. 4.29) that would have channelled large volumes of waste-water into the river.

After the dye works closed, the property was acquired by a 30-year-old engineer and aerated waterbottling equipment manufacturer named Nathaniel St George Wilcocks, who converted the building for use as the 'Bath City Foundry and Engineering Works'. Wilcocks' firm was a family business that was established c. 1818 by his great-grandfather George Weedon. His company, Weedon & Co, specialised in the manufacture of gas lamps, chandeliers and beer pumps. The opening of the Bath Gas Light and Coke Company's gasworks in 1819 provided a market for their gas fittings, which were one of the company's main products until the 1880s. Weedon & Co became Weedon & Wilcocks c. 1836, N G Wilcocks in 1862, and N S G Wilcocks c. 1889. The company was initially based at 5-6 Upper Borough Walls, but by 1861 it had relocated to 15 Westgate Buildings, and in 1865, Nathaniel George Wilcocks acquired 46 Avon Street and converted it and a former bone mill backing onto Back Street for use as the 'Bath City Brass and Iron Foundry' (BRO BC/6/2/9/665). During the 1880s, N G Wilcocks became a specialist manufacturer of

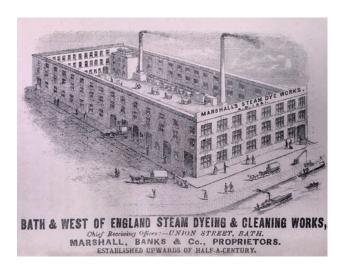


Figure 5.7 Advertisement for Marshall, Banks and Son's New Quay dye works and laundry, published in the Post Office Bath Directory (1888–9, 87), courtesy of Bath Records Office. The image of the dye works is idealised and perhaps aspirational: the real building was half the size (see Pl. 4.17)



Plate 5.2 Bath and West of England Steam Power Dye Works (B35), from the north-west. Converted for use as N S G Wilcocks' Bath City Foundry and Engineering Works in 1898

aerated water-bottling equipment, and this became the company's main product (Fig. 5.8). N S G Wilcocks' engineering works closed in 1932 and was demolished in the late 1930s (*Pigot's Directory* 1830; census 1841–1911; *Bath Directory* 1866–1933; *BCWG* 11 December 1823, 5 August 1886, 22 April 1898; *SWDP*, 9 June 1899; BRO DP 669).



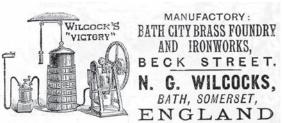


Figure 5.8 Advertisement for aerated water bottling equipment manufactured by N G Wilcocks', published in The Chemist and Druggist, 15 January 1885

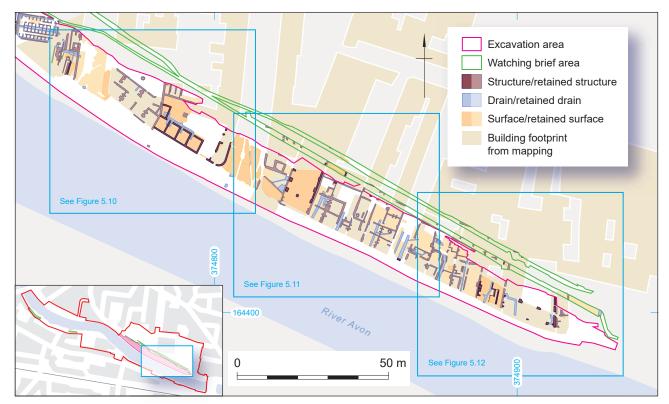


Figure 5.9 Plan of archaeological features, 1870–1930. Building outlines based on 1904 OS plan

The engineering works contained a steam engine and would have been fitted with a system of overhead pulleys and shafts to power machine tools. The steam engine must have been located in the northern part of the building, and it is possible that Wilcocks used the engine and transmission system that was installed by the building's previous occupants.

The only features that could be directly related to the building's use as an engineering works was a pair of fireplaces (S73; see Fig. 5.12; Pl. 5.3) built against the west party wall. The fireplaces had elevated hearths, which suggests that they may have been small forges. The only other significant post-1898 changes were the insertion of an additional goods doorway on the New Quay frontage, and some minor alterations to the internal layout of the building.



Plate 5.3 Detail of possible forge base within B35

B33, B34 and OA28: commercial stables

In 1862, the Hospital of St John sold 23–25 New Quay to the Ecclesiastical Commissioners for England. The property changed hands twice in 1874, first to Charles Kemble and Rev. Francis Augustine Morgan, then to William Dyer, general dealer. Dyer promptly demolished the existing buildings and replaced them with a large commercial stables (BRO DP 668). Construction of the stables entailed a slight alteration to the layout of the junction between Avon Street and New Quay, and it is probable that the paving in this part of the road was re-laid at this date.

The stables themselves comprised a walled yard (OA28) with single-storey buildings (B33 and B34) ranged around the sides (Figs 5.9–5.10; Pls 5.4–5.6). B33 was a purpose-built stable block, constructed in 1874. The walls, which survived up to 1 m high, were of uncoursed Bath Stone rubble. The stable block was divided into four 4 m-square rooms, each with a doorway opening on to the yard (OA28). The room at the eastern end of the building was paved with flagstones and was probably used as an office or tack store; the other rooms were paved with sandstone setts, which suggests that they were horse stalls. Unsurfaced parts of these rooms indicate the positions of fodder racks. The floors sloped towards drainage gullies near the doors, no doubt to facilitate mucking out.

B34 comprised an *ad hoc* range of single-storey structures, all of which were built before 1885. The east range, which measured 13.4 m long by 5 m wide, was heavily truncated by modern services. The surviving



Figure 5.10 Plan of archaeological features, 1870–1930: west end. Building outlines based on 1904 OS plan

elements included the east and west walls and a small area of Pennant Sandstone and Bath Stone sett paving. The northern range of B34 was a lean-to structure that was open-sided to the south. The floor within this part of the building was crudely paved using a mixture of flagstones and grey stable bricks.

The western half of yard OA28 was paved with sandstone setts, with sunken strips of sandstone setts and flagstones forming surface gutters; the eastern half of the yard was surfaced with compacted clinker. Iron-grated drainage gullies were set into the gutters, which fed into a network of ceramic pipes (S67) that drained waste and surface water towards the main sewer. Eighteenth-century well S17 remained in use and is marked on contemporary plans as a pump (Fig. 5.3).

In 1890, the stables were sold to John McDonald, coal merchant, and in 1916 they were acquired by H C Saw, a marine store dealer, who later became a rag and bone man (BRO DP668). The northern range

of B34 was demolished in the 1920s. B33 survived until at least 1937 (see Pl. 7.1), but it was demolished before the outbreak of the World War II.

Numerous metal objects (nuts, bolts, enamelled urinals, early 20th-century vehicle parts etc) were found scattered throughout B33, B34 and OA28; these are derived from the property's use as a rag and bone yard in the 1920s and 30s. One of the rooms within B34 contained a dump of 1920s/30s beer and mineral water bottles; these were probably discarded by workers at the yard.

B36: Slaughterhouse and stable, Back Street

Between 1852 and 1885, several new buildings were constructed in yard OA29 (Fig. 5.11), which in 1879 was described as 'a large yard and stabling, premises and slaughterhouse'. The property was purchased by Bath Corporation in 1932, who used the property as a store until the buildings were demolished in the early 1960s (*BCWG*, 24 April 1879; BRO DP 668).



Plate 5.4 Commercial stables (B33, B34 and OA28) at the southern end of Avon Street, view from the north-east, with the Albion Stay Factory and the Newark Works in the background



Plate 5.5 Commercial stables (B33, B34 and OA28) at the southern end of Avon Street, from the north-west

The remains of B36 comprised a Bath Stone rubble wall and an area of sandstone-sett paving that incorporated a gutter strip. The style of flooring indicates that the building was a non-domestic structure, probably a stable or slaughterhouse.

B37: J A Bladwell & Co's warehouse and showroom, 1-2 New Quay

Numbers 1–2 New Quay (B22–B24) were demolished in 1885 and replaced with a large purpose-built warehouse and showroom (B37) and goods yard



Figure 5.11 Plan of archaeological features, 1870–1930: central area. Building outlines based on 1904 OS plan

(OA30) for the builders' merchants, J A Bladwell & Co (Fig. 5.12; Pls 4.35, 5.7 and 7.10). This company, which supplied a vast array of building materials and fixtures, was run by Joseph Ambrose Bladwell. The Bladwell family was heavily involved in the local construction industry throughout the 19th and 20th centuries. Joseph's grandfather was a mason, his father ran a major local building firm that employed nearly 200 men, and his brother Henry ran a large stone yard at Sydenham Wharf (see below). By 1901, J A Bladwell & Co had become a partnership between Joseph and one of his other brothers named Frederick. Joseph and Frederick Bladwell's eldest sons were both killed during the World War I, so after Joseph Bladwell's death in 1929, the business passed to his younger son Ernest. The company retained use of the New Quay premises until they were demolished to make way for Green Park Road in the late 1960s. J A Bladwell & Co is still owned by the Bladwell family (census 1841-1911; BRO 2019; Companies House 2019).



Plate 5.6 Commercial stables (B33, B34 and OA28) and 49 Avon Street, from the south, taken between 1880 and 1885 © B&NES Council

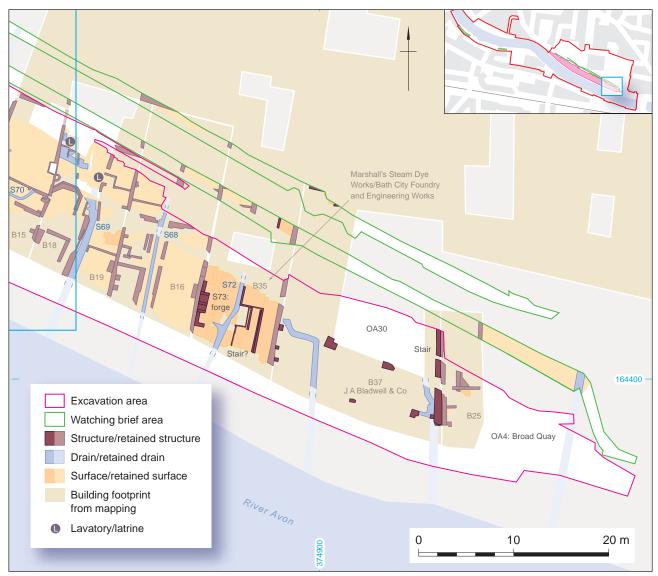


Figure 5.12 Plan of archaeological features, 1870–1930: east end. Building outlines based on 1904 OS plan

B37 was a two-storey structure, constructed using Bath Stone bonded with hard grey lime mortar. Visible elevations were ashlar; other parts of the building were constructed of roughly squared stone. The only entrance to the property was a wide gateway facing Broad Quay. The yard (OA30) provided access to the open-sided ground floor stores. The upper floor, which was supported by large Bath Stone piers, was accessed via an external stair. The ground floor was 0.8 m higher than the floors of the preceding buildings; this was a flood-prevention measure, no doubt prompted by the serious flooding that occurred in 1882. The make-up material comprised several layers of Bath Stone rubble, gravel and broken slate fragments. The ground floor was surfaced with compacted gravel.

B38: Walker's Firewood Mill, 46 Avon Street and 14–15 New Ouav

In 1886, the Bath City Brass and Iron Foundry at 46 Avon Street was purchased by George Arthur Walker,

a 45-year-old firewood and coal merchant, who operated a steam-powered sawmill near Kingsmead Square. Walker's purchase was prompted by the need to relocate his firewood mill due to complaints about the amount of smoke it was emitting (*BCWG*, 18 November 1886).

Walker appears to have been a rather quarrelsome individual who was often involved in arguments with his neighbours, some of whom he accused of stealing wood from his mill and the barges he moored at the bottom of Avon Street. He once caught a local boy stealing wood from the mill and severely beat him with a stick. Walker was taken to court, but the judge was sympathetic, so he left with nothing more than a reprimand (*BCWG*, 29 January 1885, 11 April 1886, 12 July 1892, and 18 September 1894).

In 1893, Walker purchased Hucklebridge's Court and 14–15 New Quay (B12–B13). Hucklebridge's Court was demolished and replaced by a large extension to his firewood mill (B38; Fig. 5.11). The

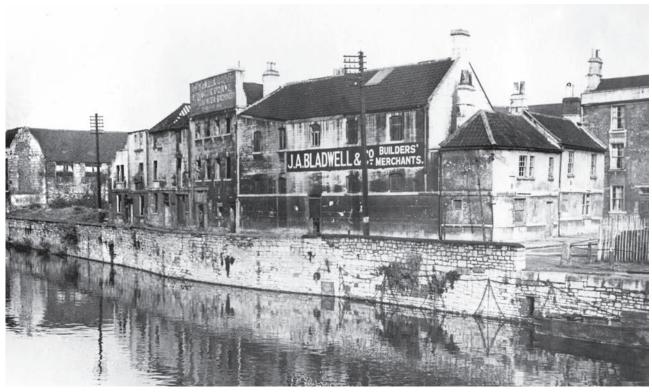


Plate 5.7 Mid-/late 1930s view of Quay House (B25) and 1–6 New Quay (B35, B37, B16 and B18–B19) from the south-east © B&NES Council



Plate 5.8 c. 1930 view of 14–15 New Quay (B12), which was incorporated into Walker's Firewood Mill (B38) in 1893 © B&NES Council



Figure 5.13 Plan of Narrow Quay Garage, 1920s-40s. Building outlines based on 1932 OS plan

other buildings were retained, but the ground floor of No. 14 was knocked through to create a covered goods entrance for the mill (Pl. 5.8). These works were undertaken without applying for permission from the Corporation, and he was reprimanded for removing a gas lamp from the front of the building and constructing a building without sanitary conveniences (*BCWG*, 19 October 1893). The firewood mill closed following Walker's death in 1926 (*Bath Directory* 1893–1927). The property was sold to the Corporation in 1934, but the mill remained standing until the late 1940s (BRO BC/6/2/9/665).

Firewood mill B38 was a tall barn-like structure, the upper part of which was open sided (Pl. 5.8). The building had a pitched roof with king-post trusses, supported by three rows of massive (1.25 m by 1 m wide) rectangular pillars constructed of reused Bath Stone ashlar blocks bonded with a hard grey lime mortar (see Pl. 4.13). The existing flagstone and gravel surfaces of Hucklebridge's Court were

retained for use as a floor within the firewood mill. The floor was covered with a compact, 0.05 m thick, layer of tar mixed with wood chips, nuts, bolts and nails, the residue of its use as a sawmill. There was no evidence for machinery bases within the excavation area, which suggests that the steam engine and steam-saws were located in the northern part of the building.

B39: Narrow Quay Garage

Lockyer's Court (B26) was demolished in the 1920s and replaced with a single-storey automotive garage (B39; Fig. 5.13) operated by William Smele. The internal face of the garage walls were brick and the exterior was Bath Stone ashlar. The building had concrete floors throughout and a corrugated-asbestos cement roof. There were two brick-lined vehicle inspection pits and a WC within the building. The garage remained in business until at least 1943 (BCWG, 10 April 1943).

The Milk Street Baths and Laundry, 1846–1930

History

In the early 19th century, most of the people who lived in poor urban districts obtained their water from shared, and frequently insanitary, communal wells. Limited access to fresh water and cramped living conditions made washing and cleaning difficult, and it is no coincidence that the phrase 'the great unwashed' was first used to describe the urban poor in this period (Bulwer-Lytton 1830, 10). Whilst the dirty condition of the poor was much bemoaned by religious commentators – 'cleanliness is next to godliness' being a heavily overused adage of the time – it was the threat of contagious disease that eventually mobilised action to address their limited access to washing facilities.

In 1831 cholera, a disease endemic to Bengal and the Ganges Delta, appeared in Britain for the first time. This outbreak, now known as the Second Cholera Pandemic (the first occurred in 1817–24 and afflicted Asia, the Middle East and East Africa),

appeared in Russia in 1829, then spread across Europe, reaching Britain in December 1831 (Hays 2005, 193; Henze 2010, 13). Europeans had no natural immunity to the disease and it spread rapidly through crowded urban areas. It is now known that the disease is spread through faecally-contaminated drinking water, and although this was unknown at the time, its association with dirty living conditions was recognised. In 1831 there were 49 recorded cholera deaths in the city, 27 of whom were residents of Avon Street (Manco 1998b, 148).

When the cholera outbreak reached Liverpool in 1832, a local woman, Kitty Wilkinson, offered the use of her boiler – the only one in the area – to wash her neighbour's clothes in boiling water and chloride of lime for a charge of one penny a week (Ashpitel and Whichcord 1851, 2–14). This was, erroneously, believed to have helped slow the spread of the disease. Wilkinson, with the support of the District Provident Society and the politician William Rathbone, successfully campaigned for the provision of a municipal washhouse for the poor, which was



Plate 5.9 c. 1930 view of the Milk Street Baths and Laundry, from the south-east © B&NES Council



Plate 5.10 c. 1930 view of the Milk Street Baths and Laundry, from the north-east, with the Albion Stay Factory in the background © B&NES Council

opened by Liverpool Corporation in 1842 (Metcalfe 1877, 3; Larkin 1856, 23; Rathbone 1927).

In 1844, the newly-formed 'Association for Promoting Cleanliness Amongst the established a public washhouse near London Dock, then opened another short-lived establishment in Whitechapel. The campaign for wider washhouse provision led to the Baths and Washhouses Bill, which was introduced by Sir George Grey in 1846. The Bill passed without opposition and received Royal assent on the 26 of August. The 1846 Act, which encouraged local authorities to construct public washhouses and empowered them to borrow funds from the Poor Rates to do so, led to a massive increase in the provision of washing facilities for the poor (Low 1850, 89; Allsop 1894, 3-4; Berclouw 2013). By the end of the 19th century, most large cities and towns had at least one, though frequently more, public washhouses. These provided an essential service for urban working class communities and many remained in regular use until the mid-20th century.

In 1845, Lord Ashley (Anthony Ashley-Cooper; later 7th Earl of Shaftesbury), Charles Brodrick (later 6th Viscount Midleton) and William Sutcliffe (former High Sheriff of Bedfordshire) initiated a scheme to

provide a public washhouse in Bath. All three were Evangelical Anglicans who were involved in a variety of social reform and missionary activities, both locally and nationally (see Chapter 7).

On 30 October 1845, the three founders, along with a committee of 21 members of the local clergy and gentry, held the inaugural meeting of the Baths and Laundries Society for the City of Bath (BLSCB), with Charles Brodrick officiating as chairman (BCWG, 30 October 1845). By this date, the provisional committee had already arranged for the purchase of a disused workhouse in Walcot, which they intended to convert for use as 'cheap baths and public laundries' (BCWG, 16 October 1845; 3 March 1881). Walcot Workhouse was purchased for £800 and it was estimated that it would cost a further £1000 to convert it. These works were not carried out, and by 11 December 1845, the BLSCB were looking for new premises elsewhere in the city (BCWG, 11 December 1845). Walcot Workhouse was subsequently sold to William Sutcliffe who converted it into an industrial school, which was posthumously named after him (Higginbotham 2018).

In 1846, Charles Brodrick's brother and fellow BLSCB committee member, Rev. William John

Brodrick (rector of Bath Abbey and later 7th Viscount Midleton), provided land at 30 Kingsmead Terrace as a site for a new washhouse (BRO DP 434). This property, conveniently located in a poor district close to the river, contained a dwelling, cabinet factory and timber yard. In August 1846, the City Architect, George Philip Manners, and his associate, John Elkington Gill, were appointed to design the new building and commission contractors for its construction. The completed washhouse opened on 2 November 1847. Construction and fitting costs amounted to £1648 (BCWG, 27 August 1846; 27 January 1848).

The BLSCB appointed a married couple, Henry and Eliza Cox, aged 28 and 37 respectively, to run the washhouse. As part of their pay, they were provided with on-site lodgings. Eliza was given the role of matron, whilst Henry was appointed as superintendent and engineer, with responsibility for maintaining the steam boilers, engine and laundering equipment (census 1851–81; BCWG, 10 October 1850 and 8 December 1853).

The new washhouse was a two-storey structure with an entrance facing Milk Street (Pls 5.9 and 5.10). It was fitted with 14 laundry tubs, five baths, and a steam engine and boiler to pump water from the river and heat the water. Each of the laundry tubs had a hot and cold water supply and a pipe that supplied steam for boiling it. The laundry cost one penny for four hours' use and half a penny for every hour thereafter. Cold baths cost a penny, warm baths were tuppence (BCWG, 30 September 1847). It quickly became apparent that the demand for washing facilities was far larger than originally anticipated, and in January 1848, William Sutcliffe, president of the BLSCB, proposed raising an additional £300 to pay for an extension (BCWG, 27 January 1848). In November 1848, Sutcliffe was appointed as Mayor of Bath, but despite holding this prestigious position, funds for his proposal did not materialise until c. 1852. The extension, which included a large laundry block and two additional steam boilers, was completed in 1853. The total cost of building and equipping the washhouse was approximately £3000 (BCWG, 8 December 1853; BCWG, 3 March 1881; SRO D\P\ wal.sw/2/1/42).

Contemporary descriptions of the enlarged baths state that there were 16 men's baths on the ground floor and eight women's baths on the first floor. The baths were supplied with hot and cold running water and a private closet for changing. The cheapest (second-class) baths cost tuppence and included the use of a towel (Fig. 5.14). First-class baths were available for threepence; these had more ornate closets, a floor-grate to stand on, a chair and cushion, a wash-stand and a mirror (Fig. 5.15). Second-class women's baths were better appointed than



Figure 5.14 'Inferior bath', extract from an engraving of St Pancras Baths and Washhouse, The Illustrated London News, 3 January 1846 © Mary Evans Picture Library

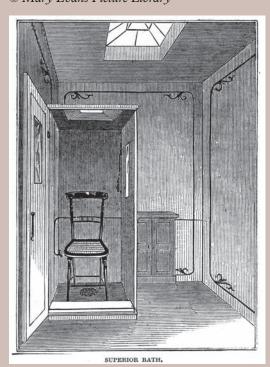


Figure 5.15 'Superior bath', extract from an engraving of St Pancras Baths and Washhouse, in The Illustrated London News, 3 January 1846 © Mary Evans Picture Library

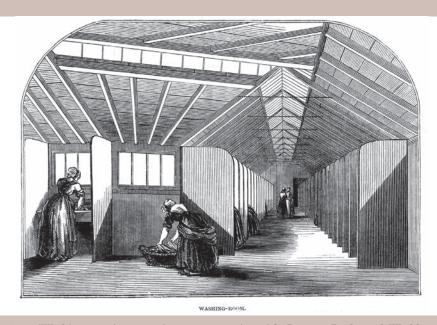


Figure 5.16 'Washing room', extract from an engraving of St Pancras Baths and Washhouse, in The Illustrated London News, 3 January 1846 © Mary Evans Picture Library

the men's; they were fitted with the same facilities and accessories as the men's first-class baths, except for a mirror, which was only available to first-class customers.

The 1853 laundry block contained 41 washing station cubicles, each with a grate for standing on and two large wash-tubs: one with hot and cold running water for washing, the other with cold water and a steam tap for boiling. Larger wash-tubs, used for washing beds, bedding and carpets, were also available. Figures 5.16 and 7.1 show a typical arrangement of cubicles within a 19th-century

washhouse laundry. Clothes were dried in hand- or steam-powered drying machines, and there were 15 'drying horses' and 'a large and cheerful ironing room, well supplied with flats [irons], and a [heated] drying closet'. Figures 5.17–5.18 show a typical ironing room layout and the types of machinery used to wring and dry clothes in mid-19th-century public washhouses. Hot water and steam was provided by three coal-fired boilers: two to heat water and a third that provided steam for a three-horse-power engine to 'pump river water into a well, where it is filtered, and from thence into a reservoir, where it is filtered

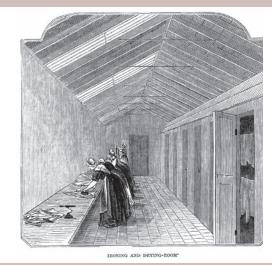


Figure 5.17 'Ironing and drying room', extract from an engraving of St Pancras Baths and Washhouse, in The Illustrated London News, 3 January 1846 © Mary Evans Picture Library

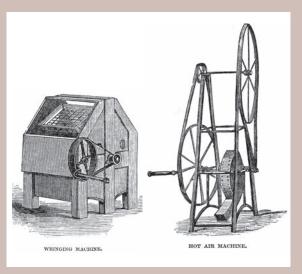


Figure 5.18 Wringing machine' and 'hot air machine', extract from an engraving of St Pancras Baths and Washhouse, in The Illustrated London News, 3 January 1846 © Mary Evans Picture Library

a second time'. Waste steam from the engine was piped to the washing tubs and heat from the boilers was used for the drying closet (*BCWG*, 8 December 1853 and 3 March 1881).

There were further outbreaks of cholera throughout the 19th century, which was, until the late 1880s, widely thought to be spread via 'miasma' a noxious form of 'bad air' - supposedly generated by rotting organic matter (Last 2001, 765). The true means of transmission, the ingestion of faecallycontaminated water, was discovered by the physician John Snow in 1854. Snow realised that all the victims of a particularly severe outbreak in Soho, London, had obtained their water from the same pump, which was subsequently found to be contaminated with sewage. When the pump was disabled, the outbreak came to an end (Snow 1855, 51-3). Although Snow's discovery was not accepted as scientific orthodoxy until the late 19th century, by the 1860s insanitary water supplies were beginning to come under increased scrutiny.

In 1868, V F Hovenden, secretary of the BLSCB, drew the Corporation's attention to the fact that the river water used by the baths was heavily contaminated with sewage, which made it unfit, particularly in the summer, for washing clothes or bathing. Hovenden stated that unless a clean water supply could be found, he would be forced to close the baths during the summer months (*BCWG*, 17 September 1868). He does not appear to have carried out the threat.

In the winter of 1874, a sudden increase in the price of coal led to the decision to raise prices for



Plate 5.11 Henry and Elizabeth Cox and family, c. 1880, image courtesy of their family

using the laundry to one penny per hour for use of the wash tubs, one penny for drying a dozen small articles, tuppence for drying a dozen large items and one halfpenny per hour of ironing. The price rise led to a rapid fall in attendance, with a consequent loss of income, and the old rates were soon reinstated (BCWG, 12 February 1874).

The problem of poor river water quality was raised again in March 1874, and it was estimated that the baths needed a piped supply of 15,000 gallons a week (*BCWG*, 5 March 1874). This proposal was accepted, and a new mains water supply was installed in June 1874; the improved water quality led

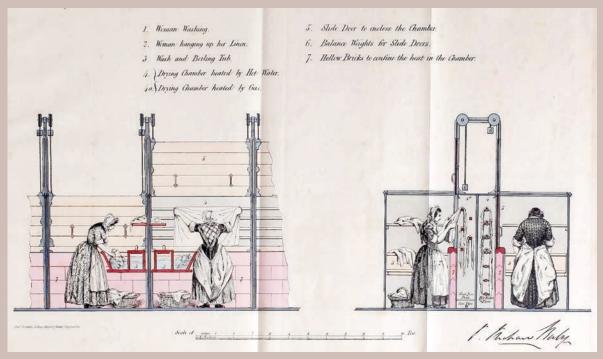


Figure 5.19 Drawing showing a washing and drying compartment with women at work, published in Baly (1852, pl. 5)

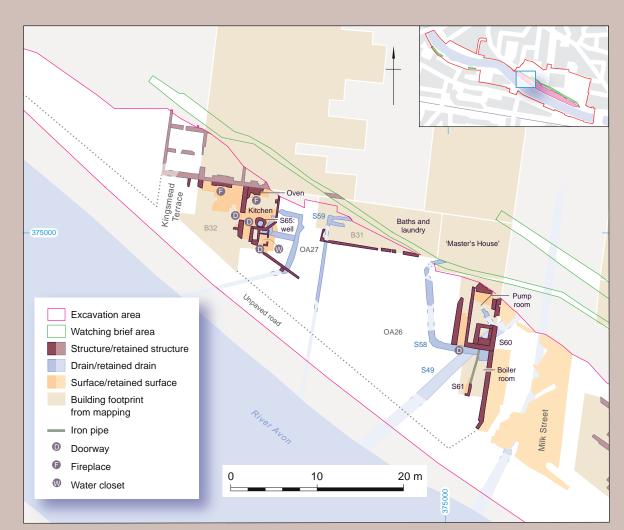


Figure 5.20 Plan showing the development of the Milk Street Baths, 1847–52. Building outlines based on Cotterell's plan of 1852

to an immediate increase in attendance at the baths (BCWG, 13 August 1874).

In 1877 Widcombe Bridge, a newly constructed wooden footbridge over the River Avon, collapsed under the weight of a crowd rushing to an agricultural show. Sixty people were thrown into the river, eight of whom were killed outright and a further 45 hospitalised. Many nearby workers and passersby rushed to help rescue the victims from the river. Henry Cox and his third wife Elizabeth (Pl. 5.11) were commended in the local press for the speed with which they laundered and dried the clothes of 100 or so people who had either fallen into the river or been soaked rescuing the victims (*BCWG*, 28 June 1877).

In October 1882, Bath's riverside districts were severely flooded. The washhouse was flooded to a depth of five feet (1.52 m), which damaged some of the pipework and furniture. The boilers were, however, soon made operational and were pressed into service to help clean and dry the soaked possessions of the

local community. There were similarly deep floods in 1894 and 1899, both of which would have severely flooded the Milk Street Baths (Buchanan 1998, 175; *BCWG*, 2 November 1882).

The Milk Street Baths were originally funded entirely by subscription and admission fees, but by the 1860s falling subscription rates were beginning to adversely affect the BLSCB's finances. The Corporation tried to ease the burden by exempting the washhouse from building rates, but this was not enough to make up for the shortfall in revenue, and in 1865 the Society requested that the council provide them with a grant of £50 per annum. The council agreed to only £20, but the requested amount was eventually given in 1881.

Henry Cox retired in 1887 and died the following year. After Cox's retirement, the BLSCB appointed his nephew, James Eli Cox, aged 32, as superintendent, and his 30-year-old wife Ruth, as matron. Following their appointment, the Coxes moved into the superintendent's accommodation at the baths,



Plate 5.12 The Milk Street Baths and Laundry, from the east, with the Newark Works foundry in the background

but by 1901 they had been given more spacious accommodation at 30 Kingsmead Terrace.

In the early 1900s, Bath Corporation increased its grant funding for the baths, and by 1910 they were paying £180 a year to help maintain the service. By this date, the numbers using the laundry had halved, but the bathing facilities were still as well used (BCWG, 7 May 1863, 15 June 1865, 5 May 1881, 23 January 1902, 28 April 1910). Housing improvements after World War I led to increased provision of home washing facilities, and by the mid-1920s the total number of bathers had halved. By this date, the City Improvements Committee was drawing up plans to redevelop the whole of the Avon Street district and the Corporation decided that the Milk Street Baths would be demolished without replacement.

James Cox died in 1927. The baths closed three years later, and by May 1931 fixtures from the demolished building were being sold for scrap (*BCWG*, 20 December 1877, 8 February 1906, 23 July 1927 and 23 May 1931).

B31: The Milk Street Baths and Laundry

The earliest part of the washhouse (Fig. 5.20), which was constructed in 1846–7, comprised an L-shaped building with an entrance facing Milk Street. Unless

otherwise stated, all elements of the building were constructed of Bath Stone ashlar, founded on rubble foundations, and bonded with a hard grey lime mortar. The building was divided into three principal elements: a two-storey 'master's house' which served as the entrance to the institution; a two-storey west wing that housed the bathing and laundering facilities and a single-storey south wing that contained the heating and pumping equipment, with a water reservoir above (see Pl. 5.9).

The master's house, which also served as the entrance to the baths, had '1847 PUBLIC BATHS AND LAUNDRIES' carved above the doorway. Most of the master's house, which would have measured approximately 8 m by 6.6 m, lay beyond the limits of excavation. The only excavated feature pertaining to this part of the building was a stone-lined drain (S58), which channelled wastewater from the washhouse into culvert S49. Historic records indicate that there was a waiting room just inside the front door, which provided access to stairs and a groundfloor corridor to the west wing. The superintendent's living quarters, which comprised 'two or three small rooms' (Anon 1864, 481), were probably situated on the upper floor. Early 20th-century photographs (Pls 5.9 and 5.10) show that the master's house had a hipped roof, with chimneys indicating the positions



Plate 5.13 'Well' for pump and filter within the Milk Street Baths and Laundry pump room, from the east

of fireplaces. The presence of a louvered vent in the roof could indicate that part of the upper floor was used as a laundry, though this may have been a late 19th-century modification. A doorway from the upper floor provided access to a water reservoir above the south wing.

The two-storey west wing, which measured 13.7 m by 5 m, had a separate hipped roof. In 1847, this block would have contained the laundry and the five baths. During the 1853 reordering, the laundry

was moved into a newly-built block and the resulting space within the west wing was re-fitted with 16 men's baths on the ground floor and eight women's baths on the upper floor. Most of the west wing lay beyond the limits of excavation, and only fragmentary remains of the superstructure were uncovered. The excavated remains comprised the south wall and two parallel surface drains (S59) formed of carved Bath Stone gutter pieces. The surface drains would have channelled water from the bathing cubicles into a sub-surface drain at the western end of the building; this drained southwards towards the river. This part of the building is likely originally to have been paved with flagstones, but these appear to have been removed when the building was demolished. There were no obvious internal partitions within the west wing, though given that the ground floor was divided into multiple bathing cubicles, these must have existed. The absence of masonry footings suggests that the partitions were probably timber-framed, with woodpanel or lath and plaster infill.

The south wing (Pl. 5.12), which measured 8.1~m by 5~m, had a north-south aligned corridor along its west side, with a single room to the west. This room contained a large sub-surface tank (S60; Pl. 5.13), measuring 2~m by 1.45~m and over 1~m deep internally, constructed of large Bath Stone blocks.



Plate 5.14 1853 laundry block, from the west



Figure 5.21 Plan showing the development of the Milk Street Baths, 1853–73. Building outlines based on 1885 OS Town Plan

There was a cast iron pipe set into the south side of the tank and stone steps for access. This structure is almost certainly the 'well', where river water was filtered, before it was pumped into the reservoir above. To the north of the tank, there was an area of brick and Bath Stone flooring, with a stone-lined drain set in the floor. The function of this area is uncertain, but the rough finish of the floor suggests that it was probably a service area – possibly an engine room or a workshop where maintenance work was undertaken.

The block at the southern end of the south wing is likely to have housed a coal store and the steam boiler that provided steam for the engine and hot water for the baths. Fragmentary remains of a brick- and stone-built boiler base (S61), likely to date from 1847, were recorded in this area.

The second phase of construction within B31, undertaken in 1853, involved adding a 16 m by 8 m laundry block (Pls 5.12 and 5.14; Fig. 5.21) to the



Plate 5.15 1853 Lancashire boiler bases S61 and S62, from the north

south-west of the original building and substantially enlarging the boiler room to accommodate three steam boilers (Pl. 5.15). The laundry contained 41 washing cubicles, each separated by Bath Stone



Figure 5.22 Plan showing the development of the Milk Street Baths, 1874–1930. Building outlines based on 1885 OS Town Plan

partitions. Two lengths of cast-iron piping were uncovered at the eastern end of the laundry; these would have supplied water or steam to the washing cubicles. Surface drains running along the length of the building channelled waste-water from the wash stations into the sub-floor drainage system.

Two steam-boiler bases (S61 and S62) were recorded at the southern end of the building; these were of Bath Stone and brick construction, with Pennant Sandstone or Bath Stone slabs used to line their bases. Both structures showed evidence of extreme heating along their flues. The form of the boiler bases suggests that they were fitted with Lancashire boilers. The firebricks used in boiler base S62 were marked 'COLEBROOKDALE CO LIGHTMOOR'. This Shropshire-based company was established in the 18th century and acquired the Lightmoor coal, iron and brick works in 1839; they continued trading until c. 1951 (Baggs et al. 1985). It is uncertain exactly where the third boiler was located.

The third phase of construction within B31 (Fig. 5.22) entailed a reordering of the drainage system below the boiler room. Specifically, the main drain was diverted into the public sewer below Milk Street via a new 12-inch diameter ceramic drain (S63). After the drains had been altered, a new set of steps and a flagstone floor was laid. Finds from below the flagstones include part of a Codd-closure mineral water bottle, which indicates that this reordering happened after 1872. The washhouse was provided with a mains water supply in 1874, and it seems probable that the drains were modified around this date.

The Milk Street Baths closed in 1930 and were demolished a year later. Salvageable metal was sold for scrap, but some of the underground iron pipes were left *in situ*. Complete flagstones and most of the above-ground stonework also appear to have been salvaged, but broken flagstones and foundations were left *in situ*.

Housing

B32: 30 Kingsmead Terrace

Numbers 1-29 Kingsmead Terrace were constructed as a row of near-identical houses in 1790-5. In 1794, the southernmost plot (30 Kingsmead Terrace) was sold to the plumber Peter Lidard. A contemporary plan (Fig. 4.6) depicts the property as a yard containing two small buildings. The property was used as a timber yard and cabinet-making workshop from at least 1819 until the 1840s, and by 1844 there was a residential property at 30 Kingsmead Terrace (Guys' Directory 1819; census 1841; BCWG 11 April 1844); this may have been the house (B32) shown on Cotterell's 1852 plan (Fig. 5.1). In the mid-late 19th century, 30 Kingsmead Terrace was occupied by a succession of private residents, but after the turn of the 20th century it was used as living quarters for the superintendents of the Milk Street Baths (census 1861-1911).

B32 (Fig. 5.20) was a substantial, 11.5 m by 10 m wide, end-of-terrace townhouse. Cartographic evidence suggests that the building was constructed between 1810 and 1852, which concurs with the date of the finds from beneath the building (see *Finds from Ground-raising Deposits Beneath 30 Kingsmead Terrace*).

The excavated remains comprised two lower-ground-floor rooms (Pl. 5.16), a coal cellar under the adjacent roadway, and a garden. There was a contemporary stone-lined well (S65) partially below the rear wall of the house. The well was 3.2 m deep and capped by a large Bath Stone slab, indicating that it was originally fitted with a hand pump. The well was situated below a room that contained a corner fireplace and oven, which suggests that it was a kitchen. To the south of the kitchen, there were two small ancillary rooms one of which was a WC, the other probably used as a scullery.

At some point between 1852 and 1885, a singlestorey extension was a constructed between B32 and B31. The extension contained two rooms, both paved with flagstones. The eastern room had a doorway that linked it to the Milk Street Baths.

In the late 19th century, a large ceramic sewer (S65) was laid through the rear gardens of Kingsmead Terrace. The sewer trench incorporated a crudely-built sub-surface retaining wall that was designed to prevent the adjacent building (B31) from collapsing into it. B32 was demolished *c*. 1933.

B9, B15, B18 and B19: 5-9 New Quay

In the 19th and early 20th centuries, 5–6 New Quay (Pls 4.20 and 4.21) were used as lodging houses. Census returns indicate that they were home to a varying population of between 6 and 29 individuals. In 1873, the property was described as a 'house of ill repute', and there are numerous late 19th- and early



Plate 5.16 30 Kingsmead Terrace (B32), from the east, with kitchen and garden in the foreground

20th-century records of its owners and occupants being convicted for offences related to prostitution, which suggests that the property was used as a brothel, though many of its occupants had other forms of employment (*BCWG*, 20 February 1873, 20 March 1873, 3 August 1882, 4 August 1887, 17 February 1898, 27 December 1913 and 8 May 1915; census 1901). Similar, though less frequent, charges for prostitution-related offences were also brought against some of the inhabitants of 8–13 New Quay and Little Corn Street during this period.

The only significant structural changes to buildings B15, B18 and B19 during the later 19th and 20th centuries was the demolition of some of the outbuildings and the laying of new ceramic drains (S69, S70 and S71; see Figs. 5.11 and 5.12). The latter would have reduced foul water leakage and helped prevent the contamination of nearby wells. Excavations of comparable sites in the United States and elsewhere have produced distinctive 'brothel assemblages', typified by large quantities of drinking vessels (tea and alcohol), medicinal/drug bottles and sanitary equipment (eg, Seifert 1991; Yamin 2001; Spude 2005). In contrast, the small collection of 19thcentury finds (mainly pottery, glass and clay tobacco pipe fragments) recovered from the drain silts of 5-6 New Quay appears to be indistinguishable from standard domestic assemblages of the period.

By 1919, Bath Corporation had begun the process of buying up properties along New Quay, by which date 5–6 and 8–9 New Quay and 1–5 Little Corn Street had been deemed as 'unfit for human habitation' (*BCWG*, 4 May 1919). Numbers 5–6 New Quay were purchased by the Corporation in 1932; the other properties were probably purchased around the same time (BRO DP 667). By the late 1930s, all the buildings had been demolished.

Finds from Ground-raising Deposits Beneath 30 Kingsmead Terrace

Clay tobacco pipes

This deposit contained a dense concentration of not just pipes but also fragments of kiln debris, all in a matrix of ash derived from kiln flue rakings (Pl. 5.17). The kiln material consists of thin fragments of fired pipeclay, which would have been used to seal areas of the kiln muffle prior to firing, and are categorised as 'thin sheets' (Peacey 1996, 65). Eighteen bowls were recovered from the deposit (and one more from the overlying deposit), and four individual moulds were represented in the group. The bowls are typical of the period 1760-90, a time when makers' marks had gone out of fashion. Given the date, these pipes could have been made by any one of John Carpenter, Giles Howell, John Smith, Jeremiah Smith or Joseph Smith, each of whom was running their own workshop in Bath at different times during this period (Lewcun 1994, 130-3). The absence of any pipes bearing the initials of Joseph Smith, however, might refine the date of the deposit to 1760-80.

Pottery

The deposit contained 27 sherds of pottery. This small group comprises a mix of utilitarian wares (redwares, Verwood, stoneware), tin-glazed drug jars, and tea-/tablewares (porcelain, white salt glaze, creamware, transfer-printed pearlware) (Pl. 5.18). Two of the drug jars carry mottos advertising the (contents) retailer: '...ROSS... / ...BON S...' and '...à Paris'; the former is a shallow tulip-shaped form dating to the later 18th century (retailer unknown), while the latter is a small cylindrical form with pale blue glaze, a late



Plate 5.17 Clay pipes and kiln debris

18th- or early 19th-century type. A number of French retailers used ointment pots of this form in the early 19th century (*internet source*: delftware ointment pots), which would place it somewhat later than the date suggested by the clay pipes. Although there are some 18th-century wares (eg, white salt glaze), other wares such as the transfer-printed pearlware would also fit with an early 19th-century date. Despite the chronological range (suggesting that some of the pottery was residual when deposited), the group as a whole is in relatively good condition, featuring large unabraded sherds.



Plate 5.18 Pottery from ground-raising deposits



Figure 5.23 Plan of archaeological features on the south side of the river, c. 1830–90. Building outlines based on the 1885 OS plan

South of the River

OA31, OA32 and OA33: Gardens of Sydenham Villa, Netley Villa and Green Park Villa

In 1810, most of Sydenham Mead was undeveloped agricultural land, but by the mid-19th-century, ribbon development had begun to encroach along the north side of the Lower Bristol Road (Figs 5.2 and 5.23). The buildings near St Lawrence's Bridge were mostly industrial, whereas those to the west were primarily high-status residential villas.

The earliest named houses in this area, Sydenham Cottage and Westmoreland Cottage, existed by 1819, at which date they were occupied by Captain Thornhill and Captain Hopkins respectively. The location of these houses is uncertain, but they are probably the same properties that were later known as Sydenham House and Westmoreland Cottage. Green Park Villa is first recorded by name in 1833, whilst Netley Villa and Sydenham Villa both existed by 1841 (*BD* 1819 and 1833; 1841 Lyncombe and Wydcombe Parish Tithe Map).

These villas were all set in landscaped gardens (OA31, OA32 and OA 33) bounded by Bath Stone

rubble walls (S74 and S75). There was a 3.7 m deep stone-lined well (S76) within OA33. The well was capped with Pennant Sandstone slabs and would originally have been fitted with a hand pump.

B40, B41 and OA34: Timber and stone yards, Sydenham Wharf and Avon Wharf

Between 1890 and 1903, the gardens of Sydenham, Netley and Green Park Villas were developed for industrial and residential use (Figs 5.4, 5.5 and 5.24). At Sydenham Villa, two rows of terraced houses were constructed, one fronting Lower Bristol Road, the other along a new street (Sydenham Road) that provided access to Sydenham Wharf, which is first recorded in 1894 (*Bath Directory* 1890–4).

In 1894, there were two commercial properties at SydenhamWharf: a stone yard operated by the building contractor Henry William Bladwell, and a timber yard run by Fredrick J Cox. Both properties contained large open-sided storage sheds and riverside wharfs which facilitated the transport of timber and stone via river barges. One of Cox's sheds (B40) incorporated an existing early 19th-century garden wall (S74). Early 20th-century photographs (not illustrated) show that



Figure 5.24 Plan of archaeological features on the south side of the river, c. 1890–1930. Building outlines based on the 1932 OS plan

the sheds were timber- or steel-framed structures with corrugated iron roofs.

By 1902, Cox's yard was trading under the name Partridge, Cox and Co Ltd., and by 1904 the garden of Netley Villa was also being used as a timber yard. The stone yard at Sydenham Wharf closed in 1908, and by 1932 a large timber shed (B41) had been constructed in the former garden of Netley Villa (Fig. 5.5). B41 incorporated a covered wharf that allowed direct loading from the river. The stone-built quay wall (S77) was 1.3 m thick and over 2 m high, with fixed iron mooring rings on the riverside elevation.

By 1939, Sydenham Wharf and Avon Wharf were occupied by the timber merchants Hill Leigh and Co. Ltd and Taylor Low Bros Ltd (*Bath Directory* 1939–73). Building B41 was destroyed by a high explosive bomb in 1942, but the properties continued to be used as timber yards into the 21st century.

Between 1900 and 1957, Green Park Villa was occupied by the building contractor E Chancellor, who used its garden as a stone yard. The yard contained several buildings and a wharf. The stone-built quay wall (S78) was 1.1 m thick and over 2 m

high. In 1957, the stone yard was incorporated into Stothert and Pitt's expanding engineering works (*Bath Directory* 1900–57).

S79: Wharf at Stothert and Pitt's Newark Works

Stothert and Pitt's Newark Works foundry was established in 1857. A riverside wall fitted with mooring rings for tethering barges (S79; Pl. 5.19) is likely to have been built at this date, or shortly after. Flood alleviation works undertaken in the late 1960s necessitated straightening a meander in the river to the south of Green Park. This entailed digging a new river channel 35 m to the north of its natural course, and infilling the old channel with imported soil and rubble.

Discussion

By the mid-19th century, approximately 10,000 people lived in the Avon Street district, one-fifth of Bath's population. This included permanent residents and a large number of transient visitors, including



Plate 5.19 Mid-19th century wharf (S79), from the north-west, with the remains of the Newark Works foundry in the background

migrant workers and assorted itinerants seeking work, lodgings, food and occasionally loot. Although it was undoubtedly a poor area, there was a high degree of socially diversity within the district: at the top of the hierarchy were property-owning lodging house keepers, publicans and business owners, whilst those at the bottom, typically the old, infirm, homeless or unemployed, led a hand-to-mouth existence (Davis 1990, 153–75). Another economically disadvantaged group were unmarried women in casual employment. Their wages, which were commonly less than half those of men (Humphries and Weisdorf 2015, fig. 8), were frequently insufficient to meet their daily needs, and as a result many were forced to turn to prostitution to support themselves. Police, census and newspaper records dating from the mid-19th century onwards indicate that many of the women who lived along New Quay and adjoining streets worked as prostitutes, and that some of the excavated buildings functioned, at least in part, as brothels.

In the 19th century, the Avon Street district was an ethnically diverse area. Germans, Jews, Italians and West Indians are all recorded as residents, but the most numerous migrant group was the Irish, who emigrated in large number following *an Gorta Mór* (The Great Famine) of 1845–9. By 1851, 17.9% of

the people living in Avon Street were Irish (Davis 1990, 153–75), and traces of their presence can be found in Irish-themed clay tobacco pipes featuring shamrocks and Irish place names (see Pl. 7.8).

Census returns show that although occupancy rates within the Avon Street district remained high throughout the 19th century, the population had in fact been gradually decreasing since the 1820s. These records also show a gradual shift in the demography of the area; as the century progressed, the population became older and the number of people engaged in low-status occupations, such as hawking, gradually increased (Davis 1990, 153–75). Broad population trends are reflected in the pattern of development along New Quay: although some residential properties were extended in the early–mid-19th century, by the end of the century houses were being demolished to make way for expanding industrial premises.

From the mid-19th century onwards, there was a conscious effort by civic authorities and charities to improve living conditions within the Avon Street district. This resulted in the construction of a public washhouse in 1847, and improvements to water supply and sanitation from the late 1840s onwards. Later 19th-century improvements included stricter enforcement of lodging house regulations, the

demolition of insanitary court dwellings, and the construction of a purpose-built block of artisans' flats, known as St John's Buildings, in 1885 (Davis 1990, 167–71; Manco 1998b, 148–50).

Despite gradual improvements in sanitation, administration and living conditions, the Avon Street district's reputation as a den of vice, disease and crime persisted throughout the 19th and early 20th centuries. This was not entirely unwarranted; the district was disproportionately affected during outbreaks of epidemic disease, and although many of the district's inhabitants were law-abiding and hardworking, the incidence of violent crime, drunkenness, juvenile delinquency, theft, prostitution and brothel-keeping remained shockingly high throughout the period.

From the late 1840s onwards, a wide variety of new industrial businesses became established in the quayside districts, including several specialist engineering firms, which exported their goods internationally. These new industries provided skilled employment for some of the local population, but at a cost of an increasingly polluted environment. When Anne, the heroine of Jane Austen's *Persuasion*, was planning a visit to Bath, she dreaded 'the white glare of Bath' (Austen 1817, 27). There were no such worries for the city's inhabitants at the turn of the 20th century: the air had become thick with smoke and buildings had darkened from soot from thousands of coal fires, whilst the river had become a conduit for untreated human and industrial effluent.

Chapter 6 The End of the Avon Street District

The Avon Street district had always been something of an embarrassment to the Corporation, who sought to market the city as a genteel resort and residence for the wealthy. The remedy for this perceived problem was the wholesale clearance and redevelopment of the 'slum districts' in the lower parts of the city. Implementation of these plans began soon after World War I, and by the 1920s the Corporation had begun buying up properties along the quayside and adjacent streets. Demolition of the Avon Street district began in the early 1930s, and by the middle of the decade most of the quayside buildings had been demolished, though many of the houses around Broad Quay and towards the northern end of the district remained standing.

Redevelopment of the Avon Street district commenced in 1932 with construction of Kingsmead Flats – a purpose-built block of model council houses – on the site of the Corporation Stone Yard to the west of Kingsmead Terrace (see Pl. 1.4). By 1934, ambitious plans had been drawn up for the construction of a new Royal National Hospital for Rheumatic Diseases between Avon Street and Peter Street. Construction of the hospital began in July 1939, but the outbreak of World War II brought the work to a halt (Chapman 2018, 15–17).

During the War, the waste ground and derelict buildings along Milk Street were put to another use. Men of 'a pronounced political persuasion' who had fought against General Franco's fascists during the

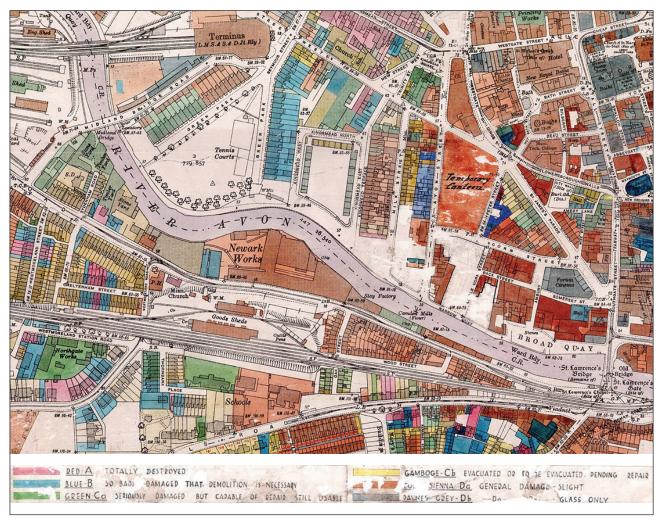


Figure 6.1 Detail of City of Bath, Air Raid Damage, April 26, 27 and 28 1942

Spanish Civil War used the area as a training ground to teach new Local Defence Volunteers (later known as the Home Guard) the street-fighting skills they would need in the event of an invasion (*ibid.*, 15–17).

The invasion never came, but for two nights between the 25 and 27 April 1942, Bath was heavily bombed by the *Luftwaffe* during the so-called 'Baedeker' Raids, which specifically targeted towns of cultural and historical significance. The raids caused immense destruction: 417 people were killed, approximately 1000 were injured and over 19,000 buildings were damaged, 1121 of which were destroyed or damaged beyond repair (Bath Blitz Memorial Project 2005). Contemporary plans show extensive generalised damage throughout the Avon Street district, and many of the buildings along Avon Street and Peter Street were damaged beyond repair (Fig. 6.1).

In the immediate aftermath of the war, Patrick Abercrombie drew up the ambitious *Plan for*

Bath (1945) which outlined a comprehensive redevelopment of the city. Under Abercrombie's plan, Bath would be divided into 10 'precincts', each with a specific function. The northern half of the Avon Street district, with its new hospital, would be dedicated to 'medical health, research and healing', whilst the southern half of the district would become a public park (Lambert 2000, 185-6, 188). These plans did not come to fruition. In the immediate post-war years, repairing bomb-damaged houses and increasing the housing stock took priority (Davis and Bonsall 2006, 283-4), and by the early 1950s the southern half of the Avon Street district was being used as a coach and car park. Plans for the new hospital were abandoned in 1955, and by 1965 a Technical College had been built in its place (Chapman 2018, 19). The last buildings around Broad Quay were demolished in the late 1960s to make way for Green Park Road.

Chapter 7 Discussion and Conclusions

Living with the River

The River Avon is integral to the story of Bath Quays Waterside. The site is located on the inner edge of a broad meander that has been gradually migrating southwards from the Late Glacial period onwards. The earliest excavated layers comprised undated, but probably medieval, alluvium. Earlier deposits will exist at greater depth, but these lay below the level impacted by the construction project and were therefore not excavated.

In AD 1090, John of Tours, the newly appointed Bishop of Bath, moved the episcopal see from Wells to Bath and began the construction of a cathedral priory, thereby raising the status of the settlement from town to city. Development of the floodplain probably began soon after, but it was largely restricted to a narrow band of occupation along Southgate Street, situated, as the name implies, between the city's south gate and the bridge over the River Avon. The adjacent meadows were predominantly used as pasturage, though arable cultivation and occasional quarrying for clay, sand and gravel was also undertaken.

In the 13th century, Bath priory granted a strip of meadowland to the Hospital of St John, the eastern boundary of which was defined by a large ditch, sometimes known as the Fosse Dyke, which carried the outfall from the city's western geothermal springs. Archaeological investigation of the Fosse Dyke was limited to the excavation of its upper fills, and although it must have existed at the time of the land grant, its origin remains obscure. It has been suggested (B&NESC 2014) that a crenellated wall on the east side of the dyke, which is depicted on historic maps dating from c. 1600 onwards, was a defensive feature dating from the 12th-century civil war known as The Anarchy. The discovery of late medieval pottery in a bank below the wall makes this theory untenable. However, even without a masonry wall, the dyke would still have formed a significant barrier that would have afforded the Southgate suburb some protection from potential attackers and it may, at least in part, have had a defensive function.

Excavations at SouthGate (Barber et al. 2015) uncovered evidence for extensive quarrying in the medieval and post-medieval periods. Further late 17th- and 18th-century quarry pits were uncovered at Bath Quays. The alluvial sequence in this part of the Avon Valley comprises coarse gravels overlain by finer deposits of sand, silt and clay. Some of the

quarries at Bath Quays were probably deep enough to reach the underlying gravels, but others were shallower, which suggests that they were dug to extract the finer sediments. Although this material could potentially have been used for brickmaking or pottery production, there are no documentary records or other archaeological evidence for either activity in the area prior to the 19th century; the purpose of these quarries therefore remains unknown.

The opening of the Avon Navigation and the construction of riverside quays in the late 1720s was a boon to local businesses, particularly the stone-mining industry, and it was crucial to the development of the city as an 18th-century spa resort. The ease by which goods could be transported along the river and, from 1810 onwards, the Kennet and Avon Canal, encouraged the siting of businesses in the riverside districts. Although water power was harnessed by mill owners upstream at Monks Mill and downstream at Twerton Mill, the principal industrial use of the river in the city centre was for transportation, though it also provided water for use in steam boilers and industrial purposes.

The excavation has shown that many, but not all, of the inhabitants of the Avon Street district had access to shared wells, and from the mid-19th century onwards, piped mains water; the remainder were forced to use insanitary river water for washing and drinking.

The Avon floodplain is, as the name implies, subject to seasonal flooding. This was both an impediment to development and a hazard for the district's 18th–20th-century inhabitants. In the 19th century, there were particularly severe inundations in 1809, 1821, 1823, 1841, 1882, 1894 and 1899, the last being the most serious (Buchanan 1998, 175). Part of the reason for the severity of the 19th-century floods was the fact that as the town expanded, the river became constrained by high walls that narrowed the channel, which forced floodwaters to rise upwards rather than outwards. There were further severe floods in 1937 (Pl. 7.1) and 1960, and it was the latter that finally spurred the council into action. Work to deepen and straighten parts of the river and remove obstructions began in the winter of 1964/5. Medieval St Lawrence's Bridge was demolished, as were most of the 18th-century riverside walls along Broad Quay and New Quay. By 1965, a new single-span concrete road bridge (Churchill Bridge) and a footbridge were constructed in its place. New steel and concrete walls were subsequently constructed along the



Plate 7.1 Flooding at the southern end of Avon Street on 27 February 1937, from the east, showing 49 Avon Street (constructed in the 1730s) and adjacent stables (B34), which were constructed c. 1874 © B&NES Council

riverbank. At the same time, the river was dredged and straightened, and a new street (Green Park Road) was constructed along an elevated bank 3 m above the level of the towpath. There was a further major flood in 1968, but by 1974 the new flood defences were in place (Buchanan 1998, 167, 185). The flood alleviation works at Bath Quays Waterside will increase the city's resilience to flooding, by reversing some of the 18th–20th-century encroachments into the floodplain, which will allow the river to safely carry a higher volume of water through the city when needed.

Bath and the Industrial Revolution

In the medieval period, Bath priory was central to the administrative and economic life of the city, but from the 14th century onwards wool and cloth merchants, who had grown wealthy on the back of their trade, began to assume a greater role in the administration of the city. The cloth trade remained important after the Dissolution, but from the late 16th century onwards economic activity became increasingly focused around providing for the needs of aristocratic visitors to the hot springs. This process accelerated in the

mid-18th century and the city rapidly expanded beyond its medieval walls.

The growing city required building materials and supplies to meet the ever increasing needs of the transient and resident populations. This necessitated improvements to the transport network: specifically, the creation of turnpike trusts to upgrade the roads, and the construction of the Avon Navigation, which opened in 1727. This made the River Avon navigable between Bath and Bristol, which was particularly important for Bath's stone-mining industry, the products of which could now be exported downriver to the port of Bristol. The cost of importing building materials into the city was similarly reduced, which provided an addition spur to the construction boom. Transport improvements also helped the development of the Bristol and Somerset Coalfield, which provided a ready source of fuel for Bath and the rapidly industrialising city of Bristol.

Avon Street was one of the earliest of the new extramural streets, and the houses along it, constructed between the late 1720s and 40s, were designed to accommodate wealthy visitors to the spa, whilst the river frontage became a focus for warehousing and industry. The land to the east and west of Avon Street was developed between 1757 and 1795, and by the

end of the century the area was densely packed with rows of houses and commercial premises.

In the second half of the 18th century new technologies and methods of production, particularly the introduction of the factory system and the development of steam-powered machines, had begun to change the nature of work and make massproduced consumer goods, such as fine china and textiles, available to the masses. This, coupled with improvements to agriculture and transportation, would have had a direct impact on the lives of Bath's 18th-century residents. Despite these changes, there was, at the end of the 18th century, very little in the way of large-scale industrialisation in Bath, something the Corporation was very keen to stress as they sought to promote the city as a 'genteel residence' for the moneyed classes (Davis and Bonsall 2006, 153). This is reflected in the range of businesses that operated within the Avon Street district, most of which could be described as either small-scale craft industries, or service providers that catered for local needs. Elsewhere in Britain, industrialisation was rapidly changing the nature of urban life: factories proliferated and the population grew at an unprecedented rate. Things happened more slowly in Bath, but by the early 19th century the process of industrialisation was well underway.

The establishment of the Bath Gas Light and Coke Company in 1819 (Cotswold Archaeology 2007, 4) brought modern lighting to the city, whilst the opening of Bath Spa Railway Station in 1840 reduced transport costs for business and public alike. Between 1800 and 1830 steam-powered breweries, soap and glass works were established in the city, and wool mills were erected in nearby Twerton (Davis and Bonsall 2006, 189). At the same time, several of the city's brass founders and ironmongers began to expand their businesses, and some became specialist engineering firms, the most prominent of which was Stothert and Pitt, who specialised in the production of large dockside cranes. In 1857, Stothert and Pitt constructed the Newark Works foundry on the south side of the River Avon and the surrounding area began to take on an increasingly industrial character. New technologies and changing consumption habits produced a demand for new products, some of which were supplied by local engineers: NG and N S G Wilcocks of Avon Street and New Quay became specialists in aerated water-bottling equipment and gas fittings, whilst the Pickwick Iron Works on Broad Quay started manufacturing steam engines and other machines. Other industries, including a dye works, a pottery, clay tobacco pipemakers, timber mills and stone yards were established in the riverside areas, whilst those serving the basic needs of the city (fuel, food, transport and storage) continued to thrive. By the mid-19th century, Bath had developed a broad industrial base, which is reflected in the census returns

of the period. By 1831, approximately three-quarters of the population were engaged in occupations that could be described as 'working class' – a proportion that grew throughout the 19th century (Davis and Bonsall 2006, 189–90).

Industrialisation of the Avon Street district had mixed impacts on the local population. Whilst smoke and effluvia from factories would have had a detrimental impact on local air and water quality, the increasing availability of skilled and semi-skilled industrial work would have provided job opportunities for many. Late 19th-century expansion of industrial premises led to the demolition of residential properties which, together with stricter enforcement of lodginghouse occupancy regulations, reduced the density and total size of the population in the Avon Street district. The reduced availability of housing, coupled with industrial pollution, and the stigma of living in the city's unofficial red light district, prompted many to migrate to Bath's expanding suburbs, where better quality houses in less-polluted and more 'respectable' neighbourhoods were becoming available.

Development, Use of Space and Living Conditions in the Avon Street 'Slum'

The Avon Street district began life as one street of well-built houses, designed to accommodate wealthy visitors to the spa. By the 1760s, the wealthy had left, and new streets were being constructed with houses specifically designed for middle- and lower-income tenants. These houses were two or three storeys high, sometimes with a garret, with one or two rooms on each floor. The low-lying and flood-prone nature of the area made cellars impractical close to the waterfront. To maximise rental income, many late 18th-century developers constructed court dwellings, often of blind-back or back-to-back houses, in the rear yards of existing properties.

Archaeological excavation has shown that although the houses were, by modern standards, cramped, they were reasonably well built. However, some elements of the buildings were poorly designed: groundlevel suspended wooden floors within some of the riverside properties were susceptible to decay, whilst poorly constructed and sited drains caused localised subsidence and contamination of well water.

Development of the Avon Street district was largely complete by the end of the 18th century, and its population peaked in the first decades of the 19th century at around 10,000. Detailed census returns, which are available from 1841 onwards, record extremely high levels of overcrowding, and the situation is likely to have been worse in the preceding decades. The residents of the district were diverse in income, occupation and origin, and although there were some relatively affluent business owners, many of

Health and Beauty

Good health was a more precarious matter in an era when a doctor's diagnosis could be both risky and too expensive for those at the lower end of the social scale. Even the best physicians were not infallible in their understanding of disease, and treatment was generally a response to symptoms, rather than a cure of the underlying cause. For those who risked a visit to the doctor, or who preferred self-medication, there was a vast array of 'curatives' available, in the form of emetics, purges, poultices, ointments, paregoric draughts, tonics and restoratives. The physicians and apothecaries of Bath, a city which attracted those wishing to 'take the waters' to cure all manner of ailments both real and imagined, would have supplied these curatives to all sections of society. Evidence for these pharmaceutical products was found at Bath Quays in the form of tin-glazed earthenware drug jars and ointment pots, and glass phials (Pls 7.2–7.5). Indeed, the proportion of the tin-glazed pharmaceutical wares as part of the total 18th- and 19th-century assemblage is high - a minimum of 74 vessels are represented, mostly in forms used for dry drugs, with one example of a spouted jar for wet preparations. A high proportion of these are likely to have come from kilns in Bristol.

Squat cylindrical forms (with constrictions at neck and base) are common, and these derive from the



Plate 7.2 Drug jars with the marks of William Singleton and Gervais Chardin

Italian *albarelli*; they were in use in this country from the 17th century. They are frequently decorated with blue and/or purple horizontal stripes. The smaller eggcup- or tulip-shaped drug jars were not made until the 18th century (they are included in a group of kiln waste from the Limekiln Lane potteries in Bristol, dated c. 1715–25: Jackson *et al.* 1991, fig. 6) and are usually undecorated, although they occasionally carry makers' marks (for the contents). Apothecaries at this period ordered drug jars or ointment pots with their names, and sometimes their addresses, written on them. One of those from Bath Quays, a particularly shallow example, is marked with the handwritten legend 'Wm Singleton Lambeth Butts'.



Plate 7.3 Drugs jars of various forms



Plate 7.4 Glass phials

William Singleton's pots, dating 1779–1807, have been found in London, and there is evidence that they were made at the adjacent Vauxhall pottery (Britton 1987, 168, fig. 173; Dawson 2010, 157), although an example marked 'J Singleton Lambeth Butts' was found amongst manufacturing waste at the Mortlake pothouse, and is assumed to be a result of production being transferred to Mortlake in 1804 by William Wagstaff, a potter from Vauxhall (Stephenson 2003, 74, fig. 56, <P32>).

The latest forms comprise three small straight-sided cylindrical vessels, from the later 18th or early 19th century, of which two carry makers' marks (again, for the contents). One is from Gervais Chardin of the Rue St Martin in Paris. On the second, only the words 'à Paris' survive, but this could come from the same source (although the context suggests an earlier date; see below). M. Gervais was a perfumer in the Rue St Martin; he was described as 'perfumer of their majesties' in 1808 (*internet source*: Houbigant perfume bottles). He went into partnership with

M. Chardin, and the firm is listed in a Paris trade directory for 1820 (Dulac 1820). Ointment pots of both M. Gervais and the Gervais-Chardin firm are also recorded in London; they could have been made either in France or London (the Glasshouse Street pottery in Lambeth was the last source of tin-glazed earthenware in Britain; Britton 1986, 61–2, 169, fig. 176; Maloney 2001, 94).

Over half of the drug jars (43) came from a spread of soil and refuse to the west of Milk Street, probably dumped in the 1780s or 1790s; this dump included both cylindrical and tulip-shaped jars. Three more were found in make-up layers below 30 Kingsmead Terrace dating to the end of the 18th century, including the late cylindrical example stamped 'à Paris', and two from under-floor deposits at 14 New Quay dating to the first decades of the 19th century, including another late cylindrical jar.

Nineteen glass phials were found, several of them complete (Pl. 7.4). These would have been used by apothecaries to dispense medicines to customers;

they could be re-filled at the pharmacy and were thus not necessarily discarded as superfluous when empty. All are of cylindrical form, although some are shorter and squatter than others. They were made in both greenish and colourless glass. Cylindrical phials appeared in the second half of the 17th century and became predominant in the 18th century, continuing in use into the 19th century. They generally became longer and slimmer through time, and greenish glass was superseded by clear glass by the 19th century – the phials here thus suggest a chronological sequence from 17th to 19th century (Castillo Cardenas 2014, 314).

As well as medicines, items of personal hygiene are represented by two early 19th-century toothbrushes, one double-headed, the heads grooved where copper alloy wires held the bristles in place (Hassall *et al.* 1984, 229, fig. 39, nos 17, 44). There is also one example of a possible beauty product that can be linked to a specific supplier. A small octagonal bottle has an applied seal with the mark of Madame Rosalie Bode (Pl. 7.5). Madame Bode was a well-known figure in Bath; she was born in 1772 in 'foreign parts', according to the 1841 census; there are references to her working as a milliner between 1815 and 1842, variously in Gay Street, Wood Street and Pulteney



Plate 7.5 Glass bottle with the seal of Madame Rosalie Bode

Bridge (Mangin 1815; Gye's Bath Directory of 1819; Hunt's Directory of 1824; Pigot's Directories of 1822, 1830 and 1842); she died in 1844.

the inhabitants were very poor. Outbreaks of epidemic disease such as cholera, smallpox and influenza were frequent, and there was a striking correlation between income and life expectancy. In 1842, the Rev. Whitwell Elwin noted that although gentlemen, professionals and their families in Bath had an average life expectancy of 55 years, amongst tradesmen and their families it was only 37 years, whilst the families of labourers and artisans had an average age at death of only 25 years. Worst of all were the families of shoemakers, whose average life expectancy was only 14 years (Chadwick 1842, 168–9).

Sanitation and Water Supply

Part of the reason behind the appalling mortality statistics was undoubtedly poor sanitation. Most households obtained their water from shared wells, though for some the river was the only available source. Wells were frequently sited near leaking drains and sewers, whilst the river itself was heavily contaminated with sewerage and industrial effluent. Frequent floods added a further means by which wells could be contaminated.

Only one cesspit was found during the excavation, and one of the surprising features of the quayside properties was that all of the excavated 18th-century lavatories were sited over drains that flowed into main sewers, which suggests that they were water-flushed. This is rather unusual, as most lavatories of the period were dry privies - generally a wooden plank or seat with a hole, with a bucket or cesspit below. The presence of 18th-century water closets has, however, been noted elsewhere in the city, for example at Kingston Buildings, St John's Hospital and Royal Crescent, and it may be no coincidence that the earliest known English water closet was developed at nearby Kelston Hall by Sir John Harrington in 1594-6 (Bradley-Lovekin nd; Kinghorn 1986; Mason 2018). The reason water-flushed lavatories are rare before the mid-19th century is that they require an adequate supply of water to function correctly. Mains water provision in the Avon Street district remained patchy until the late 19th century, which suggests that the excavated lavatories at Bath Quays were flushed using waste-water or rainwater, possibly using a slop-flush system similar to a recently excavated late 19th-century example from Hungate, York (Hunter-Mann 2008).

The passing of the *Bath Water Works Act* 1846 (Earle 1864, 328) led to the construction of Chilcombe Bottom Reservoir in Batheaston, which from 1848 onwards significantly increased the supply of fresh water to the city. The opening of the reservoir coincided with the passing of the *Public Health Act* 1848, which established a Central Board of Health and made corporate boroughs responsible for water supply, street paving, refuse collection and improvements to drains and sewers. Corporate improvements to sanitation were guided by inspectors from the Board of Health, who ensured that Edwin Chadwick's insistence on the use of glazed ceramic drainpipes, which are less prone to leaking than brick- or stone-lined drains, was implemented (Binnie 1981).

Cotterell's map of 1852 (Fig. 5.1) shows the extent of the city's water supply and drainage network four years after the passing of the *Public Health Act*. By this date, all the principal streets apart from New Quay had a mains water supply, though it is uncertain how many individual properties were connected. The drainage system was less well developed: the 18th-century stone-lined sewers below Avon Street and Milk Street remained in use, and a new 12-inch pipe sewer had been laid through the rear gardens of Milk Street and Avon Street.

The results of 19th-century sanitary improvements were evident throughout the excavation; by the end of the century all of the main sewers and most of the subsidiary drains had been replaced with ceramic pipework. On short drain runs, this was often accomplished by 'threading' the pipes inside the existing drains. For longer runs, particularly where heavy 12-inch diameter pipes were used, the drains were either laid in new trenches or they were inserted into the existing 18th-century sewers via a series of regularly-spaced shaft pits. Excavating the shaft pits, which were less than a metre square and 2–3 m deep, would have been extremely dirty and dangerous work for the men involved, but would have been less disruptive for the owners and inhabitants of the buildings above than the digging of new trenches.

Public Washhouses: Their Origins, Use, Politics and Economics

The Milk Street Baths is an early example of a public washhouse that was built following the passing of the *Baths and Washhouses Act* 1846. The campaign for the provision of public washhouses formed part of the wider Public Health Movement, which was to a large extent driven by the fear of epidemic disease, particularly cholera. Contagious diseases were, prior to the 1880s, widely-considered to be spread via miasma or 'bad air' emanating from rotting organic matter. Consequently, many of the public health measures



Figure 7.1 A public washhouse (Marylebone Road): washing, published in Brook-Alder (1902, 364)

instigated in the 1840s were designed to combat the perceived threat from bad smells. Fortunately, although the route of transmission was misunderstood, the actions taken (eg, improvements to water supply and sanitation, refuse collection and the provision of washhouses) did inadvertently combat disease by removing sources of contamination. The earliest public washhouse, constructed in Liverpool in 1842, was established with the explicit aim of controlling epidemic cholera by washing clothes in boiling water and chloride of lime. This would have had no effect on transmission of cholera, which is contracted by ingesting water contaminated with the bacteria Vibrio cholerae, but it would have had other tangible health benefits: specifically, the killing of parasites (eg, lice and fleas) and pathogens (eg, tuberculosis, smallpox, colds and influenza) spread through physical contact with contaminated textiles. Public washhouses (Fig. 7.1) also provided an important intangible benefit: specifically, they allowed the poor to clean themselves and their clothing. This would have decreased the very obvious difference between them and the rest of society, which would have been particularly important at a time when many religious commentators explicitly linked cleanliness of body to morality, a concept encapsulated in John Wesley's much overused phrase 'cleanliness is next to godliness'.

Religion, Politics and the Washhouse Movement

In the mid-19th century, political agitation for social and public health reform was often driven by individuals with strong religious beliefs. The campaign for the provision of washing facilities for the poor was no exception, and the type of individual drawn to this type of work is epitomised by the three foundermembers of the Baths and Laundry Society for the City of Bath (BLSCB), all of whom were wealthy Evangelical Anglicans.



Plate 7.6 Anthony Ashley-Cooper, 7th Earl of Shaftesbury, mid–late 1850s albumen print, probably by Maull & Polyblank © National Portrait Gallery, London

Lord Ashley

Anthony Ashley-Cooper (Pl. 7.6), known as Lord Ashley from 1811 until he became the 7th Earl of Shaftesbury in 1851, was one of the most successful social reformers of the 19th century, and by far the most prominent founder-member of the BLSCB. Lord Ashley was born in London in 1801, and had a neglected and unhappy childhood both at home and at Manor House School, Chiswick, which he later described as a real-life version of Dotheboys Hall from Dickens' novel Nicholas Nickleby. For spiritual and emotional consolation, he turned to the Bible, and became a devout premillennial evangelist (Fisher 2009; Wolffe 2008). His later education was at Harrow and Oxford, where he studied classics, and in 1826 he was elected as MP for Woodstock, a 'rotten borough' that was controlled by his uncle, the Duke of Marlborough. In 1827, Lord Ashley was appointed to a select committee to review the provision of the care for pauper lunatics in the private madhouses and asylums of Middlesex. He was appalled by the conditions he found and began campaigning for reform of the lunacy laws. This culminated in a series of acts, passed between 1828 and 1845, which vastly

improved conditions for those held by these institutions (Battiscombe 1974, 37-8, 182; Fisher 2009). In 1830 Lord Ashley was elected as MP for Dorchester, where he unsuccessfully campaigned against the Reform Bill. Between 1831 and 1846 he served as MP for Dorset (Fisher 2009), and turned his attention to the problems of child labour and working conditions in factories. His campaigning on these issues led to the passing of the Ten Hours Acts of 1833 and 1845, which banned the employment of children under the age of nine; restricted the employment of children under 14 to an eight-hour day; and limited women and boys under the age of 18 to a 10-hour day (Battiscombe 1974, 88, 91, 202). He also introduced the Mines and Collieries Act 1842, which banned the employment of children and women underground (ibid., 148-9), and supported early legislation that aimed to outlaw the use of child chimney sweeps, though these laws were widely ignored until he persuaded Parliament to pass the Chimney Sweeps Act 1875 (ibid., 126–7).

In addition to his parliamentary work, Lord Ashley was involved with numerous missionary and philanthropic organisations, and was prominent Christian Zionist and campaigner for a Jewish homeland in Palestine, a territory he, as a patriotic Englishman, assumed would be a British dominion (Larsen 1998, 463; Lewis 2014, 380). He also served as president of the British and Foreign Bible Society, the Evangelical Alliance, the Ragged School Union, and the Society for Promoting Christianity Amongst the Jews (Smith 1906, 277; Battiscombe 1974, 196, Wigram 1866, 2). Another founder-member of the BLSCB, Charles Brodrick, was also a member of this missionary group, and it may have been where the two men became acquainted (BCWG, 11 May 1848).

Lord Ashley's association with Bath began in the mid-1840s, where his prominent political profile helped galvanise support for the provision of a washhouse for the poor. His interest in promoting 'good works' in the town were not entirely selfless: the construction of the Milk Street Baths in 1846–7 coincided with a general election, which saw Lord Ashley returned as MP for Bath – a constituency he held until he succeeded to his father's peerage in 1851 (Fisher 2009). Lord Ashley died in 1885.

Charles Brodrick

Charles Brodrick (Pl. 7.7) was born in Midleton, Ireland, in 1791, and became the 6th Viscount Midleton following the death of his cousin in 1848. The Viscounts Midleton were a prominent Anglo-Irish family, who were for the most part, absentee landlords (Landed Estates Database 2018), and who held a second estate in Pepper Harrow, Surrey. Brodrick studied at Eton and Cambridge, and was admitted to Lincoln's Inn in 1813 and qualified as a barrister in 1819. He lived in London until at least

1841, before moving to 10 Lansdown Crescent, Bath, in the early 1840s, where he became active in local missionary groups and charities, including the Society for Promoting Christianity Amongst the Jews (GRO *GDR/V1/329; Bath Directory* 1846, 32; census 1841; *BCWG*, 11 May 1848).

Although Lord Ashley was the most prominent of the three founder-members of the BLSCB, it is likely, given the number of campaigns he was already involved in, that Charles Brodrick and William Sutcliffe, who served as the first and second chairmen (*BCWG*, 30 October 1845 and 27 January 1848), were the driving forces behind its formation. Brodrick also served as vice-chairman of the Bath Board of Guardians, president of Bath General Hospital and chairman of the Bath Auxiliary British and Foreign Bible Society (*BCWG*, 10 December 1863, 9 November 1848, 16 May 1850 and 14 March 1850). Brodrick subsequently moved to Pepper Harrow, where he died in 1863.

William Sutcliffe

William Sutcliffe was born into a wealthy Bath family in 1800. He was educated at Little Dunham School, Norfolk, studied law at Cambridge, was admitted to the Inner Temple in 1821 and graduated as a barrister in 1830 (Inner Temple Admissions Database 2018). By 1832, Sutcliffe had returned to Bath, where he practised as a barrister and served as a magistrate (BCWG, 2 February 1832; Pigot's Directory 1842). He also became a member of the Bath Auxiliary British and Foreign Bible Society, an organisation later chaired by Charles Brodrick, and it seems probable that he became associated with the other founder-members through their missionary work. In 1841, Sutcliffe was appointed as High Sheriff of Bedfordshire, a position he held until 14 January 1844. He returned to Bath later that year and became the treasurer of the Bath Pastoral Aid Association, before becoming involved in the establishment of the BLSCB in 1845. In 1848, Sutcliffe became the chairman of the BLSCB (BCWG, 14 June 1844, 30 October 1845 and 27 January 1848) and helped fund and establish an Industrial School, posthumously named after him, in the former Walcot parish workhouse (BCWG, 16 November 1848; Higginbotham 2018). Sutcliffe, like Lord Ashley, benefited politically from his involvement in the establishment of the Milk Street Baths, and in 1848 he was appointed Mayor of Bath. He died four years later.

Economics

As well as the support given by local politicians and private charitable subscription, the Milk Street Baths benefited from direct assistance from the Corporation; the building was designed by the City



Plate 7.7 Charles Brodrick, 6th Viscount Midleton, albumen print by Camille Silvy, 14 June 1861 © National Portrait Gallery, London

Architect George Philip Manners and his associate John Elkington Gill. Although the Corporation clearly supported the establishment of the institution, it was expected to be self-funding once operational.

The accounts of the Milk Street Baths, which were regularly published in the Bath Chronicle and Weekly Gazette, show that while most of the institution's income was raised through admission charges, it was never enough to meet running costs. The shortfall was made up by ongoing charitable subscription and, from the 1850s onwards, a small annual grant from the Corporation. In the later 19th century, subscriptions gradually fell and the Corporation was forced to increase its support. This fall in subscriptions was probably due to a change in public perception about how public services, such as washing facilities, should be funded – that is that they should be the responsibility of local government rather than charities.

Attendance at the baths, which generally amounted to around 6000 bathers and 4000 launderers per annum, remained high until end of the 19th century, but by 1910 the numbers using the laundry had halved, though the numbers of bathers remained high. The decrease in attendance can probably be attributed to



Plate 7.8 Irish-themed clay tobacco pipe with a factitious maker's mark. The pipe was probably made in England

improved piped mains water provision and an increase in domestic space, both of which would have made home laundering more practical.

By the early 1920s, the numbers using the bathing facilities also dropped, and when plans for a redevelopment of the area were drawn up, the Corporation explicitly stated that the baths and laundry would not be replaced. The planned new houses would have their own bathing facilities and it seems likely that the decision not to replace the washhouse was, at least partially, driven by a desire to make a definitive break with the 'poor and dirty' past.

Material Culture and Identity

The rise and fall of the Avon Street district is mirrored not only in the structural remains and the documentary evidence, but also in the material culture, in a trajectory peaking with high-quality pottery and wall tiles in the mid-18th century and culminating in the debris from a rag and bone business in the 1920s/30s. The problem, however, lies in determining how much of the material assemblage excavated actually belonged to the inhabitants of the district, since much of it clearly formed part of dumped deposits that could have come from anywhere in Bath, and there is little evidence of the type of 'house clearance' deposits

often found in wells and cesspits (few of these types of feature were excavated). The tin-glazed wall tiles, for example, came from a made ground deposit beneath the floor of a house in New Quay, and much of the high-quality pottery (yellow slipwares, white salt glaze, red stoneware, porcelain) was incorporated in large-scale dumping into quarry pits west of Milk Street. If the inhabitants of Avon Street and the surrounding area were unlikely to have been using these products, what were they using instead?

Only two groups were identified which are sufficiently large for informed comment. One came from the backfill of a cesspit (S51) at 30 Kingsmead Terrace (see Large-scale Dumping in Quarrying/Pitting West of Milk Street). The small size of the assemblage (44 sherds of pottery, 199 fragments of clay pipe, 31 fragments of vessel glass) precludes identification as a house clearance deposit and it can be seen instead as a more gradual accumulation of household waste. The small group of pottery lies at the cusp of social and ceramic change in the 1770 or 1780s, a period when dining habits were becoming more formal and requiring a wider ceramic repertoire, which in turn was being supplied more cheaply by the potteries of Staffordshire. This was also the period when the initial occupation of the Avon Street district by the well-todo had been replaced by that of middle- and lowerincome households and demonstrates that such social changes permeated all social levels. However, the fact that the clay pipes all date to the period c. 1780–90 may be telling - these could date 10 years or more after the ceramics and suggest that their users were not in fact at the forefront of fashion but were still using older dining equipment.

The second group came from the under-floor deposits at 14-15 New Quay (B12) and probably represent chance losses through the floorboards (see Finds from Beneath the Floor of 14-15 New Quay (B12)). Datable objects suggest a date range from the 1790s to the 1830s, with the proviso that some of the pottery could be earlier 18th century; the house was built in 1767, and the floor relaid probably in the 1830s or 1840s. Finds include pottery, clay tobacco pipes, small denomination coins, small items of domestic equipment (thimble, knife handle, small spoon, stone mortar), personal items (buttons) and playthings (stone marbles, bone gaming fish). The pottery displays few pretensions to gentility beyond the few sherds of lustre-decorated porcelain (including a tea bowl, which could be a residual vessel). The slip-decorated and transfer-printed wares are typical of the mass-produced pottery that would have been readily and cheaply available to all sections of society from the end of the 18th century. The gaming fish provides a tenuous link to the Bath of Jane Austen (who incidentally lived for a short period in 1803–5 in Green Park Buildings, just to the west of Kingsmead

Terrace), but the inhabitants of New Quay, although with a lifestyle not bereft of the social niceties, are unlikely to have moved in the same social circles.

The ethnic diversity of the Avon Street district is demonstrated by census records, but the ethnicity of the inhabitants is rarely reflected in the material record. The Avon Navigation would have brought both goods and people to the area, and some of this is seen in the clay tobacco pipes. Pipes from outside the city are not unusual finds in Bath, but the proportion of non-local pipes is slightly higher at the quays, and these probably reflect the arrival of boat hands from the coastal trade who had arrived in the city on barges which used the Avon Navigation. Boat hands, seeking accommodation and the variety of 'services' offered on the quays, are unlikely to have ventured into the city centre, and the pipes they brought with them remained by the riverside. Pipes from Bristol are comparatively rare finds in Bath but, again, there is a slightly higher number here for the same reasons. There are two Irish-themed pipes, both dating to the period c. 1870–1920, one with the mark of a factitious Dublin maker (O'Brien, Mayo Street) (Pl. 7.8) and another with a shamrock moulded on one side and a harp on the other. Though many such pipes were made in England, these might add to the picture of the strong Irish population of the Avon Street district who wished to show some patriotism; unfortunately, one came from a floor bedding layer and the other from a made ground deposit, so neither can be securely tied to the area. The only other artefact which might have some connection with ethnicity is a creamware vessel bearing part of the Dutch patriotic motto 'Voor Vryheid en Vaderland' (For Liberty and Fatherland), found in the under-floor deposits at 14-15 New Quay (Pl. 7.9; see Finds from Beneath the Floor of 14-15 New Quay (B12)), a vessel more likely to have been sold on the Dutch market rather than to British consumers.

Consumption Habits and Refuse

Archaeological analysis of past consumption habits is essentially the study of people's rubbish. What they left behind is heavily influenced by what constituted 'rubbish' and how people managed its disposal. In urban contexts, items that could not be reused or sold were frequently dumped in holes in the ground – either in purpose-dug pits, or in cesspits, disused wells or other cavities that needed filling. The fills of these features can provide valuable information about the material culture of the local inhabitants, particularly where large so-called 'clearance groups' – dumps of household items that were dumped *en masse*, usually in a single episode – are found (Pearce 2000, 144–5; Powell 2014, 50).



Plate 7.9 Creamware pottery with part of motto "...en Vaderland"

In the 18th and early 19th century, the definition of 'rubbish' was much more restricted than in later periods. Food scraps were fed to animals or used as manure; bones were boiled down to make glue, then crushed for use as fertiliser; glass, metal and clothing rags could be sold and recycled; ash and cinders were used in brick making, whilst broken pottery, oyster shells and rubble were used as hard core in road construction (Horne 1850). The incorporation of clay pipemaking waste in make-up layers and dumped deposits in various locations at Bath Quays demonstrates this – none of the waste related to makers working within the area of the site. In short, most materials could, and often were, recycled.

In contrast to many contemporary urban sites, there were few backfilled pits, cesspits or wells at Bath Quays, and none that produced particularly large groups of finds, which begs the question—where did the area's 18th- and 19th-century inhabitants dispose of their refuse?

By 1795, the Avon Street district was filled with densely packed rows of houses and commercial premises. The few open spaces that did exist were generally paved, which made digging pits for refuse disposal impractical. For the quayside dwellers there was an obvious, but illicit, place where they could dispose of rubbish: over the quay wall and into the river. Away from the quayside, the only option was for rubbish to be collected and removed.

Between 1614 and the 1880s, refuse collection in Bath was undertaken by Corporation-appointed 'scavengers', who were contracted to clean the streets and dispose of any unrecyclable refuse on nearby farmland. In the 19th century, most of the refuse was loaded onto carts or barges and transported to

riverside scavengers' yards in Twerton and Weston for sorting (Marek Lewcun, Paul De'Ath and Mike Chapman pers. comm.). In the second half of the 19th century, urban consumption and disposal habits began to change. Packaged goods became widespread and, from the 1870s onwards, large quantities of ostensibly usable items came to be seen as rubbish. Disposal of this material necessitated the creation of municipal refuse tips (Licence 2015, 105-6). By the 1880s, Bath's scavengers were struggling to cope with the increased volume of waste and the Corporation was forced to intervene by finding new dump sites. In 1886, they gained permission to use the disused wharfs of the Somerset Coal Canal at Midford as a dump, but were forced to stop after the District Council took out an injunction against them. The solution was the construction of a 'destructor' (waste incinerator) in one of the old scavengers' yards at Twerton. The destructor began operating in 1895 and remained in use until the 1950s (Mike Chapman pers. comm.).

The largest group of finds from Bath Quays was recovered from an extensive spread of soil that infilled a series of shallow quarries to the west of Milk Street. This deposit was probably dumped by the local scavenger in the 1780s and 90s and probably originated from many households across the city. The dumped material comprised a mixture of clinker and ash, construction waste including broken 18th-century Bath Stone balustrades, large quantities of broken pottery and clay tobacco pipes. Very few animal bones were found, which suggests that these were being separated for use as glue and fertiliser. Cinders and ash were commonly separated for use in brick-making, but the ready availability of locally-quarried stone hampered the development of a local brick-making industry and, as a result, the city's ashes are likely to have had little or no value. The ceramics (see Mepham 2019a; Large-scale Dumping in Quarrying/Pitting West of Milk Street) are chronologically mixed, including some wares potentially as early as late 17th century (yellow slipwares, tinglazed earthenware, Westerwald stoneware), or even earlier (redwares), some from the 18th century up to around the 1770s (white saltglaze, red stoneware), later 18th century (creamwares) and 19th century (developed creamware, pearlware, refined earthenware). The 19th-century wares, however, are relatively scarce, and the emphasis seems to be on the second half of the 18th century. The pottery may therefore represent continued refuse dumping over a period of time or - what is more likely given the conjoining and possible same-vessel sherds observed across different parts of the deposit - the redeposition of an accumulation of material in a number of dumping episodes over a restricted timespan. As to where the pottery was originally discarded, there is nothing that marks this out as a 'higher status' assemblage from

better-class households within the city, and the Milk Street dump shows the same diversity of wares as is seen, on a much smaller scale, in the better stratified groups within the excavated areas of Avon Street – the same mix of 18th-century finewares superseded by mass-produced tea- and tablewares from the 1770s or 1780s.

Conclusions

The excavation at Bath Quays Waterside uncovered a substantial area within the former Avon Street district, an area that was, from the 18th to early 20th centuries, synonymous with poverty, crime and social deprivation.

Modern visitors to Bath's world-famous Georgian streets could be forgiven for thinking that the majority of the city's 18th-century inhabitants were wealthy. This is in part due to a much-lamented programme of post-war redevelopment, later known as the 'Sack of Bath', which entailed the demolition of much of the city's 18th-century artisan housing (Furgusson 1973). The reality is that labourers, servants, artisans and the 'middling sort' (shopkeepers, clerks and small business owners) far outnumbered the aristocratic visitors to the spa. Many of these individuals lived in the Avon Street district. The 19th century was a period of tremendous technological and social change, which affected Bath as much as any city. Although Bath's civic authorities propagated the idea that it was 'not a city of trade' (Gibbs 1844, 56-7; Davis 2009, 1), it had, by the middle of the century, developed a substantial industrial base which supported a large working-class population. During this period, the Avon Street district became a focus for new industries; these provided work for the local population, but also polluted the air they breathed and the water they drank.

Archaeological excavation and historical research has shown that the early 18th-century buildings along Avon Street were predominantly well-built townhouses, constructed for wealthy visitors to the spa, which were later converted for use as lodgings for visitors and residents of more modest means. Later 18th-century houses in the adjacent streets were built specifically for lower-income tenants. These houses were of simple but solid construction, though some poor construction choices, such as the use of groundfloor timber flooring in a periodically flooded area and the siting of wells close to sewers, would have created problems for their inhabitants. By the turn of the 19th century, the area had become extremely overcrowded, which, coupled with the proliferation of slaughterhouses and industrial premises, created unhealthy living conditions that provided an ideal environment for the spread of epidemic disease.

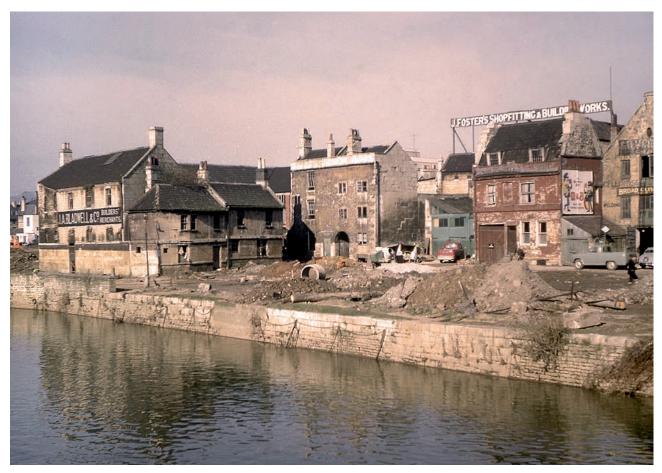


Plate 7.10 1960s view of Broad Quay, from the south, showing Quay House (B25) and JA Bladwell & Co's c. 1889 warehouse and showroom (B37) shortly before their demolition © B&NES Council

The outbreak of cholera in 1832, a disease previously unknown in Europe, caused much anxiety about living conditions and the prevalence of disease in Britain's rapidly expanding towns and cities. This led to political agitation for improvements to public health, which eventually prompted a range of measures designed to halt the spread of infectious diseases, one of which was the provision of public washing facilities for the poor. The Milk Street Baths and Laundry was one of the country's earliest public washhouses and the first well-preserved example to be archaeologically excavated. Later improvements by Bath Corporation included the provision of piped mains water, improvements to sewers, stricter enforcement of lodging house regulations and more active policing within the Avon Street district. Despite these changes, the area's bad reputation persisted into the early 20th century, and the city authorities eventually decided to demolish the whole district and relocate the residents.

The identification of social problems within 'slums' as being primarily a housing issue is a worldwide phenomenon, one that has historically led to the wholescale clearance of working class districts (Gaskell 1990, 7; Solari 2001, 22; Murray and Mayne 2001, 90; Massheder-Rigby 2018, 90), and it is perhaps

ironic that excavated quayside buildings at Bath Ouavs might, if they were still standing, be considered desirable period properties. Why then was demolition considered to be the only solution? Their flood-prone location and the proximity of noxious industries were undoubtedly very real problems, but perhaps more significant was the fact that many of the houses were poorly maintained. This can largely be attributed to the system of leasehold tenure. In the 18th century, large landowners sold small plots to developer-builders, for which they levied a ground rent. The plots varied in size, but they could normally accommodate a few houses, which were then individually sub-let. Within individual houses there were further tiers of subletting, frequently down to single rooms or sleeping spaces within them. Consequently, it was often unclear who was responsible for maintenance, and as a result it was frequently neglected.

Demolition of the Avon Street district was meant to be the first stage of a comprehensive redevelopment of the area. By 1939, these plans were well underway: the first of the new model council houses at Kingsmead Flats were occupied, and the foundations of a new state-of-the-art hospital were being laid. The outbreak of World War II brought these plans to an abrupt halt. Bath suffered huge damage during the 'Baedeker'

Raids of 1942 and the austerity of the post-war years put paid to any non-essential works. The growth of road transport did, however, create a need for parking near the city centre, so instead of a planned riverside park, the southern half of the former Avon Street district was turned into a car and coach park. The last quayside buildings were demolished in the 1960s (Pl. 7.10).

The archaeological work showed how the river was instrumental to the development of the city in

the 18th and 19th centuries, and how early 20th-century redevelopment plans were halted by the outbreak of war. Subsequent flood defence works and construction of Green Park Road inadvertently created a barrier that separated the city from the river. The flood mitigation and development enabling works at Bath Quays Waterside have now created a scenic riverside park, which will help reconnect the city with its river and start the long-planned redevelopment of the former Avon Street district.

Appendix 1 Known publicans at the *Duke of York*

1798-1801	William Hunt
1801-1813	John Leaves
1814	Mr Strickland
1816-1824	William Cripps
1830-1841	George Dowling
1844	George Charles
1846	John Wilkins
1848	William Southey
1850-1851	Charles Tilley
1854	Thomas Allen
1859-1861	Frederick Broadripp
1862	George Hobbs
1863	Joseph D Jenkins
1865	Frederick Davis
1866	Mr McCarthy
1865-1861	Robert Hurd



The Duke of York public house, 4 New Quay (B16), from the south (see Chapter 4, B16–B17: Ward's Warehouse and the Duke of York public house and brewery, 4 New Quay)

Bibliography

- Allsop, R 1894 *Public Baths and Wash Houses*. London, E and F Spon
- Ashpitel, A and Whichcord, J 1851 Observations on Baths and Wash-houses, with an Account of their History: an abstract of the Acts of Parliament relating thereto, their applicability and advantage to provincial towns and a description of the principals adopted. London, John Weale
- Austen J 1817 Persuasion
- Baly, P P 1852 Baths and Wash-Houses for The Labouring Classes. London, Effingham Wilson
- Barber, B, Halsey, C, Lewcun, M and Phillpotts, C 2015 The Evolution and Exploitation of the Avon Flood Plain at Bath and the Development of the Southern Suburb: excavations at South Gate, Bath, 2006–9. London, MOLA
- Barker, D, 2010 Producing for the table: a view from the Staffordshire potters, in J Symonds (ed.), *Table Settings: the Material Culture and Social Context of Dining AD 1700–1900*. Oxford, Oxbow Books, 6–20
- Battiscombe, G 1974 Shaftesbury: a biography of the Seventh Earl 1801–1885. London, Constable
- Benn, JW 1893 *The Cabinet Maker and Art Furnisher* Betts, I and Weinstein, R I, 2010 *Tin-Glazed Tiles from London*. London, Museum of London Archaeology
- Bevan, L, Mould, Q and Rátkai, S, 2009 The medieval and post-medieval finds, in C Patrick and S Rátkai, The Bull Ring Uncovered: excavations at Edgbaston Street, Moor Street, Park Street and The Row, Birmingham, 1997–2001. Oxford, Oxbow Books, 172–88
- Binnie, G M 1981 Early Victorian Water Engineers. London, Thomas Telford Limited
- Blackmantle B 1826 The English Spy. London, Sherwood, Jones and Co
- Boyes, G 1987 The legislative history of river navigation and canals, 1275–1603, J Railway Canal Hist Soc 29, No. 136, 65–78
- Bradley-Lovekin, T nd 18th century Water Closets at Kingston Buildings, Bath (Bath Water Closets), unpubl typescript held by the Roman Baths Museum
- Brennan, N 2016 The first prisoner of War camp: a *Time Team* evaluation at Norman Cross, Cambridgeshire, *Proc Cambs Antiq Soc* 105, 99–108
- Britton, F 1986 London Delftware. London, Jonathan Horne
- Brook-Alder, I 1902 London's wash-houses and baths in G R Sims, Living London: its work and its play, its

- humour and its pathos, its sights and its scenes, volume 2, 364. London, New York, Melbourne and Paris, Cassell and Company
- Brooks, I P 2015 The significance of the Mesolithic assemblage, in Barber *et al.* 2015, 178–81
- Brown, D 1990 Dice, a games-board, and playing pieces, in M Biddle, Artefacts from Medieval Winchester part II: object and economy in medieval Winchester. Oxford, Winchester Studies 7, 692–706
- Buchanan, B J 1996 The Avon Navigation and the inland port of Bath, *Bath History* 6, 63–87
- Buchanan, R A 1998 The floods of Bath, *Bath History* 7, 167–88
- Bulwer-Lytton, E 1830 *Paul Clifford*. London, Henry Colburn and Richard Bentley
- Castillo Cardenas, K 2014 Pharmaceutical glass in post-medieval London: a proposed typology, London Archaeologist 13 (1), 309–15
- Chadwick, E 1842 Report to Her Majesty's Principal Secretary of State for the Home Department from the Poor Law Commissioners, on an Inquiry into the sanitary condition of the labouring population of Great Britain. London, Clowes and Sons
- Chapman, M 1997 A Historical Guide to the Ham and Southgate area of Bath. Bath
- Chapman, M 2018 Avon Street, Peter Street and 'the Great Gap', *The Survey of Bath and District*, 33. Pensford, A2B Print Solutions, 13–20
- Clew, K R 1985 *The Kennet & Avon Canal.* Newton Abbot, David & Charles
- Cotswold Archaeology 2007 7-10 Kelso Place, Bath, Bath and North East Somerset: building impact assessment. Circncester, unpubl rep 07118
- Cunliffe, B and Davenport, P 1985 *The Temple of Sulis Minerva at Bath. Volume I: The Site.* Oxford, Oxford Univ Comm Archaeol Monogr 7
- Davenport, P 2002, Medieval Bath Uncovered Stroud, Tempus
- Davenport, P 2004, An Archaeological Excavation on the Site of Old St Andrew's Church and Victoria Park, Bath. B&NES HER rep, unpubl
- Davis, G 1990 Beyond the Georgian Facade: the Avon Street district of Bath, in S M Gaskell 1990, 144–185
- Davis, G 2009 Bath as a spa and Bath as a slum: the social history of a Victorian city. Edwin Mellen Press, New York, Lampeter and Queenston, Canada
- Davis, G and Bonsall, P 2006 A History of Bath: image and reality. Bath, Carnegie
- Dawson, A 2010 English and Irish Delftware 1570–1840. London, British Museum

- Dumbrell, R 1983 *Understanding Antique Wine Bottles*. Woodbridge, Antique Collectors' Club
- Egan, P 1819 Walks Through Bath: describing every thing worthy of interest, including Walcot and Widcombe, and the surrounding vicinity, also an excursion to Clifton and Bristol hot-wells. Bath, Mayler and Son
- Eglin, J 2005 The Imagined Autocrat: Beau Nash and the invention of Bath. London, Profile
- Flinn, W M (ed.) 1965 Introduction, in E Chadwick, Report on the Sanitary Condition of the Labouring Population of Great Britain. Edinburgh, Edinburgh Univ Press, 1–73
- Furgusson, A 1973 The Sack of Bath: a record and indictment. Salisbury, Compton Russell
- Gaskell, S M 1990 *Slums*. Leicester, London and New York, Leicester Univ Press
- Gibbs, S 1844 Gibbs's Bath Visitant; or, the new guide to Bath
- Halsey, C, Macphail R I and Nicholls, M 2015 The pre-Holocene landscape and environment (period 0), in Barber *et al.* 2015, 9–36
- Hassall, T G, Halpin, C E and Mellor, M 1984 Excavations in St Ebbe's, Oxford, 1967–1976: Part II: Post-medieval domestic tenements and the post-Dissolution sites of the Greyfriars, *Oxoniensia* 49, 153–275
- Hays, J N 2005 Epidemics and Pandemics: their impacts on human history. Santa Barbara, ABC-CLIO
- Hembry, P 1990 *The English Spa 1560–1815: a social history*. London, Athlone
- Henze, C E 2010 Disease, Health Care and Government in Late Imperial Russia: life and death on the Volga, 1823–1914. London and New York, Routledge
- Higbee, L 2017 Animal bone, in Wessex Archaeology 2017, 57
- Horne, R H 1850 Dust; or ugliness redeemed, Household Words 1, 379–83
- Humphries, J and Weisdorf, J 2015 The Wages of Women in England, 1260–1850, J Economic Hist 75:2
- Hunter-Mann, K 2008 Block E Hungate Development, York: a report on an archaeological excavation. York Archaeological Trust, unpubl
- Jackson, R, Jackson, P and Beckey, I 1991 Tinglazed earthenware kiln waste from the Limekiln lane Potteries, Bristol, *Post-Medieval Archaeol* 25, 89–114
- Jeffries, N, Owens, A, Hicks, D, Featherby, R and Wehner, K 2008 Rematerialising metropolitan histories? People, places and things in modern London, in A Horning and M Palmer (eds), Crossing Paths or Sharing Tracks? Future directions in the archaeological study of post-1550 Britain and Ireland. Woodbridge, Boydell and Brewer, 323–49
- Kevil, A J 1996, The Barton of Bath, Bath Hist 6, 25–53
- Kinghorn, J 1986 A privvie in perfection: Sir John Harrington's water closet, *Bath Hist* 1, 173–88

- Lambert, R 2000 Patrick Abercrombie and Planning in Bath, *Bath Hist* 8, 172–96
- Larkin, C 1856 Lecture on Baths and Washhouses. Gateshead, Observer Steam Press
- Larsen, D L 1998 The Company of the Preachers: A History of Biblical Preaching from the Old Testament to the Modern Era, Vol 2. Grand Rapids, Michigan, Kregel Publications
- Last, J M 2001 Miasma Theory, in L Breslow (ed.) *Encyclopedia of Public Health*. New York, Macmillan Reference
- Last, J M 2007 A Dictionary of Public Health. Oxford, Oxford Univ Press
- Latimer, J 1900 The Annals of Bristol in the Seventeenth Century
- La Trobe-Bateman, E and Niblett, R 2016 Bath: an archaeological assessment. Oxford, Oxbow Books
- Lewcun, M 1994 The Clay Tobacco Pipe Making Industry of Bath, *Bath History* 5, 125-146
- Lewcun, M in prep., Somerset Clay Pipes and Pipe Makers
- Lewis, D 2014 The Origins of Christian Zionism: Lord Shaftesbury and Evangelical Support for a Jewish Homeland. Cambridge, Cambridge Univ Press
- Licence, T 2015 What the Victorians Threw Away. Oxford, Oxbow Books
- Low, S 1850 The Charities of London: comprehending the benevolent, educational, and religious institution, their origin and design, progress, and present position. London, Sampson Low
- Maloney, C 2001 Fieldwork round-up 2000, London Archaeologist 9 (3), 67–94
- Manco, J 1998a Saxon Bath: the legacy of Rome and the Saxon rebirth, *Bath Hist* 7, 27–55
- Manco, J 1998b The Spirit of Care: The eight-hundredyear story of St John's Hospital, Bath. Bath, St John's Hospital
- Mangin, E 1815 An Intercepted Epistle from a Person in Bath, to His Friend in London. London, Guy and Son
- Massheder-Rigby, K 2018 The housing experience of the working classes 1790–1970: the potential of the combined approach of archaeology, the historical record and oral history. PhD thesis, Liverpool, Univ of Liverpool
- Metcalfe, R 1877 Sanitas Sanitatum et Omnia Sanitas. London, Co-operative Printing Company
- Mitchell, B and Penrose, H (eds) 1983 Letters from Bath 1766–1767 by the Rev John Penrose. Gloucester, Alan Sutton
- Monckton, L 2008 Bath Abbey: a re-assessment of its patronage and architectural history, *Church Archaeology* 10, 1–14
- Murray, T and Mayne, A 2001 Imaginary landscapes: reading Melbourne's 'Little Lon', in A Mayne and T Murray (eds), *The Archaeology of Urban Landscapes: explorations in slumland.* Cambridge, Cambridge Univ Press, 89–105

- Neale, R S 1981 Bath: A Social History 1680–1850. A valley of pleasure, yet a sink of iniquity. London, Routledge
- Noël Hume, I 1969 A Guide to Artifacts of Colonial America. Philadelphia, Univ Pennsylvania Press
- Peacey, A 1996 The Archaeology of the Clay Tobacco Pipe. XIV: the development of the clay tobacco pipe kiln in the British Isles. Oxford, BAR 246
- Peach, R E M 1895 *The Life and Times of Ralph Allen*. London, D Nutt
- Pearce, J 2000 A late 18th-century inn clearance assemblage from Uxbridge, Middlesex, *Post-Medieval Archaeology* 34, 144–86
- Powell, A B 2014 Steelworks, Crucible Furnaces and Workers' Housing: Archaeological Investigations at Hoyle Street, Sheffield. Salisbury, Wessex Archaeology
- Price, B 1967 The Benevolent Man: a life of Ralph Allen of Bath. Cambridge, Mass., Harvard Univ Press
- Rathbone, H R (ed.) 1927 Memoir of Kitty Wilkinson of Liverpool, 1786–1860: with a short account of Thomas Wilkinson, her husband. Liverpool, H Young and Sons
- Ray, A 1973 English Delftware Tiles. London, Faber & Faber
- Seifert, D J 1991 Within site of the White House: the archaeology of working women, *Hist Archaeol* 25:4, Gender in Historical Archaeology, 82–108
- Sims-William, P 1974 Continental influence at Bath Monastery in the seventh-century, *Anglo-Saxon England* 4, 1–10
- Silver, I 1969 The ageing of domestic animals, in D Brothwell and E Higgs (eds) *Science in Archaeology*. London, Thames & Hudson, 293–302
- Sims-William, P 1990 Religion and Literature in Western Europe 600–800. Cambridge Studies in Anglo-Saxon England 3, Cambridge, Cambridge Univ Press
- Skempton, A W, Chrimes, M M, Cox, R C, Cross-Rudkin, P S M, Rennison, R W, Ruddock, E C, 2002 A Biographical Dictionary of Civil Engineers in Great Britain and Ireland, Volume 1: 1500–1830. London, Thomas Telford
- Smith, B E (ed.) 1906 The Century Cyclopedia of Names. New York, The Century Company
- Smollett, T 1771, The Expedition of Humphrey Clinker Snow, J 1855 On the Mode of Communication of Cholera. London, John Churchill
- Solari, E-M 2001 The making of an archaeological site and the unmaking of a community in West Oakland, California, in A Mayne and T Murray (eds), *The Archaeology of Urban Landscapes: explorations in slumland.* Cambridge, Cambridge Univ Press, 22–38
- Spude, C H 2005 Brothels and saloons: an archaeology of gender in the American west, *Hist Archaeol*, 39:1, Sin City, 89–106

- Stellingwerf, W 2018 "The Delft stick pulverizing the disgusting yellow and hideous red English earthenware" British ceramics on the late 18th-century Dutch market: A political question? Conference paper, Medieval Pottery Research Group, June 2018
- Stephenson, R 2003 Pottery, in B Sloane and S Hoad 2003 Early modern industry and settlement: excavations at George Street, Richmond and High Street, Mortlake, in the London Borough of Richmond upon Thames. London, Museum of London Archaeology Service, Archaeology Studies Series 9, 69–79
- Swift, A and Elliot, K 2005 *The Lost Pubs of Bath*. Bath, Akeman Press
- Tomlinson C 1853 Cyclopedia of useful arts, Mechanical and Chemical, Manufactures, Mining, and Engineering, Volume 6. London and New York, George Virtue & Co.
- Wardle F D (ed.) 1923 The Accounts of the Chamberlains of the City of Bath 1568–1602. London, Somerset Rec Soc 38
- Wessex Archaeology 2013 Bath Quays Waterside, Bath and North East Somerset: archaeological desk-based assessment. Salisbury, unpubl rep 101270.01
- Wessex Archaeology 2016 Bath Quays Waterside, Bath: archaeological evaluation and watching brief. Bristol, unpubl rep 111020.03
- Wessex Archaeology 2017 Bath Quays Waterside, Bath, Bath and North East Somerset: post-excavation assessment. Bristol, unpubl rep 111021.02
- Wigram, J C 1866 Report on the conference upon the Rosenthal case, held with the representatives of the committee of the London society for promoting Christianity among the Jews, by the bishop of Rochester and others. London, Longmans, Green, Reader, and Dyer
- Willan, T S 1936 River Navigation in England 1600–1700. Oxford, Oxford Univ Press
- Wood, J 1749 Essay Towards a Description of Bath, 2nd Edition, reprinted 1765
- Yamin, R 2001 Alternative narratives: respectability at New York's Five Points, *The Archaeology of Urban Landscapes: Explorations in Slumland*, 154–70

Internet Sources

- Anon 1864 Bodies and Souls: a discursive paper, with glimpses of the City of Bath, *MacMillan's Magazine* 10, 477–86, https://babel.hathitrust.org/cgi/pt?id=coo.31924065545901;view=1up;s eq=495 (accessed 10 April 2019)
- B&NESC 2010 The City of Bath World Heritage Site Management Plan 2010-2016, http://www.bathworldheritage.org.uk/sites/world_heritage_site/files/heritage/City%20of%20Bath%20World%20Heritage%20Site%20

- Management%20Plan%202010.pdf (accessed 6 July 2016)
- B&NESC 2014 Placemaking Areas: Bath Quays North, http://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Evidence-Base/Urban-Design-Landscape-and-Heritage/her_bath_quays_north_2014.pdf (accessed 1 February 2018)
- B&NESC 2016 The City of Bath World Heritage Site Management Plan 2016–2022 Consultation Draft May 2016, http://www.bathworldheritage.org.uk/sites/world_heritage_site/files/heritage/World%20Heritage%20Site%202016-2022%20 Management%20Plan%20consultation%20draft.pdf (accessed 30 June 2016)
- Baggs, A P, Cox, D C, McFall, J, Stamper, P A and Winchester A J L 1985 Dawley: economic history, in G C Baugh and C R Elrington (eds) A History of the County of Shropshire: Volume 11, Telford, 115-125, http://www.britishhistory.ac.uk/vch/salop/vol11/ pp115-125 (accessed 29 June 2016)
- Bath Blitz memorial project 2005 http://www.bathblitz.org/ (accessed 9 April 2019)
- Bath Records Office 2019 Lyncombe and Widcombe & St James' Cemetery https://www.batharchives.co.uk/cemeteries/lyncombe-and-widcombe-st-james-cemetery (accessed 16 May 2019)
- Bristol potteries: http://www.bristolpottersand potteries.org.uk/potteries-list/ (accessed 30 October 2018)
- Berclouw, M 2013 A Prosaic but Useful Service: bathhouses and washhouses, an idea whose time had come, http://www.victorianweb.org/science/health/berclouw.html (accessed 2 April 2019)
- Bindoff, S T 1982 (ed.) *The History of Parliament: the House of Commons 1509–1558*. London, Boydell and Brewer, http://historyofparliamentonline.org/volume/1509-1558/member/colthurst-matthew-1517-59 (accessed 25 January 2018)
- Companies House 2019 J. A. Bladwell & Company Limited https://beta.companieshouse.gov.uk/company/00668389 (accessed 16 May 2019)
- Delftware ointment pots: https://sites.google.com/site/ointmentpots/delftware (accessed 11 July 2019)
- Dulac, H 1820 Almanach des addresses de tousles commerçans de Paris pour l'année 1820, https://books.google.co.uk/books?id=HvhAAAAAAAAAA pg=PA401&lpg=PA401&dq=gervais+chardin+pe rfumer+rue+st+martin&source=bl&ots=QQ54Z M5PB8&sig=GMMpFfUzOHtTpI_1nineSBMs7 uI&hl=en&sa=X&ved=0ahUKEwjD1tmww5fUA hUYM8AKHYIYBP0Q6AEIOzAF#v=onepage& q=gervais%20chardin%20perfumer%20rue%20 st%20martin&f=false (accessed May 2017)
- Earle, J 1864 A Guide to the Knowledge of Bath, Ancient and Modern. Bath, Hayward https://archive.org/details/aguidetoknowled00earlgoog/page/n7 (accessed 29 March 2019)

- Fawcett, T 2017 Bath City Council Members, 1700-1835. History of Bath Research Group http://historyofbath.org.uk/Publications/Bath%20 City%20Council%20Members%201700%20 to%201835.pdf (accessed 6 December 2017)
- Fisher, D R 2009 The History of Parliament: the House of Commons 1820–1832, http://www.historyofparliamentonline.org/volume/1820-1832/member/ashley-cooper-anthony-1801-1885 (accessed 1 March 2018)
- Hasler, P W 1982a (ed.) *The History of Parliament:* the House of Commons 1558–1603. London, Boydell and Brewer, http://www.historyof parliamentonline.org/volume/1558-1603/member/shareston-william-1621 (accessed 29 January 2018)
- Hasler, P W 1982b (ed.) *The History of Parliament:* the House of Commons 1558–1603. London, Boydell and Brewer, http://www.historyof parliamentonline.org/volume/1558-1603/member/snigge-george-1545-1618 (accessed 29 January 2018)
- Hayes, RW 2017 The aesthetic interior as incubator of health and well-being, *Architectural History* 60, 277–301, doi:10.1017/arh.2017.9 (accessed 11 January 2019)
- Higginbotham, P 2018 Sutcliffe Industrial School, http://www.childrenshomes.org.uk/BathSutcliffe/ (accessed 28 February 2018)
- Houbigant perfume bottles: https://houbigantper fumes.blogspot.co.uk/search?q=gervais (accessed May 2017)
- Inner Temple admission database 2018 http://www.innertemplearchives.org.uk/detail.asp?id=3714 (accessed 3 March 2018)
- JCR-UK 2017 The former Bath Jewish Community and Synagogues, Bath, Somerset https://www.jewishgen.org/jcr-uk/Community/bath/index.htm (accessed 6 February 2019)
- Landed Estates Database 2018 Estate: Brodrick (Midleton) http://landedestates.nuigalway.ie/Land edEstates/jsp/family-show.jsp?id=2754 (accessed 2 March 2018)
- Lewcun M 2019 Bath Quays: clay pipes and pipe kiln workshop waste, unpubl rep https://www.wessexarch.co.uk/our-work/bath-quays-waterside (accessed 20 July 2020)
- Mason, C 2018 Down the drains of Georgian Bath https://www.wessexarch.co.uk/news/down-drains-georgian-bath (accessed 29 March 2019)
- Mepham, L 2019a *Bath Quays: Pottery*, unpubl rep https://www.wessexarch.co.uk/our-work/bath-quays-waterside (accessed 20 July 2020)
- Mepham, L 2019b *Bath Quays: Glass*, unpubl rep https://www.wessexarch.co.uk/our-work/bath-quays-waterside (accessed 20 July 2020)
- Namier, L and Brooke, J (eds) 1964 The History of Parliament: the House of Commons 1754-1790,

http://www.historyofparliamentonline.org/volume/1754-1790/member/garrard-benet-1704-1767 (accessed 1 February 2018)

Paris Universal Exhibition 1855 Exposition Universelle, 1855: Catalogue of the works exhibited in the British section of the exhibition in French and English; with exhibitors' prospectuses, prices current, &c. London, Chapman and Hall, https://archive.org/stream/parisuniversale01goog#page/n6/mode/2up/search/pickwick (accessed 6 February 2019)

Sedgewick, R 1970 (ed.) *The History of Parliament: the House of Commons 1715–1754*. London, Boydell and Brewer, http://www.historyofparliamentonline. org/volume/1715-1754/member/gay-robert-1738 (accessed 29 Jan 2018)

Wolffe, J 2008 Cooper, Anthony Ashley-, seventh earl of Shaftesbury (1801–1885). Oxford, Oxford Dictionary of National Biography, https://doi.org/10.1093/ref:odnb/6210 (accessed 2 March 2018)

List of Maps Consulted

c. 1568 William Smith's Map of Bath

c. 1600 Henry Savile's Map of Bath

1610 John Speede's Map of Bath

1694 Joseph Gilmore's Map of Bath

1735 A Plan of the City of Bath in the County of Somerset, by John Wood

1742 An actual Survey of the City of Bath, in the county of Somerset, and of Five Miles Round, by Thomas Thorpe

1750 A New and Correct Plan of the City of Bath and Adjacent Places, Anon

1755 A New and Correct Plan of the City of Bath, Anon

c. 1770 A New and Correct Plan of the City of Bath, Anon

1771 A New and Correct Plan of the City of Bath, by J Basnett

c. 1775 'A Plan of the City of Bath According to the Latest Improvements', published by J Basnett

1786 Maps of the Bath Turnpike Roads, Charles Harcourt Masters

1793 A New and Accurate Plan of the City of Bath to the Present Year, published by W Taylor and W Meyler

1794 Plan of the City of Bath, Charles Harcourt Masters

1808 Plan of the City of Bath, Charles Harcourt Masters

1810 A New and Correct Plan of the City of Bath, from a Recent Survey by B. Donne

1848 Hollway's Illustrated Plan of the City of Bath

1841 Lyncombe and Wydcombe Parish Tithe Map and Apportionment

1852 J. H. Cotterell's Survey of Bath, Engraved by E. Hollway

1852-3 J. H. Cotterell's Survey of Bath (Large Scale), Sheets 18, 19, 20, 30, 31 and 36

1885-6 Ordnance Survey Town Map 1: 500 Sheet XIV 5.13, XIV 5.14 and XIV 5.19

1888 Ordnance Survey 1st Edition 1:2,500 Sheet XIV.5

1904 Ordnance Survey 1:2,500 Sheet XIV.5

1932 Ordnance Survey 1:2,500 Sheet XIV.5

1942 City of Bath, Air Raid Damage, April 26th, 27th and 28th 1942

1951 Ordnance Survey 1:1,250 Sheet 7464NW, 7464NE, 7464NE and 7564SW

Excavations ahead of the Bath Quays development in the City of Bath World Heritage Site provided an opportunity to excavate a strip through the heart of the former Avon Street District – a notorious area, which was once synonymous with crime, disease and poverty. Developed in the 18th century and demolished in the early 1930s, this district was once home to 10,000 of the city's poorest inhabitants who lived in cramped dwellings nestled amongst the factories, stables, slaughterhouses, breweries, pubs and warehouses that grew up alongside the city's riverside quays.

The excavation uncovered limited evidence for pre-18th-century activity, including a medieval watercourse that served as an outfall for the city's western geothermal springs, and the foundations of a late medieval or early post-medieval crenellated wall that flanked it.

Development of the area began the late 1720s with the construction of a quay and laying out of the district's eponymous main street, which was lined with well-built townhouses designed to accommodate wealthy visitors to the spa. The proximity of the busy quayside, and the warehouses and insalubrious industries that sprang up around it, soon led to an exodus of wealthier patrons to more fashionable lodgings in the upper parts of the city. Having lost their affluent tenants, landlords sought to maximise their revenues by subdividing and extending houses and infilling gardens with courts of blind-back and back-to-back houses: a process that was largely complete by the late 18th century. During this period Avon Street acquired a fame of sorts, though not for the reason its architects had intended: it had become the city's principal red-light district.

In the 19th century, the area remained densely occupied, poor and lawless, but from the 1840s onwards, it also became increasingly industrialised. New businesses, including brass and iron foundries, dye works, engineering firms and timber mills, provided skilled work for many, but at the expense of an increasingly polluted environment. At the same time, concern about living conditions in Britain's cities, and a fear of social disorder and epidemic disease, prompted a range of reforms designed to improve the health of the urban population. This included improvements to sanitation, provision of piped water, and the construction of public washhouses, one of which, the Milk Street Baths was built along the quayside. This steampowered institution, which opened in 1847, is the earliest well-preserved public washhouse to have been archaeologically excavated.

The archaeological work, coupled with extensive documentary research, has allowed the physical remains and artefacts to be linked to some of the area's colourful and diverse inhabitants.





Bath & North East Somerset Council

