CHAPTER 4

COMMERCIAL ARCHAEOLOGY AND THE STUDY OF ROMAN YORK 1990–2013

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INTRODUCTION

Roman York represents a combination unique in *Britannia*, in being the site of both a legionary fortress and a provincial capital (FIG. 1). Today, York is one of a number of historic towns and cities in Britain which also have a role as medium-sized, regional, urban centres. This means that York's experience of commercial archaeology has been similar to that of many other English towns and it provides a good example of a case history for assessing what we have learnt about the towns of Roman Britain since 1990.

York is located at a point where a ridge of high ground — the York moraine — is cut by the river Ouse, more or less at its former tidal head. The Ouse was navigable from the North Sea, *c.* 60 km distant, until the mid-eighteenth century. York sits on lacustrine clay and, close to the rivers, on alluvial deposits, but on the moraine there is boulder clay below sands and gravels (BGS 1983). Petillius Cerialis, legate of the Roman Ninth Legion, chose York as the site of a legionary fortress in about the year A.D. 71, probably for strategic purposes, at the beginning of the conquest of northern Britain. In addition to the fortress, located on the north-east bank of the Ouse, Roman York also included a civilian settlement, both north-east and south-west of the Ouse, which would assume an urban character by the mid-second century. South-west of the Ouse there were probably town defences on the line, at least in part, of the medieval walls (RCHMY1, 49). Outside the fortress and urban areas there were extensive cemeteries.

Documented events relating to York include the death of the emperor Septimius Severus in A.D. 211 while campaigning in the North. In the reign of his son, Caracalla (A.D. 211–15), York became capital of the province of *Britannia Inferior* and probably acquired the honorific title of *colonia* at the same time. In the year A.D. 306 Emperor Constantius I died in York and, perhaps during the reign of his son Constantine, York probably became the headquarters of the *Dux Britanniarum*, commander of the Roman army in the North, as recorded in the *Notitia Dignitatum*. In addition, by the early fourth century York had become the seat of a bishop who attended the Council of Arles in A.D. 314.

Within the medieval walls of York — the historic core — the archaeological resource is extremely rich. Ancient buildings include parts of the Roman legionary fortress defences and below ground there are up to 5 m of deposits and structural remains in many areas; those of the Roman period, because they are the most deeply buried, can be particularly well preserved from modern disturbance. Furthermore, a high water table, especially adjacent to the rivers, has allowed remarkable preservation of timber structures, artefacts in organic materials, and environmental material (bones, plant material, insects etc.). Outside the historic core, archaeological remains are less well preserved, not usually waterlogged, and not as deep. Close to the core there can be up to 2 m of deposits, but in most suburban areas remains often survive only as features cut into natural. Roman York has been a subject of research for at least 300 years, but the most recent overview (including reference to unpublished sites of the 1980s) is by the author of this paper (Ottaway 2004).

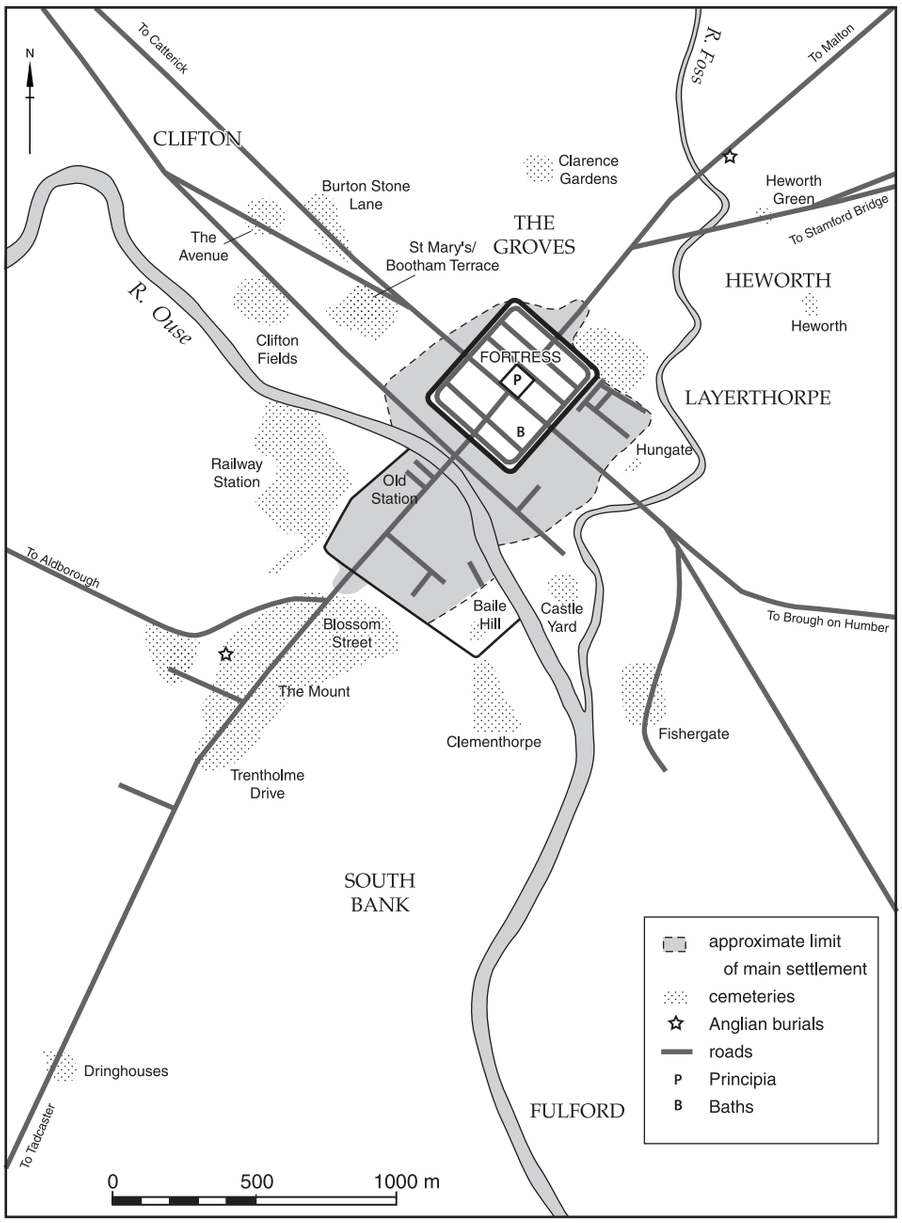


FIG. 1. Roman York and its environs, showing the principal settled areas, cemeteries, roads and streets. (*Drawn by Lesley Collett of York Archaeological Trust*)

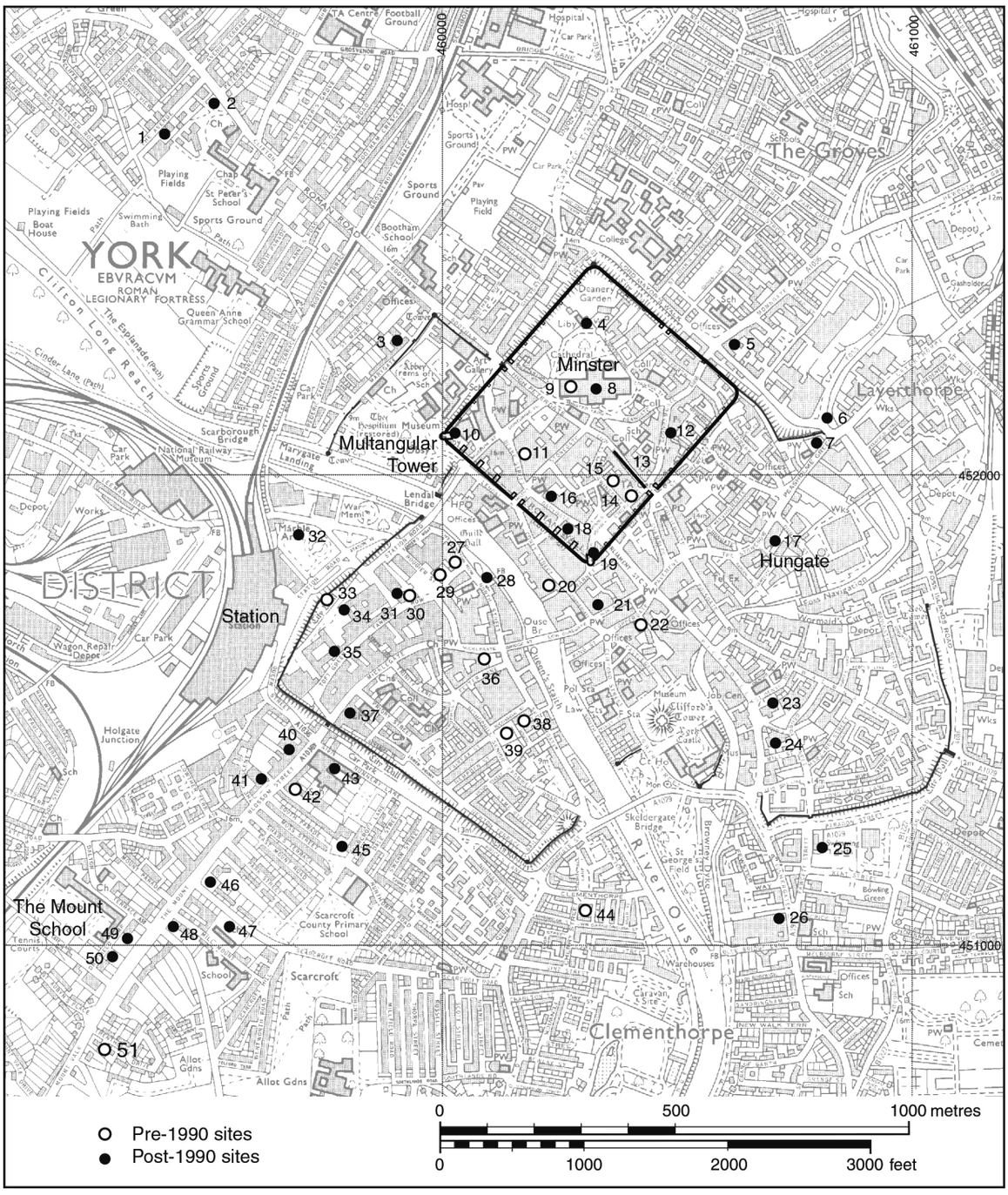
Before 1990 archaeological research in York was funded by a mixture of the local authority, central government and, increasingly during the 1980s, commercial developers. Alongside the setting out of government policy on archaeology in PPG 16, the City of York adopted its own *Conservation Policies for York: Archaeology* in 1992 and appointed an Archaeological Officer to put them into practice. Developers would now become the principal source of funding for archaeology in the city. At the same time, new contractors began to work in York; the York Archaeological Trust (hereafter YAT) no longer had the monopoly it had enjoyed since the early 1970s.

This paper is a summary review of what has been learnt about Roman York as a result of work generated by the commercial, development-led process. This will focus on the historic core of York within its medieval city walls and on a peripheral zone, immediately beyond the core, up to *c.* 1.5 km from the city centre (FIG. 2).

YORK: THE STATE OF KNOWLEDGE *c.* 1990

The RCHME inventory volume *Eburacum* (1962; RCHMY1) presented an outline history of Roman York and catalogued its archaeological resource. This was based, first of all, on a limited number of excavations (largely in the legionary fortress), secondly, on records of varying quality and reliability for buildings, roads, burials etc. assembled since the eighteenth century, and, thirdly, on a rich resource of inscriptions, sculpture and other artefacts. In the period between the publication of *Eburacum* and 1990 new excavations would add a great deal to our knowledge of the chronology, topography and many other aspects of Roman York — in retrospect it appears as an archaeological 'golden age'.

No pre-Roman settlement was known in the historic core of York in 1990, although it had



become clear, largely from aerial photography, that in the surrounding Vale of York the Ninth Legion found a well-populated landscape (Addyman 1984). Whilst the natives may have been elusive, knowledge of the legionary fortress since *Eburacum* had grown considerably by 1990. At 9 Blake Street, in the *praetentura*, evidence emerged for short-lived military occupation predating the fortress buildings (FIG. 2, 11; Hall 1997). Excavations at both Blake Street (barracks and another building) and (in 1966–73) at York Minster (FIG. 2, 8–9; *principia* basilica and first cohort barracks) produced sequences of the greatest importance for understanding the layout and history of the fortress from the late first to early fifth centuries (Carver 1995; Phillips 1995). In addition, parts of the legionary fortress baths, including the main sewer, were examined in the Church Street/Swinegate area in 1972 (FIG. 2, 14; Whitwell 1976) and 1989–90 (FIG. 2, 15; Frere 1991, 241). The history of the fortress defences was revised in a number of small-scale excavations (Ottaway 1996a), although the final *coup de grâce* for the sequence proposed in *Eburacum* would not be administered until 2006.

Immediately outside the fortress, remains of two phases of timber granary were examined on Coney Street (FIG. 2, 20; Hall 1986). Further evidence for the civilian settlement north-east of the Ouse emerged at 16–22 Coppergate (FIG. 2, 22; Hall *et al.* 2011) and in a number of other smaller scale investigations (Brinklow *et al.* 1986). Very little had been known in 1962 of Roman York south-west of the Ouse, but in the 1970s and 1980s a Roman townscape began to emerge. It was one with only a limited extent until the mid-second century, but then expanded rapidly between the Antonine and Severan periods. Excavations, for example, on Bishophill and Skeldergate (FIG. 2, 38–9; Carver *et al.* 1978), at Clementhorpe (FIG. 2, 44; Brinklow and Donaghey 1986), at 5 Rougier Street in 1981 (FIG. 2, 29), and 24–30 Tanner Row in 1983–4 (FIG. 2, 30), revealed terracing, new streets, commercial buildings and houses. However, other than the great baths *caldarium*, or reception hall, excavated in 1939 at the Old Station (FIG. 2, 33; RCHMY1, 55–6; Bidwell 2006), the public buildings remained largely unknown until the discovery of part of a monumental bath-house at 1–9 Micklegate (Queen's Hotel) in 1989 (FIG. 2, 36; Ottaway 2004, 110). In the trenches which reached Roman remains, albeit less than *c.* 100 m² in extent, several walls 2 m thick and standing *c.* 3 m high were found.

At Wellington Row, near the Ouse bridgehead, the first, and so far only, complete Roman urban building (of uncertain status) in York was excavated in 1988–9 in a trench 20 m by 10 m (FIG. 2, 27; Ottaway 2004, 94–7). Erected in *c.* A.D. 150, it had a long and varied history until the last quarter of the fourth century. Subsequent to its collapse or demolition, an unbroken sequence of deposits and structural remains, running from the latest Roman phase to one of the Anglian period (*c.* A.D. 600–800) was identified for the first time on any scale outside the fortress.

FIG. 2 (opposite). Plan of York showing location of sites referred to in the text (date of excavation in brackets). (*Drawn by Lesley Collett of York Archaeological Trust*)

1. Wentworth House, The Avenue (1999)
2. St Peter's School, Clifton (1999)
3. 26–28 Marygate (1992)
4. Minster Library (1997)
5. St Maurice's Road (2005)
6. Layerthorpe Bridge (1995)
7. Peaseholme Green (1995)
8. York Minster: *principia* (1966–73) and 'undercroft' (2012)
9. York Minster: barracks (1966–73)
10. St Leonard's Hospital and Multangular Tower (2001–4)
11. 9 Blake Street (1975)
12. Goodramgate watching-brief (1996)
13. Low Petergate sewer trench (1997)
14. Church Street/Swinegate (1972)
15. Swinegate (1989–90)
16. Davygate and Little Stonegate (1998–9)
17. Hungate (2007–12)
18. Former Davygate Centre (1996)
19. BHS Store, Feasegate (1998)
20. 39–41 Coney Street (1974–5)
21. 7–15 Spurriergate (2000–5)
22. 16–22 Coppergate (1976–81)
23. Dixon Lane (2006)
24. 41 Piccadilly (1992 and 1998)
25. Barbican Centre (2003)
26. Blue Bridge House, Fishergate (2000–2)
27. Wellington Row (1989–91)
28. North Street pumping station (1993)
29. 5 Rougier Street (1981)
30. 24–30 Tanner Row (1983–4)
31. Cedar Hotel (2008)
32. Royal York Hotel (1999)
33. Old Station (1939)
34. Old Station/Council Offices (2011)
35. Toft Green (2012)
36. 1–9 Micklegate (1989)
37. 127 Micklegate (2000)
38. 58–9 Skeldergate (1973)
39. 37 Bishophill Senior (1973)
40. 14–20 Blossom Street (1991 and 1994)
41. 28–40 Blossom Street (1999 and 2009)
42. 35–41 Blossom Street (1990)
43. All Saints' School, Nunnery Lane (2002)
44. Clementhorpe (1976–7)
45. Moss Street Depot (2003–4)
46. 89 The Mount (1991)
47. All Saints' School, Mill Mount (1991)
48. Mill Mount (2005)
49. 3 Driffield Terrace (2004–5)
50. 6 Driffield Terrace (2005)
51. Trentholme Drive (1951–9)

In 1990 knowledge of York's cemeteries and funerary practices was still based largely on data of very variable reliability, much of it from burials unearthed in the late eighteenth to early twentieth centuries during suburban expansion and the development of the present railway station (Jones 1984). The most substantial area to have been excavated archaeologically (in the 1950s) was at Trentholme Drive, *c.* 1.5 km south-west of the Ouse, where 53 cremation burials and 342 inhumations were recorded (FIG. 2, 51; Wenham 1968). The inhumations formed the subject of what is still the only large-scale research report on Roman human remains from York (Warwick 1968). Archaeologically excavated burials of the pre-PPG 16 era also included a late fourth-century group of five inhumations at 16–22 Coppergate (FIG. 2, 22; Hall *et al.* 2011, 214–16), and those in a cemetery area at 35–41 Blossom Street, south-west of the Ouse (FIG. 2, 42; Ottaway 2011). Established in the third century, the main period of use at the latter was in the early fourth century. In a managed burial ground some 35 graves were ordered in rows with minimal intercutting and a common alignment, not a phenomenon previously recorded in York.

Sites examined in the 1960s to 1980s generated research into Roman pottery from the fortress (Monaghan 1993; specialist reports in Phillips and Heywood 1995) and from south-west of the Ouse (Perrin 1981; 1990). In 1997 Monaghan published a compendium volume on York's Roman pottery excavated up to 1990. Environmental material from Roman deposits was reported on in ground-breaking studies by Buckland (1976), Kenward and Williams (1979), Hall *et al.* (1980), and Hall and Kenward (1990). Artefacts and architectural materials from the Minster excavations were published by various specialists (in Phillips and Heywood 1995). In addition, selected artefact groups were published by MacGregor (1976; 1978) and Cool *et al.* (1995); an unpublished report by David Hooley on the rich assemblage of artefacts from 24–30 Tanner Row was summarised by Cool in 2002.

ROMAN YORK 1990–2013

In the last twenty years or so the scope of the archaeological investigation of Roman York has changed somewhat. Compared to the previous twenty, there have been relatively few archaeological interventions of any great size in the historic core of the city, although there have been more opportunities than hitherto in areas peripheral to the historic core and in the suburbs. As a result, the balance of achievement between the research themes touched on above has been rather different.

THE ORIGINS OF ROMAN YORK

It remains the case that there is no pre-Roman settlement known in the historic core of York, although further work in the surrounding area has produced good evidence for a late Iron Age settlement landscape. This has involved not only aerial photography (Horne 2003), but also commercial excavation projects at, for example, Rawcliffe Moor, 4 km north of the city centre (Pearson 1996) and, in particular, at Heslington East, 3 km to the east. Here, extensive excavations in advance of a new university campus have revealed a late Iron Age–early Roman field-system and a number of roundhouses on the south-facing slope of the York moraine (http://www.york.ac.uk/campus-development/expansion/archaeology/).

THE LEGIONARY FORTRESS

Since 1990 little has been added to knowledge of the early fortress, except at the York Minster Library site where a street and timber barracks were located (FIG. 2, 4; Garner-Lahire 2000). However, knowledge of the mid-second-century and later fortress has fared better. In addition to stone buildings at the Minster Library, more of the stone-built barracks in the *praetentura*, previously examined in the 1950s and 1960s, were revealed in small-scale excavation and watching-brief work in the Davygate and Swinegate areas (FIG. 2, 16; FIG. 3; YAT 1998a; 1999a; 1999b). Glimpses of other buildings and streets have come from utility-funded watching-briefs, notably in four sewer repair shafts in Low Petergate where the *via principalis* was recorded (FIG.

FIG. 3. Davygate (1998): Roman fortress barrack wall in a lift shaft trench. (© *P. Ottaway*)

2, 13; Ottaway 1997). In 2012 small-scale work by YAT in advance of upgrading the display facilities in the 'undercroft' below the Minster revealed a street north-east of the *principia* (the *via quintana*, FIG. 2, 8).

The fortress defences were re-examined at the Davygate Centre (Interval Tower SW2) and Feasegate (near the south corner tower) (FIG. 2, 18–19; YAT 1997; 1998b), although little new information on construction technique or dating was recovered in either case. However, it should also be noted that work on the fortress defences in the YAT training excavation at St Leonard's Hospital (FIG. 2, 10; 2001–4) produced, perhaps, the most important discovery for the history of Roman York as a whole in recent years. Two timber (alder) piles from below the foundations of the Multangular Tower (west corner tower) were radiocarbon dated to *c.* A.D. 80–120 (Hunter-Mann 2009). This range may be taken to provide a construction date for the tower itself, and for associated towers and walling in a similar style around the circuit. Construction now appears to have been considerably earlier than previously proposed by RCHME (early fourth century: RCHMY1, 10) or the author (late second–early third century: Ottaway 1996a, 293–4). Furthermore, what this dating exercise shows is that targeted research on unthreatened sites should always have a place alongside the commercial work as it can provide the sort of additional historical context not necessarily obtainable in any other way.

URBAN DEVELOPMENT

We remain poorly informed about the early history of the Roman urban settlement north-east of the Ouse. A rare example of an excavation took place on Spurriergate in 2004 (FIG. 2, 21; Malton Archaeological Projects (hereafter MAP) 2005) on a site previously examined in 1959 (RCHMY1, 59–60). A mitigation strategy was designed to retain 95 per cent of surviving archaeology, but in two trenches, both *c.* 3 m by 3 m, several phases of Roman building floors and foundations of late first- to late third-century date were found. However, the small scale of the work has made meaningful interpretation of the discoveries difficult. Otherwise, there have been hardly any opportunities to investigate the deeply buried Roman levels around the fortress.

Investigation of the core Roman urban area south-west of the Ouse has also been on a fairly small scale. Little new can be said about the origins of the town within the medieval walls, although the picture of rapid urban development in the late second century has been reinforced.

FIG. 4. West Offices (2011): multiphase Roman wall foundations, robber trenches and drains surviving in an area previously truncated for York's first railway station in the 1830s; south-west at top of picture. (© *On Site Archaeology*)

A corner of a substantial stone building of that date was found in 2000 at 127 Micklegate (FIG. 2, 37; On Site Archaeology (hereafter OSA) 2000), unusual because of an east–west alignment at odds with that of the adjacent main Roman street which has the north-east/south-west alignment observed by most other buildings and topographical features in the area. In the same part of the city, a useful addition to knowledge of the large public building and other structures previously recorded at the Old Station was made in advance of development of the new City Council West Offices, although preservation was poor due to considerable truncation in the 1830s (FIG. 2, 34; FIG. 4; excavation by OSA in 2011). A short distance to the north-east, there was small-scale work within the Cedar Hotel in advance of refurbishment; it revealed a complex sequence of structural features, pits and deposits, although its significance is uncertain (FIG. 2, 31; OSA 2013). Other small excavations and watching-briefs in advance of construction projects and utility works have recorded fragments of streets and buildings. For example, in 2012, more of a mosaic previously recorded in Toft Green in 1840 (RCHMY1, 53–4) came to light in a gas pipe trench (FIG. 2, 35; work by Northern Archaeological Associates). Finally, also worthy of special mention is a rare glimpse of the Ouse waterfront made in the excavation of a shaft for a pumping station on North Street (FIG. 2, 28; Burnham *et al.* 1994, 267). A Roman river-retaining wall on timber piles was recorded cut into alluvial deposits 8 m below modern level.

THE URBAN PERIPHERY

As far as areas peripheral to the core of Roman York are concerned, the post-PPG 16 era has seen a good deal of new information emerge from a succession of what have been, for the

FIG. 5. Peasholme Green (1995): successive dumps of Roman pottery kiln debris. View to the north-west; note that Roman archaeology here is unusually close to modern level. (© *Malton Archaeological Projects*)

most part, small-scale evaluations. A report on work by YAT, largely in 1990–2005, and also referring to work by other contractors, has recently appeared in the *Archaeology of York* series (Ottaway 2011). This adds to and refines knowledge of approach roads, settlement, cemeteries (see below), and other activities.

Sites of particular interest include one on Peasholme Green, south-east of the legionary fortress, where debris from the legionary pottery industry was recorded (FIG. 2, 7; FIG. 5; Swan and McBride 2002). In a trench 16 m by 5 m, excavated to a depth 1.5 m, there were successive dumps, sloping down towards the river Foss, of intact, but redeposited, kiln groups of the Hadrianic, Antonine and Severan periods. A short distance away on the river bank itself timbers of what was thought to be a Roman riverside revetment were found during reconstruction of Layerthorpe Bridge (FIG. 2, 6). Immediately north-east of the fortress work took place on the corner of Monkgate and St Maurice's Road (FIG. 2, 5) which located traces of a timber building and pits and ditches (OSA 2005). About 0.8 km north-west of the fortress on the main approach road from the north-west, now represented by Clifton, evidence for more than one phase of roadside settlement was found at St Peter's School (FIG. 2, 2; Ottaway 2011, 143–9).

Also north-east of the Ouse, but east of the Foss and 550 m south-east of the fortress, a site on Dixon Lane, 25 m by 20 m, was excavated selectively to natural (FIG. 2, 23; McComish 2006). A terrace created in the Roman period lay immediately west of the probable line of an approach road from the south-east on the same north–south alignment (Ottaway 2011, 235). On the terrace, pits and traces of timber structures, also on the same alignment, were found, all dating to the second to early third century.

South-west of the Ouse it is clear that the Roman settled area extended for least 150 m from the city walls along the line of the main Roman approach road from the south-west, either side of present-day Blossom Street. Excavations and observations at 14–20 Blossom Street produced remains of a monumental stone building, probably of the late second century, along with a minor street and other structures (FIG. 2, 40; Ottaway 2011, 275–90). Excavations at 28–40 Blossom

Street, in 1999 (MAP 2000) and 2009 (by YAT), adjacent to an area previously examined in 1953–4 (Wenham 1965), also produced deeply stratified archaeological remains (FIG. 2, 41). They included the main Roman road from the south-west, structural features and debris from metalworking.

Finally, what has become particularly striking about all peripheral areas of Roman York is the abundant evidence for land division by means of ditches in a period beginning in the mid-second century and continuing until the early third, although not continuing to any great extent thereafter (Ottaway 2011, 370–3). These ditches may also have served for drainage such as to bring new land into cultivation and would seem to speak of an intensification of agricultural production in a period when the population of Roman York was growing rapidly.

BURIALS AND CEMETERIES

Because a good deal of the commercial archaeology in York since 1990 has taken place immediately outside the historic core, it is not surprising that there have been investigations of the main Roman cemeteries as well as the recovery of small groups of burials in other areas.

A small group of early cremations was found in the Fishergate cemetery, *c.* 1 km south-east of the fortress, to add to those found in the late nineteenth century (FIG. 2, 26; RCHMY1, 69–70; Spall and Toop 2005a). However, the most extensive investigations have taken place in The Mount cemetery south-west of the Ouse. Of particular importance has been the work on Driffield Terrace where at Nos 3 and 6 and in the nearby Mount School premises the burials of some eighty males, most of whom had clearly been executed, were found (FIG. 2, 49–50; FIG. 6; Ottaway 2005; 2011, 319; Hunter-Mann 2006). It seems that there may have been a dedicated cemetery zone for execution victims which extended over *c.* 0.5 ha and was in use from the late second to early fourth centuries. There has been some speculation about the status of the deceased, as gladiators or soldiers, for example, which is as yet unresolved. However, the zone's location on a high point close to the main approach road from the south-west, one in which the legionary tombstone of Baebius Crescens (RCHMY1, 121) and other funerary monuments have been recorded, may suggest the men were themselves of high social status and not necessarily slaves or common criminals.

On the opposite side of the main Roman approach road from the south-west, burials have been found at Mill Mount (FIG. 2, 48; OSA 2002a; Spall and Toop 2005b) and a little to the north-

FIG. 6. 3 Driffield Terrace (2004): decapitated Roman skeleton with iron rings around the ankles. (© *York Archaeological Trust*)

east at 89 The Mount in 2005 (FIG. 2, 46; work by OSA). At the former thirteen inhumations of third-century date were found, including one in a stone coffin in which the body was covered in gypsum. This is a fairly common occurrence in York, but rarely found in a controlled excavation (RCHMY1, 108–9). 89 The Mount also produced a burial in a stone coffin. A little further from the main Roman road four more inhumations (late second–early third century) were found at All Saints' School, Mill Mount (FIG. 2, 47; MAP 1991). The Mount/Blossom Street cemetery can also be extended to the south-east to take in four late Roman inhumation burials at Moss Street Depot (FIG. 2, 45; Toop 2008). Close to the city walls a further burial was found at All Saints' School, Nunnery Lane, where others have been recorded previously (FIG. 2, 43; RCHMY1, 94; OSA 2002b).

Rather less that is new can be said about the other great cemetery south-west of the Ouse, in the Railway Station area, except that some eighteen inhumation burials, late second-century and later, were found by OSA at The Royal York Hotel (FIG. 2, 32). Remains of a circular structure were interpreted as part of a mausoleum. The work took place partly in advance of new development, and partly as part of a Time Team project in 1999 (Burnham *et al.* 2000, 396–7).

North-east of the Ouse excavations at Wentworth House, Clifton produced a group of about twenty inhumations in The Avenue cemetery, probably of the mid-fourth century (FIG. 2, 1; RCHMY1, 74–6; Ottaway 2011, 150–2). Their fairly regular east–west alignment suggests another managed cemetery zone comparable to that on Blossom Street. Some 250 m north-west of the fortress two late third-century inhumations were found at 26–28 Marygate in an area of open land much nearer to settled areas than other cemetery zones in this part of York (FIG. 2, 3; ibid., 138–9). Immediately north-east of the fortress a burial was found on the St Maurice's Road site referred to above (FIG. 2, 5; OSA 2005) in an area where other, scattered burials are known (ibid., 193–4).

South-east of the fortress a small group of Roman inhumations was found at 41 Piccadilly (FIG. 2, 24; MAP 1998, 12–13) and two more were found at the Barbican (FIG. 2, 25; OSA 2003), but the principal cemetery zone examined in this part of York in recent years was at Hungate (FIG. 2, 17). A very extensive area (*c.* 0.3 ha) was excavated by YAT in advance of development in 2007–11 which has produced 112 inhumations and eight cremations (Connelly 2011). The inhumations included two richly furnished female graves comparable to others of the third to fourth centuries known from York; one had a necklace of glass and jet beads, the other had over 500 jet beads from a pair of necklaces as well as a bronze bangle, a shale bracelet and a bracelet made of jet plates. Also of particular interest, an inhumation from the site was radiocarbon dated to cal. A.D. 400–540 (2 sigma calibration 95 per cent probability) suggesting, for the first time at York, the use of a Roman cemetery continuing into the fifth century.

As a result of the recent work in the cemeteries, many new patterns of development in spatial organisation and burial practice are beginning to emerge. For example, in the third to fourth centuries land previously unoccupied and nearer to the town than earlier burial zones was often taken over for funerary use. Within cemetery zones, the pattern of inhumation graves in the late second to early third centuries often appears disordered with a variety of alignments and frequent intercutting, whereas by the early fourth there is much greater regularity.

Reports by a number of different hands have been produced for most of the Roman human remains found since 1990, although, with the exception of those from 6 Driffield Terrace (Tucker 2006) and Moss Street (Tucker 2008), they are only to be found in grey literature reports. In addition, Lauren McIntyre, a doctoral student at Sheffield University, is examining Roman human remains from York as part of her thesis.

An analysis (unpublished) of isotopes in tooth enamel was conducted by Janet Montgomery (Reading University) on six skeletons from 3 Driffield Terrace for a BBC television programme in 2005. This revealed a mixture of probable birth places, some local and others in Mediterranean regions. Although not in a development-led context, the research potential of isotope analysis was also illustrated in the study of the late Roman skeleton of a woman of possible North African origin at Sycamore Terrace, York, excavated in 1901 and now in the Yorkshire Museum (RCHMY1, 73; Leach *et al.* 2010).

ARTEFACTS

The artefactual resource for economic, technological and other themes in the history of Roman York had become substantial by 1990 and has continued to grow, although not, perhaps, at the same pace as in the 1970s and 1980s. There is, none the less, a large quantity of Roman pottery from post-1990 excavations which, for the most part, has been subject to only the most cursory examination for dating purposes in the grey literature reports. As far as small finds are concerned, there are some important grave goods from Hungate (see above). In addition, a most remarkable individual find from this site was a cornelian intaglio on which are carved two fish hanging from the crossbar of an anchor (Henig 2011). This is probably the best archaeological evidence for an individual Christian in Roman York; the anchor recalls the hope of salvation and the fish Christ's mission to be a 'fisher of men', whilst the letters of the Greek word for fish — *icthys* — were a mnemonic (in Greek) for 'Jesus Christ, Son of God Saviour'. Two other unusual objects, possibly disturbed from a nearby cemetery, come from the excavations at Dixon Lane: a gold ring with inlaid carnelian gemstone and a small jet bear (McComish 2006).

ENVIRONMENTAL MATERIAL

Grey literature is the principal repository for the studies of environmental material from Roman deposits since 1990, although a couple of short reports concerned specifically with animal bones from the cemetery sites at 3 and 6 Driffield Terrace have been published online (Foster 2012; Foster and Jacques 2012). There have, however, been no wide-ranging research reports published comparable to those of the pre-1990 era and one feels that the study of the environmental aspects of Roman York has stagnated somewhat.

LATE ROMAN YORK

Whilst there is good archaeological evidence for the history of Roman York up to the mid-fourth century, for the latest Roman and early post-Roman periods there is far less. In a trench, 2.9 m by 2.7 m, dug in advance of a lift shaft at York Minster an accumulation of 'dark earth' was found, in this case probably derived from agricultural soil mixed with demolition material from the fortress *principia* (FIG. 2, 8; Milsted 2012). It could not be closely dated, but must belong to the late Roman or early post-Roman periods. Otherwise, only the briefest of sightings have been possible of sequences in any way comparable to those excavated at the Minster and Wellington Row, on both occasions in watching-briefs in the fortress, one in Goodramgate (FIG. 2, 12) and the others in the sewer repair trenches in Low Petergate (FIG. 2, 13; Ottaway 1996b; 1997). In the latter the *via principalis* was overlain by deposits of dark silt, in turn succeeded by what appeared as a rough resurfacing of the street containing a certain amount of reused building stone. Subsequently, there were up to 1.7 m of dark silty deposits, some with a perceptible organic content, before the earliest identifiable surface of Petergate itself, dated to the twelfth century. Unfortunately, there is no resource for the study of the deposit samples which would potentially elucidate environmental conditions throughout the late Roman, early post-Roman and early medieval periods.

Another reason for there being little late Roman evidence from recent work is that so much of it has taken place in areas peripheral to the legionary fortress and urban core into which York had retreated after *c.* A.D. 350. There is virtually no evidence for occupation, whether as features, or even as pottery residual in later deposits, on sites outside the fortress or the medieval walled town south-west of the Ouse. A rare exception from close to the main approach road from the south-west was a series of post-holes and cobbled surfaces, thought to be late fourth century, found at 28–40 Blossom Street (FIG. 2, 41). The cemeteries have produced hardly any burials which can be assigned to the late fourth or early fifth centuries, although, as noted, we now have one from Hungate which is probably fifth-century; others may come to light, although this will probably depend on radiocarbon dating.

RETROSPECT AND PROSPECT

A full review of archaeological investigations before 1990 lies outside the remit of this paper. It is worth noting, however, that completing the analysis and publication of such important Roman sites in the historic core as Swinegate (1989–90) in the fortress and 24–30 Tanner Row, Wellington Row and 1–3 Micklegate in the urban core south-west of the Ouse (all largely funded by the developers) remains a challenge for the future for which there appears to be no obvious solution. The research dividend to be drawn from these sites will be considerable and without it the study of Roman York cannot be taken forward as effectively as it should be. Since 1990 commercially-led archaeology has continued to contribute important new material to that study, although it has clearly been very uneven as between one topic and another. However, it has to be evaluated against the pattern of recent development in the city and the types of site which have been available for investigation.

The largest archaeological site in York of recent years, in terms of area, has been Hungate, a mixed use, but primarily residential development immediately outside the historic core. There have been many other housing projects in similar peripheral locations, albeit on a smaller scale, in the last twenty years or so reflecting York's status as a popular residential centre, benefiting from a proximity to Leeds and the West Yorkshire conurbation. Large new developments in retail, and sports and entertainment facilities have usually been sited out of town, close to the trunk roads, rather than in the city centre. Within the core developers have avoided extensive groundworks (such as basements), in part because the city has discouraged them (*Conservation Policies* 7.11) and partly because of the potential cost of archaeology. The opportunities for archaeological examination of the well-preserved and deeply stratified Roman deposits of the historic core have, therefore, been relatively few since 1990 compared to the 1970s and 1980s. This, in turn, means that in terms of new information, the legionary fortress and, in particular, the Roman urban areas have not been particularly productive, although we have continued both to fill out the picture of the townscape and to enhance the deposit model for York which will aid future responses to development impact.

By contrast, the numerous development-led investigations in areas peripheral to the core, both within the *c.* 1.5 km radius used for this study, and beyond it, often in parts of the city previously silent archaeologically, have yielded a body of new information of great importance. Firstly, there has been the evidence for settlement along some of the main approach roads extending for up to 1 km. Secondly, there has been the emergence of a landscape pattern of ditched enclosures which existed between the mid/late second century and early third century. The implications of this episode for, for example, the relationship between the peripheral and core areas of Roman settlement have yet to be fully realised, but there is an important project for the future here. Thirdly, there have been the investigations in the cemeteries accompanied by the expert scientific examination of the human remains, albeit undertaken in a piecemeal rather than systematic manner.

Since 1990 government policy on archaeology has enabled effective management of the resource within the development process in York. The grey literature reports continue to pile up in the City HER. However, what is really required now to take knowledge of Roman York forward is not simply more fieldwork, but a project to maximise the research dividend from already completed fieldwork (both pre- and post-PPG 16). A few of the post-1990 projects cited in this paper have yielded a published research report, fully funded by the developer, which considers all the excavated material in detail and sets it in a wider context; this will also be the case for Hungate. However, the outputs of many other projects will remain as grey literature. Many of them may not be particularly significant in themselves, but collectively they have the potential to support important narratives about the Roman period in the city. In order to realise this potential a good deal of further research work will, however, be required. Anyone who has consulted grey literature reports extensively will know that not only are they of variable quality, but that they rarely provide much more than a stark description of the stratigraphic sequence and a minimal assessment of the archive of finds and environmental material.

Extracting the research dividend from commercial archaeology is also hindered by the fragmentation of the archive as a result of the free market in contracting. In a way we have

returned to the situation as it was in the 1960s in that it is not clear who could or should take responsibility for co-ordinating archaeological research in York over and above what is done on a project by project basis. As one example of the problem, some three hundred Roman burials have been excavated in York since 1990 by four different archaeological contractors. Some have been fully published and those from Hungate will be published in the future, but for many others there is no prospect of publication. Thanks to the work of a postgraduate student, it seems as though we may have some sort of overview of the physical character of the Roman urban population in due course, but there seems little prospect of a corresponding York-wide overview of the cemeteries themselves and of the development of burial practice within them. It is difficult to know how what would be a very important piece of work, setting the very diverse evidence from the city in the wider context of Roman Britain as a whole, is to be undertaken except, perhaps, by another postgraduate.

The future course of commercially driven archaeology in York is hard to predict, but in the immediate future one suspects that a pattern of small-scale interventions, largely in areas peripheral to the core and in the suburbs, will continue and will, of course, generate useful information. However, whilst it is in the nature of the archaeological examination of towns that the whole is a good deal more than the sum of the parts, unless there is some way of bringing those parts together and relating them one to another, then the whole that is Roman York will be a lot less coherent than it ought to be.

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