

**Hybrid waterscapes: an examination of  
meaning-laden water flow in the towns  
of Roman Britain**

Volume II

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**Thesis submitted for the degree of Doctor of Philosophy  
2014**

## Volume II

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**Figure 1:** Locations of the towns examined in this thesis (drawn by author).



**Figure 2:** Roman coins depicting reclining river deities (images from Shillam 2003).

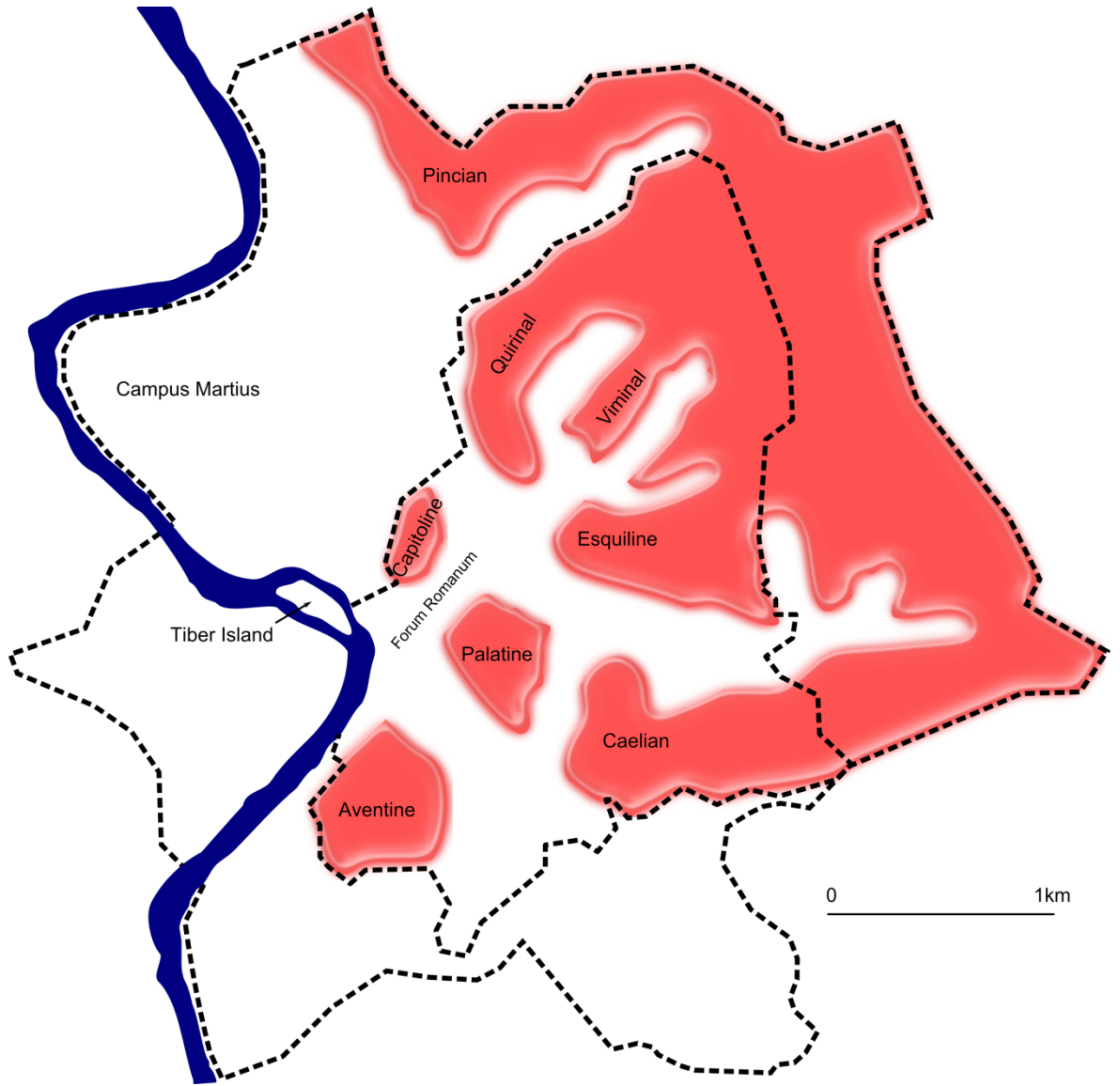
*Top left:* The Nile - reverse on Alexandrian tetradrachm of Antoninus Pius. While not a standard Imperial minted coin, this shows possible mixing of beliefs involving these river deities in a provincial setting.

*Top right:* The Danube - reverse on denarius of Trajan.

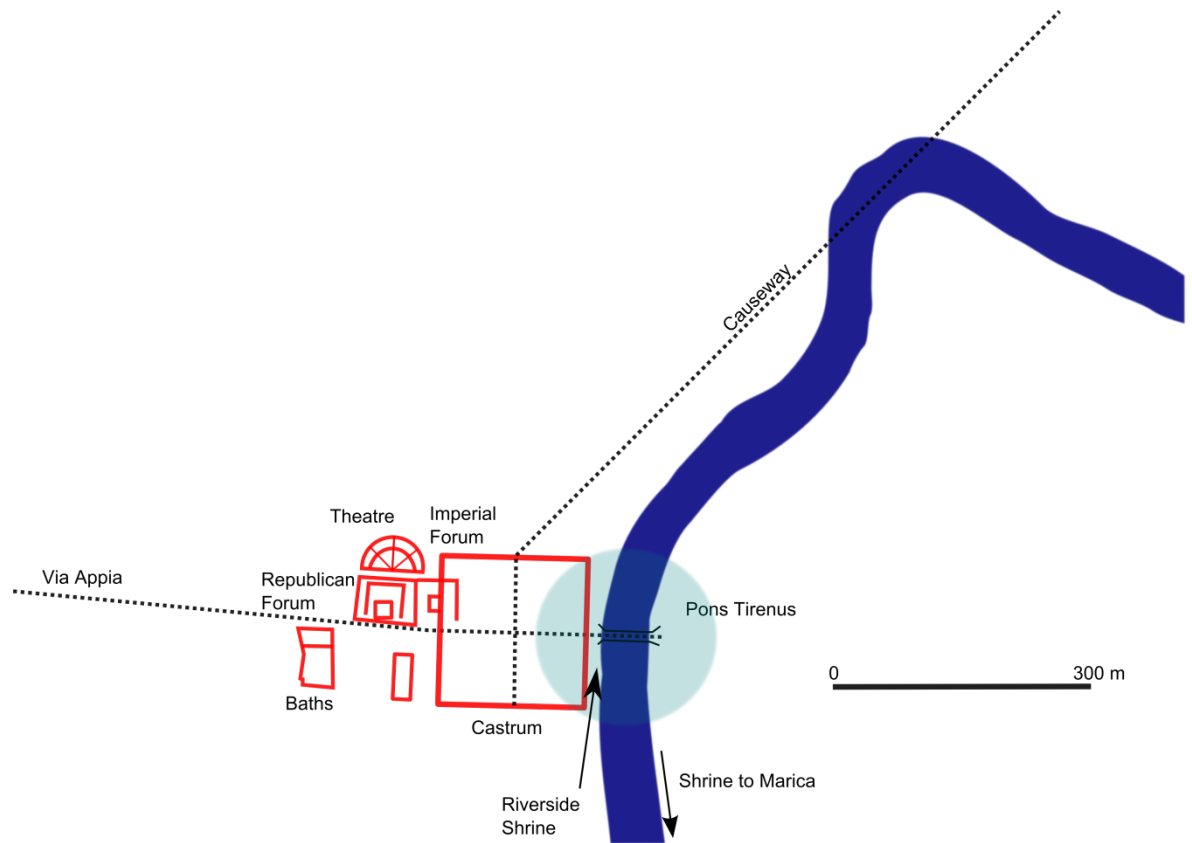
*Centre:* The Tiber or possibly the Tyne – reverse on aureus of Hadrian.

*Bottom left:* Oceanus - reverse on denarius of Hadrian.

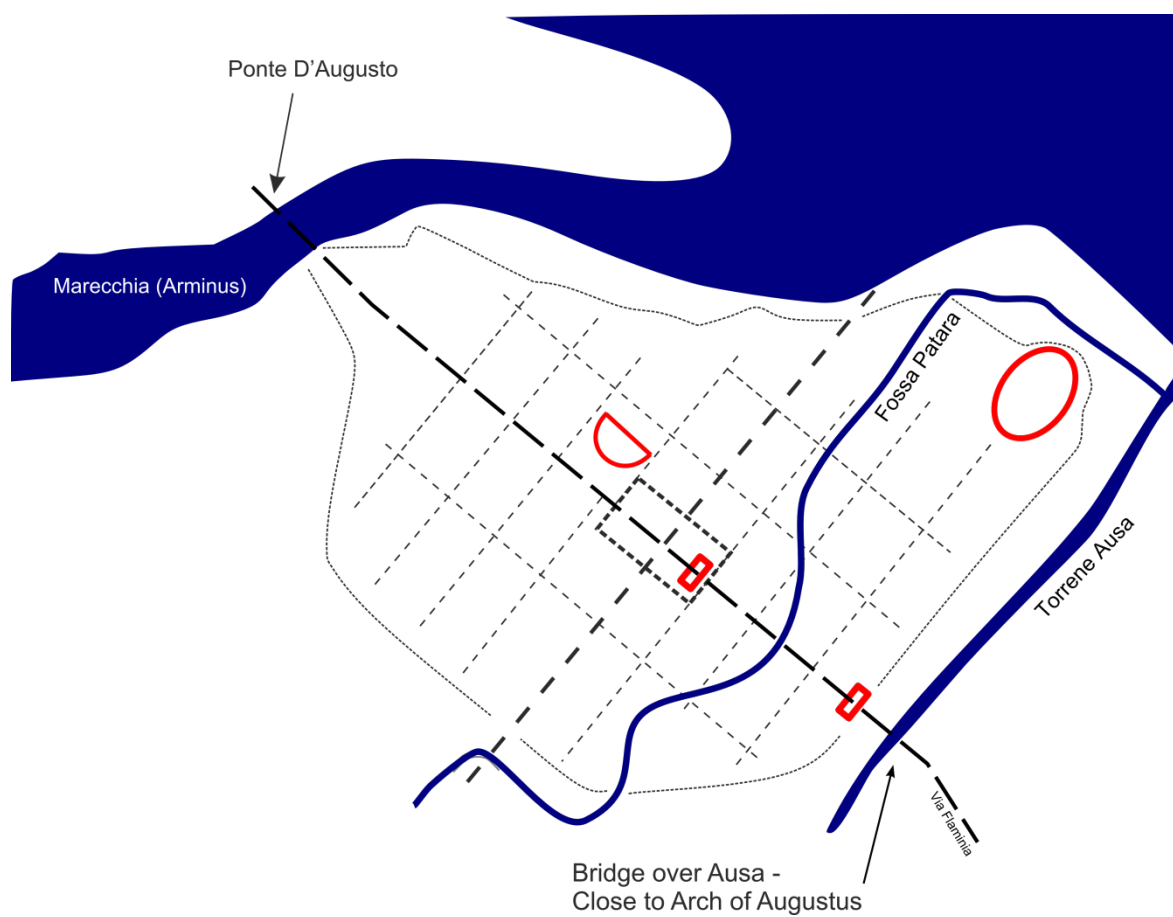
*Bottom right:* Tiber - reverse on sestertius of Antoninus Pius.



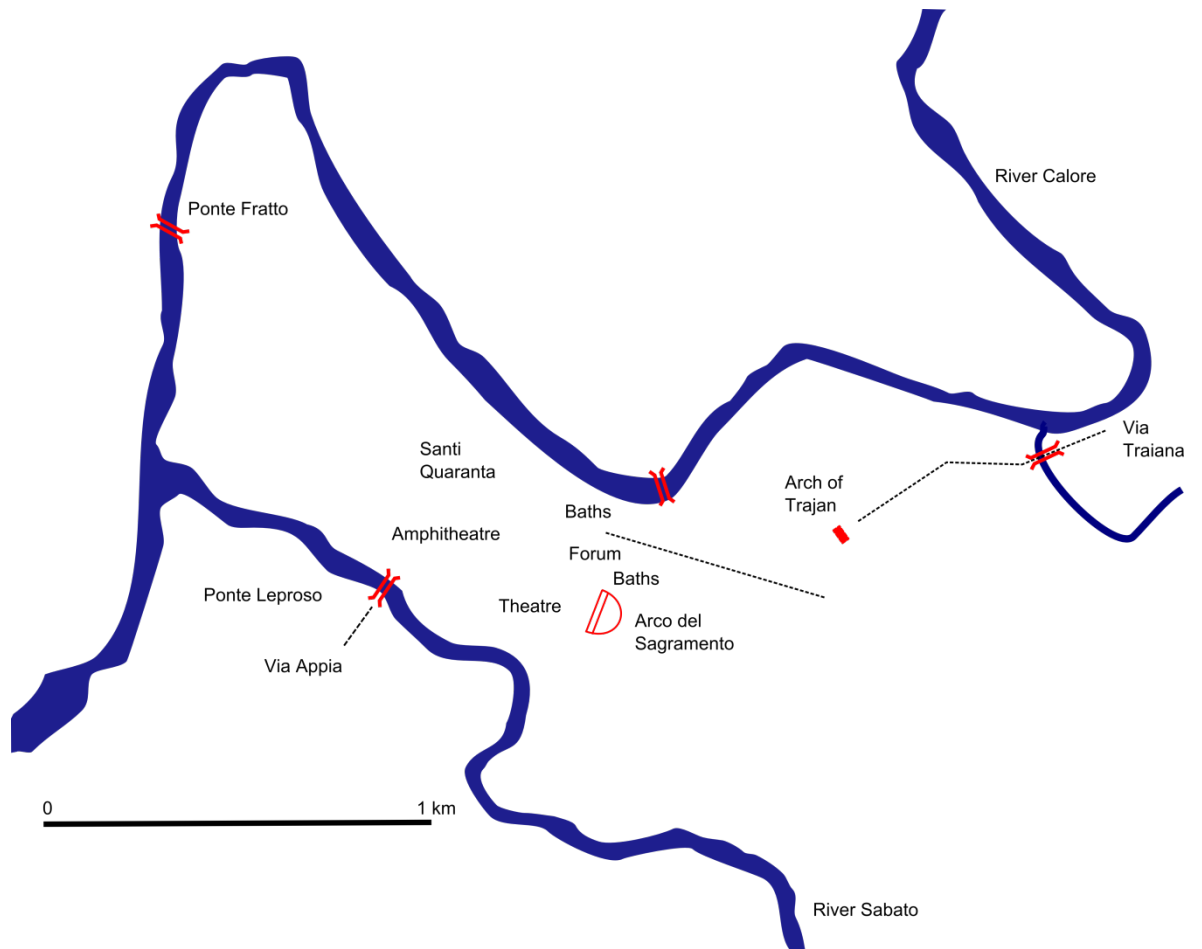
**Figure 3:** Central Rome with the seven hills, the Tiber, Tiber Island, *Campus Martius* and *Forum Romanum* annotated (drawn by author).



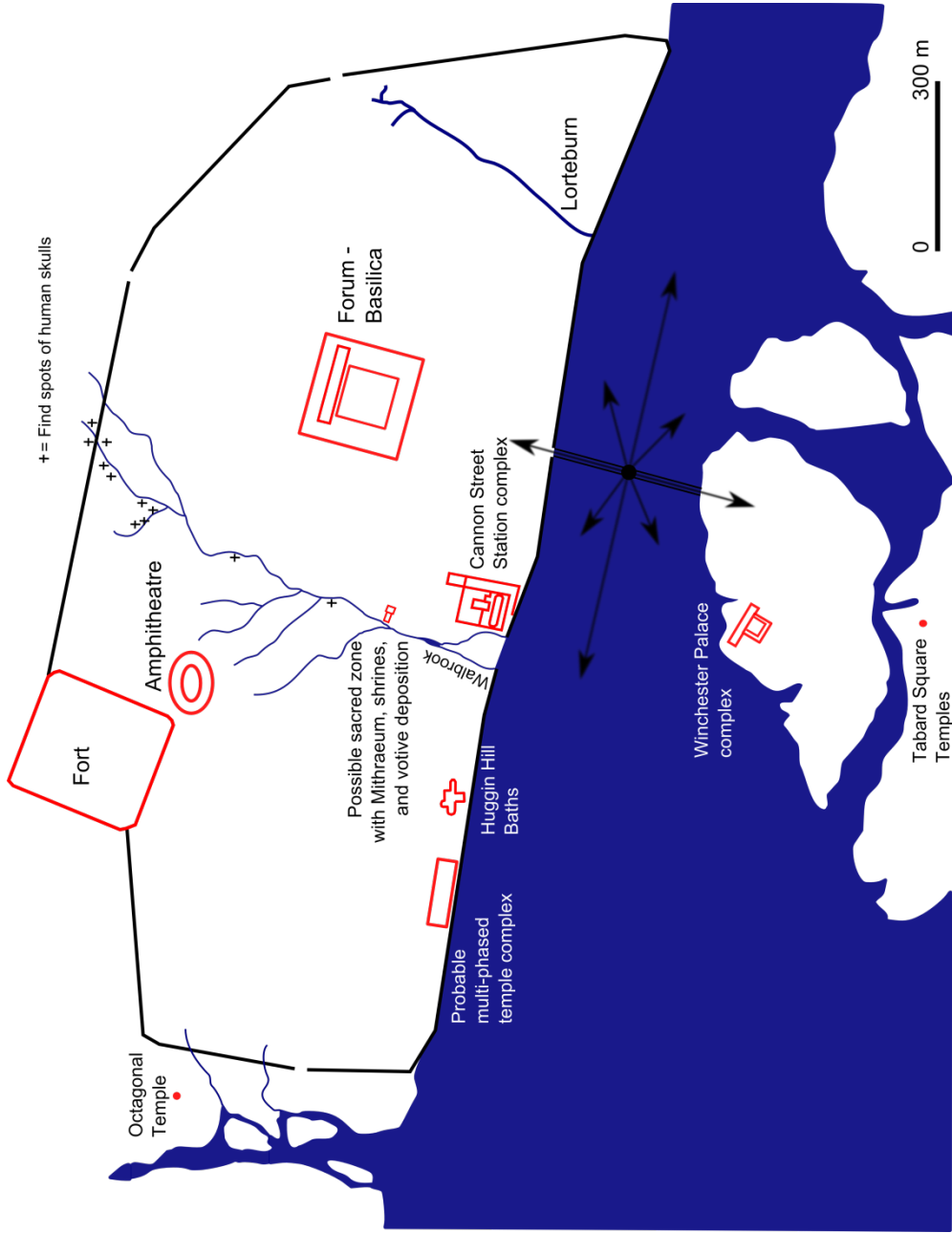
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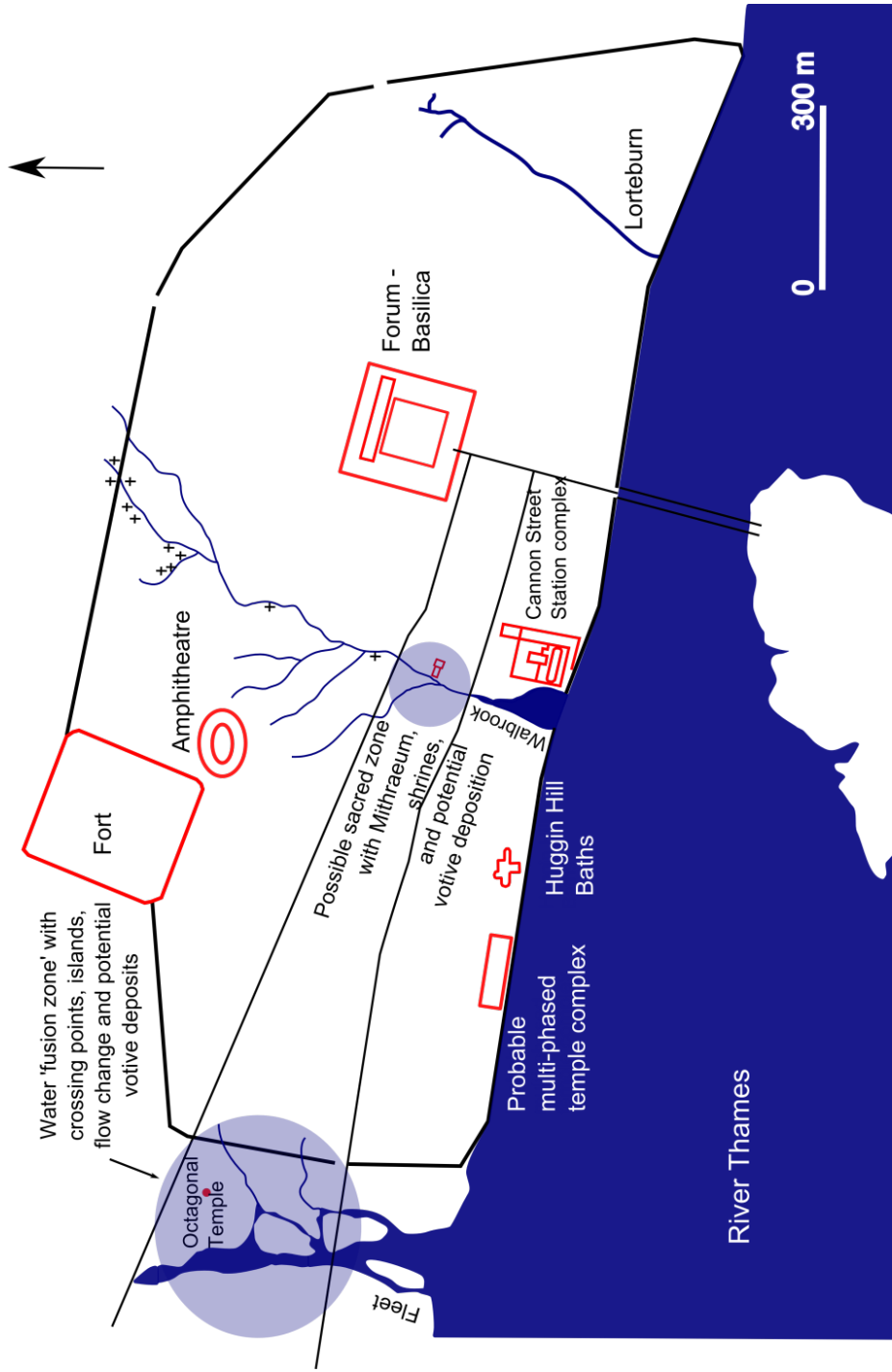
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**Figure 6:** *Beneventum* with river confluences and bridging points (redrawn with additions by the author from Patterson 2006).

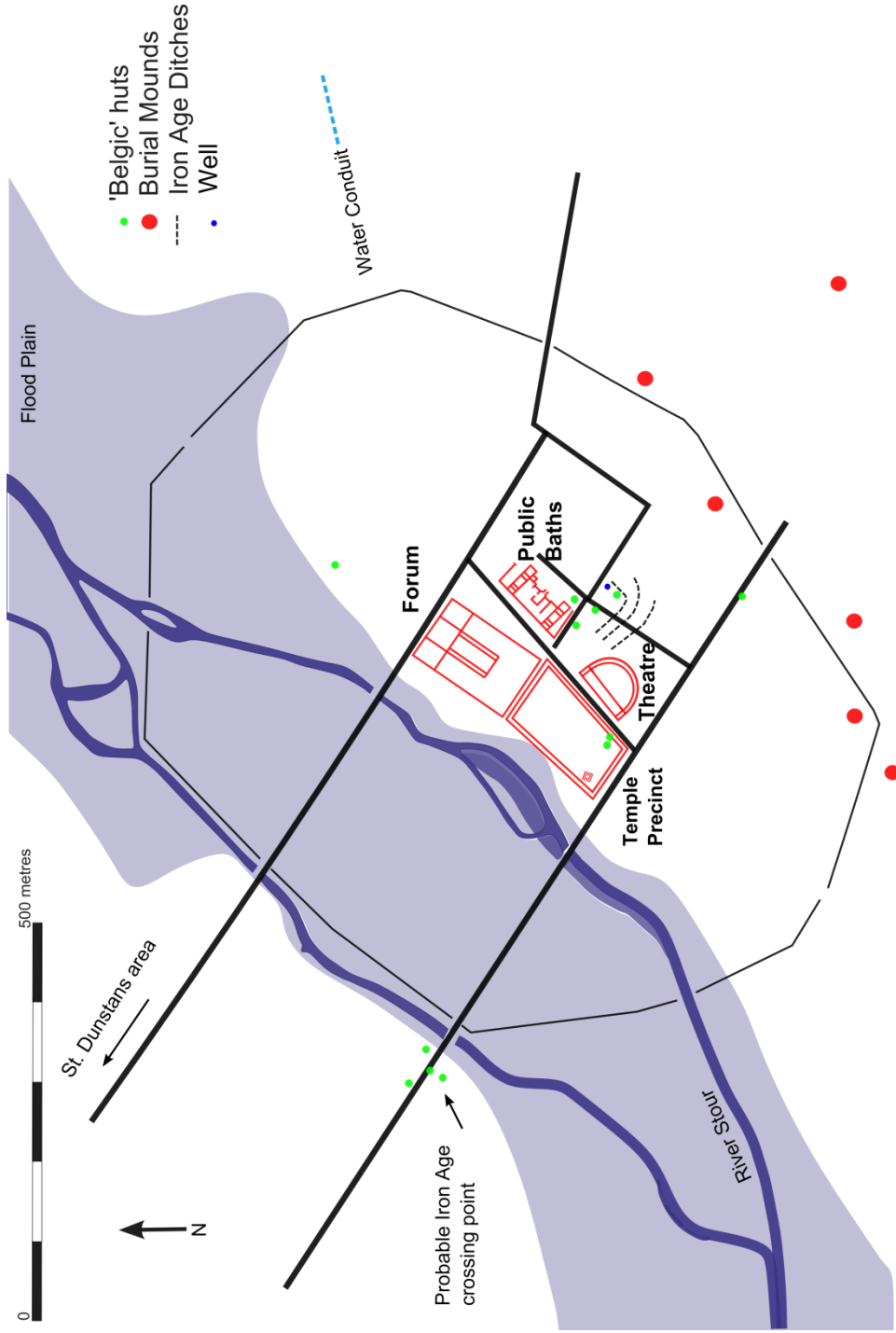


**Figure 7:** Multi-phase plan of *Londinium* (London) with potential sight lines from the primary Thames crossing (redrawn with additions by the author from Rowsome 2008 and Rogers 2011).

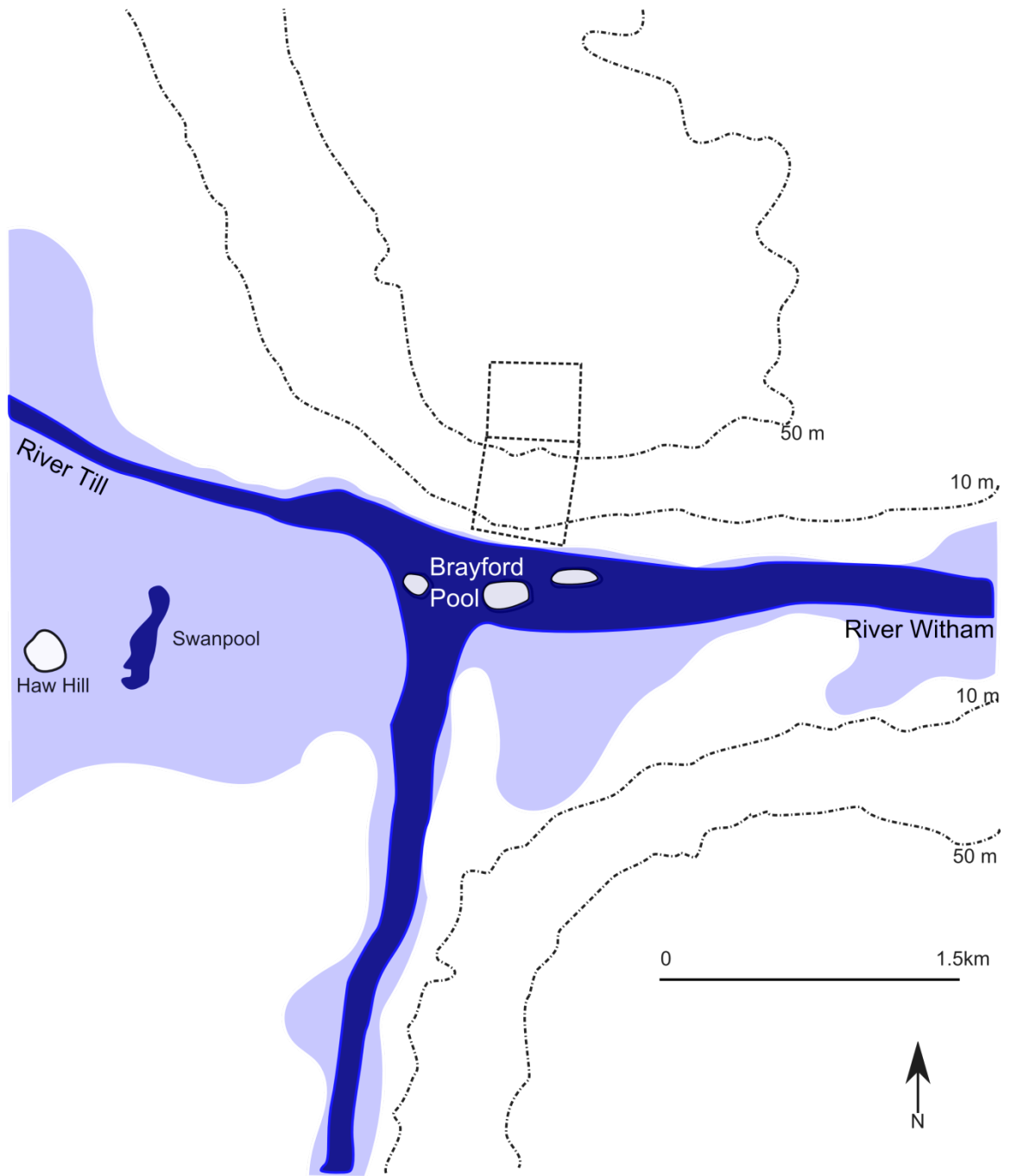


**Figure 8:** *Londinium* (London) crossing points of the Walbrook and the Fleet (redrawn with additions by the author from Rowsome 2008 and Rogers 2011).

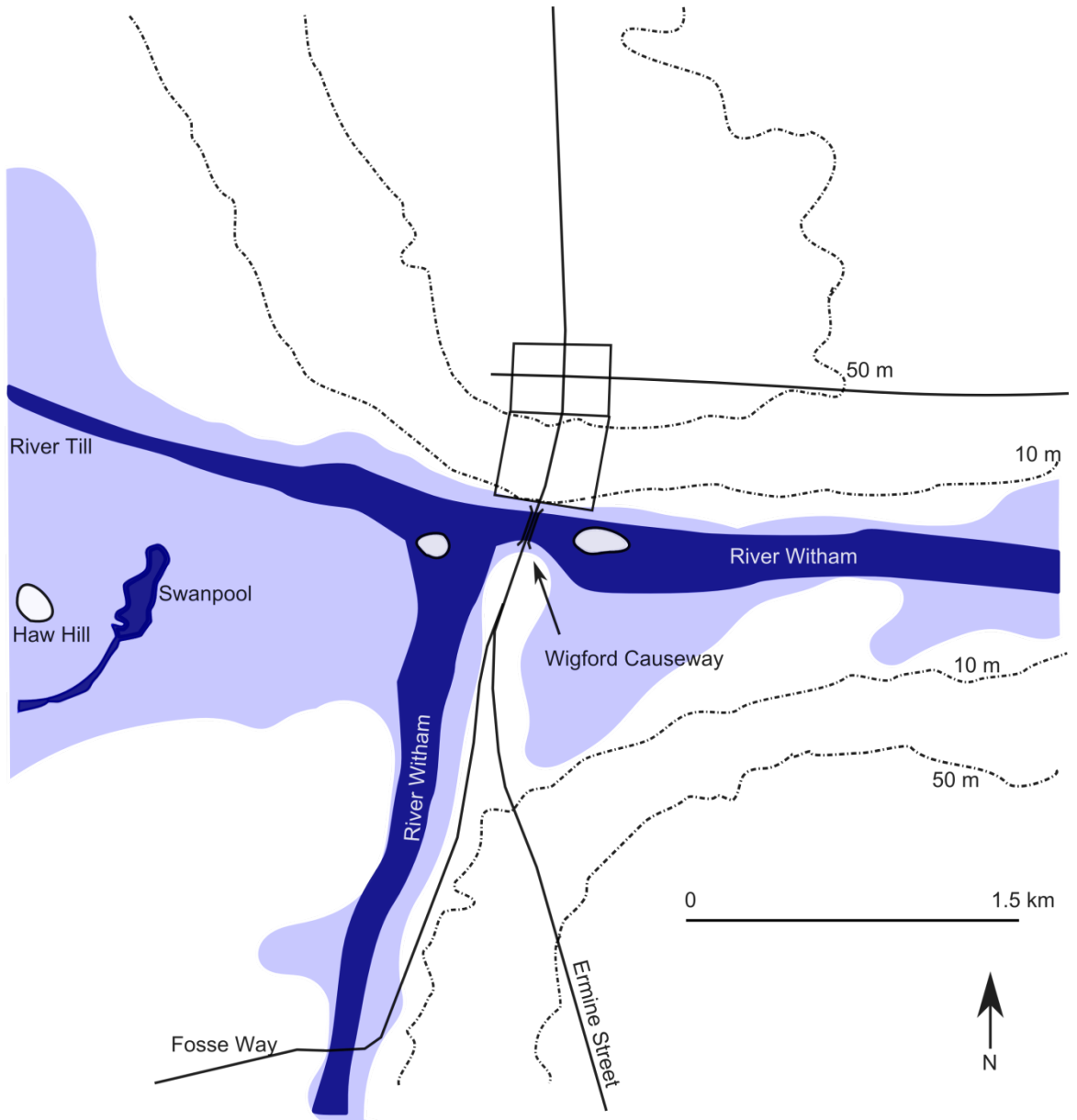




**Figure 9:** Plan of *Durovernum* (Canterbury) with monumental buildings, water features, and elements of Iron Age significance (redrawn by author from Canterbury Archaeological Trust).

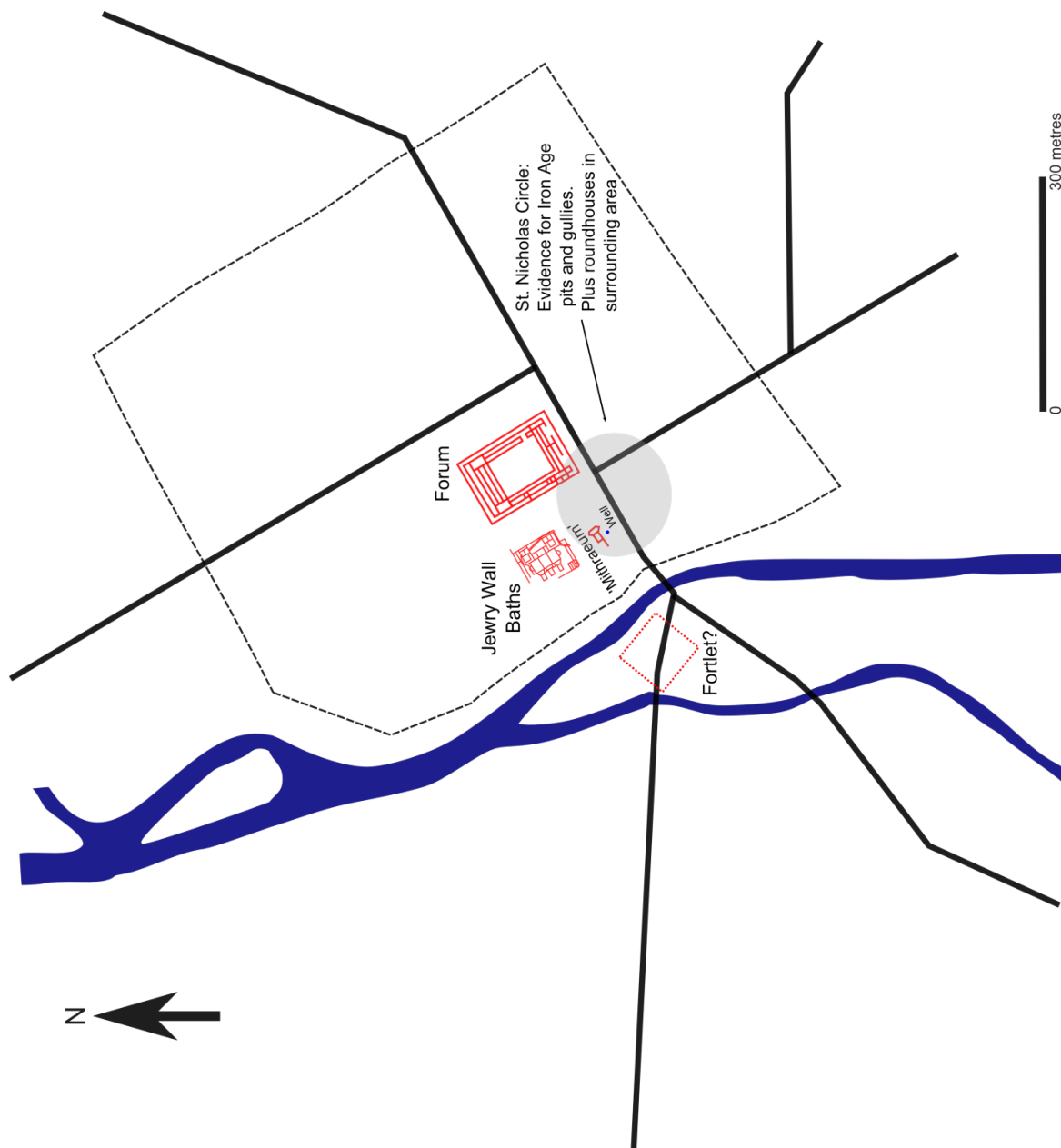


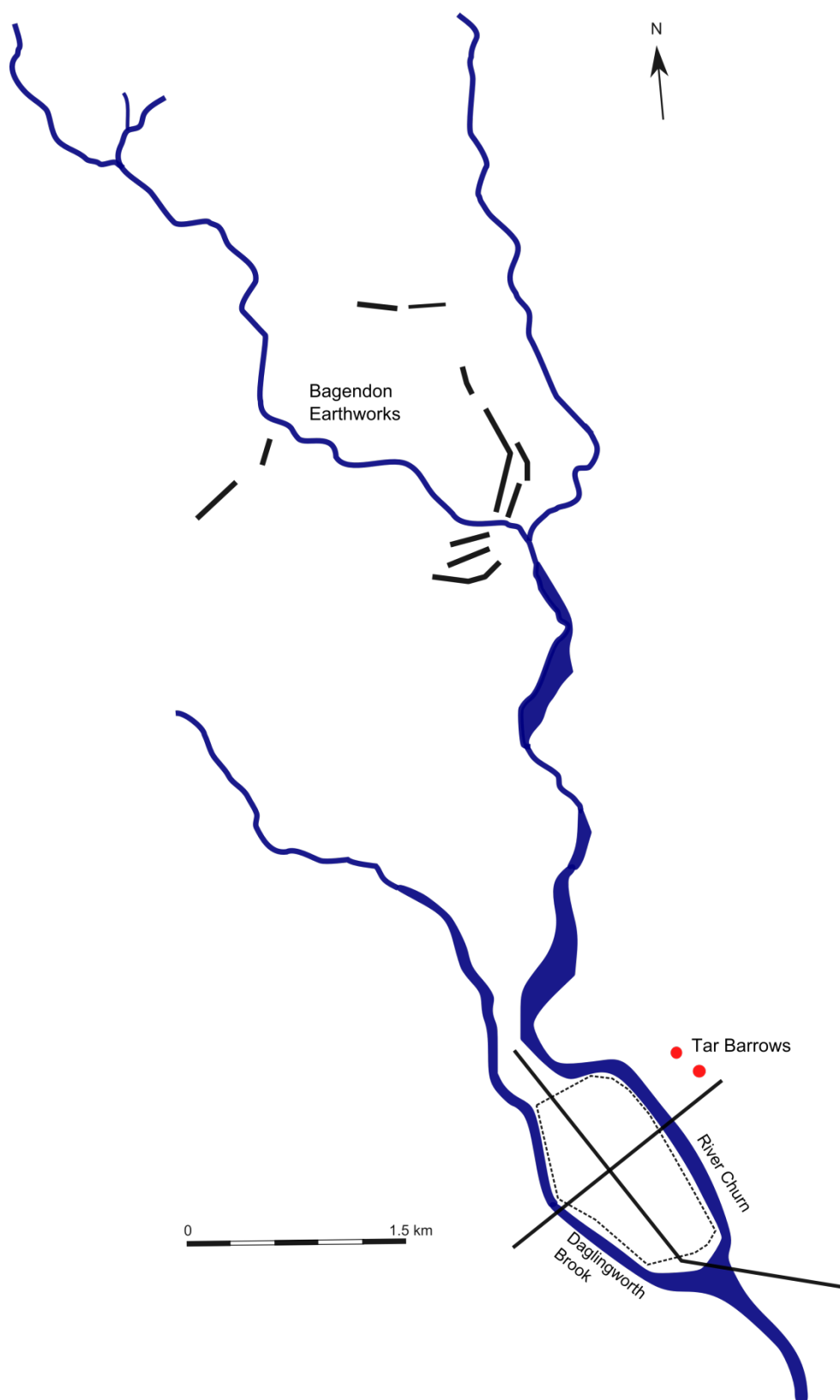
**Figure 10:** The landscape of pre-Roman Lincoln. Note the three distinct islands in the Brayford Pool, close to the area that would later become the Roman town (redrawn by author from Jones et al 2003)



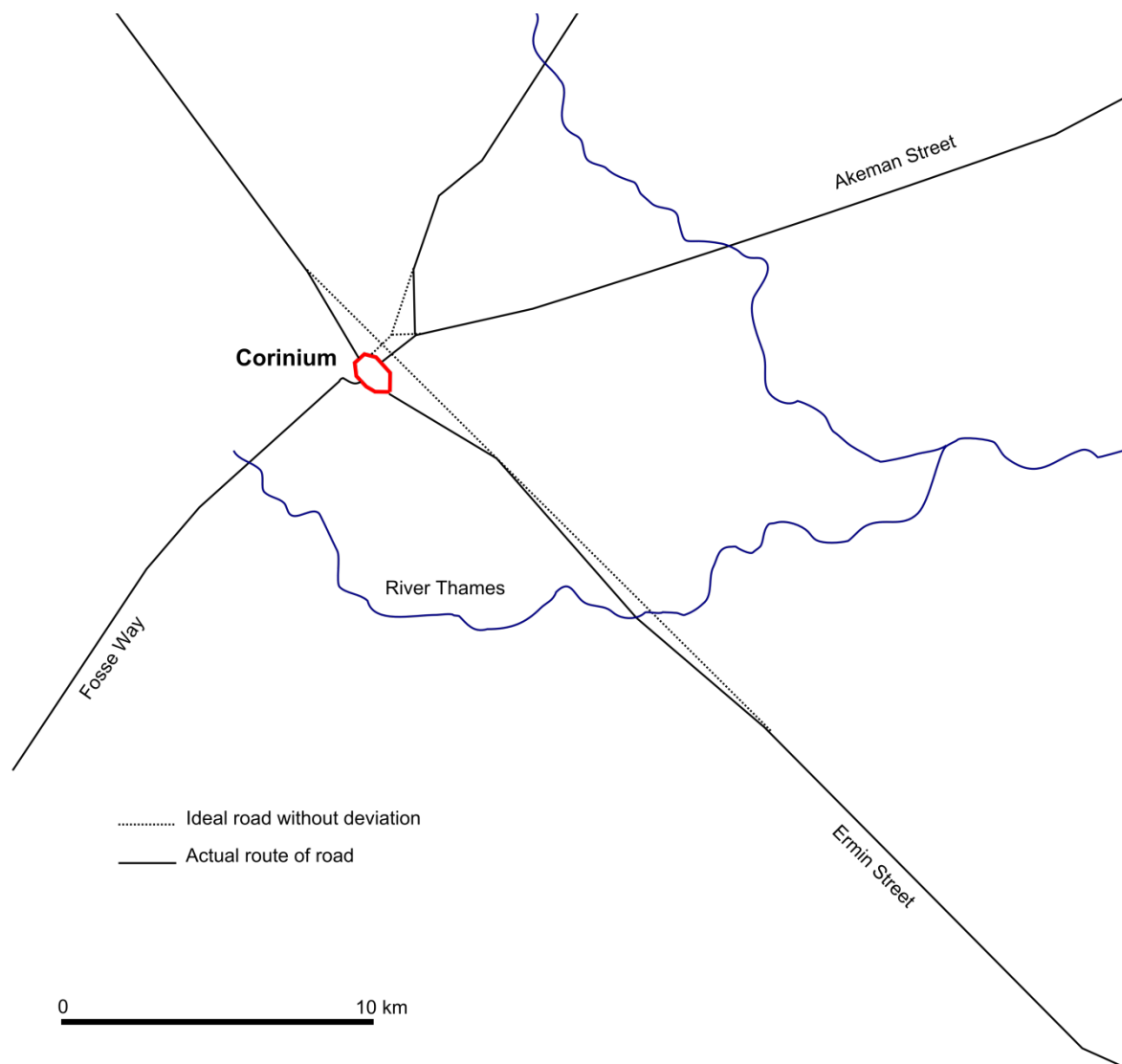
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 with additions by the author  
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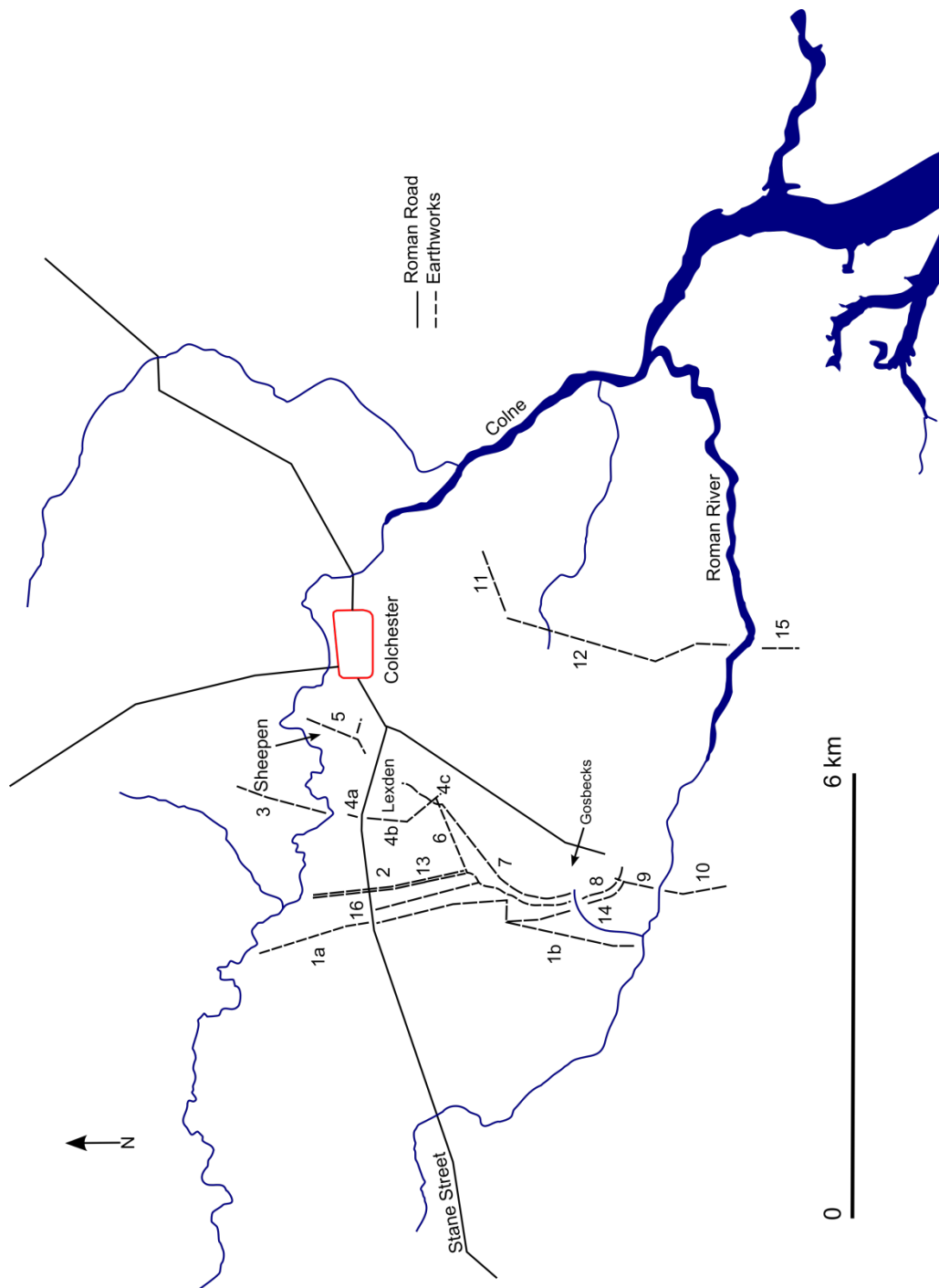




**Figure 13:** Location of *Corinium* (Cirencester) in a dynamic waterscape linked to the Iron Age settlement at Bagendon (redrawn by author from Reece 2003 and Rogers 2008).

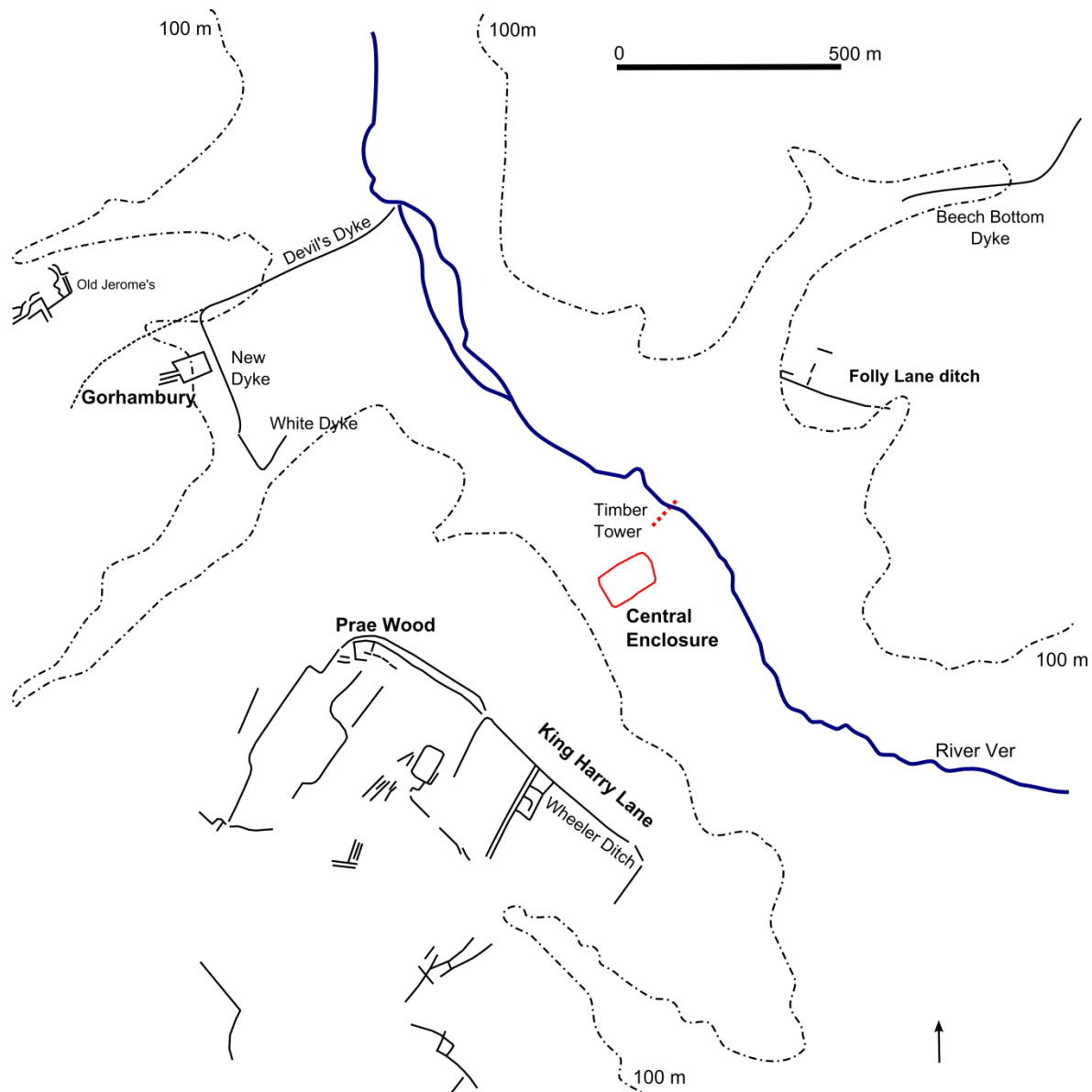


**Figure 14:** The notable deviation of roads approaching *Corinium* (Cirencester) (redrawn by author from Reece 2003).



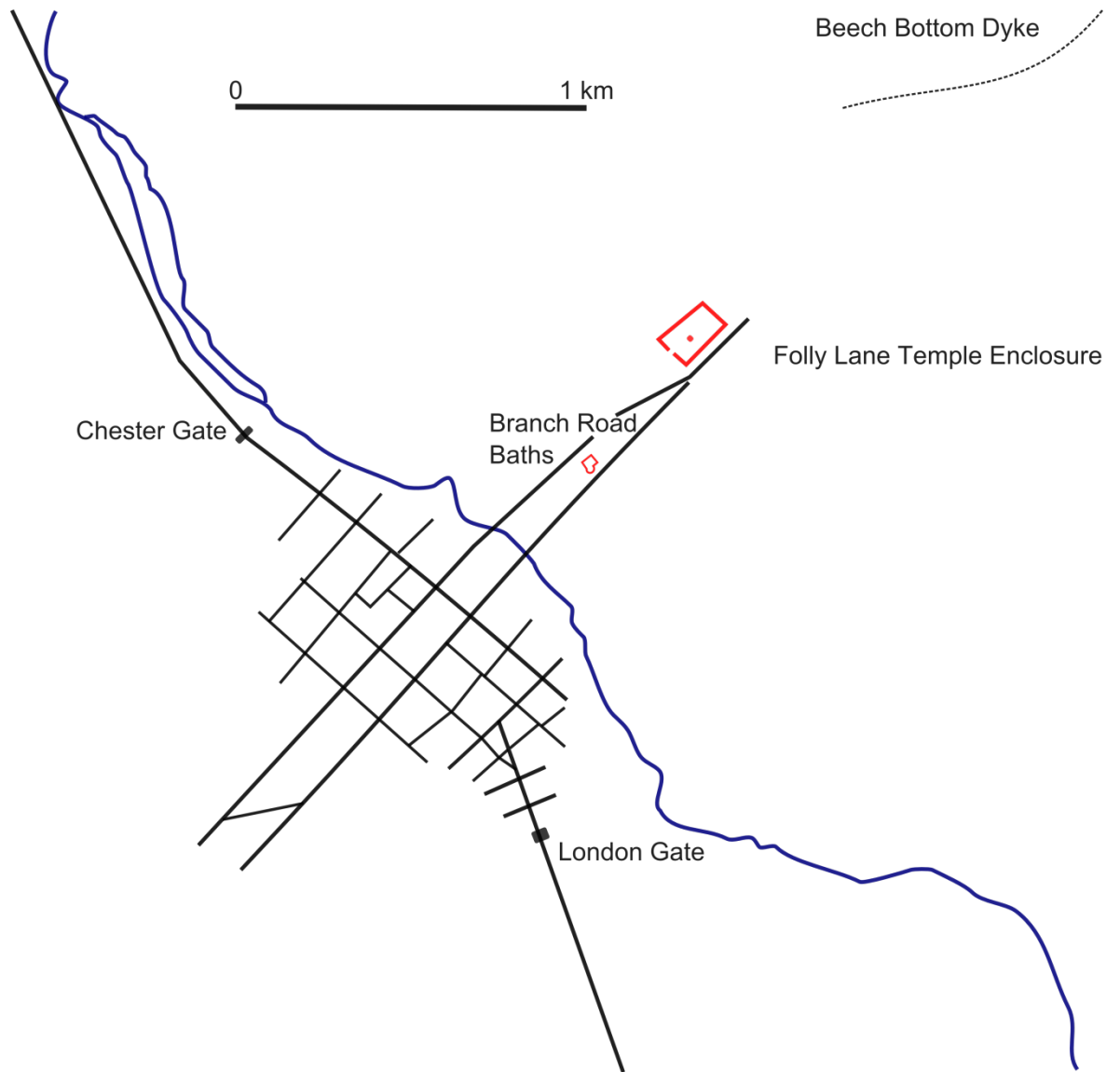
**Figure 15:** *Camulodunum* (Colchester) with its surrounding landscape and waterscape (redrawn by author from Hawkes & Crummy 1995 and Wachter 1995).

- 1a + b) Gryme's Dyke North and South
- 2) Triple Dyke
- 3) Moat Farm Dyke
- 4a,b,c) Lexden Dyke North, Middle, South
- 5) Sheepen Dyke
- 6) Prettygate Dyke
- 7) Kidman's Dyke
- 8) Oliver's Dyke
- 9) Layer Dyke
- 10) Barnhall Dyke
- 11) Berechurch Dyke
- 12) Shrub End Dyke
- 13) Gosbecks Dyke
- 14) Abberton Dyke
- 15) Dugard Dyke
- 16) Dugard Dyke

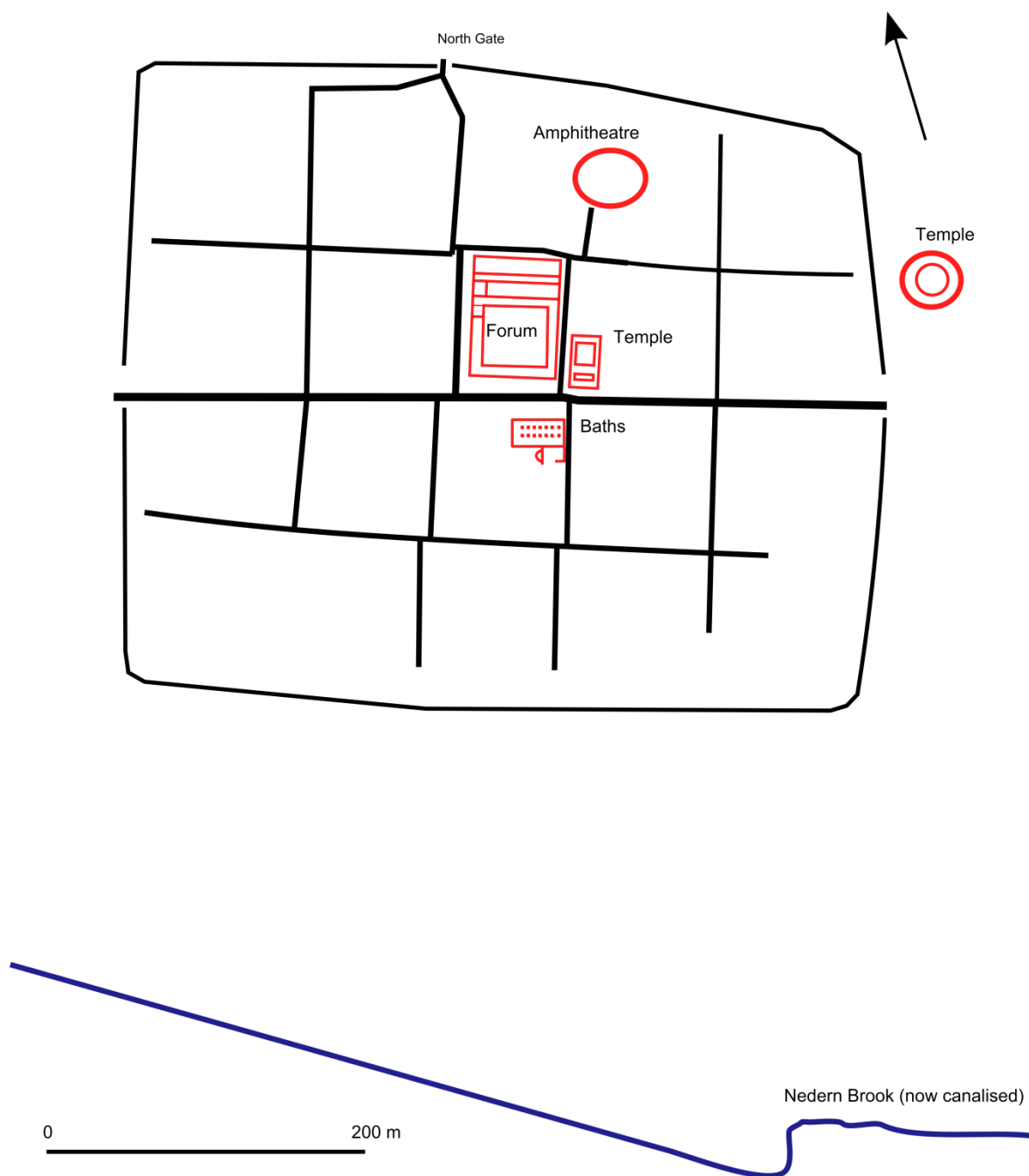


**Figure 16:** *Verlamion* with various dykes, enclosures and the Timber Tower crossing point of the Ver (redrawn by author from Niblett 2001).

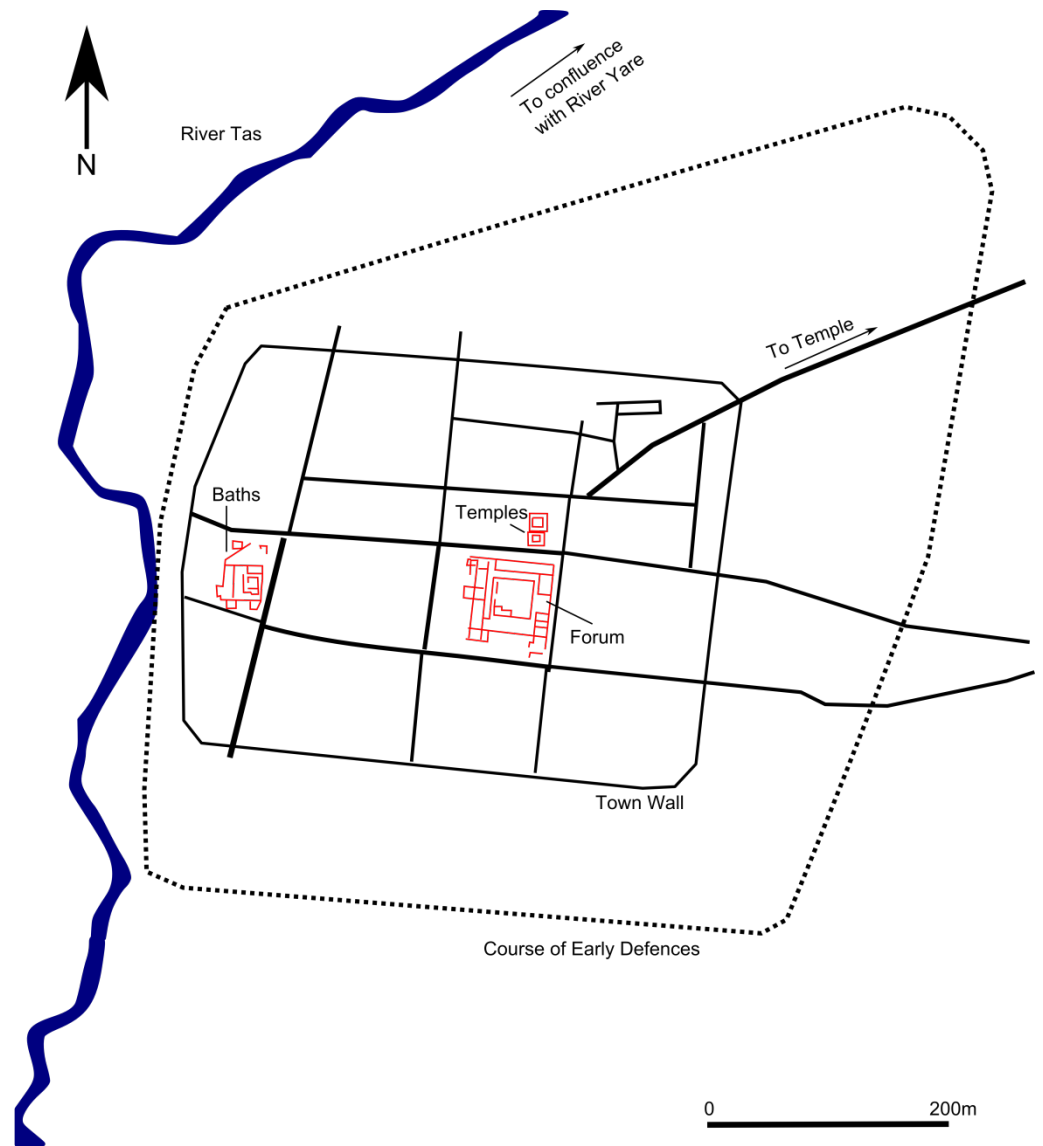




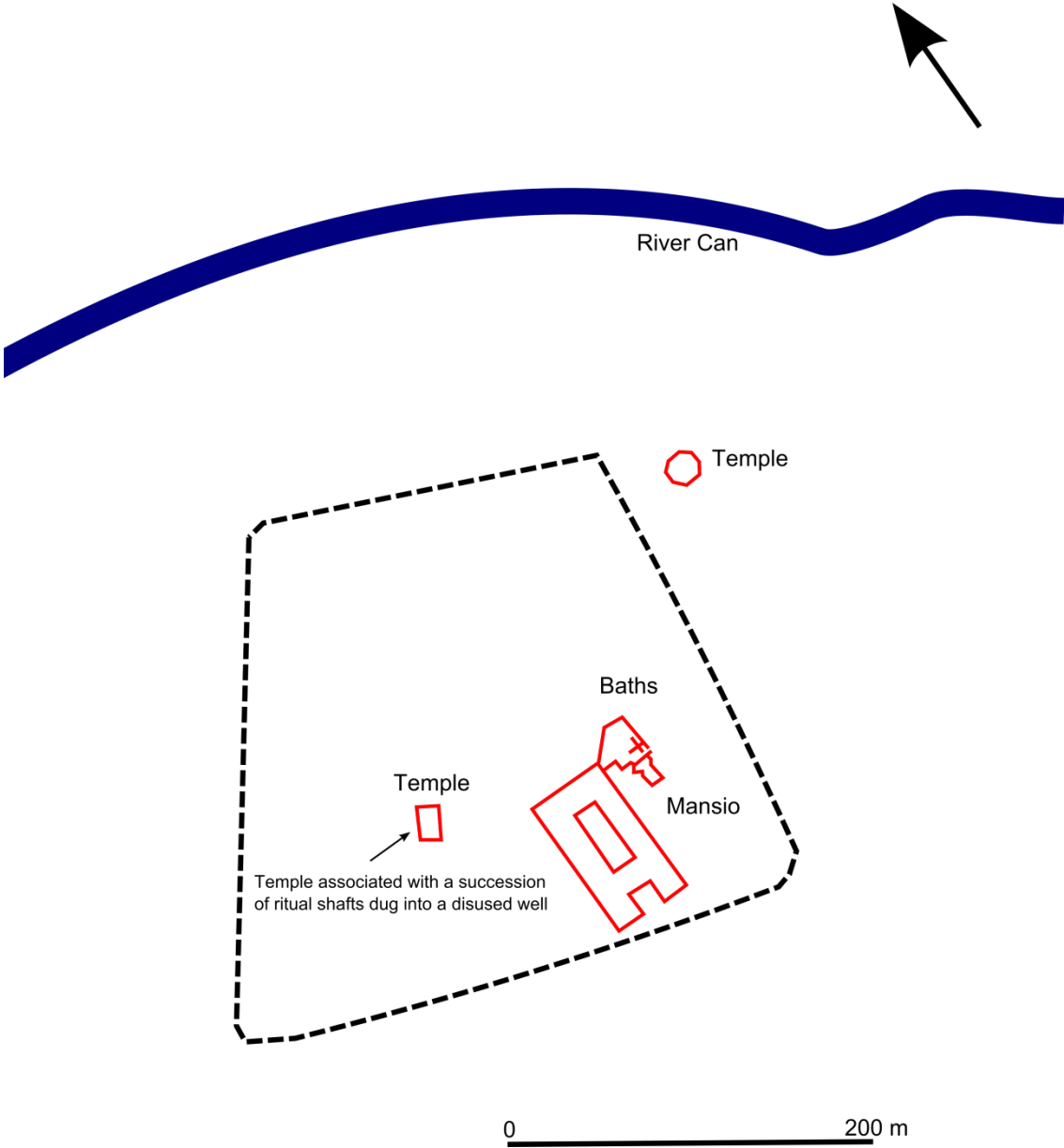
**Figure 17:** *Verulamium* (St. Albans) with the location of the Folly Lane temple and Branch Road bathhouse (redrawn by author from Niblett 2005).



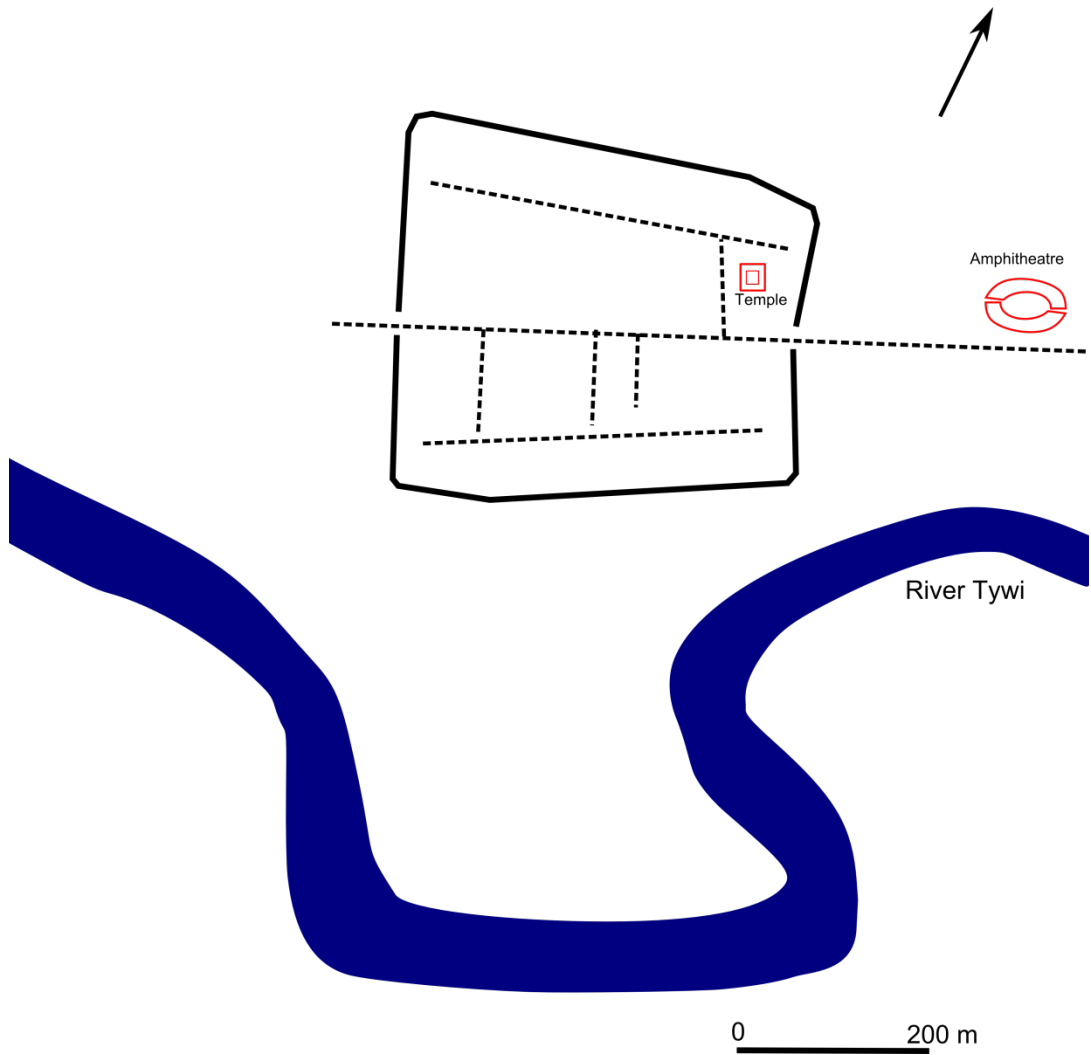
**Figure 18:** Plan of *Venta Silurum* (Caerwent) with primary monumental buildings and the Nedern Brook (redrawn by author from Wacher 1995 and Rogers 2008).



**Figure 19:** Plan of *Venta Icenorum* (Caistor-by-Norwich) with monumental buildings and the course of the river Tas (redrawn by author from University of Nottingham and Norfolk Archaeological Trust).



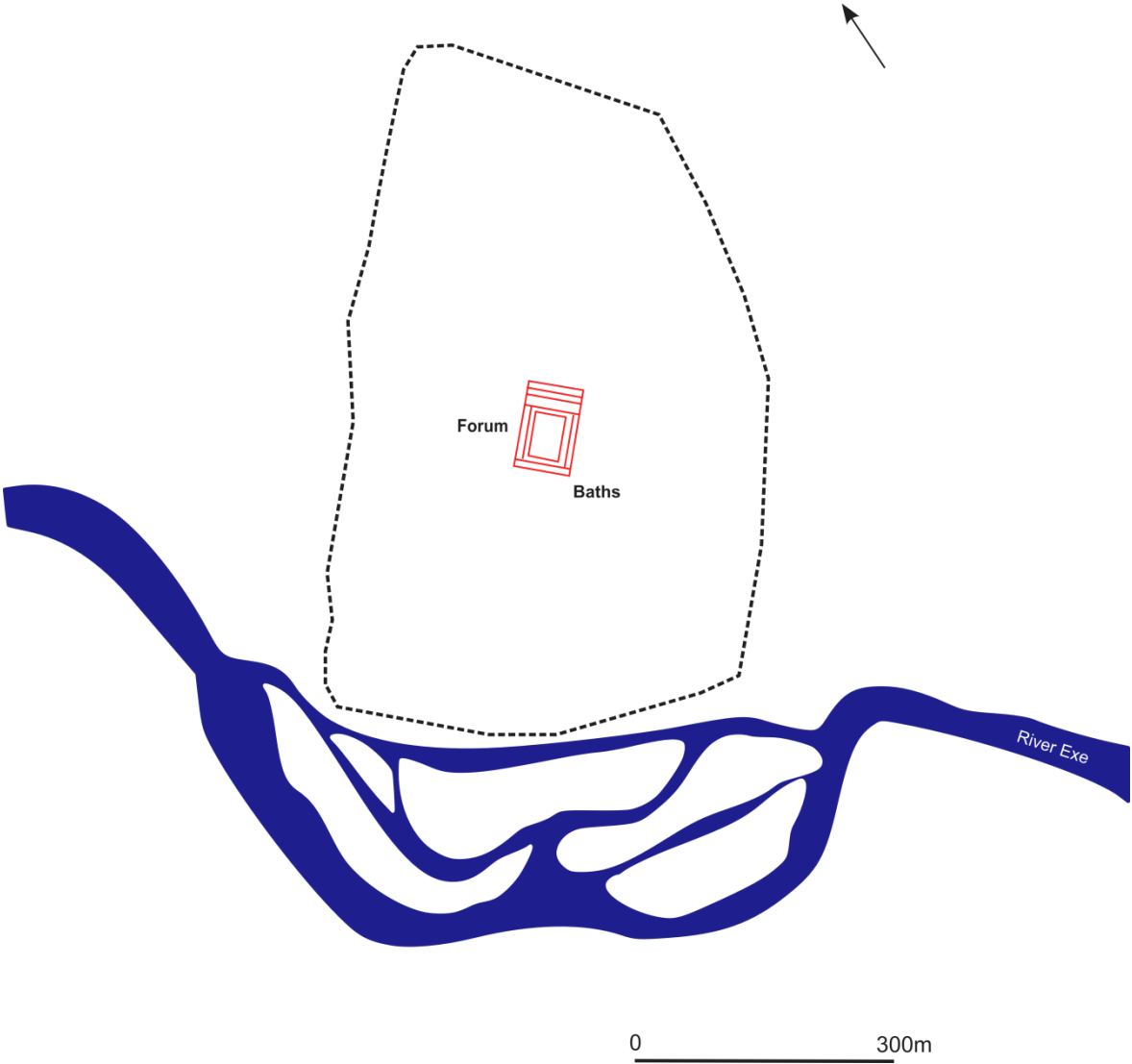
**Figure 20:** Plan of *Caesaromagus* (Chelmsford) showing monumental buildings and the River Can (redrawn by author with additions from Wachter 1995).



**Figure 21:** Plan of *Moridunum* (Carmarthen) with known monumental buildings and relationship to the River Tywi (redrawn by author from Wachter 1995).



**Figure 22:** Plan of *Venta Belgarum* (Winchester) with known monumental buildings, the course of the aqueduct, and relationship to the floodplain of the River Itchen (redrawn by author from Biddulph, 2011)

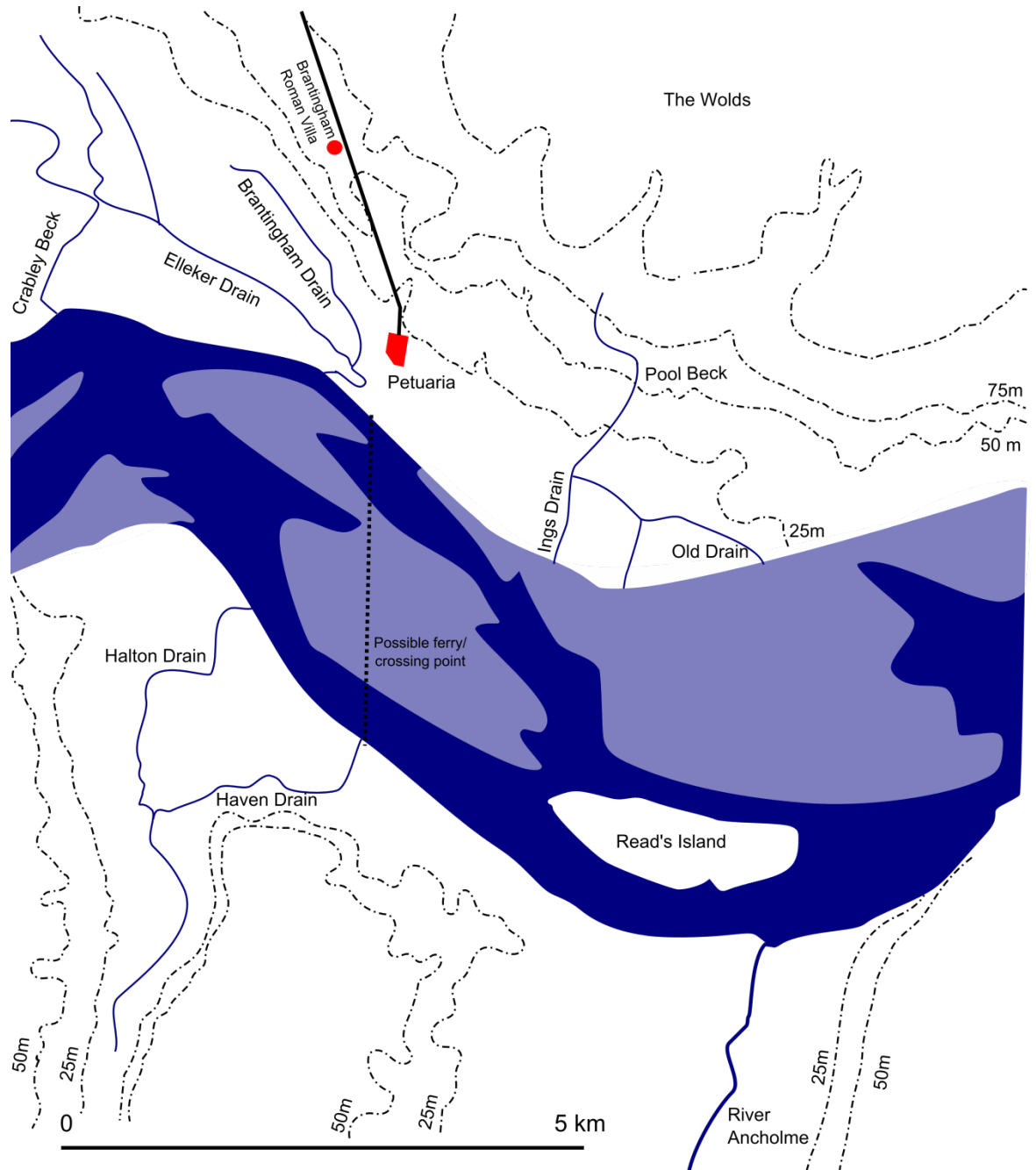


**Figure 23:** Plan of *Isca Dumnoniorum* (Exeter) showing the extent of the Roman town, known monumental buildings, and the islands in the nearby River Exe (redrawn by the author from Rogers 2008).

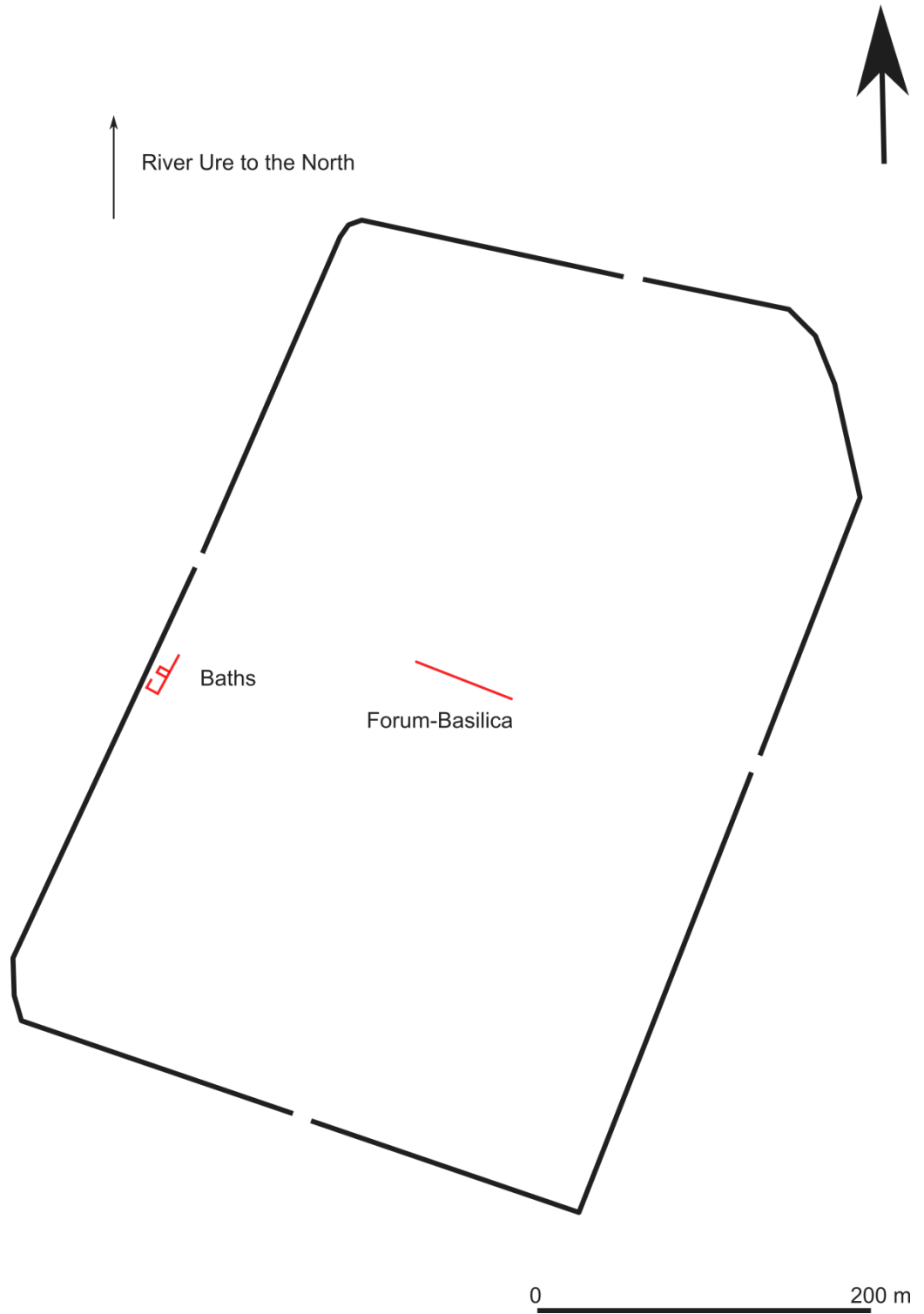


**Figure 24:** Plan of *Virconium* (Wroxeter) showing prominent buildings, the town aqueduct, and the relationship of the town to its immediate waterscape (redrawn by author from Wachter 1995 and Rogers 2008).



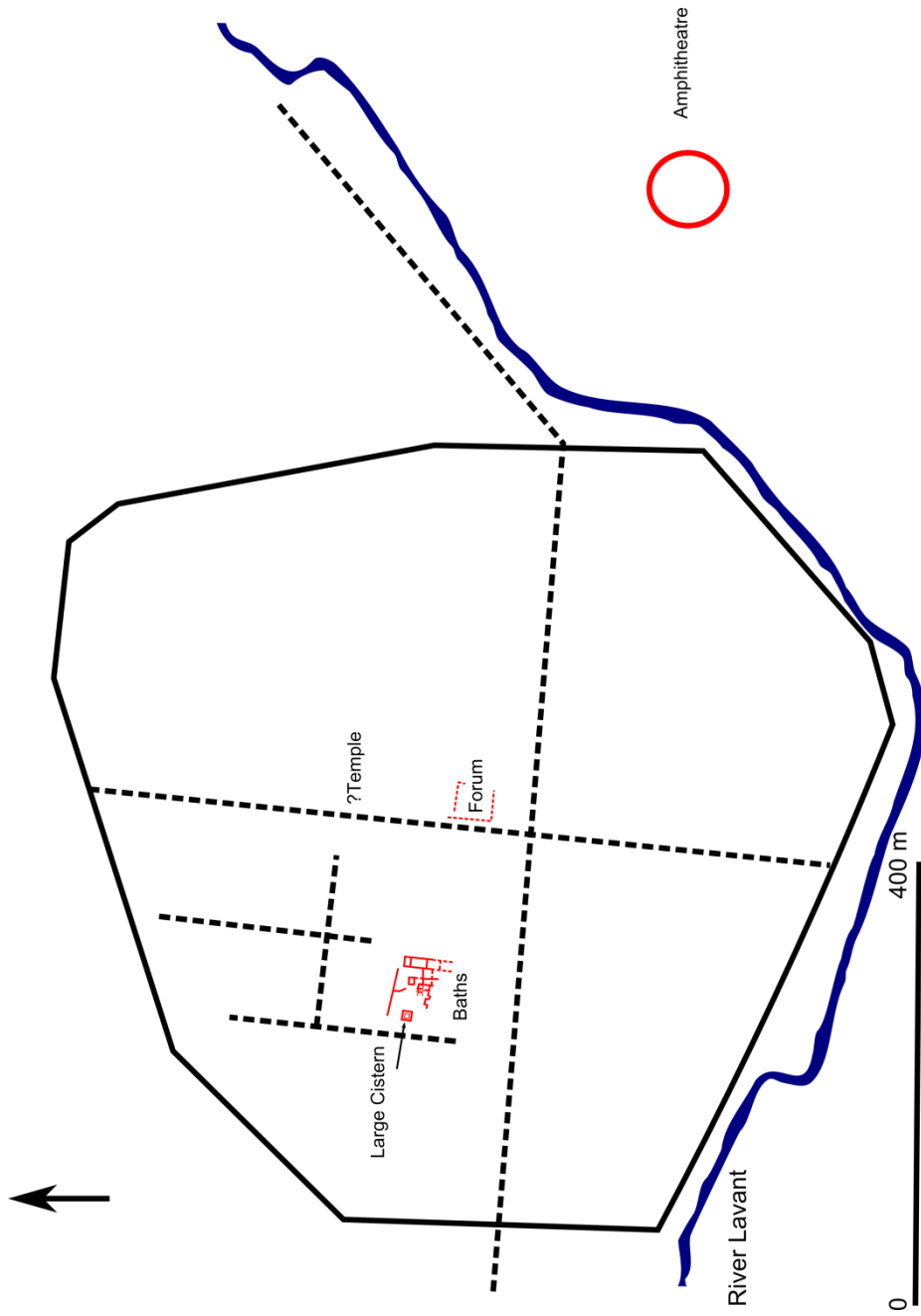


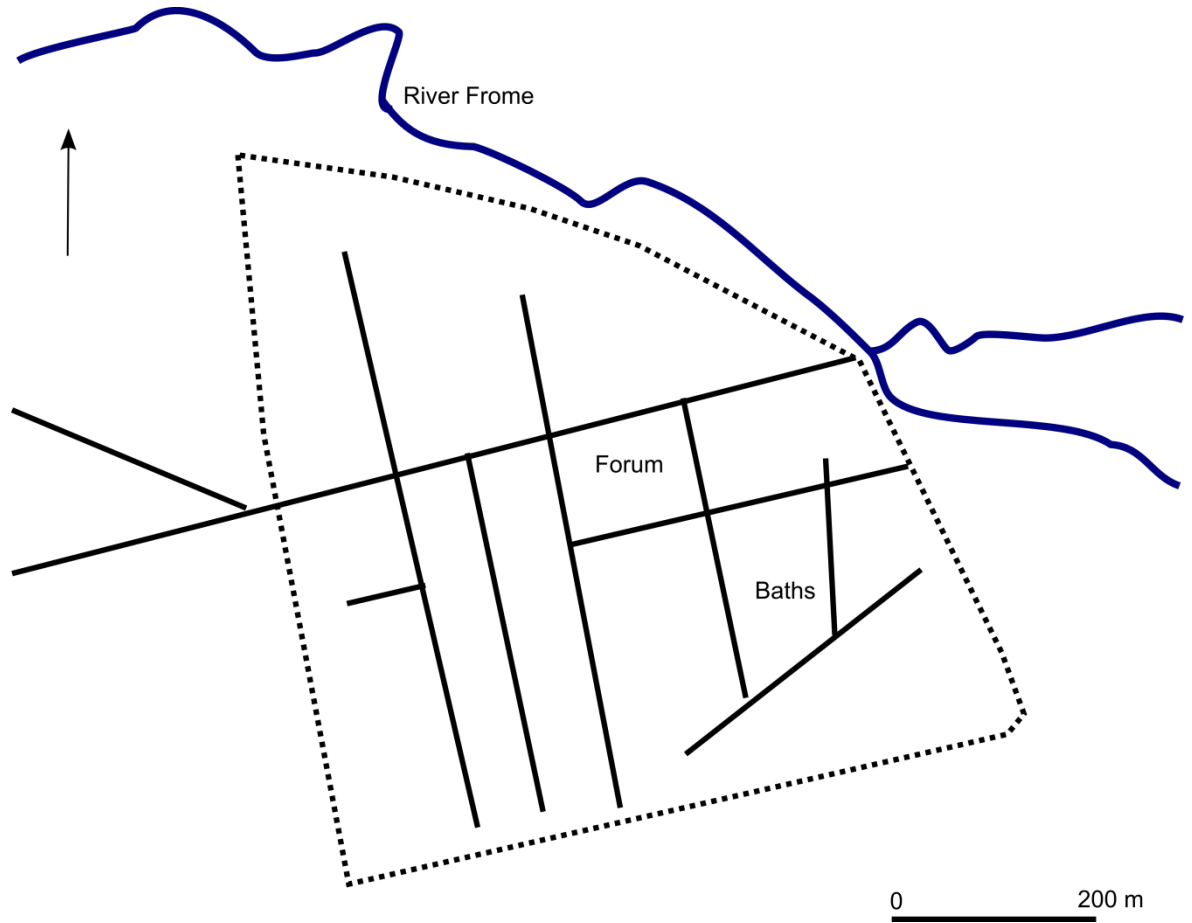
**Figure 25:** The dynamic surrounding waterscape of *Petuaria* (Brough-on-the-Humber) showing a number of watercourses, in addition to the multiple sandbanks/islands of the Humber itself (redrawn by author from Wacher 1995).



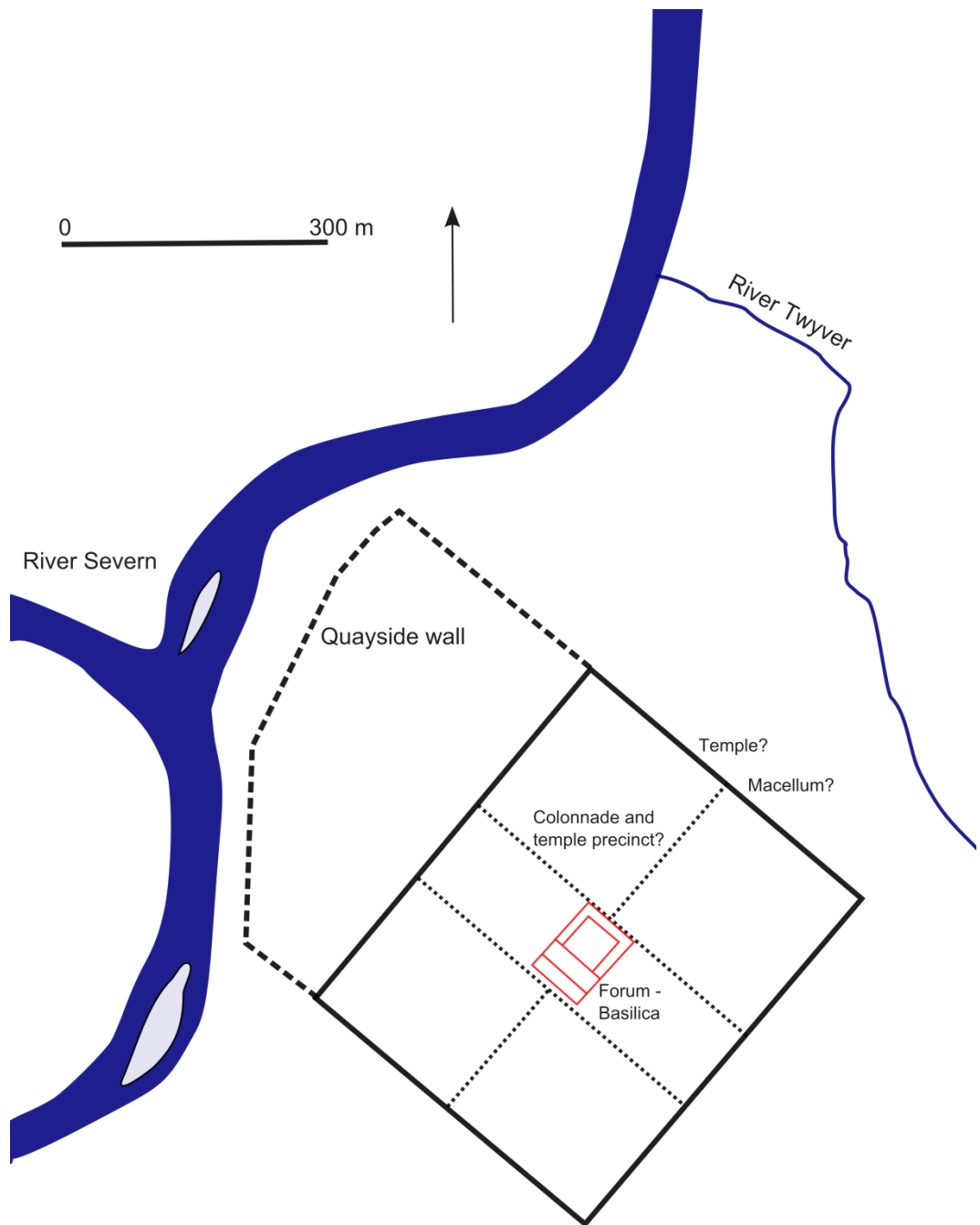
**Figure 26:** Plan of *Isurium* (Aldborough) with known buildings (redrawn from Rogers 2008).

**Figure 27:** Plan of *Noviomagus* (Chichester) showing monumental buildings and the relationship of the River Lavant (redrawn by author with additions from Down 1978).

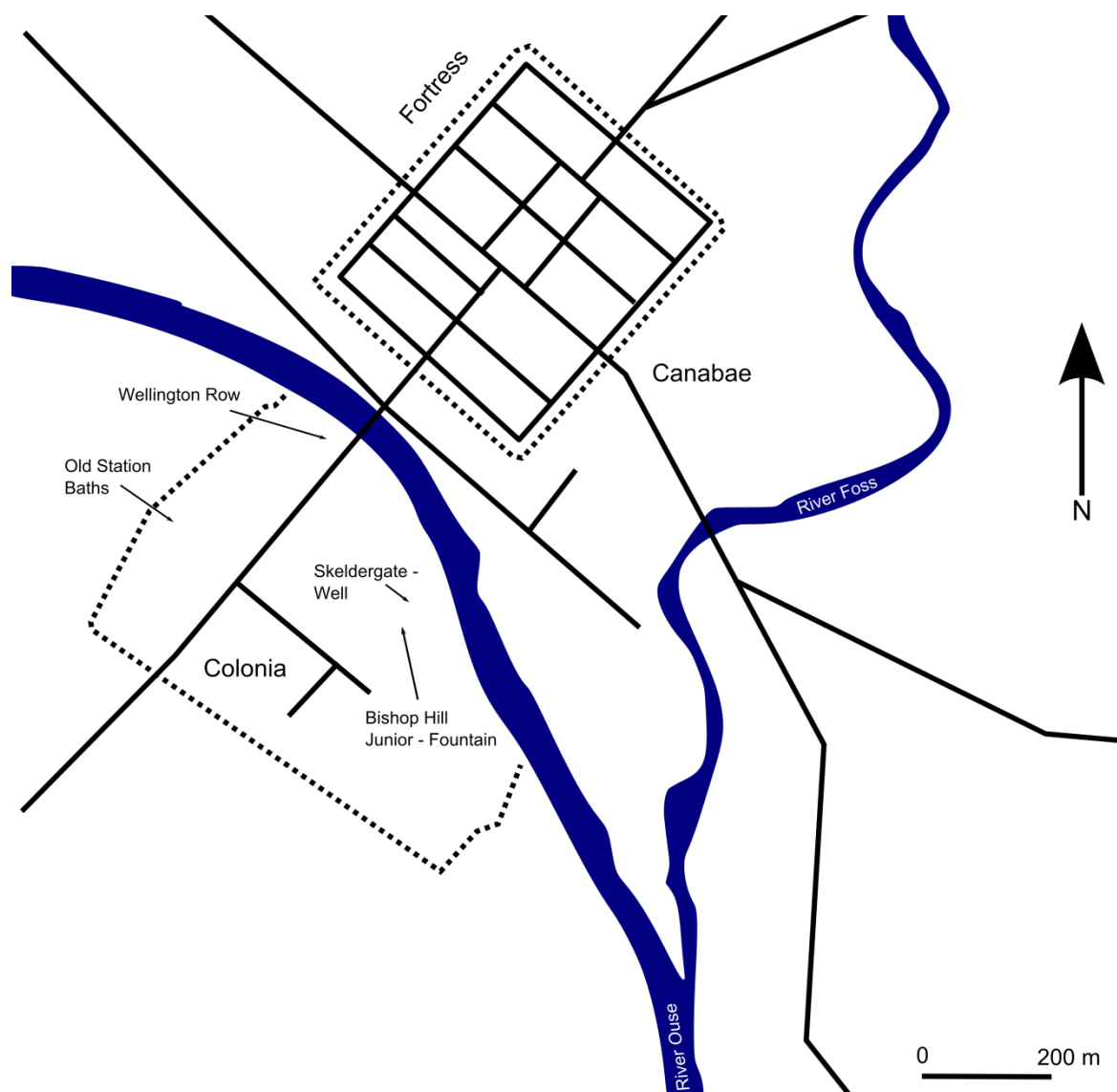




**Figure 28:** Plan of *Durnovaria* (Dorchester) with the locations of the forum and bathhouse, plus the relationship of the town to the nearby River Frome (redrawn by author from Woodward & Woodward 2004).

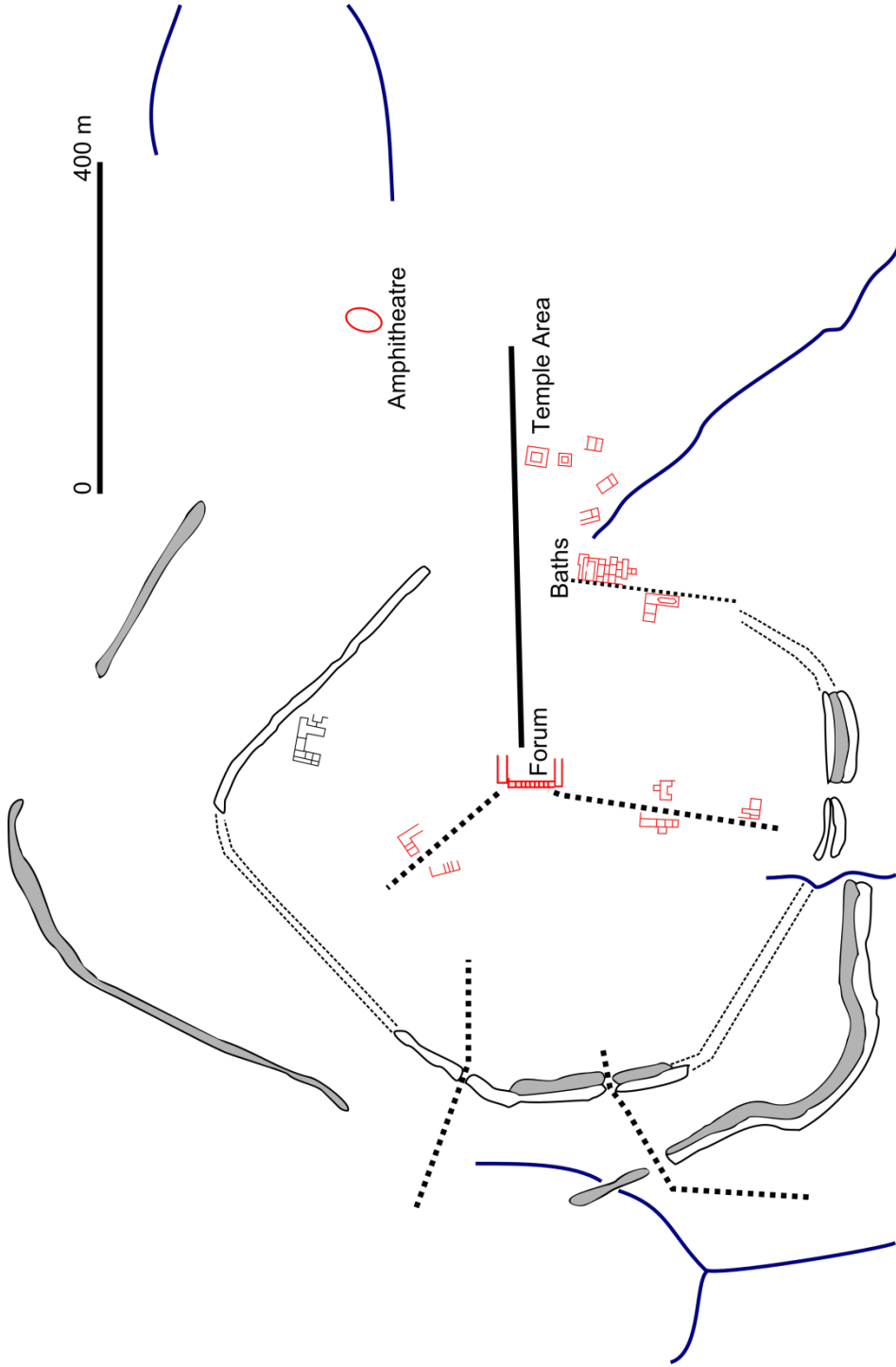


**Figure 29:** Plan of *Glevum* (Gloucester) with possible locations of significant buildings plus the old courses of the Severn and Twyver (redrawn with details added from Herbert, 1988).

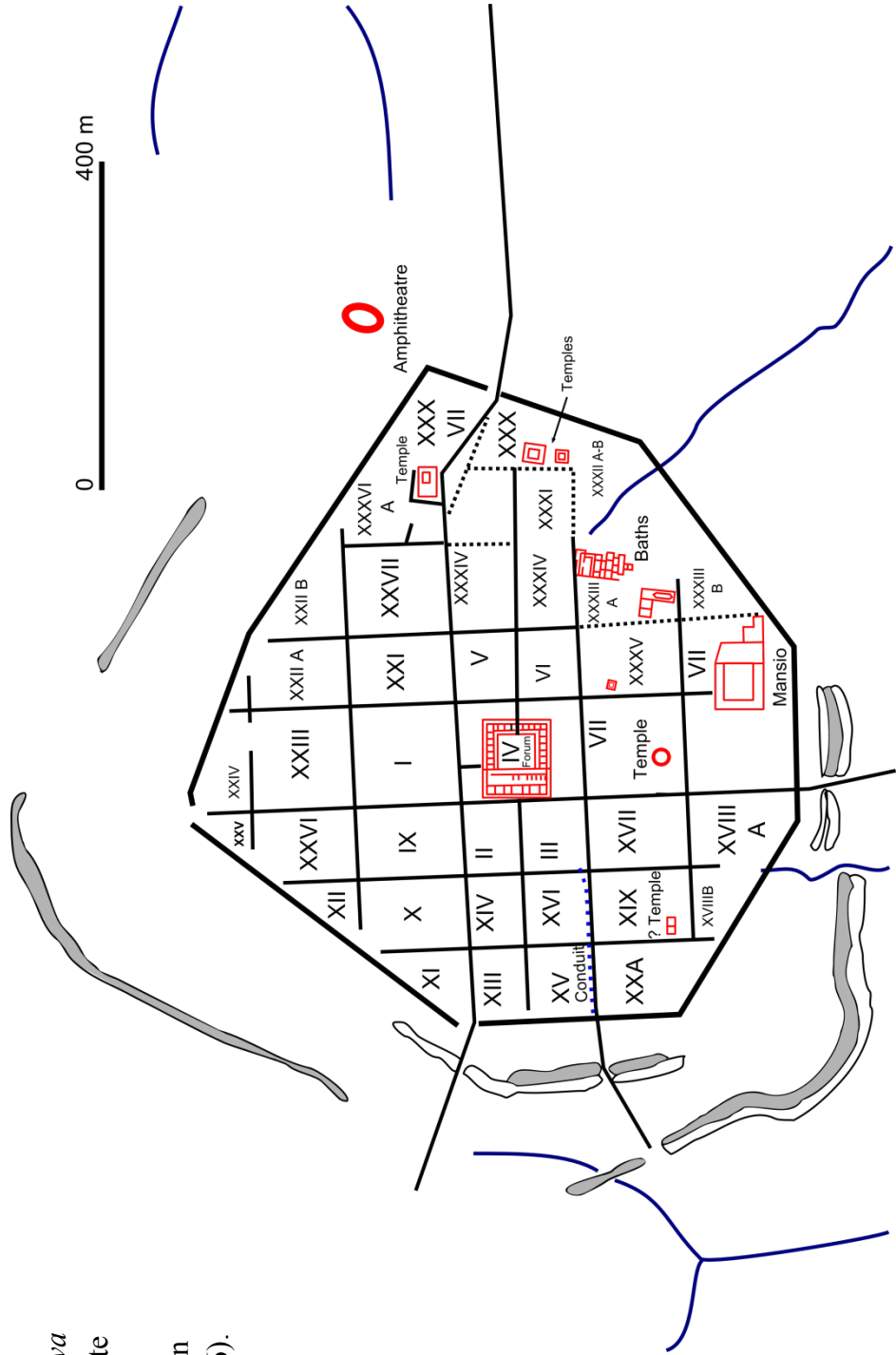


**Figure 30:** Plan of *Eboracum* (York) showing the military and civilian settlements entangled with the fork of the River Ouse (redrawn by the author from York Archaeological Trust).

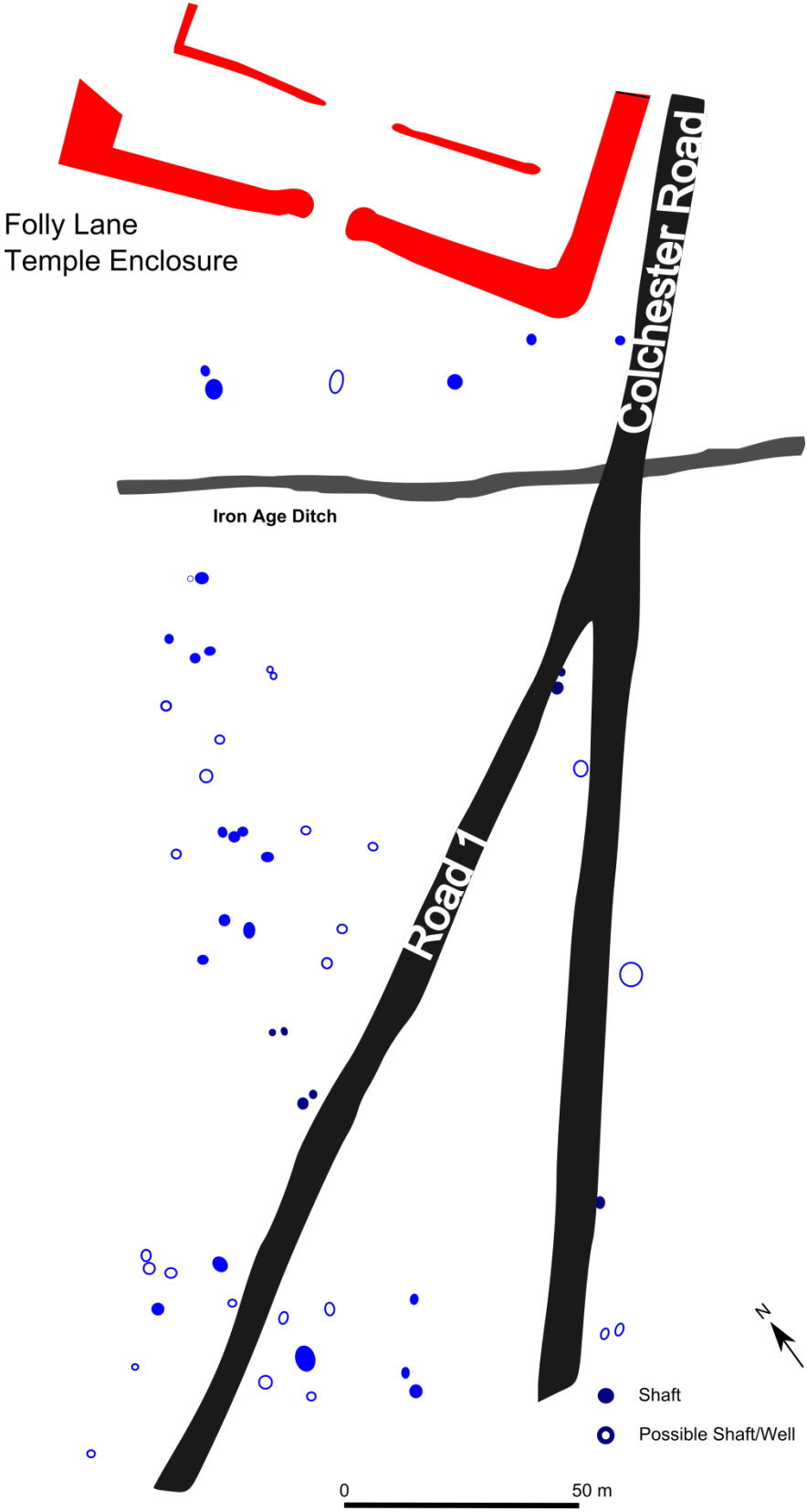
**Figure 31:** Plan of early *Calleva Atrebatum* (Silchester) showing the Iron Age ditch system, the development of significant buildings, and a number of small streams that were close to the settlement (redrawn by the author from Creighton 2006).



**Figure 32:** Developed *Calleva Atrebatum* (Silchester) complete with street grid and numerous monumental buildings (redrawn by author from Creighton 2006).

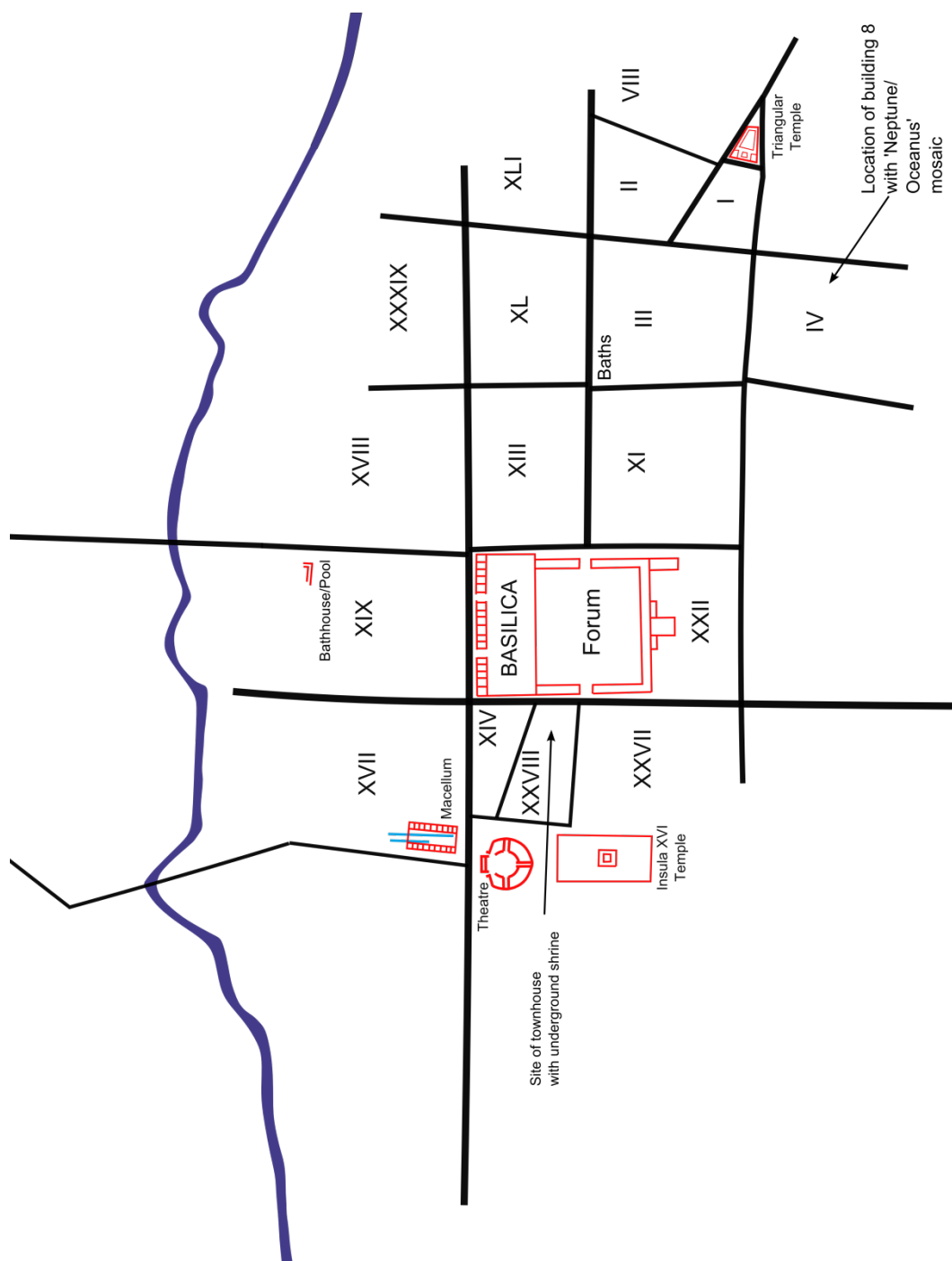


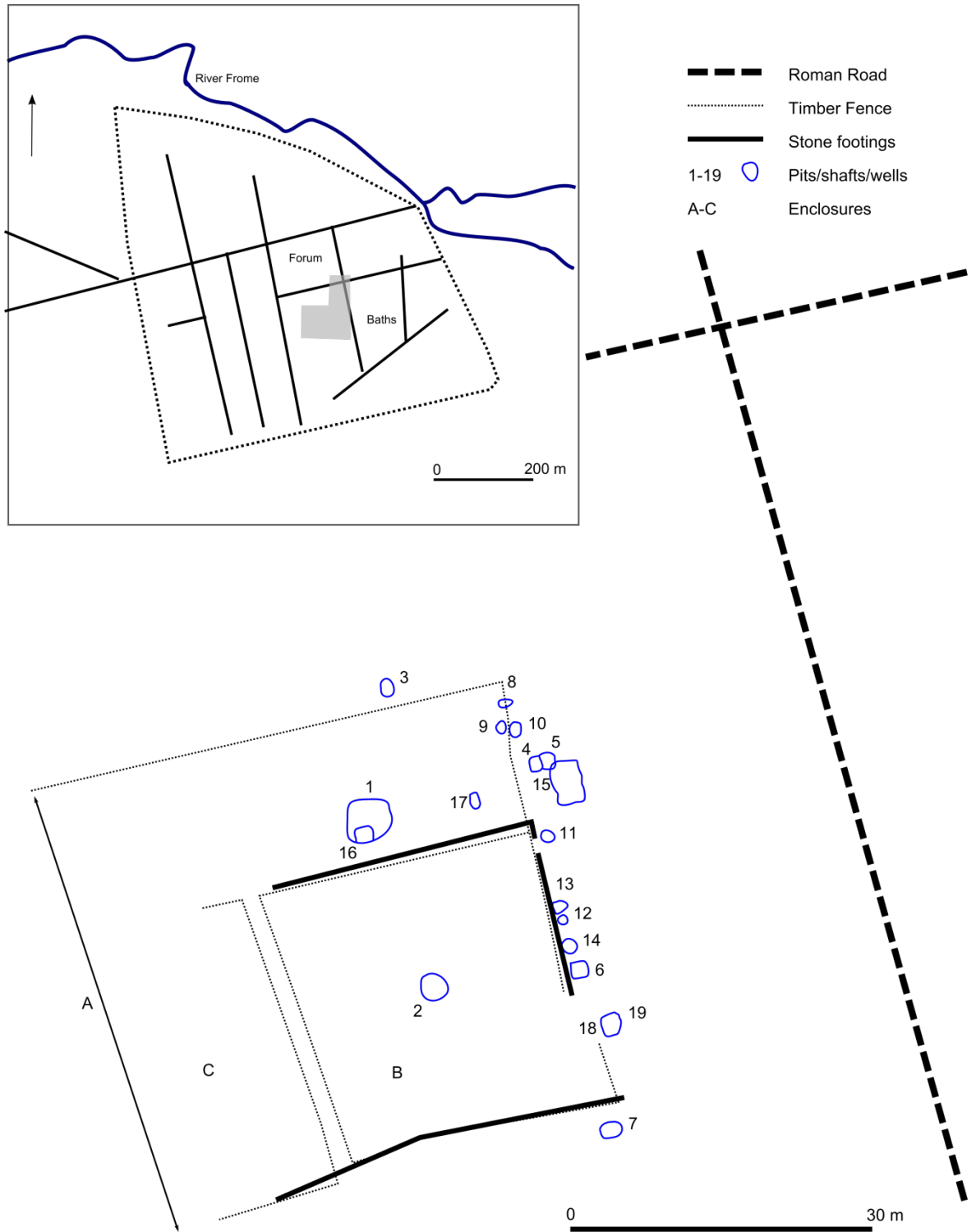




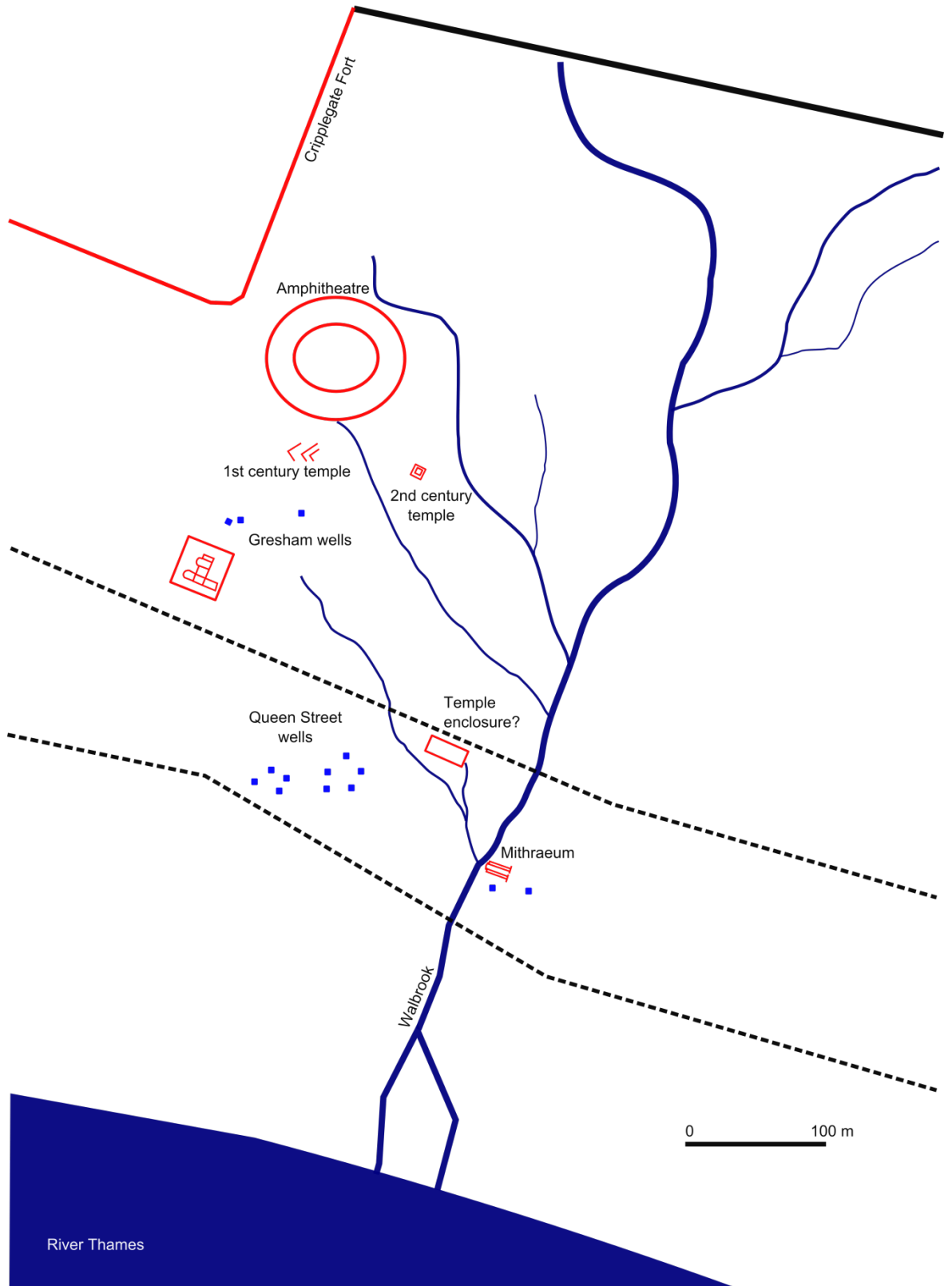
**Figure 33:** The shaft/well features close to the Folly Lane Temple enclosure (redrawn by the author from Niblett 1999).

**Figure 34:** Plan of the central insulae of *Verulamium* with important features highlighted (redrawn with additions by the author from Niblett 2005).

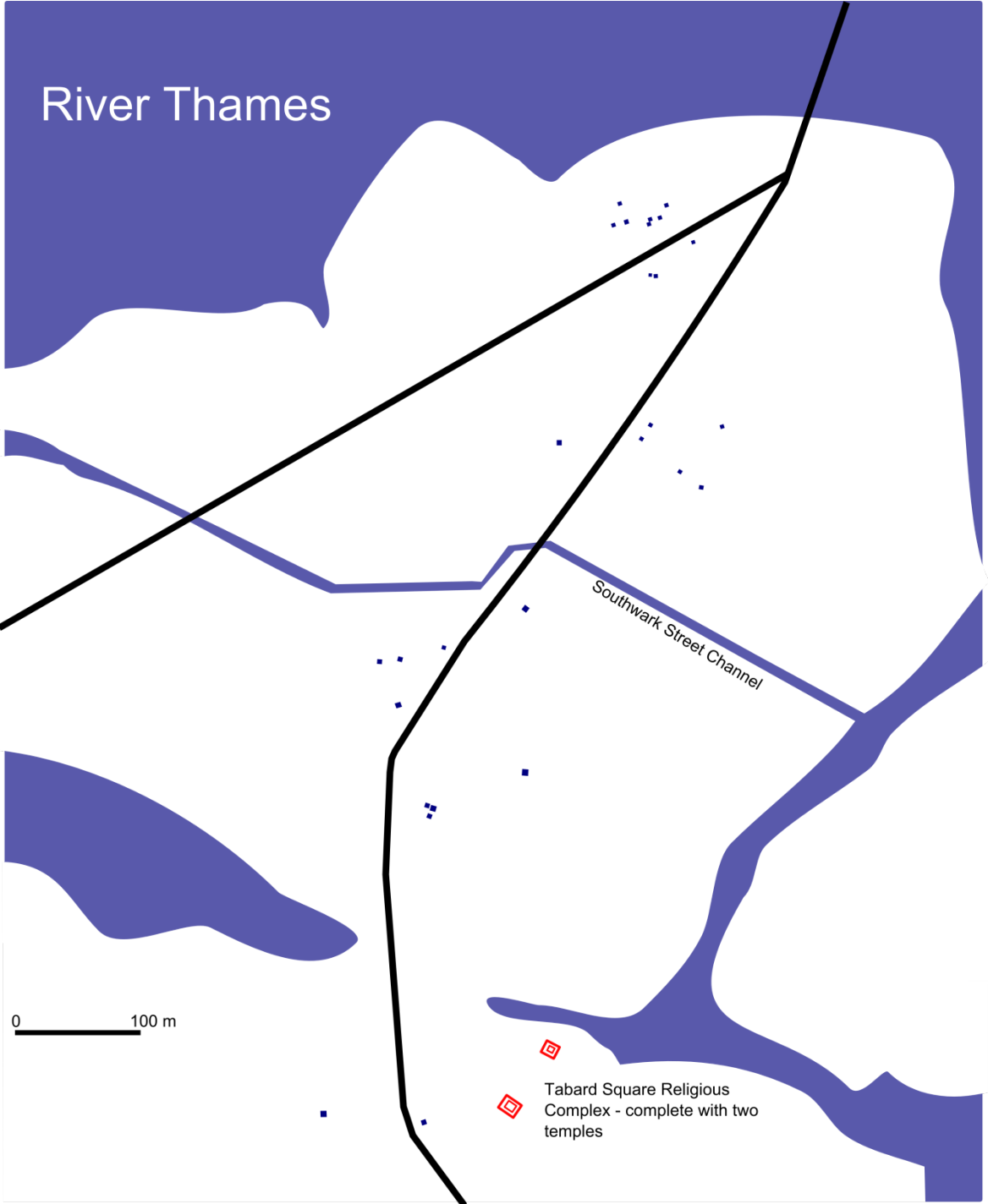




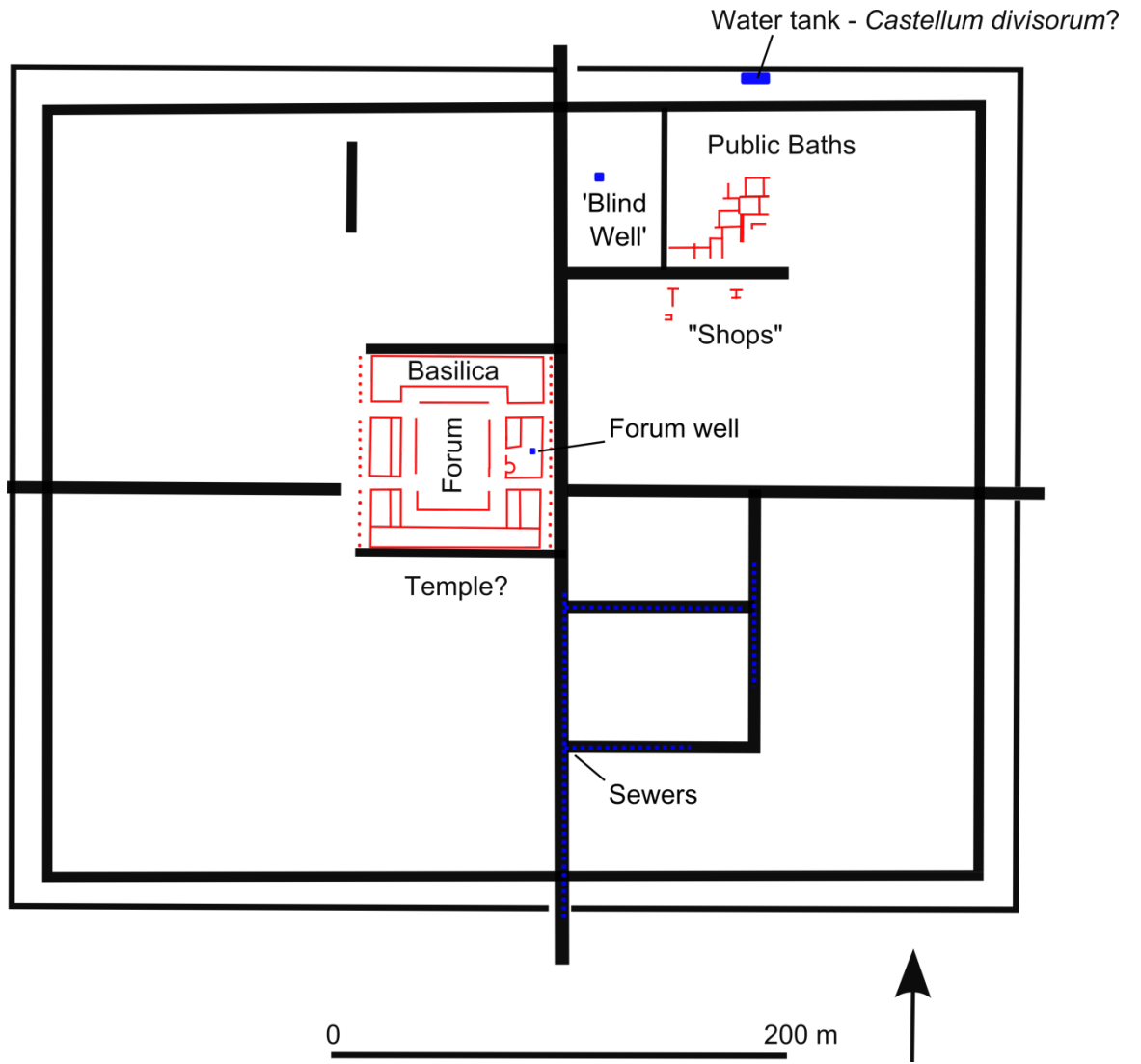
**Figure 35:** The shafts/well features discovered in the Greyhound Yard excavations in central Dorchester. The three enclosures may have held a ritual importance crucial to the significance of the surrounding urban infrastructure – including the nearby bathhouse (redrawn by author from Woodward & Woodward 2004).



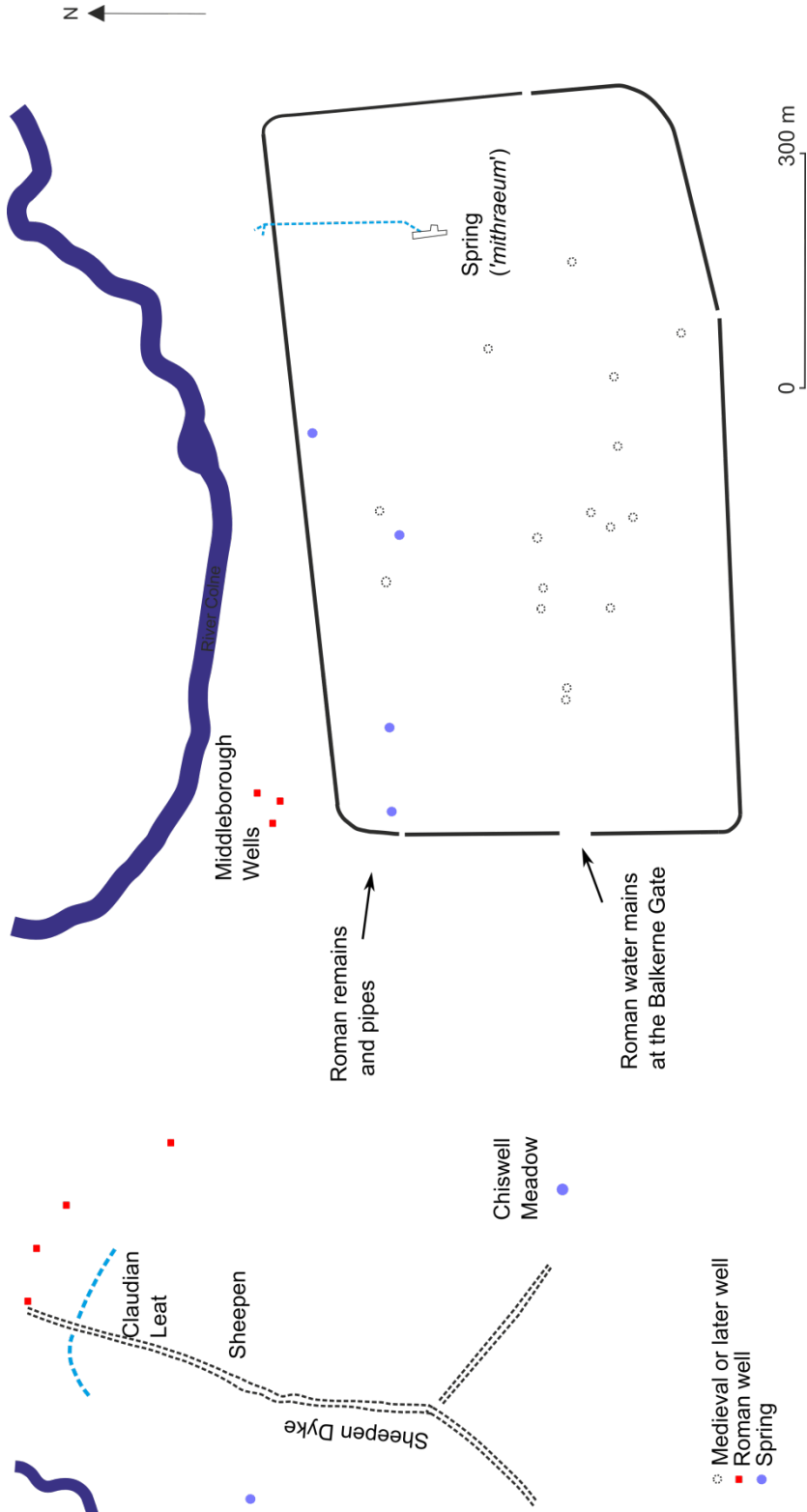
**Figure 36:** The Middle Walbrook with significant religious foci and water features – including the wells at Gresham Street and Queen Street (redrawn by author from Rowsome, et al., 2001)



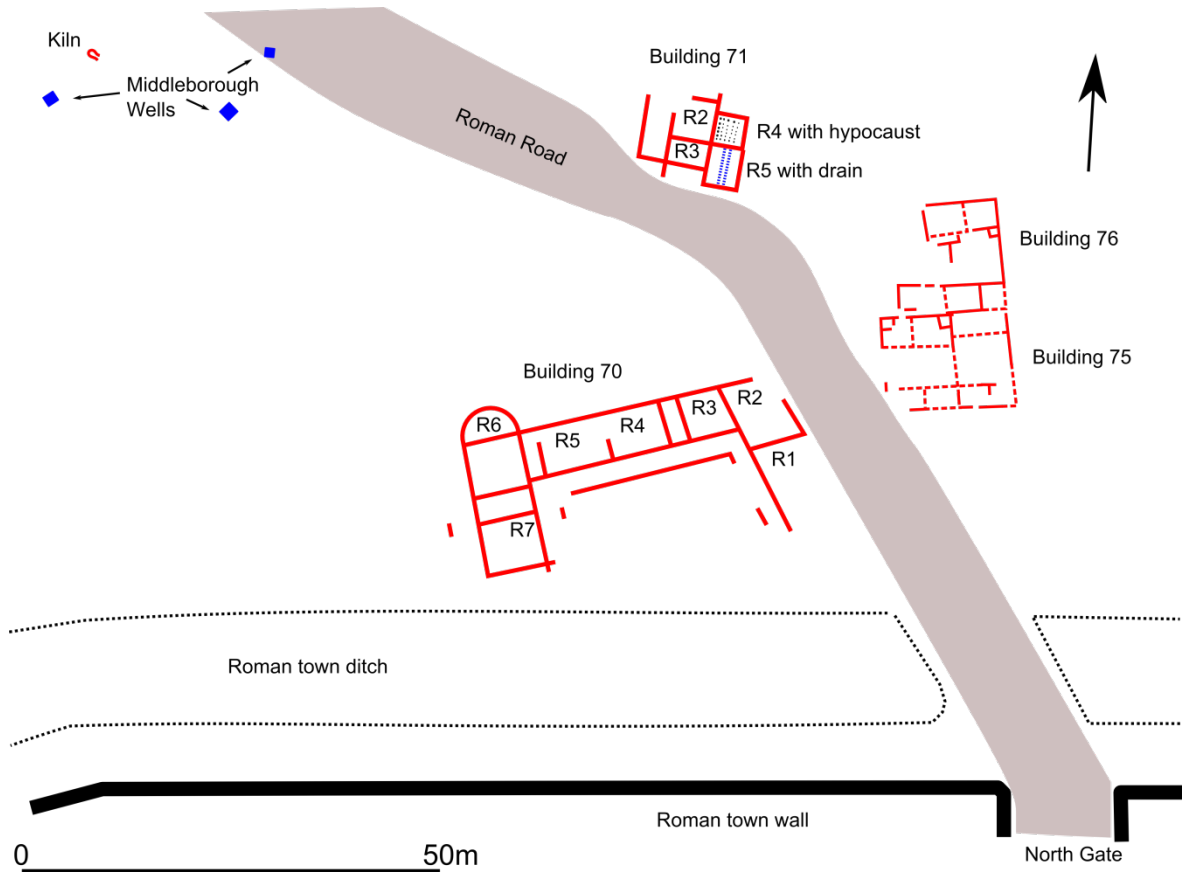
**Figure 37:** Plan of the Southwark islands showing known wells and their proximity to the main thoroughfare leading to the crossing of the Thames (redrawn by the author from Rowsome, et al., 2011).



**Figure 38:** Plan of the Upper City of Lincoln with primary water features (redrawn by author from Jones 2003).

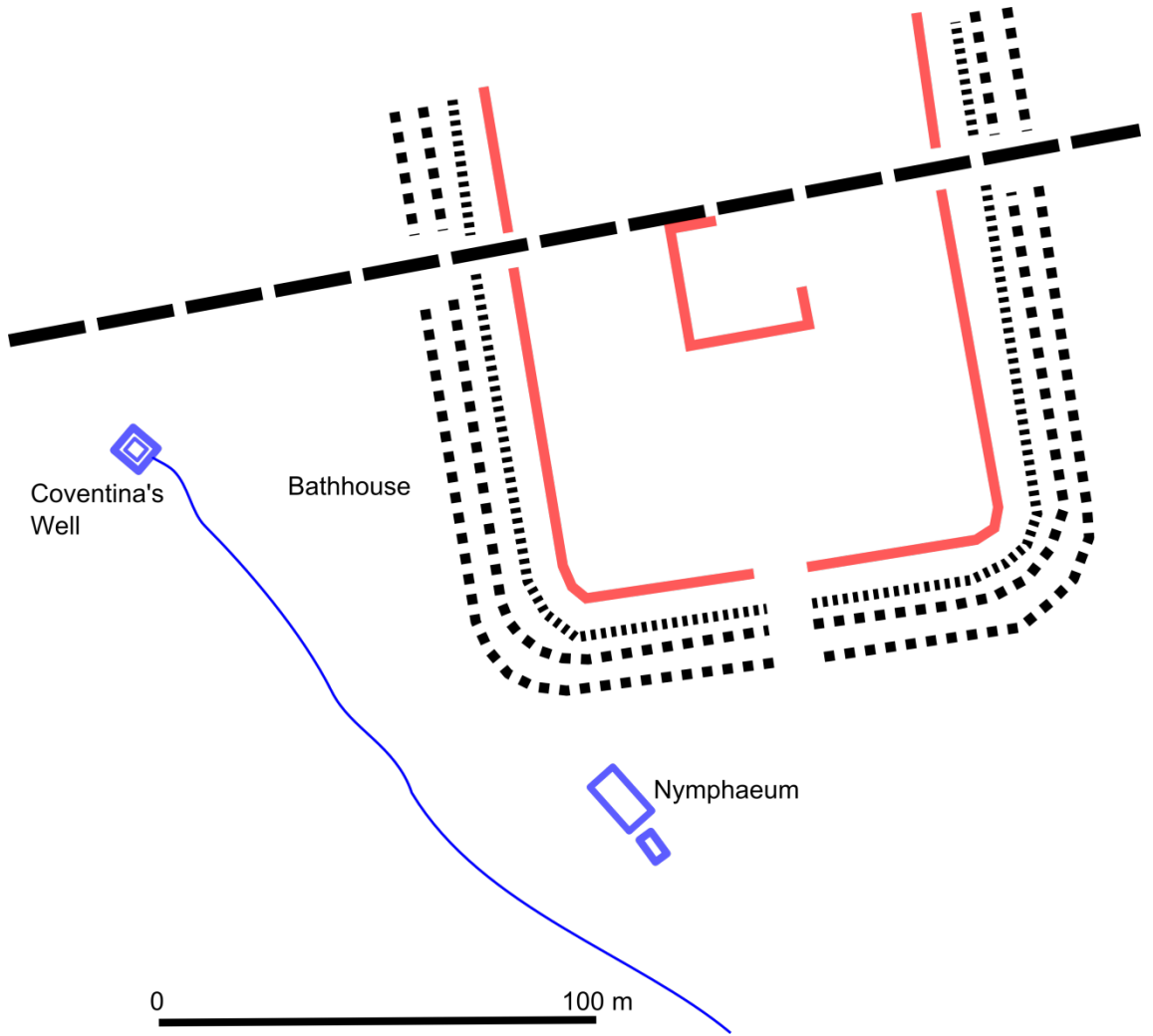


**Figure 39:** Plan of *Camulodunum* (Colchester) with primary water features in the town and surrounding area.



**Figure 40:** Middleborough wells, nearby buildings, and deviation of the road from the town gate (redrawn by author from Crummy 1984).





**Figure 41:** Plan of the Carraburgh fort with associated water structures (redrawn by author from Allason-Jones & McKay 1985).



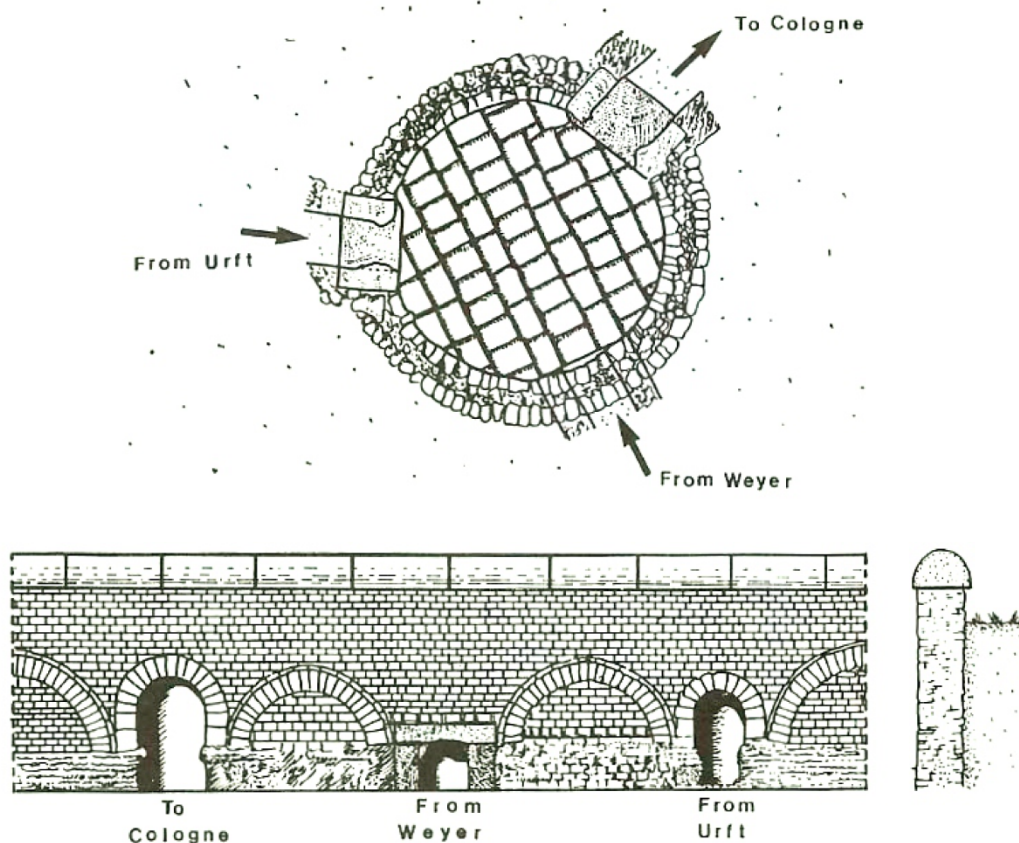
**Figure 42:** Depictions of aqueducts on Roman coins utilising the same imagery as used to present rivers.

*Top Left:* Reverse of an As of Caracalla depicting the water supply to the town of Neikeia Kilbanion (from Kowalewski, 2006).

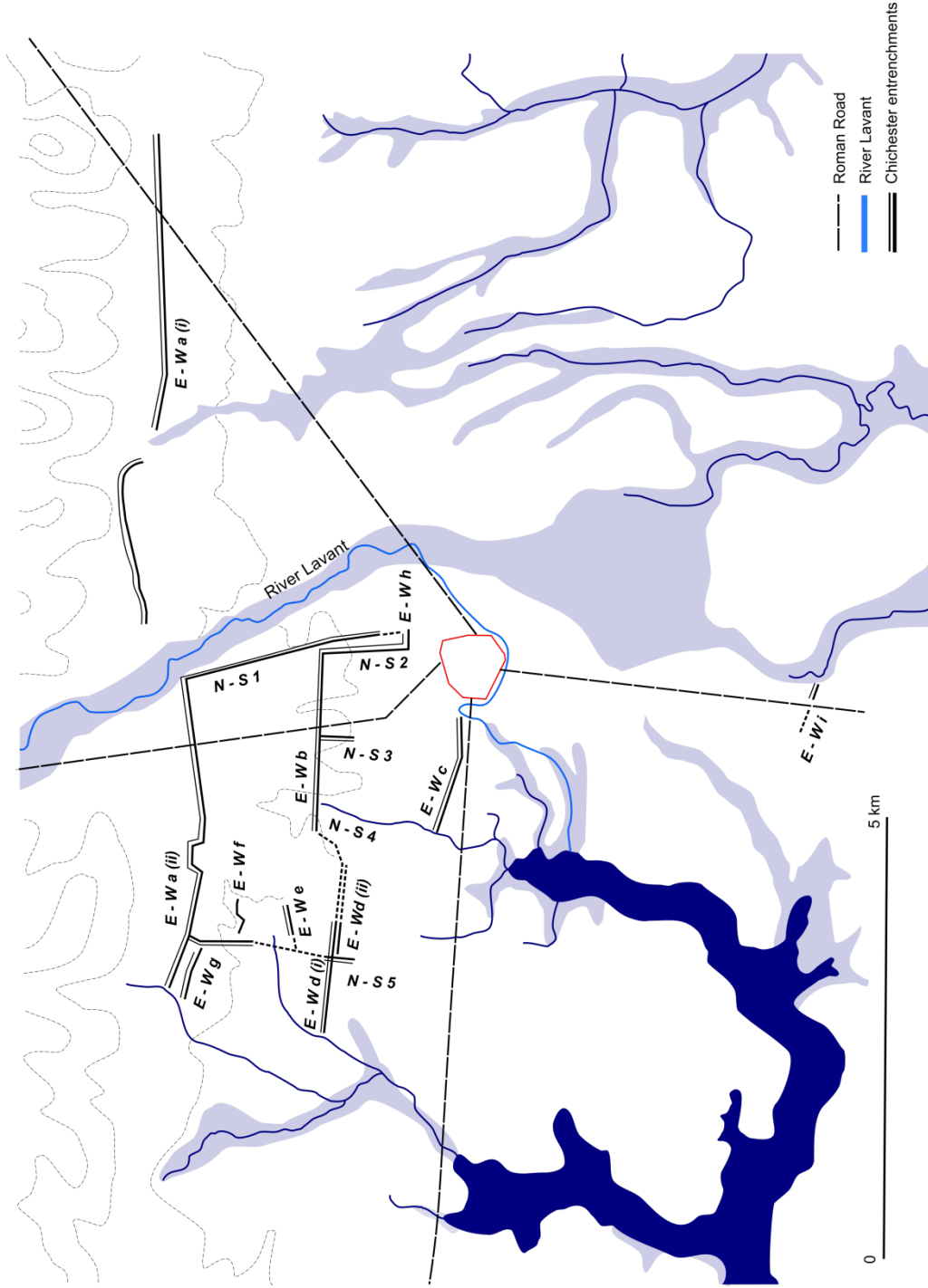
*Top Right:* Coin of Marcus Aurelius celebrating the inauguration of the Madradag aqueduct to the city of Pergamon.

*Bottom Left:* Reverse of a coin of Alexander Severus depicting the water supply of Dorylaeum (Phrygia) (from Price & Trell, 1977).

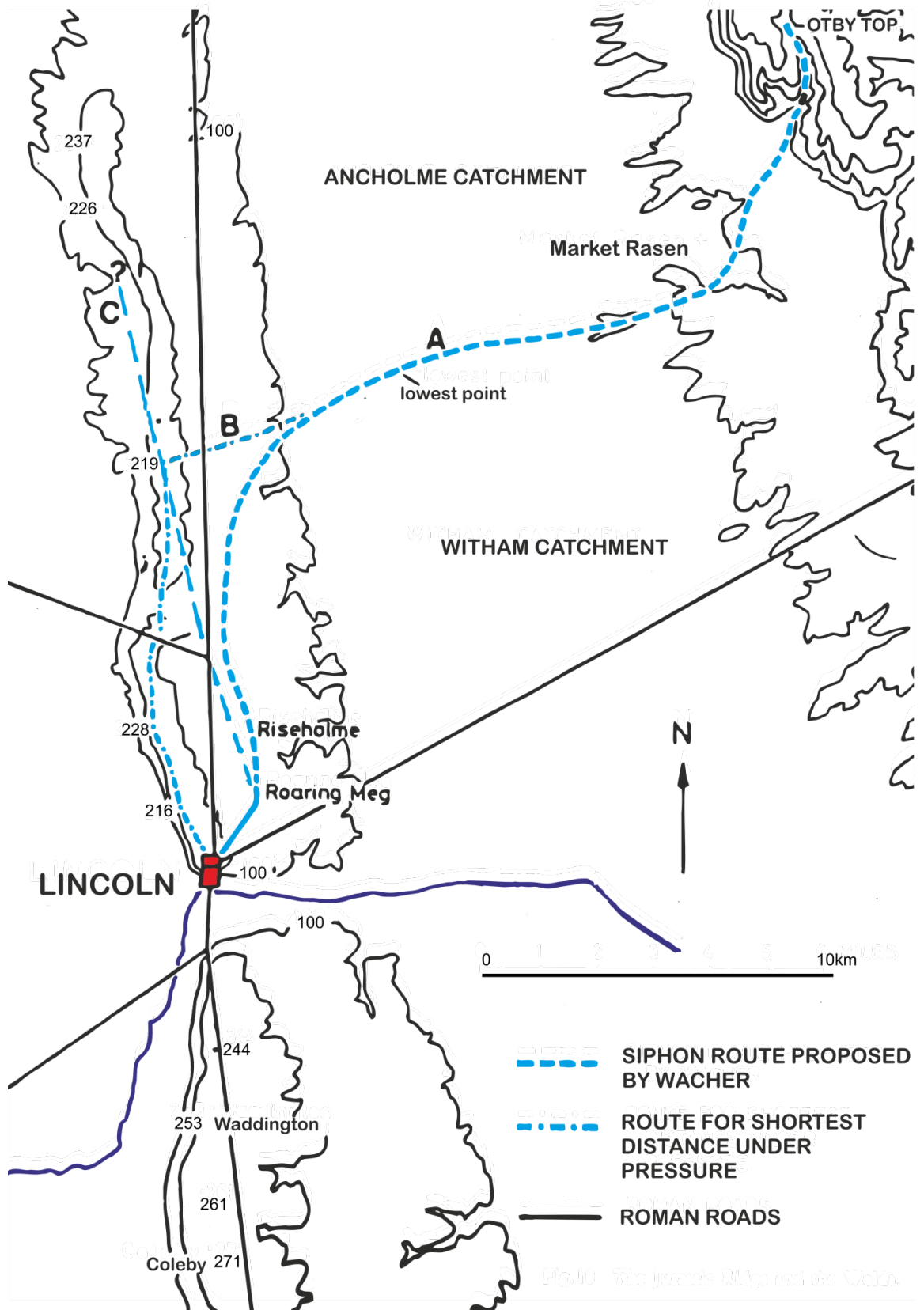
*Bottom Right:* Coin of Trajan depicting the Aqua Traiana of Rome (from Price & Trell, 1977).



**Figure 43:** The Eiserfey junction chamber and settling tank (of the Eifel aqueduct leading to Cologne). This plan shows the main line of the aqueduct (running from Urft to Cologne) being joined by a small branch line from Weyer. The whole tank was open to the air (from Hodge, 1992).

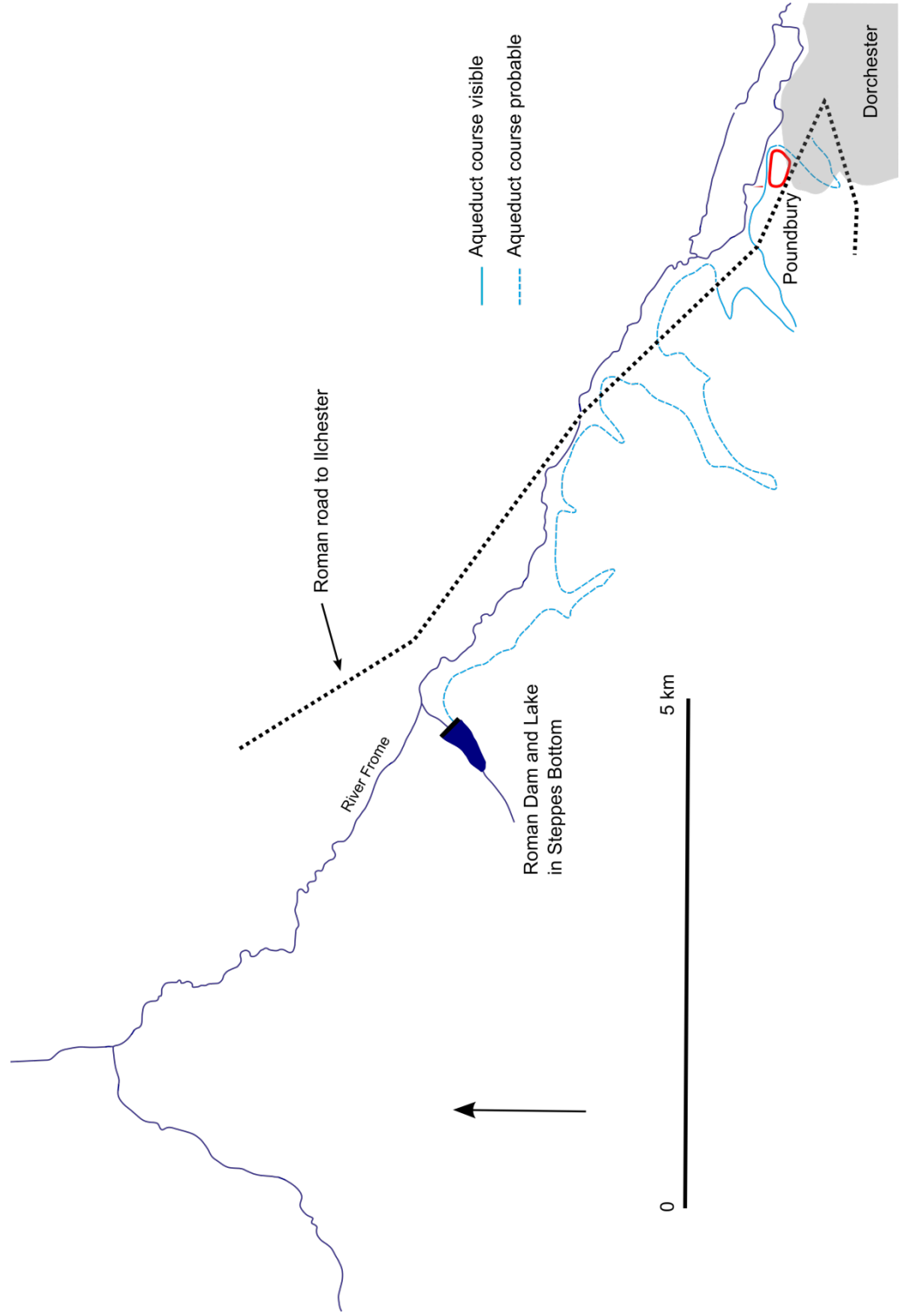


**Figure 44:** *Noviomagus* (Chichester) and its surrounding territory – including the Chichester Entrenchments (redrawn by the author from Bradley 1971).

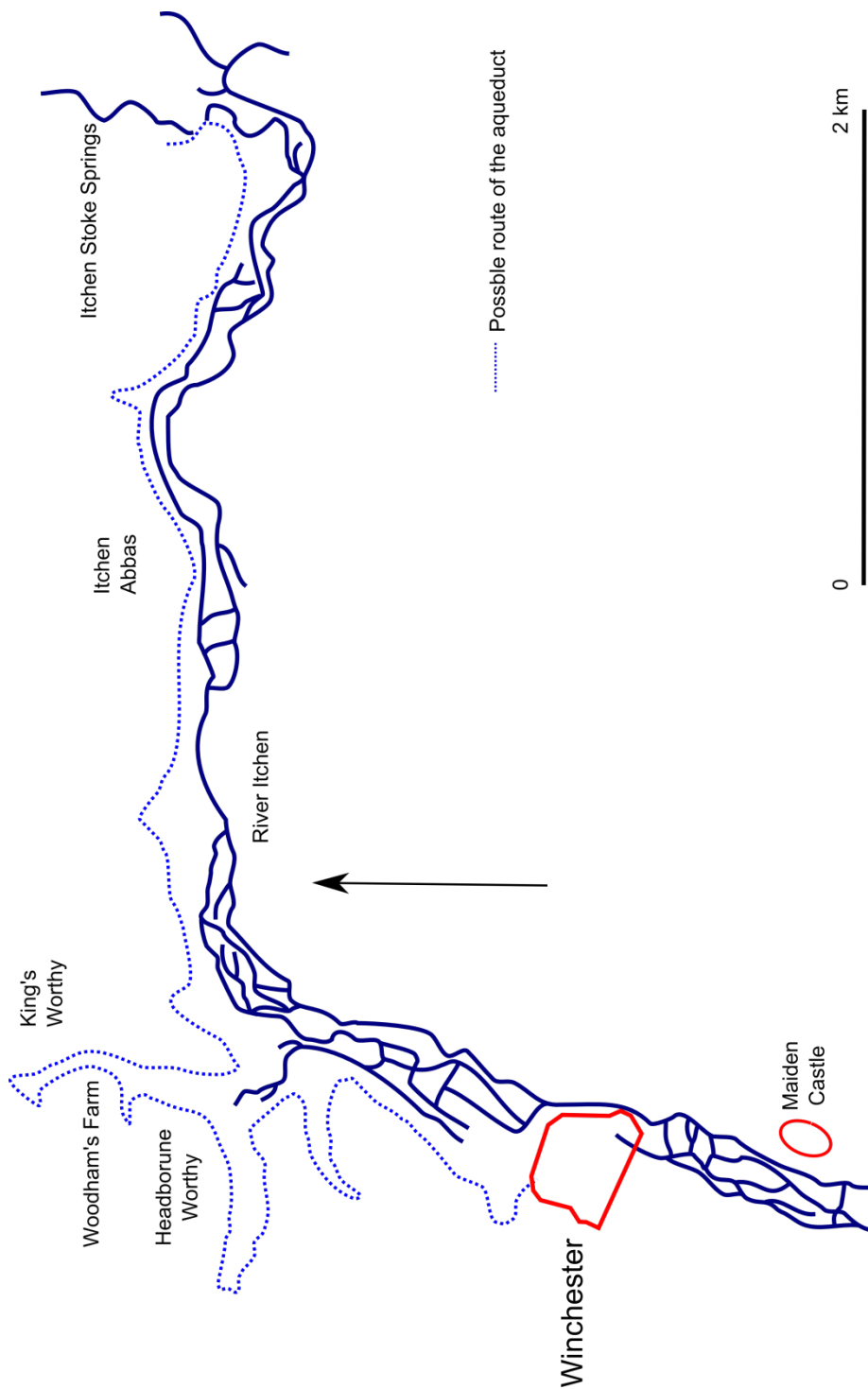


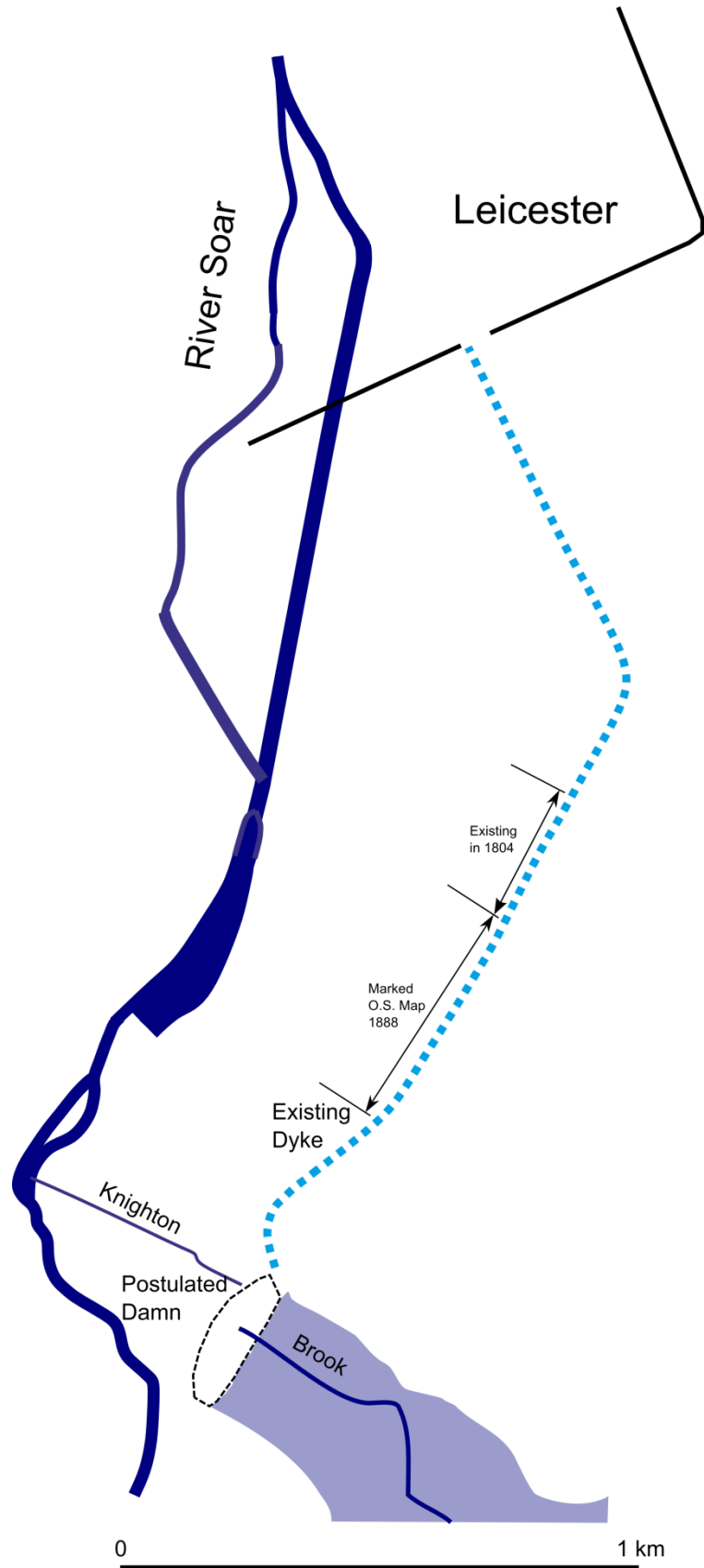
**Figure 45:** Differing interpretations of the source and route of the Lincoln aqueduct – A) Wachter, B) Lewis, C) Lewis (redrawn by author from Burgers 2001).

**Figure 46:** Source and route of the Dorchester aqueduct – with the notable circling of Poundbury Hillfort close to the town (redrawn by the author from Putnam 1997).



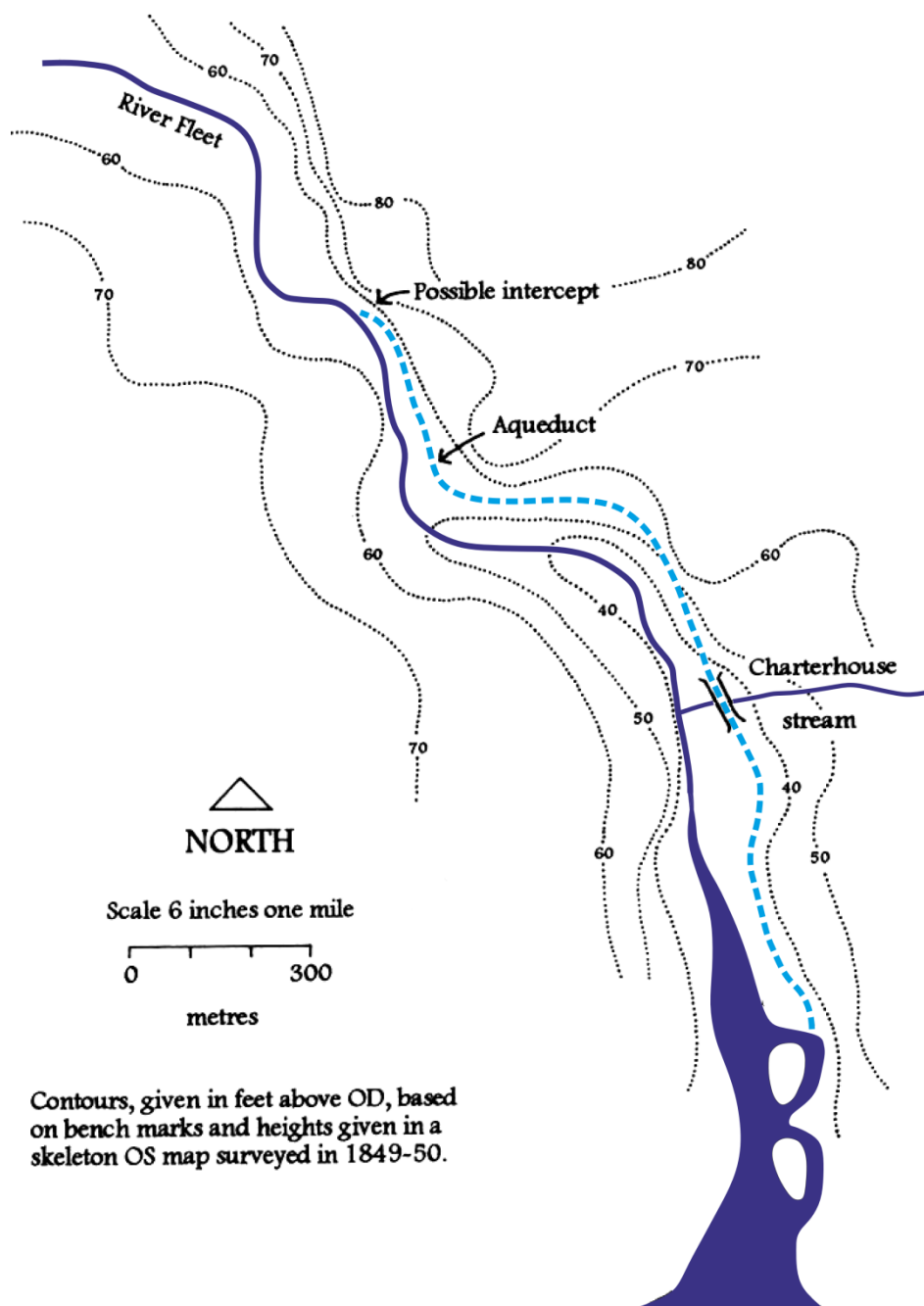
**Figure 47:** Possible route of the Winchester aqueduct in conjunction with the extensive braiding of the River Itchen (redrawn by author from Burgers 2001).





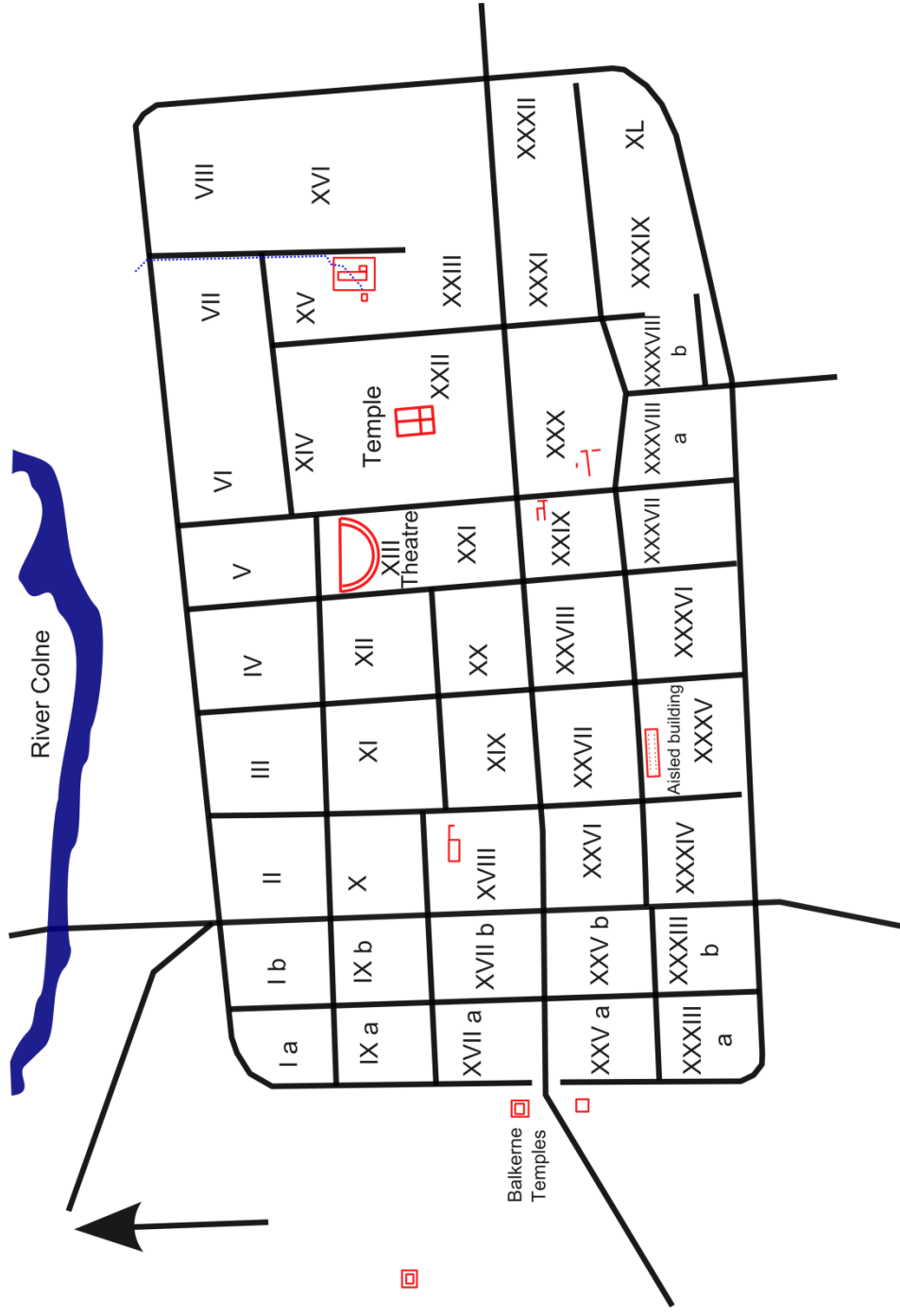
**Figure 48:** The Raw Dykes as a possible aqueduct leading water from the Knighton Brook to the South Gate (redrawn by author from Wachter 1995).

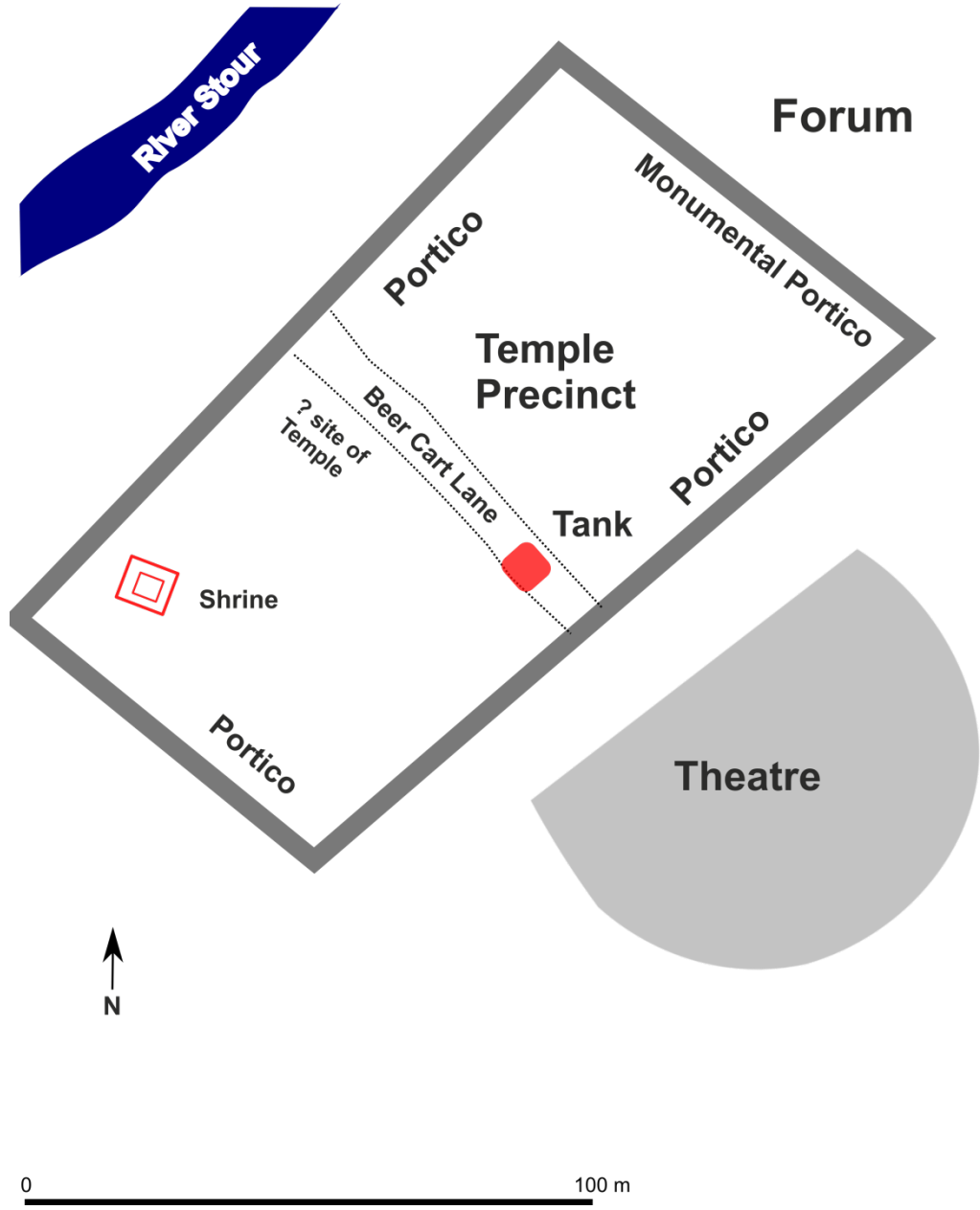




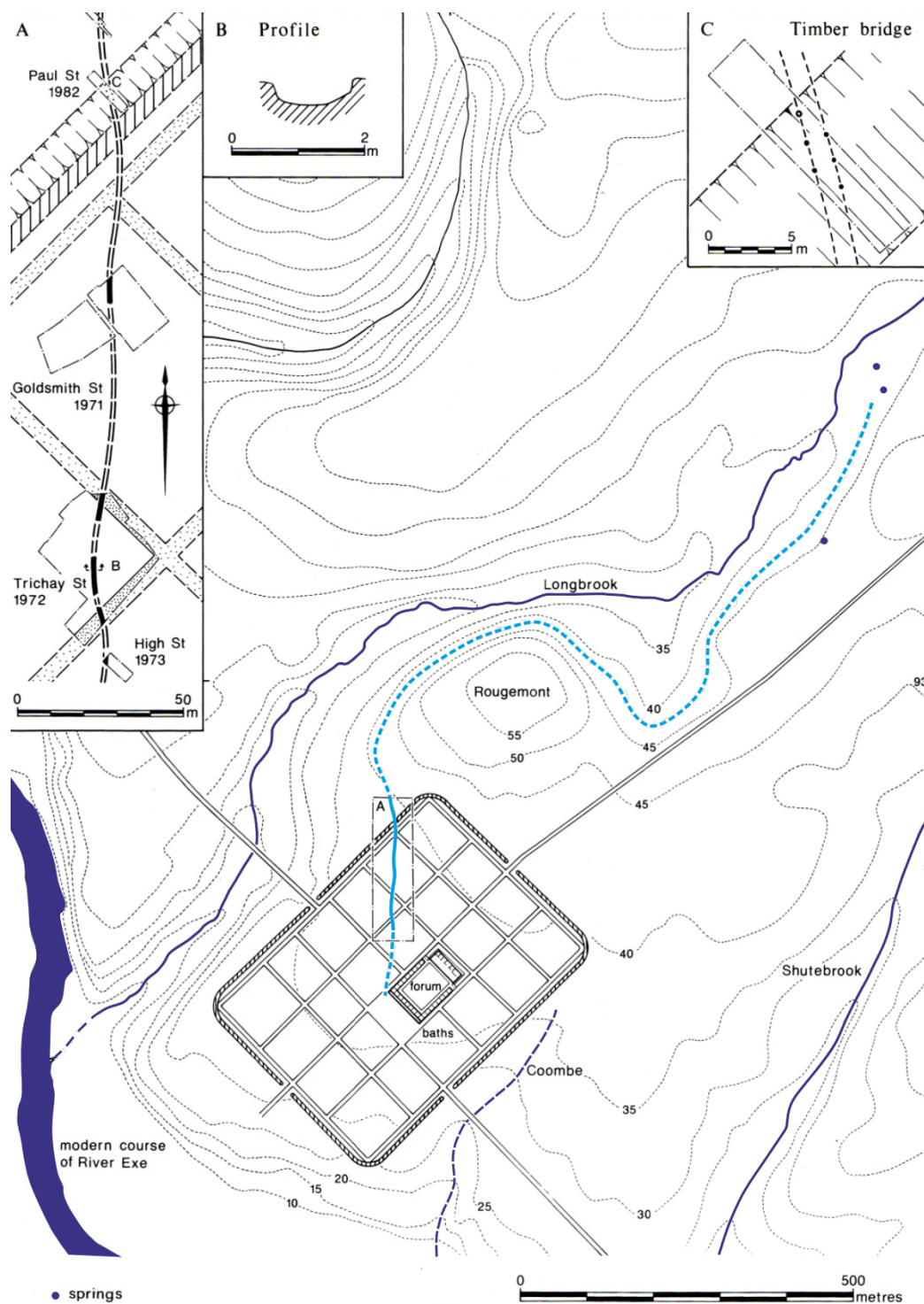
**Figure 49:** Course of the small aqueduct that may have diverted water close to the aforementioned islands in the mouth of the River Fleet (additions by author from Spain 2004).

**Figure 50** : Insulae of Roman Colchester with known monumental buildings (redrawn by author from Wachter 1995)

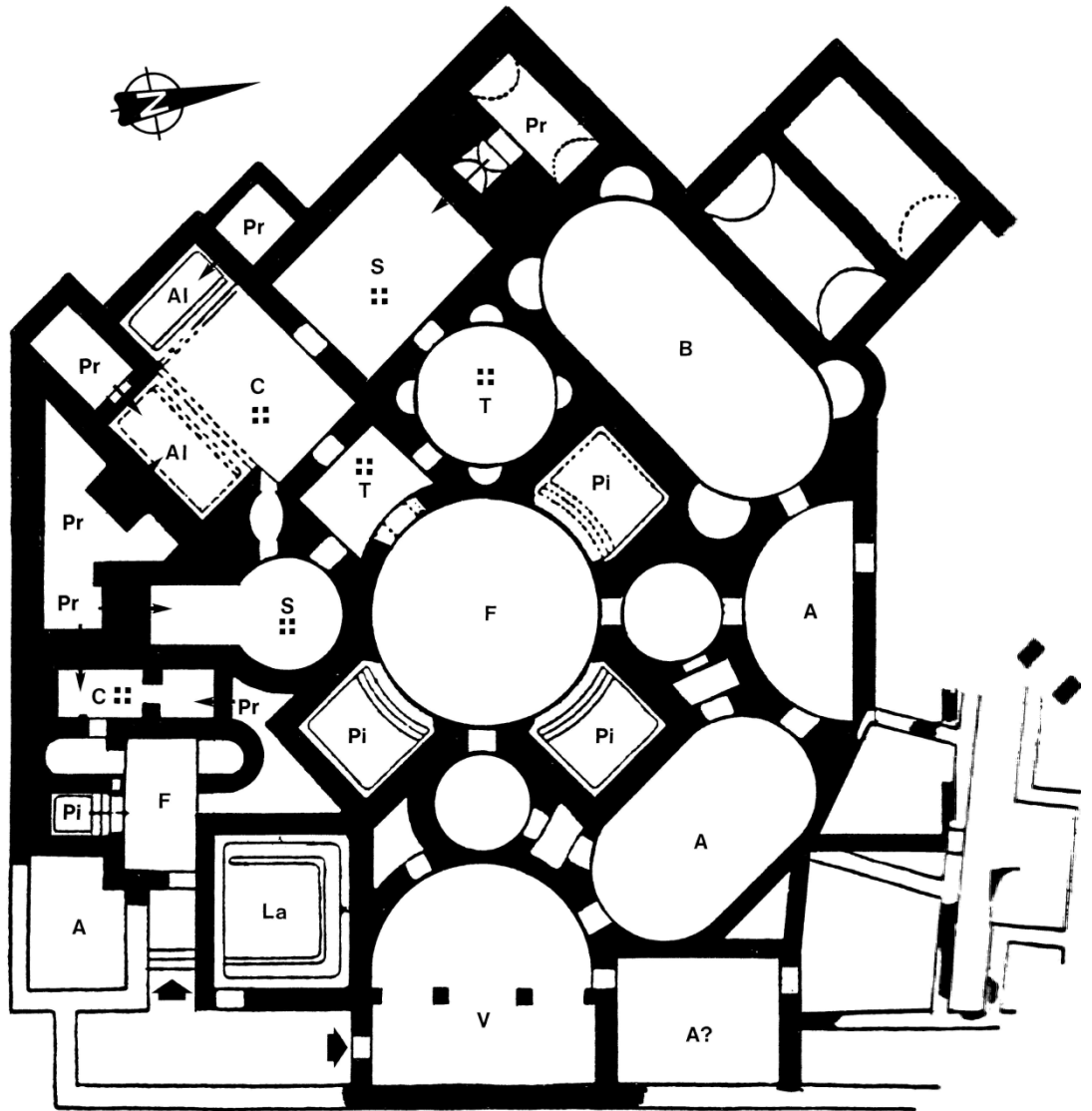




**Figure 51:** Plan of the Canterbury temple precinct with the tank discovered on modern Beer Cart Lane (redrawn by author from Bennett 1980).

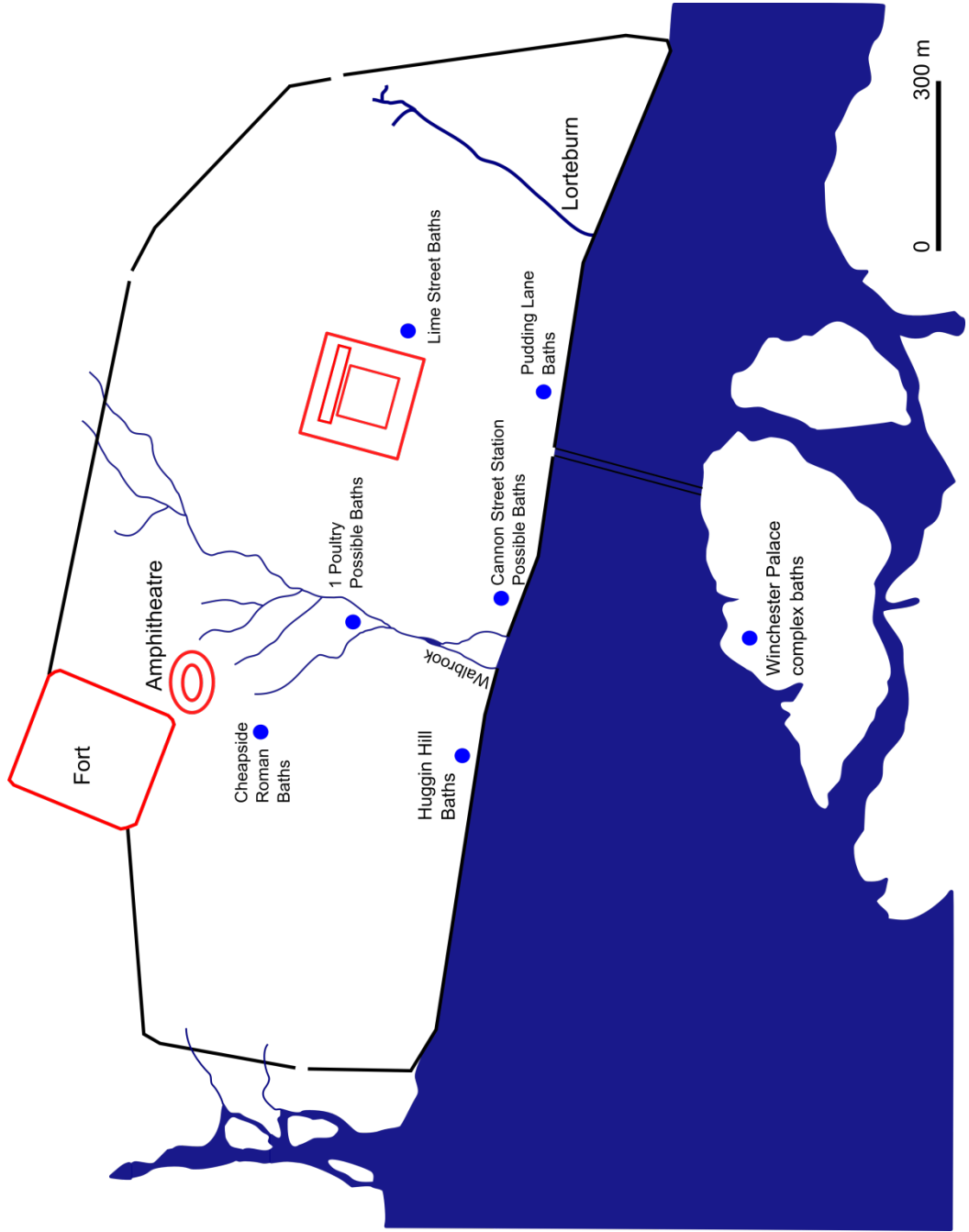


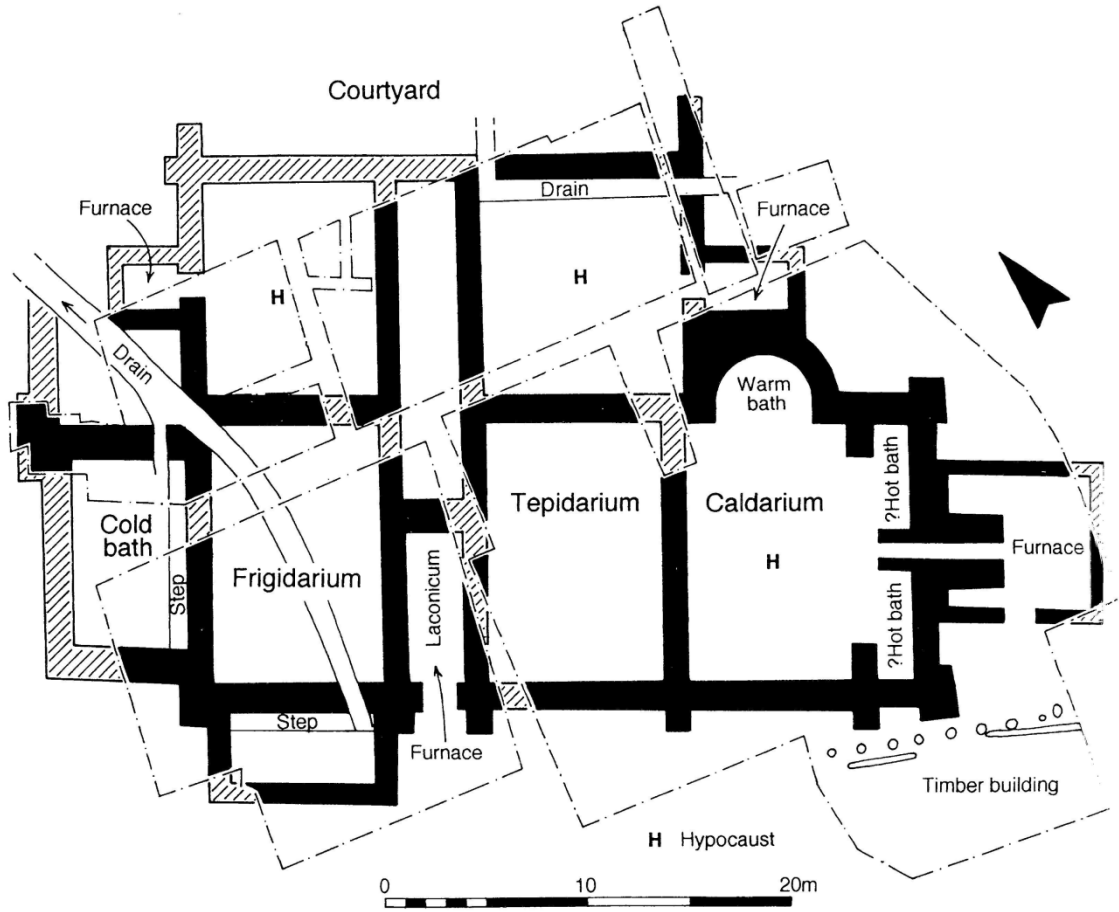
**Figure 52:** The course of the Exeter aqueduct and its deviation around Rougemont Hill (additions by author from Henderson 1988).



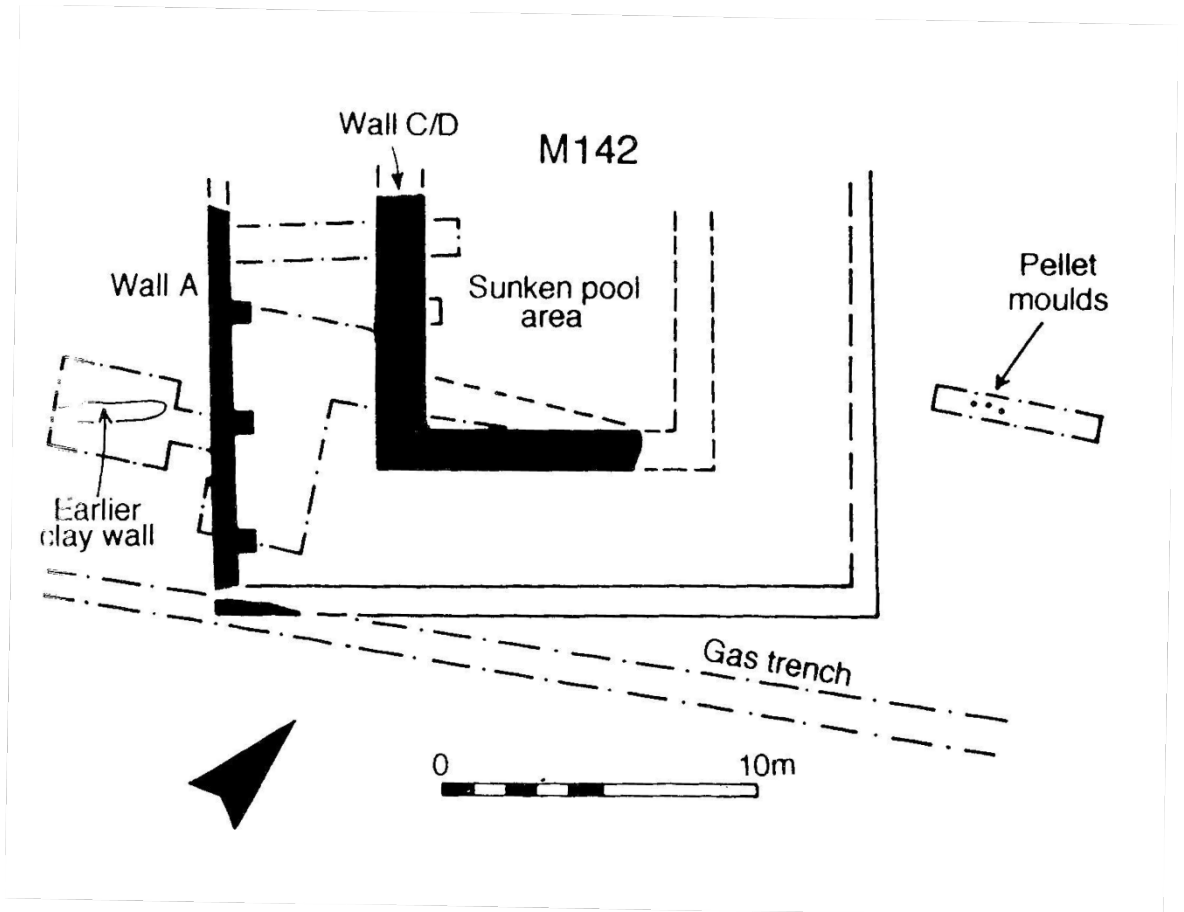
**Figure 53:** The Small Baths at *Thenae* – with their unusual formation around a central *frigidarium* (from Nielsen, 1993).

**Figure 54:** Location of *Londinium* bathhouses mentioned in the text (redrawn with additions by author from Rowsome 2008 and Rogers 2011)



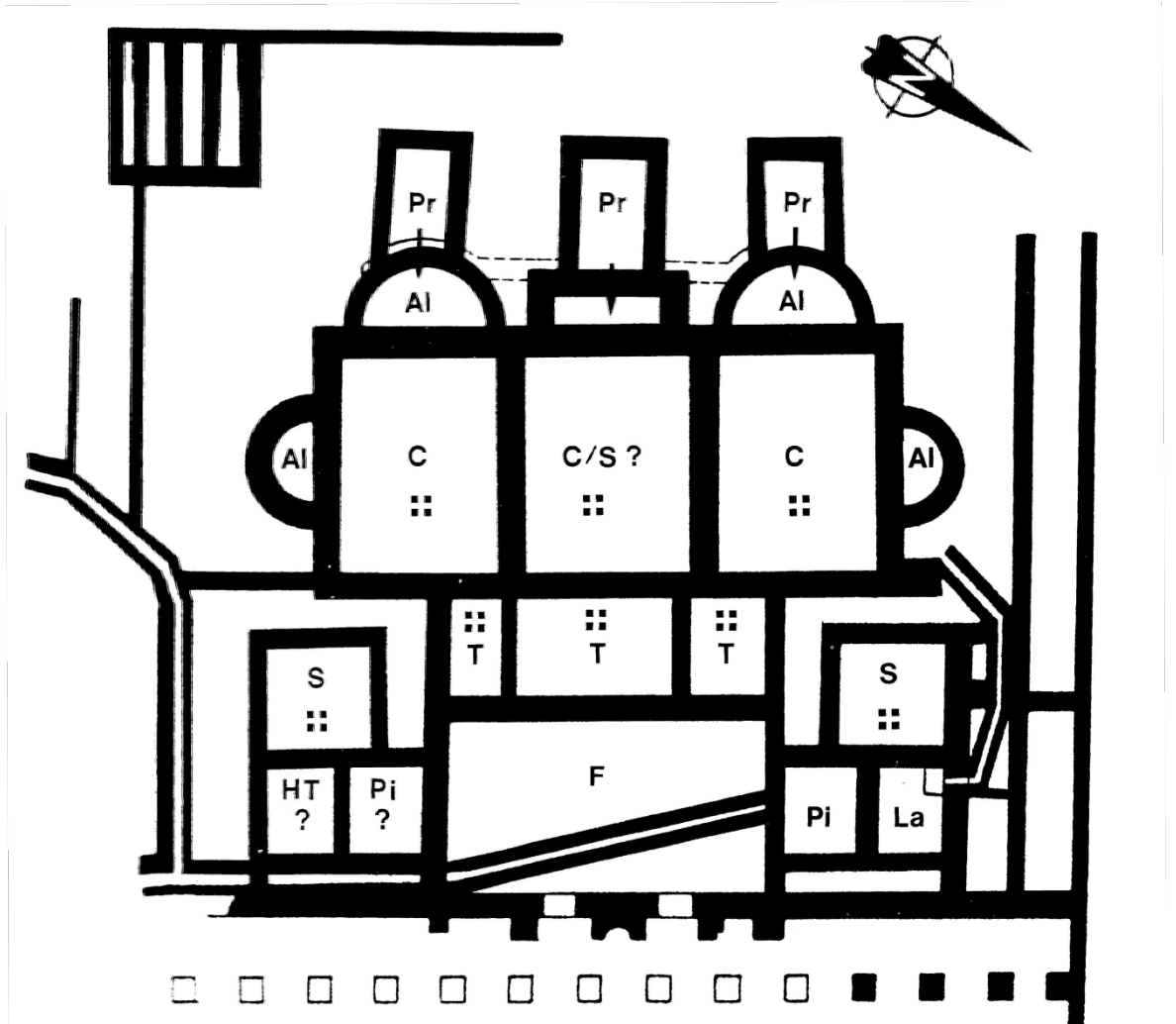


**Figure 55:** Plan of the Branch Road bathhouse (from Niblett 2001).

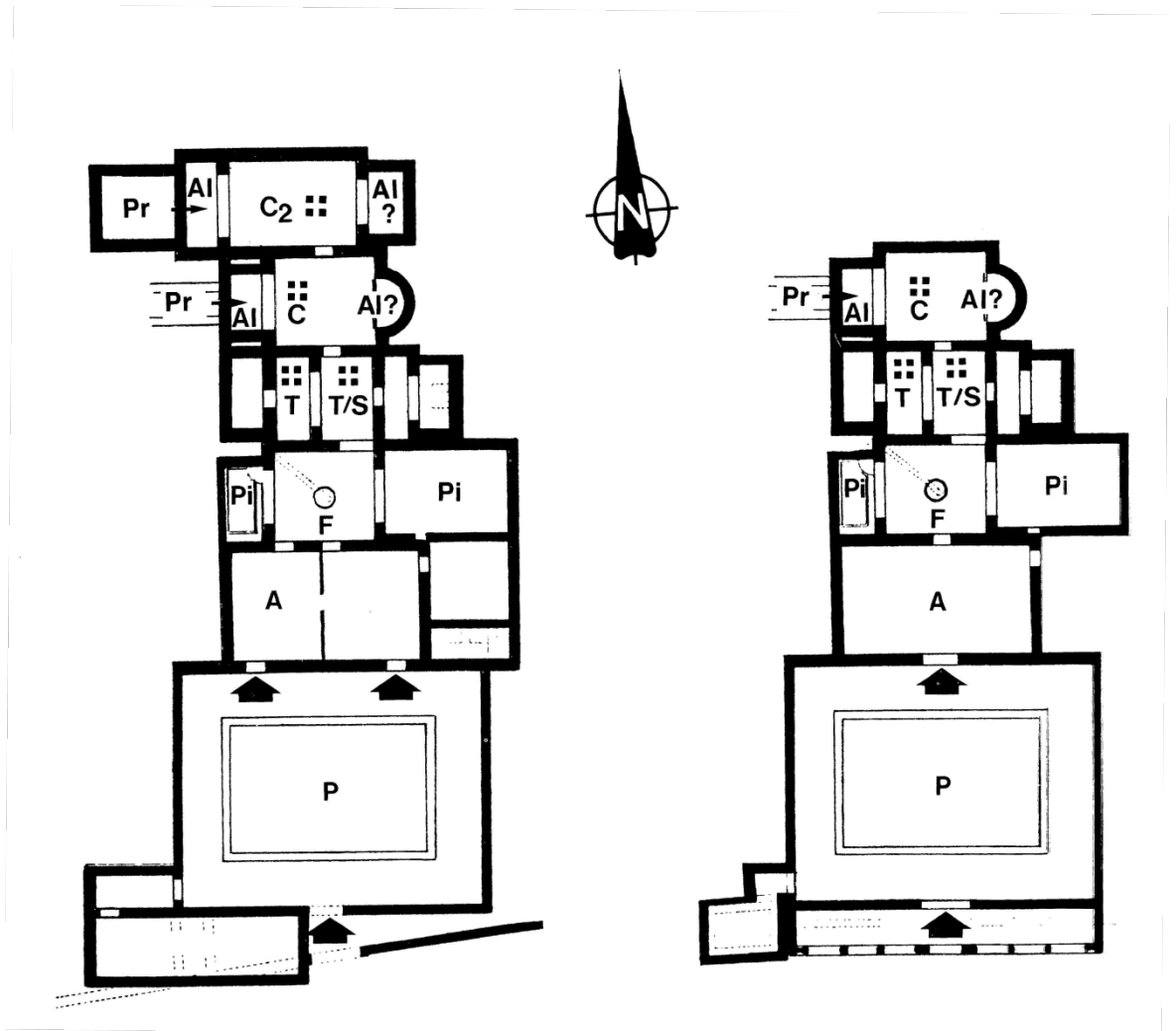


**Figure 56:** Sunken pool feature in Insula XIX that may have been a bathhouse (from Niblett 2001).



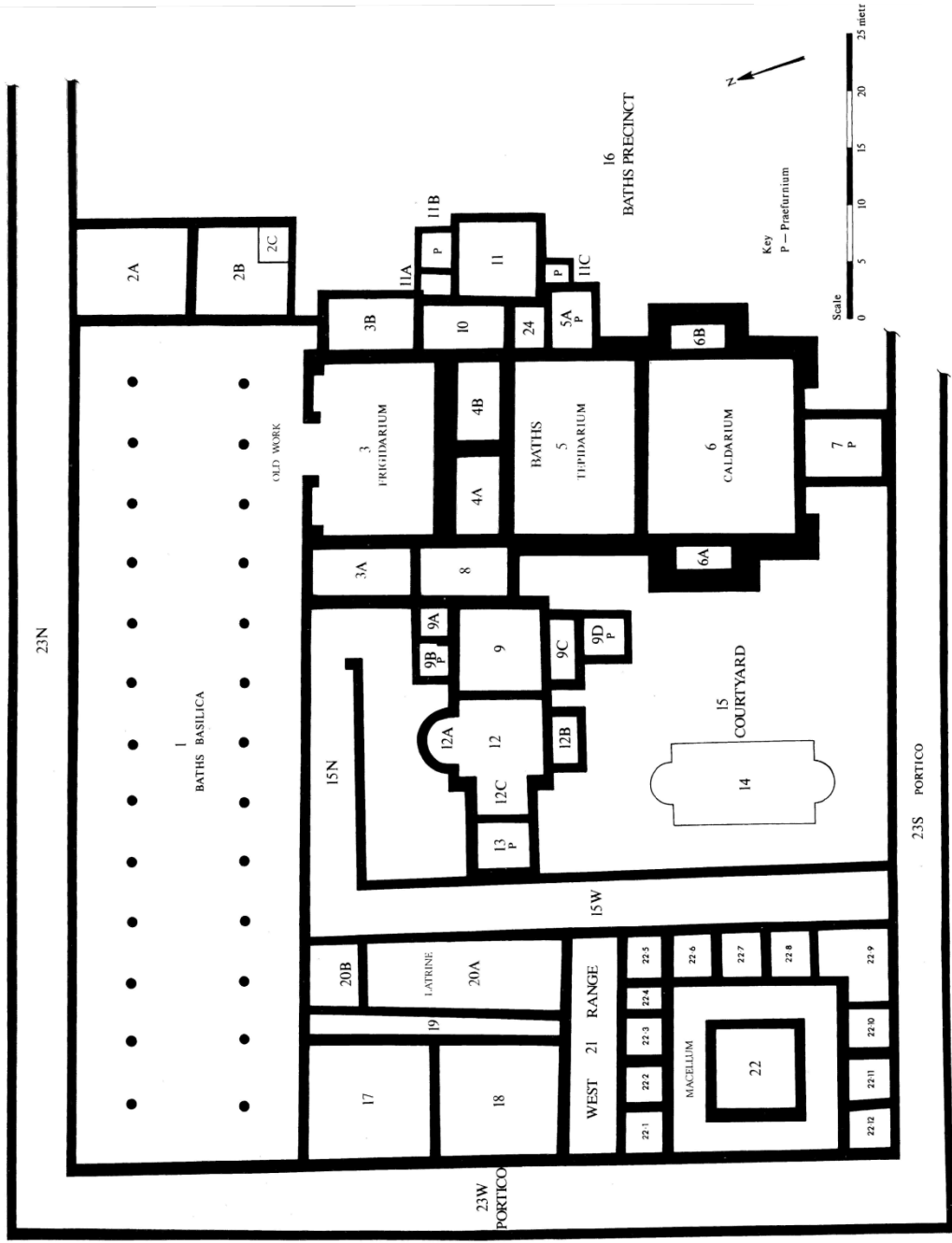


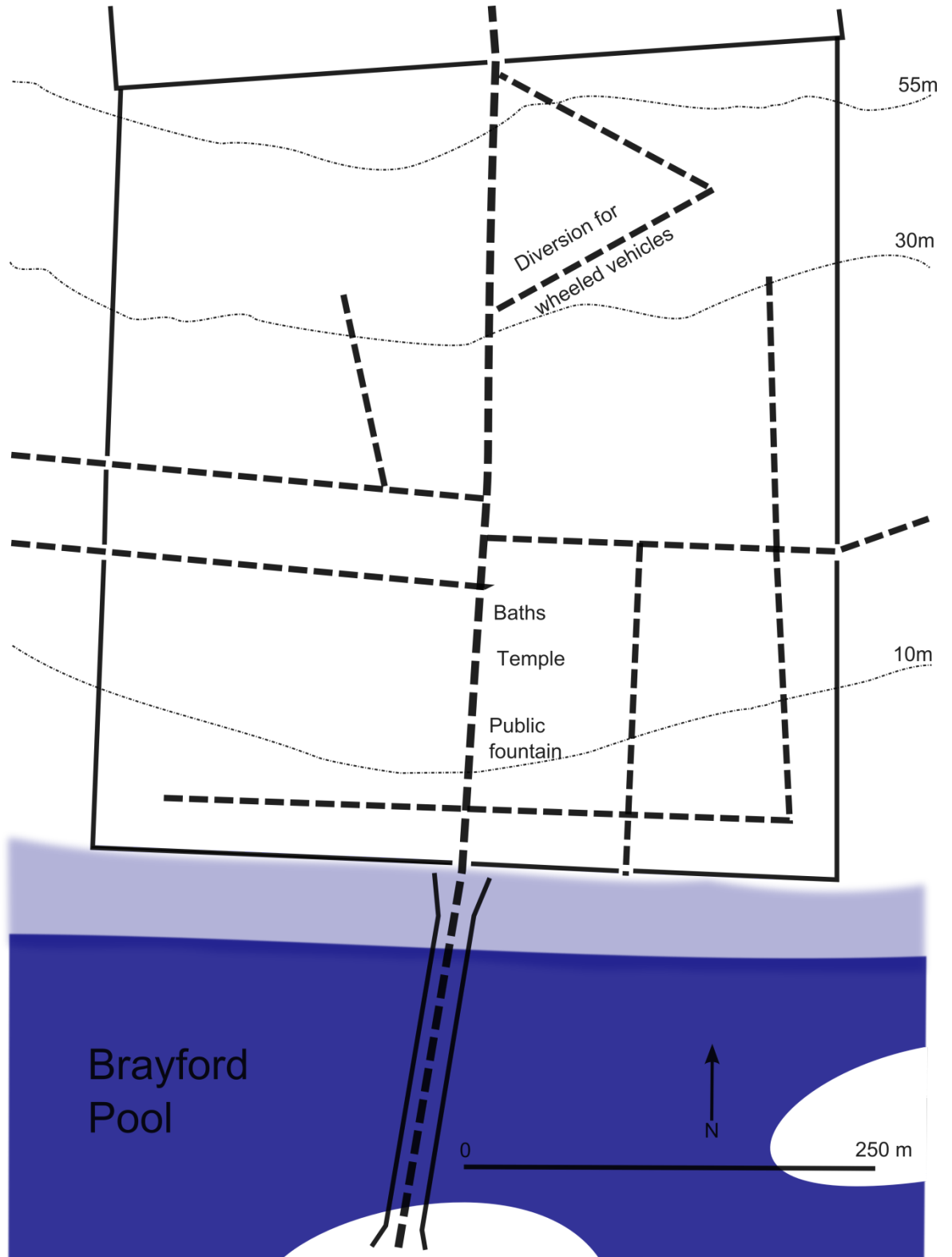
**Figure 57:** Plan of the Jewry Wall Baths at Leicester (from Nielson 1993).



**Figure 58:** Plan of the Silchester City Baths in phases I and III (from Nielson 1993).

**Figure 59:** Plan of the Wroxeter baths insula (from Ellis 2000).





**Figure 60:** Plan of the Lower City at Lincoln showing the possible location of a temple area, baths, and a prominent public fountain (redrawn by author from Jones, et al., 2003).