Chapter 6: Roding Bridge

Introduction (Figs 1.6, 6.1-6.2)

The site is located on the banks of the River Roding (also known as Barking Creek) approximately 1.4km north-west of the River Thames. The existing crossing of the River Roding represents the most recent truncation of deposits associated with the site. The early maps (Chapman and Andre 1777; Milne 1800) show the River Roding and the adjacent areas of marsh known as the East Ham Level and Barking Level (Fig. 1.6). The river is shown as having several braided channels at Barking; further downstream a single channel is shown. There is little or no occupation along the lower reaches of the river at this time. The nature of the river floodplain and the marginal land either side resulted in very little activity until well into the 19th century. By the 1900s the London, Tilbury and Southend railway line was constructed to the north of the site and the Northern Outfall Sewer to the south. Alongside the River Roding a road was constructed to Creekmouth and a few isolated buildings were associated with the road. Modern development of the area of the site has included industrial sites and workshops on either bank of the Roding, but much of the site remains undisturbed.

The Phase I evaluation involved the excavation of 5 boreholes (Rdar 1-5) along a 50m transect on the west bank of the River Roding (Fig. 6.1). A sequence of Holocene peat and clay silts occurred beneath 2m to 4m of recent fill (Fig. 6.2). The sequence superficially resembles the tripartite sequence found throughout the Lower Thames, with thin peat overlying Pleistocene gravel. No archaeological horizons were encountered and stratigraphic assessment did not reveal sedimentological indica-

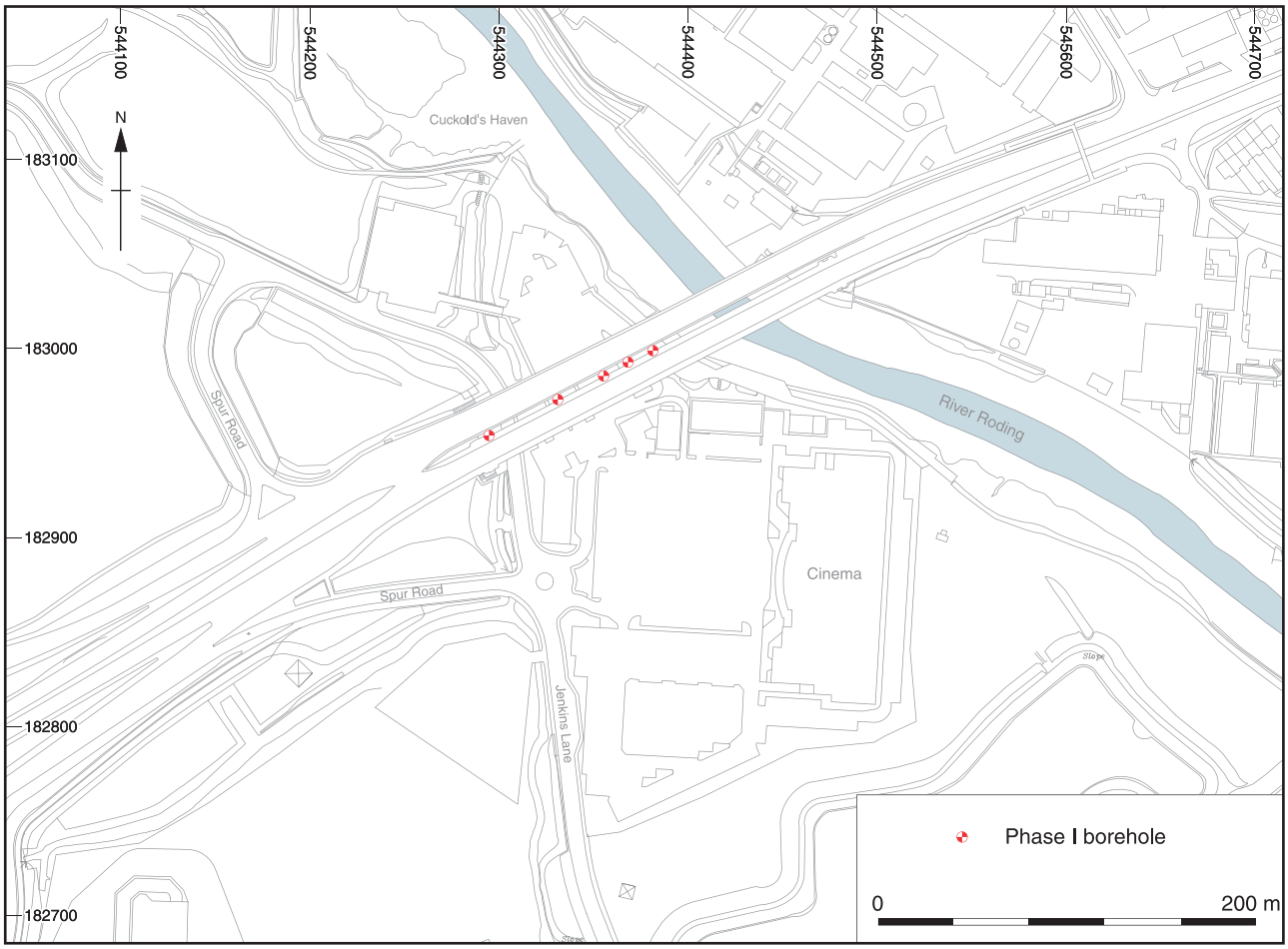

Fig. 6.1 Plan of archaeological interventions, Roding Bridge

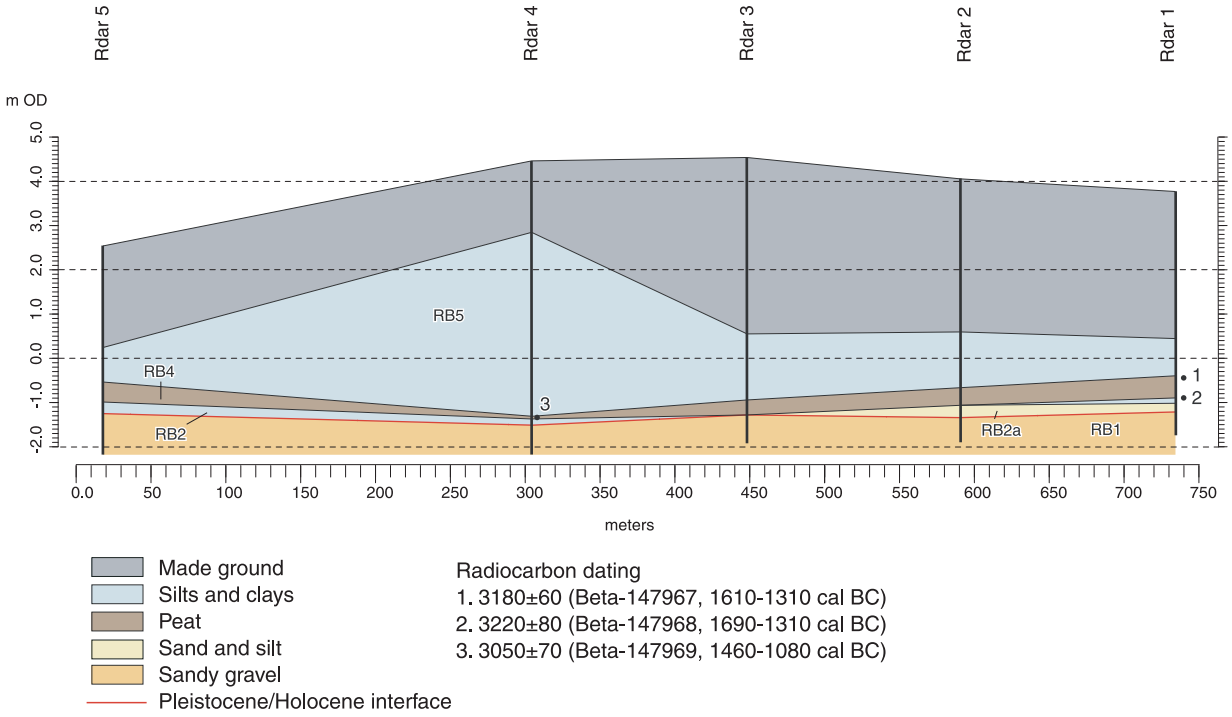

Fig. 6.2 Stratigraphical cross-section based on borehole data, Roding Bridge

tors of local cultural activity. The depths of recent fill and the relatively limited scale of impact did not warrant Phase II investigations. The results of the borehole assessment carried out during the evaluation are presented below. A limited programme of environmental work and radiocarbon dating was carried out from the cores retrieved from borehole Rdar 1.

Sedimentary architecture and environments of deposition

The pre-Holocene sediments and basement topography

Fluvial gravel (RB1)

At Roding Bridge poorly sorted coarse flint gravel grading upwards into sandier deposits lay between the Holocene soft sediment sequence and the London Clay bedrock. These deposits were only penetrated by around 0.5m to 1.0m by the purposive geoarchaeological drilling. These sediments typically accumulated in cold climate braided river conditions during the late Pleistocene. The height datums indicate that they probably correlate with the Shepperton Gravels which were deposited between 10,000 and 15,000 BP.

The early Holocene topographic template

A major temporal unconformity is likely to be represented by the surface of the terrace gravel, in other words the early Holocene topographic template. The surface therefore represents the Mesolithic/Neolithic land surface. Examination of the shape of the template reveals relatively consistent levels of around -1.25m OD. Due to the relatively high elevations inundation of this land surface appears to have occurred later than other parts of the route, probably during the middle Holocene.

The Holocene sediments

Freshwater sand and clay silts (RB2)

This group of sediments directly overlay the Pleistocene gravel and consists of minerogenic sandy-silts or clay-silts becoming increasingly organic up-profile approaching the interface with the overlying peat. The fine-grained nature of the sediments suggests deposition in a relatively low-energy environment. Environmental remains were poorly preserved in the deposits examined in Rdar 1, although pollen was recovered from the lower sandier part of the sequence (RB2a). The assemblage was dominated by pondweeds which, together with spiked water millfoil, suggests a freshwater environment, perhaps adjacent to an active channel. The low values for trees and presence of plantains, including ribwort plantain, indicates it was probably a relatively open environment with grassland nearby. Pollen of the goosefoot family perhaps hints at saltmarsh environments in the vicinity, although the poor preservation compared to the other taxa suggests the freshwater component may better represent the actual conditions on site during deposition. Age estimates from the base of the overlying peat in

Rdar 1 suggests this lower alluvial sequence predates at least about 1700 cal BC.

Freshwater peat and organic silt (RB4)

This group of sediments are dominated by highly organic silt and peat which lay directly over the Pleistocene gravel, or the lower alluvium where present, and was sealed by an extensive unit of minerogenic alluvium. Although the peat was mapped as continuous across the site the maximum thickness was only around 0.5m, lying at elevations between *c* -0.5m and -1.4m OD. Differentiating between the different units of alluvium and peat, however, proved difficult as the alluvium was frequently quite organic. Localised units ascribed to this group vary from firm humified peats to peats containing well-preserved wood and twig fragments. Towards the west, in the vicinity of Rdar 5, the peat graded laterally into a peaty clay silt. The consistent presence of fine mineral material may imply frequent flood episodes. Radiocarbon age estimates from the base and top of the peat in borehole Rdar 1 produced dates of 1690-1310 cal BC (Beta-147967: 3220±80 BP) at -0.90m OD and 1610-1310 cal BC (Beta-147966: 3180±60 BP) at -0.60m OD. Pollen was generally poorly preserved although suggestive of an alder carr environment.

Estuarine clay silts (RB5)

This sedimentary complex is dominated by minerogenic clays and silt containing variable quantities of organic material. This group of deposits typically underlies the 19th century made ground and post-dates about 1300 cal BC in the eastern part of the site (Rdar 1). The deposits contained zones dominated by laminated or bedded sediments and represent a period of inundation leading to the development of an intertidal wetland system. In Rdar 1 the sediments contained frequent brackish water ostracods (*Cyprideis torosa* and *Cytherura gibba)* and occasional freshwater species (*Candona* sp.). Unfortunately pollen was absent from these deposits.