

12 Thames Road, Barking & Dagenham

Site type: Deep Alluvial

Fieldwork: QUEST (2020)

GLHER Records: [Geoarchaeological Deposit Model at 12 Thames Street](#)

Proposed scheme

Construction of up to 5,086 sqm of industrial floorspace and up to 156 residential units and associated works. The development formed part of the Council's ambitious urban regeneration plans with an objective of assisting the delivery of 50,000 residential units over a 20-year period. Over the next five years, the Council's own programme aims to directly deliver over 2,700 residential units, of which over 70% are anticipated to be affordable.

Archaeological response

The site lies within the Barking Level and Dagenham Marsh Tier 3 Archaeological Priority Area. Barking Reach was once an extensive estuarine/marshland landscape, the remains of which can be expected to be found beneath modern made ground, with many instances of peat being recorded. In the early Holocene (Mesolithic) much of this landscape would have been dry but was gradually inundated by rising sea levels leaving the 'Barking Eyot', a now-buried large prehistoric island still attractive to human activity. Finds dating to the prehistoric era, particularly the Bronze Age, have been found nearby, especially within peat deposits, for example the Dagenham Idol and a large Bronze Age trackway (Ripple Road). Well preserved prehistoric features could be found with potential discoveries including boats, fish-traps and trackways, as well as artefacts and environmental evidence.

Initial assessment indicated that the site lay on or close to the Barking Eyot. Four geoarchaeological boreholes were put down to supplement existing borehole data from the area and refine previous deposit models. Samples were recovered for radiocarbon and Optically Stimulated luminescence (OSL) dating and for assessment of pollen, diatoms and macrofossils.

On the western side of the site, the Shepperton Gravel surface was overlain by a tripartite sequence of Lower Alluvium, Peat and Upper Alluvium, capped by Made Ground. Peat formation was recorded as taking place from the early Neolithic (5910-5740 cal BP) to late Bronze Age (3450-3230 cal BP). During this time, the peat surface was occupied by alder woodland with an understorey of grasses and sedges possibly forming reed-swamp and sedge fen type communities. Oak, yew and hazel

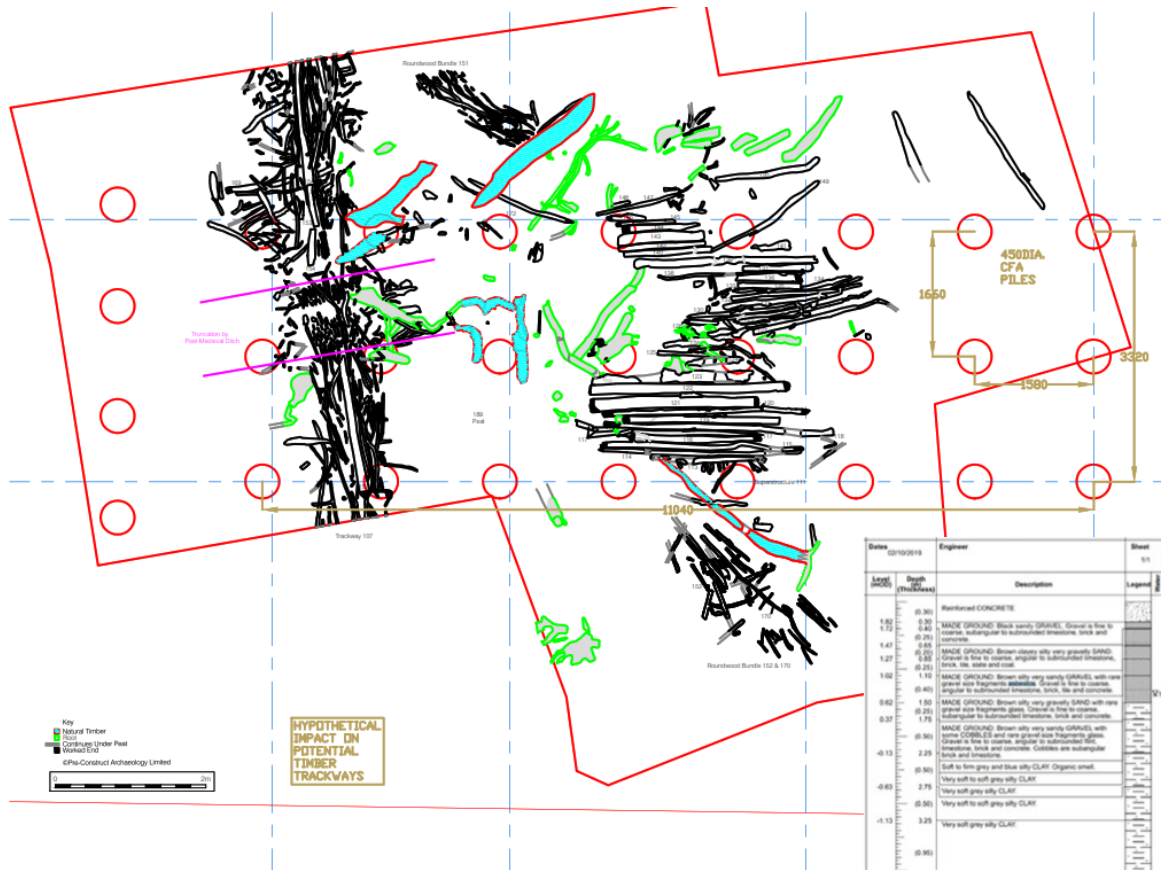
may also have occupied the peat surface, but could also have grown on the dryland, forming mixed deciduous woodland with lime.

The buried landscape on the eastern part of the site was different. The Shepperton Gravel is recorded at a lower elevation above which thick deposits of silts and sands are recorded. These deposits are interpreted as representing the formation of a sizable north-south aligned palaeochannel traversing the eastern side of the site. OSL dating confirmed that this entire sequence accumulated during the early medieval over a period of up to 260 years.

The diatom assessment indicates the presence of saline tolerant and freshwater species throughout the sequence, whilst the forams and ostracods record taxa from brackish and marginal marine environments. Thus the channel would appear to have infilled under estuarine conditions.

Outcomes

The geoarchaeological deposit model established that although the upper layers of the site were not of archaeological interest the lower deposits had high potential. Deep trial trenches were considered but the cost and delay would have been prohibitive for this social housing development. Instead a pile design was agreed using non displacement continuous flight auger (CFA) piles. With pile caps and ground beams retained in made ground and upper alluvium the only impact on archaeologically significant deposits was from a fairly low-density piling array, lift pits and a crane base. The impact of the piling array was tested hypothetically on two nationally significant assets of a type which might survive at depth; a timber trackway and a lithic scatter. Both assets would only have sustained a low level of harm enabling us to agree this approach to mitigation by design instead of archaeological investigation. A watching brief was maintained on the few deep excavations.



Hypothetical model of pile array impact on Beckton Bronze Age trackway

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