

Preliminary notes on sections of prehistoric waterlogged wood lifted from Crossrail excavations at the Plumstead Portal; Site Code XSW 11

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Background

The flood plain east of the City of London is well known for its waterlogged prehistoric deposits. In these deposits a range of structures of worked roundwood and timber have been found, mostly of the Bronze Age period. These structures occur mainly in peat and estuarine clay silts deposits. For example, a recent civil engineering project, the expansion of the A 13, exposed a number of such structures including trackways, platforms, bridges, fences and possible building walls. However, both these types of deposits are also well documented as containing natural deposits of fallen and water sorted round wood and timber. Typically wetland woodland seems to have colonised areas of the flood plain when the water levels were low enough only to be drowned and killed by rising water levels. Large trees fell apart slowly and sometimes whole groups of trees were blown over together into the increasingly soft and saturated bog or estuary shores growing up around them. The upper faces of lying logs are effected by extra decay, not being continually waterlogged which, combined with compression often gives the appearance of having been flattened somewhat by human action. When trees or boughs fall they may split or cause adjacent trees to split creating cleft surfaces resembling those made by deliberate human splitting, such as that needed for half logs for trackways etc. Finally, structures were also created by beavers where the tributary channels reached the main flood plane which have been mistaken for human constructions. These various natural events frequently create an impression of human activities and can operate along side true human workmanship creating a confusing picture which is the case with the assemblage of woodwork retrieved here.

Of course, the natural, mixed or totally artificial assemblages all have the potential to provided evidence of past extinct woodlands and dating for the deposits in which they occur.

The waterlogged wood as perceived *in situ* at the Plumstead portal

This writer had no involvement on-site but has been able to briefly converse with supervisor P. Askew and the project manager D Divers. The latter provided photographs of apparent 'posts', set c. 3m apart, being excavated in box sections. The former provided some provisional information as to the site conditions and level of truncation with some general information as to the full lengths of timbers for which only a short sample length could be lifted. At first glance the photograph of the excavation of possible 'posts' resembled similar photos of the excavation of small Bronze Age piled bridges found in the Thames flood plane (at Freemasons Rd, and

Ebsfleet). However, on the close examination of the lifted timbers this proved not to be the case, though different evidence of limited human activity was found (Below).

Quantification and recording

A total of 16 double wrapped items were passed to this author at the MoLA facilities. The bagged material was all opened, cleaned where necessary and examined in good raking light for cut marks or other signs of ancient working. Some of the material was wood sp ID samples which were listed, reduced to manageable size and re-bagged. Others sections of timbers or whole pieces of roundwood were examined thoroughly for working traces and natural shaping. Those naturally shaped or probably naturally shaped by tree fall, differential decay etc, were briefly recorded on pro forma 'timber sheets'. Whilst the humanly worked items were drawn to scale and recorded in full on timbers sheets, with one half log [36] being reserved for detailed photography prior to discard. All the material was provided with a wood sp Id or tree ring samples which can also double as a C14 sample.

NB* Normally the timber number is sufficient to label a wood sample, sample numbers only being required where the item is treated as an inclusion within another context D. Saves having two numbers.

The limited evidence of humanly worked material in the lifted group and classic examples of 'naturally shaped timber'

What appears to have been a possible plank-like cleft timber stake during the excavation, timber [10] was closely examined and found to be a fragment of wind torn timber from a large tree (Prob alder?). The section comprised a thin tapering slice of sapwood and thick bark up to 240mm wide by up to 80mm thick and 0.75m long. It tapered to a feathered edge tip of sapwood and bark, with no cut marks visible.

However, lifted half log end [36] was not naturally broken but had one neatly bevelled end left from either cross cutting or felling with a metal axe. It was found set on its bark face with the flatter cleft side uppermost and had been c. 3m long (PA Pers. Com). The lifted section was 0.21m long by 175 mm wide and compressed down to c. 90mm thick. The smooth 'gob' cut was on the underside as found and had been heavily compressed by the overburden weight but very faint axe stop marks could be seen and traces of the uncut 'hinge' left at the end of cutting two opposed 'V's. The timber appeared to have been the end of a log deliberately split in half after being axe cut to length. Initially it seemed to bear faint traces of charring on the upper face but that is proved uncertain after washing. Such a cleft and trimmed log could have had many uses, with use in a trackway or platform being the most likely. This log end was drawn, sampled and set aside for further photography of the gob cut. Like most of the material lifted it was soft very fragile and had been pierced by later plant roots.

A section of partially decayed oak roundwood item [37], which was found in near vertical position apparently used as a stake, was also found to have traces of working of a kind. The tip may have been roughly cross cut with an axe and was certainly charred leaving a blunt point. Although decayed it would appear that the impromptu

stake had been made from a roughly cleft section of a small oak log where just over half the log was used. It survived 0.25m long by 80mm by 60mm.

We must also note that it is possible that other horizontal logs may also have been worked but no clear worked surfaces were found such as log [34] where the upper face was flatted apparently by decay.

In Sum

In sum, from the lifted woodworking evidence we must say there is clear evidence of human activity in the area examined but it appears to have been low key perhaps the remains of something like a temporary platform used during hunting or foraging trips into the wet carr type woodland and bog. This is also supported by the finding of heat fractured foreign stone (P. Askew, pers. comm). Unfortunately the tool mark survival is too limited to suggest a dating other than from the early Bronze Age to Iron Age on toolmark, condition and stratigraphic grounds. A small possibility for tighter dating lies in the existence of a sample of slow grown oak with full sapwood timber [31].

Further work

It is suggested that it would be useful to carry out microscopic Sp ID of the samples that were not clearly oak and to attempt a tree ring dating of the oak sample. Following that and other relevant work a full referenced, up-dated version of this report could be produced in c. ½ a day unless more evidence is revealed at the same site.