



**Arch-Manche**  
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# Extant Timbers at Hamble Yacht Services

## Site Visit Report



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### Summary

This report describes the initial site visit that has been undertaken by the HWTMA to the an area of the inter-tidal zone of the River Hamble following the reporting of exposed timbers. The site visit comprised a basic site assessment, production of a measured sketch of the site and the recording of essential characteristics of the timbers. Subsequent analysis has allowed the timbers to be identified as the remains of a flat-bottomed, chine-built barge of a type that was probably common in the Solent Region. Comparative examples demonstrating the same building tradition, located in similar environmental contexts have also been located and are described.

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## 1. Introduction

The Hampshire and Wight Trust for Maritime Archaeology (HWTMA) was contacted by David Evans of Hamble Harbour Authority (HHA) in mid-June 2012 to report that some large timbers had been further exposed and dislodged on the foreshore adjacent to Hamble Yacht Services (HYS) at Port Hamble (Figure 1). Archaeologists from the HWTMA made a site visit on 27<sup>th</sup> June in order to assess the exposed timbers. This visit had four main aims;

- To establish the extent and disposition of the exposed timbers.
- To attempt to identify the nature of the exposed timbers; hulked vessel, foreshore embankment, etc.
- To record the basic characteristics of the exposed timbers.
- To offer a preliminary assessment of the potential importance of the timber.

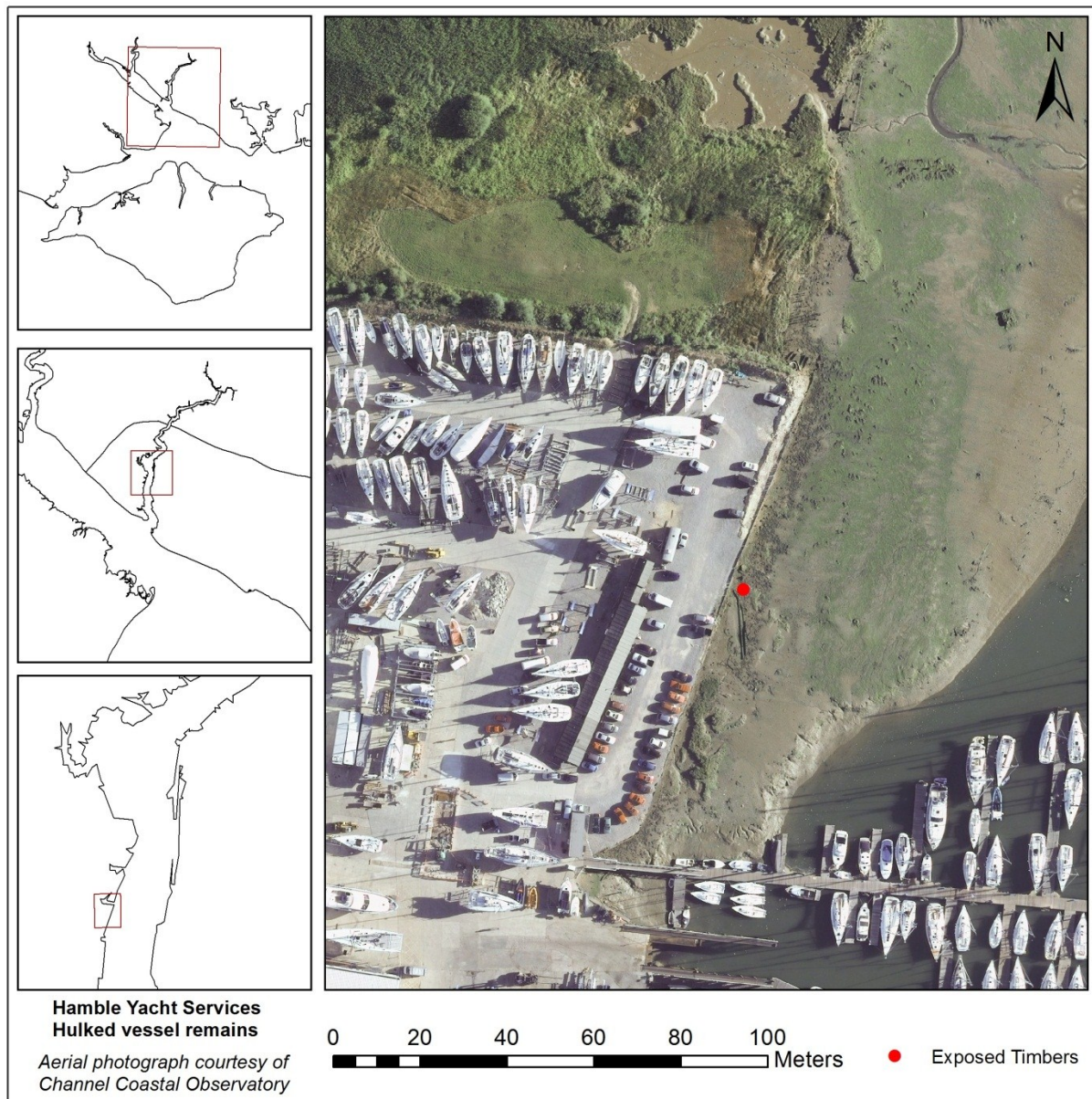


Figure 1. Location of timber remains in relation to Hamble Yacht Services, the aerial photo was taken in 2008 and shows the vessel in its more complete former state.

## 2. Previous Investigation and Site History

The Maritime Archaeology of the River Hamble has been subject to extensive archaeological investigation by the HWTMA and others, at both a local (HWTMA 2008) and national scale (Davies 2011), encompassing fieldwork and desk-based research. This has taken the form of surveys and work at specific individual sites, as well as broader surveys along the entire river. Hulked vessels located along the river have received particular attention in the past. With the exception of a potential correlation with HAM083, the timbers visible at HYS have not been noted in any of this previous work and no detailed work has been conducted on them. The site has been noted in recent, on-going, unpublished HWTMA work that analysed available low-tide aerial photographs to identify hulked vessel remains along the Hampshire and Isle of Wight coast.

Despite this, it was clear from talking to members of HYS staff that the timbers have been known about for at least 30 years. During this time they appear to have been degrading at a steady rate, while becoming increasingly exposed as foreshore mud levels drop in this area of the River. Available aerial photos of the site, taken in 2008, clearly show the remains of a hulked vessel of some sort (Figure 2), measuring c.17.5m in length and c.4.3m in width. Two substantial longitudinal timbers are visible on the eastern side of these remains.



Figure 2. Detailed view of the 2008 aerial photograph in which the coherent remains are visible.

### 3. Site Description

The exposed timbers are located at 50° 51.806'N 001°18.741'W (Datum WGS84), immediately adjacent to the present waterfront that forms the eastern edge of the main car park at HYS (Figure 1 and 3). The exposed timbers cover an area c. 25m in length by 7.5m. Access to the site is easily gained from the present waterfront and the mud in across the site is suitable for walking on, with suitable footwear. The time allowed for the site visit did not permit a full survey of the site to be conducted, however a sketch plan was taken, along with key measurements allowing the sketch to be scaled to represent the disposition of material at the site (Figure 4).

The site comprises four main elements of wooden remains; three substantial timbers (numbered 1-3) and a substantial area of planking. These are all illustrated in the measured sketch of the site and now discussed in turn.



*Figure 3. General view of the site and extant timbers, looking north-east.*

#### 3.1 TIMBER 1

Timber 1 (Figure 5) lies at the southern end of the site and measures 11.06m in length. In its current disposition it has a breadth of 290mm and a depth of 250mm. However, the growth of weed and other marine organisms suggests that the timber has rolled over by c. 90° in the direction of the river. A diagonal face at one end of the timber, suggestive of a scarf joint, measures 0.75m in length. The current underside of the timber is notched to receive a series of much smaller timbers, some of which are still preserved in-situ. The visible notches average 140mm in width and are spaced an 550mm centres. The timbers that are placed in these notches, lying perpendicular to timber 1, are quite poorly preserved, but appear to measure c. 110mm sided by 100mm moulded. These timbers protrude for a maximum of one metre. In one area, planking is secured to the exterior of these timbers, running in line with Timber 1, this has a thickness of 30mm and a width of 170mm. An iron knee is also preserved (Figure 6), lying amongst the perpendicular timbers. It comprises a straight right-angled knee with arms 580mm and 850mm in length, 70mm moulded at their junction and tapering to 20mm moulded at their tip. The angle between the arms is c.100°.

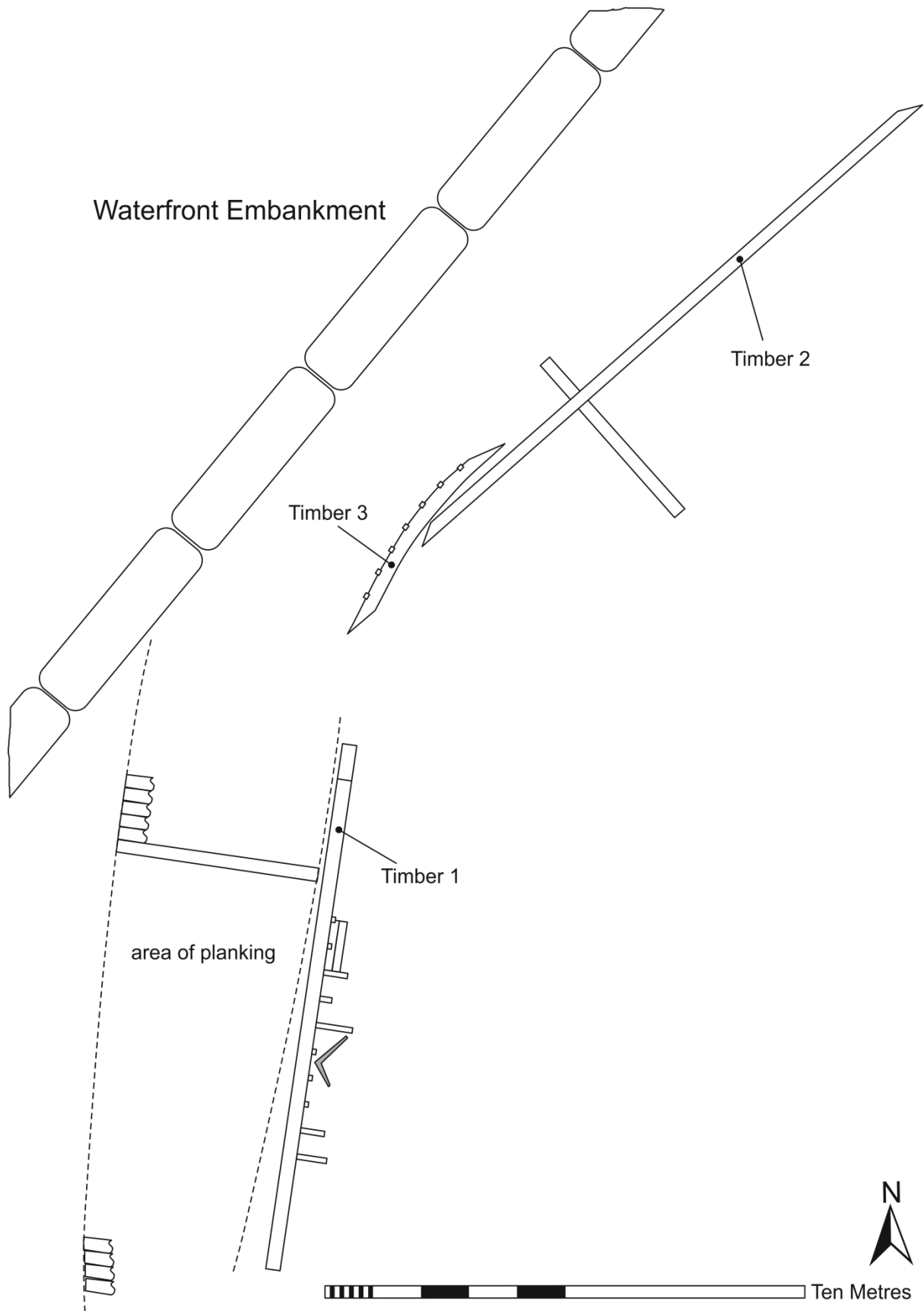


Figure 4. Measured sketch-plan of the site and illustrating the disposition of the extant remains.



*Figure 5. View of Timber 1, looking south, scale =50cm.*



Figure 6. Iron frame located adjacent to Timber 1, scale =50cm.

### 3.2 TIMBER 2

Timber 2 (Figure 7) lies approximately four metres to the north of timber 1 and measures 13.91m in length. In its current disposition it has a breadth of 240mm and a depth of 280mm. However, the growth of weed and other marine organisms suggests that the timber has rolled over by c. 90° in the direction of the river. A diagonal face at one end of the timber, suggestive of a scarf joint, measures 0.47m in length. Staff at HYS report that timber 2 has dried out enough to regain some buoyancy and often shifts position, within the site, at high-water. To prevent it from drifting away, it has been tied to the riverbank. It is clear from discussion with HYS staff and from impressions left in the mud, that timber 2 was formerly located parallel to timber 1, towards the riverbank.

### 3.3 TIMBER 3

Timber 3 (Figure 7 and 8) is the smallest of the three main timbers and lies between timber 1 and 2, slightly overlapping timber 2. Timber 3 measures 5.18m in length and in its current disposition has a breadth and depth of 290mm. Unlike timbers 1 and 2, there is no indication that timber 3 has rolled over recently, in any direction. A diagonal face at one end of the timber, suggestive of a scarf joint, measures 0.76m in length. Timber 2 has a clear curve along its entire length (Figure 7). The outside of the curve is notched in order to receive a series of smaller timbers, some of which remain in-situ. The visible notches measure 130-140mm in width and are located on 550mm centres. The preserved timbers are 90mm moulded, they are too degraded for a sided dimension to be recorded. These timbers are fastened to timber 2 with a pair of iron bolts that measure 20mm in diameter.

### 3.4 PLANKING

A large area of planking lies between timber 1 and the river bank (Figure 9), extending for at least 13m. At its widest point, a single plank was recorded that measured 4.23m in length with a width of 270mm. This plank was c.50mm and had a diagonal bevel on its outer end, the acute angle of the bevel being uppermost. The area of planking is clearly curved towards along its western and eastern edges, with the points where the two curves meet lying at the northern and southern ends of the site. The planking extends to the very edge of timber 1 and is currently overlain by a layer of sediment c. 5cm thick. All of the planking lies perpendicular to timber 1, no evidence of any edge-to-edge joining was observed.





*Figure 7. View of Timber 2 and Timber 3 (foreground) looking north, scale =50cm.*



*Figure 8. View of Timber 3, scale =50cm.*



Figure 9. Area adjacent to Timber 1, containing the remains of the vessel's bottom planking, delineated in red.

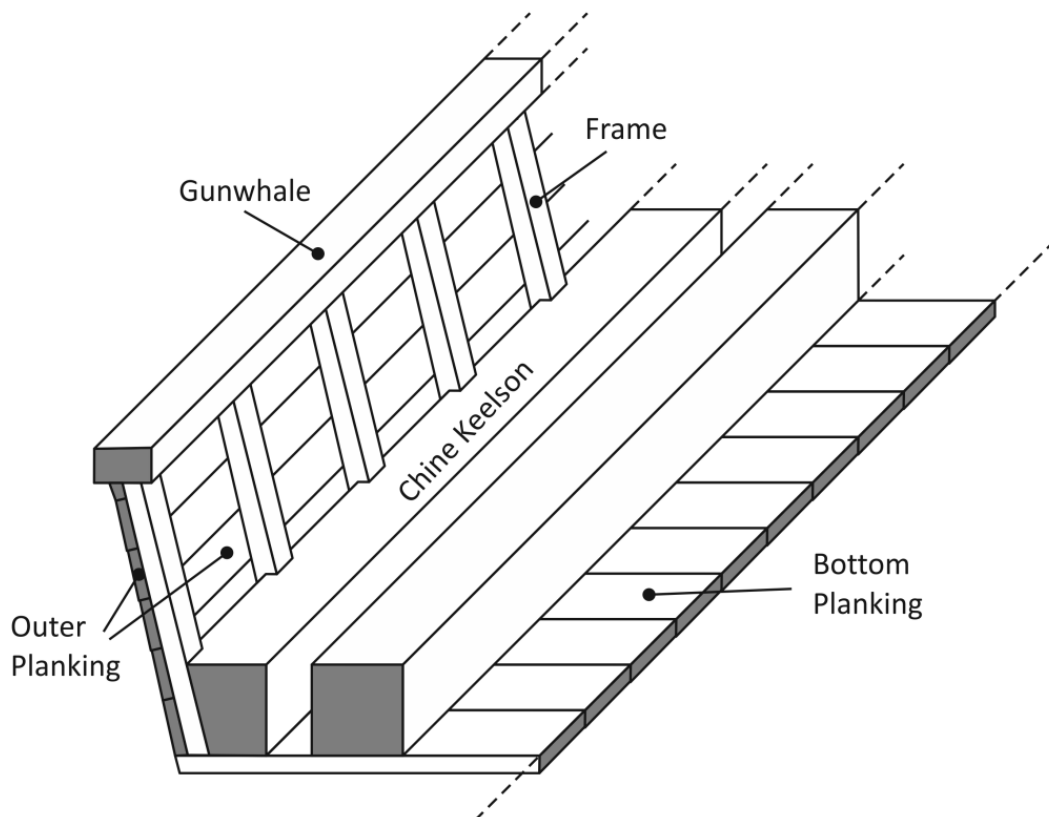


Figure 10. Simplified isometric reconstruction of the construction method used for the original vessel, showing the relationship between chine keelsons, bottom and side planking, amidships. Not to scale.

## 4. Interpretation

Based on the extant timbers currently visible at HYS, in conjunction with the available aerial photographs, it seems probable that the remains comprise some form of chine-built, flat-bottomed, wooden barge (Figure 10). There is no surviving indication of any propulsion, so the vessel may have been propelled by sail, by sweep/pole or simply been a dumb barge. The possibility must also exist that any engine and machinery has been salvaged from the hulk since its deposition. The presence of iron bolts and an iron knee, in conjunction with primarily wooden construction suggests a tentative date range between the mid/late 19<sup>th</sup> century and early 20<sup>th</sup> century. Although the vessel may be earlier than this, its material composition suggests that it is highly unlikely to be earlier than the mid-18<sup>th</sup> century.

### 4.1 CONSTRUCTION

Timber 1 and 3 represent the chine keels, also sometimes termed 'chine keelsons', of the vessel, to which upright frames were fitted into a series of rebates along the outer face. External planking was then fixed to these frames, extending the freeboard of the vessel. Timber 2 is harder to interpret, but the aerial photographs indicate that it must have formerly been a large internal longitudinal timber. It appears to be offset from the centreline in the aerial photographs and so probably had a matching timber on the other side of the vessel. The large area of planking represents the bottom planks of the vessel, which were formerly attached to the chine keels. The end of one plank indicates that this was achieved with square shafted iron nails, c.10mm in width. This method of construction would have produced a heavily-built, robust vessel capable of conveying a large quantity of cargo with only a limited draught. Ideal for shallow estuarine waters such as those found in the River Hamble.

### 4.2 PARALLELS

A number of features allow some parallels to be drawn with the HYS vessel. The orientation of the bottom planking, perpendicular to the chine keels has been observed as indicative of vessels built for use on inland waterways within the UK and for canal barges in particular (McKee 1983: 53). Other parallels exist in the form of a chine built vessel from Bude known as a Bude tub-boat and used locally on canals for the transport of coal (see Blue 2004). Additionally this type of construction has also been associated with a vessel type known as a 'Langstone Barge' originally used in Langstone Harbour and nearby coastal/estuarine areas (D. Goodburn, pers.comm.). The proximity of the present vessel to Langstone Harbour makes such an association plausible. The use of such vessels in the wider Solent Region is given further credence by the recent documentation of a chine-built vessel at Forton Lake, Gosport (Whitewright *et al* 2011). Significantly, although only the stern of that vessel was excavated and recorded, the general construction is extremely similar to the HYS vessel. In particular, the dimensions of the chine keelsons, side frames and the spacing of the side frames are virtually the same. All of the vessel parallels just described are extremely rare examples of chine-built vessels, when considered within the overall corpus of preserved wooden watercraft within the UK.

## 5. Conclusion/Recommendations

The extant timbers located on the foreshore at Hamble Yacht Services may be identified as a chine-built barge, originally some 17m in length and around 4.5m in width. The vessel has not previously been identified and studied, although it is clearly visible on existing aerial photographs. Discussion with HYS staff indicated that the remains of the vessel have been naturally degrading over the course of the past 30 years. At the same time they have become increasingly exposed, as mudflat levels fall in the area. Comparison between the disposition of remains observed during the site visit and aerial photographs dating from 2008 illustrate that the coherence of the vessel has been greatly diminished during the present phase of exposure. Despite this, several large elements of the vessel are present, along with most of the bottom planking.

The date of the vessel is difficult to ascertain with any precision, however, it is likely to date to the late 19<sup>th</sup>/early 20<sup>th</sup> century and to have assumed the function of a sailing barge or lighter barge. The vessel itself is relatively rare, although not unique in terms of its overall construction method, when seen in the context of a coastal/estuarine, rather than inland waterway environment. Despite this, a direct parallel has been recently recorded at Forton Lake, Gosport. The association with another vessel of the same type, within the same region, greatly enhances the archaeological value of the HYS vessel, illustrating that such vessels may have been relatively common in the region in the past.

As noted above, the coherence of the vessel has been recently diminished. However, enough of the vessel survives to warrant further investigation. Ideally, this would take the form of a full survey of the timbers and the related elements that are still located in the surrounding mud. The location of the site indicates that completing such a survey would be a straightforward task. Such an approach offers the best means to create a permanent record of this piece of the River Hamble's maritime heritage before the vessel is destroyed further as a result of natural processes. Furthermore, it would also provide a relatively complete record of a vessel type that appears to have been used across the Solent region in the past, but which is not commonly preserved in the archaeological record.

## 6. References

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