

## 4.0 Maritime Archaeological Survey Work

### 4.1 Maritime Archaeological Survey (Cosmos Archaeology 2009)

Cosmos Archaeology undertook a maritime archaeological survey in the location of the ca.1814 wharf on the southern side of the Hawkesbury River, to the east of the current road bridge in December 2008. An underwater survey was conducted as part of early stages of a proposed new bridge crossing over the Hawkesbury River at Windsor. A series of transects were established in the general area of the former wharf to investigate if relics relating to the former wharf were present, or had the potential to be present on the riverbed.

Nine 20 m transects were set out and recorded during the inspection between the bridge and the 1980s wharf (see Figure 24). The transects were evenly spaced to ensure that this area was sufficiently examined for below water remains of the wharf.

The search for the possible remains of the punt ramps and associated features was confined to the north bank, where a diver swam around in the shallows feeling for a hard sloping surface. No search was conducted on the south bank as the river bed has been reclaimed and any remains of the punt ramp may be buried under the fill and the recently laid Gabion walls.

Above the low water line on the southern riverbank between the bridge and the existing wharf it was noted that it had been recently modified with the installation of a gabion wall. This has resulted in a near vertical retaining wall closer to the bridge with the gradient lessening with distance downstream to a point close to the existing wharf where the wall ceases (Figure 25). The thick vegetation on and around this wall prevented any further examination of the southern side of the riverbank.

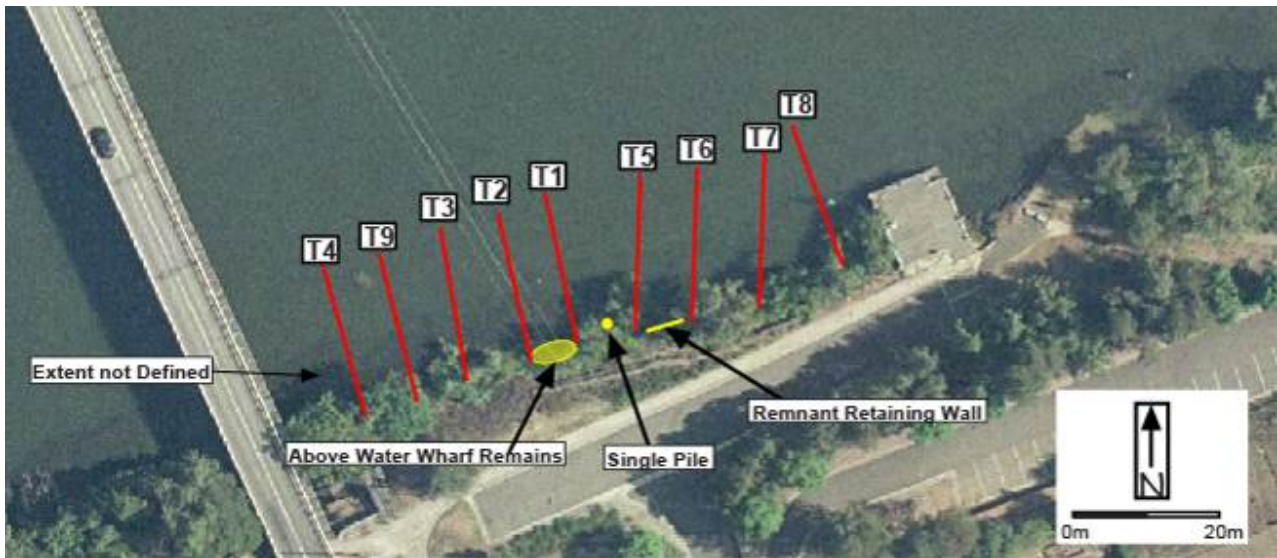
The above water remains of a wharf structure are present on the southern side of the river to the east of the Windsor Bridge. The remains are located 38 m to the east of the bridge and 34 m to the west of the current wharf situated at the eastern end of the study area (see Figure 24). The extant remains are present in two adjacent areas; the first group consists of remnant timber beams, and the other of a single pile. There are also remains of a retaining wall further to the east.

The first group, three timber beams, including a possible deck beam, are parallel to the riverbank, and rest on two walers (Figure 26).<sup>37</sup> The deck beam is 5.2 m long, 0.25 m wide and 0.20 m thick. This beam rests on top of the walers with no visible fastenings attaching them (Figure 27). There are the remains of fastening holes in the middle of the beam above where the beam intersects the two walers, implying the beam may have been fastened to another section of the wharf positioned on, or in, the riverbank.

At either end of the deck beam are walers. On the eastern side of the deck beam there is only one timber waler remaining, while on the western side there are two. The timbers on both sides run back into the riverbank, possibly attached to a buried portion

<sup>37</sup> A waler is a piece of timber placed horizontally to strengthen a structure. In a wharf or jetty, these are usually placed running either side of piles, connecting two or more piles together below a headstock (which sits on top of the piles).

of the wharf. The two timbers on the western side of the deck beam are both 2.9 m long and 0.3 m wide, and are crescent shaped, being 0.25 m at the thickest point in the middle. Both timbers appear to be from the same rounded log that has been halved, and spaced 0.4 m apart (Figure 28 and Figure 29). There are two large iron bolts that connect each waling timber together, one approximately 0.4 m in front of the deck beam, and the other at the river end of the timbers (Figure 30). The inside sections of both waler beams have also been carved out immediately around the location of the bolts. This is likely where the beams would have been bolted through the piles. A recess has also been cut into the top of the wale beam. The recess is located approximately 1.2 m in front (river side) of the deck beam, measuring 0.35 m wide and 0.05 m deep. This may have been for the placement of another deck beam across the timbers (Figure 31).



**Figure 24:** Location of the recorded above water features identified in the 2008-9 survey.



**Figure 25:** Gabion wall recently constructed above the location of the former wharf site (Photo: Cosmos Archaeology).



**Figure 26:** Structural remains present of the former wharf. Scale in 200 mm increments (Photo: Cosmos Archaeology).





**Figure 27:** Remains of a deck beam resting on two walers. Scale in 200 mm increments (Photo Cosmos Archaeology).



**Figure 28:** Two waler beams on the western side of the wharf remains. Scale in 200 mm increments (Photo Cosmos Archaeology).





**Figure 29:** Remains of the two walers on the western side of the wharf remains (Photo Cosmos Archaeology).



**Figure 30:** Fastening remains present on the two waler beams on the western side of the wharf remains (Photo Cosmos Archaeology).



**Figure 31:** Recesses cut into the top of the walers (red arrow). Probable location of another deck beam. Note also the location of another waler in the centre of the photo (red circle) (Photograph: Cosmos Archaeology).

The timber on the eastern side is also crescent shaped, being 2.5 m long x 0.35 m wide, and is approximately 0.20 m thick at the middle of the beam. There are two fastening holes drilled into the side similar to those opposite timber, the first 0.4 m in front of deck beam, and the other at the other end of the timber remains (Figure 32 and Figure 33). There is also a less defined recess cut into the top of this waler, approximately 1 m in front of the deck beam.