

Historic Environment Record

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| Subject: Recording during repairs to bridge | | |
| National Grid Reference: SS80211 47452 | Civil Parish: Oare | Scheduled Monument Number: SO229 |
| Planning Application Number: N/A | Event Number: | Recorder and Organisation: Sam Walls, South West Archaeology |
| Date of Site Visit(s) or Fieldwork: 12 th -16 th September 2011 | | Date of Report: 28.09.2011 |
| OASIS ID: southwes1-110848 ENP HER no: MSO7745 Somerset SMR (Somerset): 34587 | | |
| <p>Description of Works, Monitoring and Results: Historic building recording and archaeological monitoring and recording were undertaken by South West Archaeology Ltd. (SWARCH) at the request of Mr Darren Norman of the Bridges Section of Somerset County Council (the Client) during the repair of Oare Bridge, Oare. The work was carried out in accordance with a Written Scheme of Investigation (WSI) drawn up in consultation with Nick Russell of English Heritage (EH). The work was undertaken by S. Walls over several visits in the week beginning 12th September 2011.</p> <p>Oare Bridge is a single-span, hump-backed stone bridge, with parapets and a semi-circular arched head. It is a Scheduled Monument and a Grade II Listed Building. It is possibly of 18th century origin (although not appearing on the 1840s tithe map) replacing an earlier ford, and is built with a mix of random local stone rubble with a lime mortar bonding. The parapet of the bridge has previously been extensively repaired (with cement bonding) and the whole bridge extensively re-pointed with cement (although now partially blown).</p> <p>A photographic survey was made in advance and during the repairs made to the parapets of the bridge, and particularly to the southern spandrel panel on the eastern side of the bridge (e.g. Figure 2a). The works also necessitated the removal of the road surface (Figure 2b), which was done by a mechanical excavator primarily using a grading bucket, although a toothed bucket was used to break up the tarmac. Approximately 0.42m of material was removed from the apex of the bridge, increasing to a maximum depth of 1.0m at the southern and northern ends of excavation.</p> <p>The excavations revealed a sequence of recent deposits associated with the road surface. 0.05m of tarmac overlay 0.05m dark grey chippings (hardcore), which in turn overlay a 0.15-0.35m thick deposit of reddish-yellow sand (101). Below this layer (101) of reddish-yellow sand (seemingly laid down during the last major phase of repairs (c.2003)) was a thick deposit (0.1-0.6m) of gritty yellowish-brown sandy clay-silt (102) containing frequent small sub-angular stones and occasional mortar fragments. This deposit of soil and rubble directly overlay the stone build of the bridge (Figure 2b). No finds were recovered from these deposits.</p> <p>The parapets of the bridge were c.1.1m high (including the coping) and 0.28-0.32m wide. The removal of the archaeological deposits revealed that the visible parapets were built on top of a stone rubble wall 0.55m wide, bonded with mixed lime and earth. This wall was overlain by the reddish-yellow sand (101) and was abutted by (102). As the internal faces of this wider wall were very roughly dressed and coursed, it seems unlikely they formed the internal parapet walls of a narrower bridge (i.e. 2.1m wide rather than the current 2.9m), and relate instead to the primary construction phase.</p> | | |

Historic Environment Record

In order to insert protective curbs on the approach to the bridge, four shallow trenches were excavated at the edges of the road, both north and south, of the bridge. These trenches extended for approximately 6m from both ends of the bridge, and simply revealed that beneath the tarmac (0.05m thick) was a considerable (0.2-0.25m thick) deposit of hardcore. This exposed the top of a mid-brown silt-loam (topsoil) and was the limit of excavation. No finds were recovered.

Two main areas of the fabric of the bridge were carefully demolished as part of the repair works. The parapet located 0.9m from the northern end of the eastern wall was reduced in height by 0.75m for 2.3m, before raising 3-4 courses (0.4m) at its southern end remaining at this height for a further 0.7m before returning to the top of the parapet (Figure 3a). This stonework had primarily been re-laid during the 20th century (it had a cement bonding), although within the initial 2.3m section the lowest two courses (0.2m) had a lime mortar bonding. The very soft sandy cream-coloured lime mortar contained rare flecks of coal and occasional small sub-angular stones (up to 0.01m). These two courses of stonework relate to the primary construction of the bridge, and it was clear that the parapet had been constructed of a coursed and dressed outer face of large sub-angular to sub-rounded stones (up to 0.5x0.2x0.1m), with a roughly coursed and dressed inner face with an earth and rubble infill. Several of the stones used in this part of the bridge, both in the rubble infill and as part of the dressed outer face, were clearly river-worn. These tend to be of a slightly greyer colour than the greyish-yellow stones which are primarily used, and they are identical to those seen in the stream (Oare Water) below.

The second area of demolition ran north for 7.9m from the southern end of the eastern parapet (extending to within 2.6m of the other area of repair). This was a much more extensive repair, with the southernmost 4.4m of the parapet completely removed together with a significant portion (up to 0.97m) of the southern spandrel panel (see Figures 3b-c). The spandrel panel was constructed of a dressed outer (eastern) face of roughly coursed stones with a lime mortar bonding (re-pointed with cement) and with a rubble infill bonded by earth and lime mortar.

At the southern end of the bridge it appears the hedge bank on the eastern side abutted the parapet, as no cut for the bridge was visible in the exposed section of hedge. The section through the hedge exposed a single phase of construction, with the bank comprised of a slightly reddish-brown silt-clay loam, with substantial root disturbance. The hedge bank at this end also contained a large number of substantial (semi-dressed) locally-derived stones and rubble, which may have been left over from the construction of the bridge.

The northern 3.5m of this southern repair (i.e. the central portion of the eastern parapet) was reduced to the base of the parapet (c.1.1m) and the point at which the wall widened. During this careful reduction of the surviving stonework, it became clear that there were at least three phases of 'modern' repair to the parapet, with three different types of cement visible. The repaired stonework accounted for the majority of the parapet, with only the lowest two courses of stonework retaining the original lime mortar bonding and an earth and rubble core to the wall. The facing stones of the two original courses of the parapet, and the stones of the southern spandrel panel, were individually numbered so that they could be placed back in their original positions, but the rubble core and inner roughly-coursed face were not (as these were highly irregular and will not be visible). The removal of the parapet in this central portion exposed the arch barrel itself in places (see Figure 3b). The arch was bonded with lime mortar and constructed from slightly larger stones (0.5x0.25x0.15m) than seen elsewhere in the bridge, but no further detail was attainable, as only the top of the eastern face of these stones was exposed during the repairs.

Please attach a **Location Plan** showing the area investigated and any features exposed. Also attach any relevant drawings or photographs.

Historic Environment Record

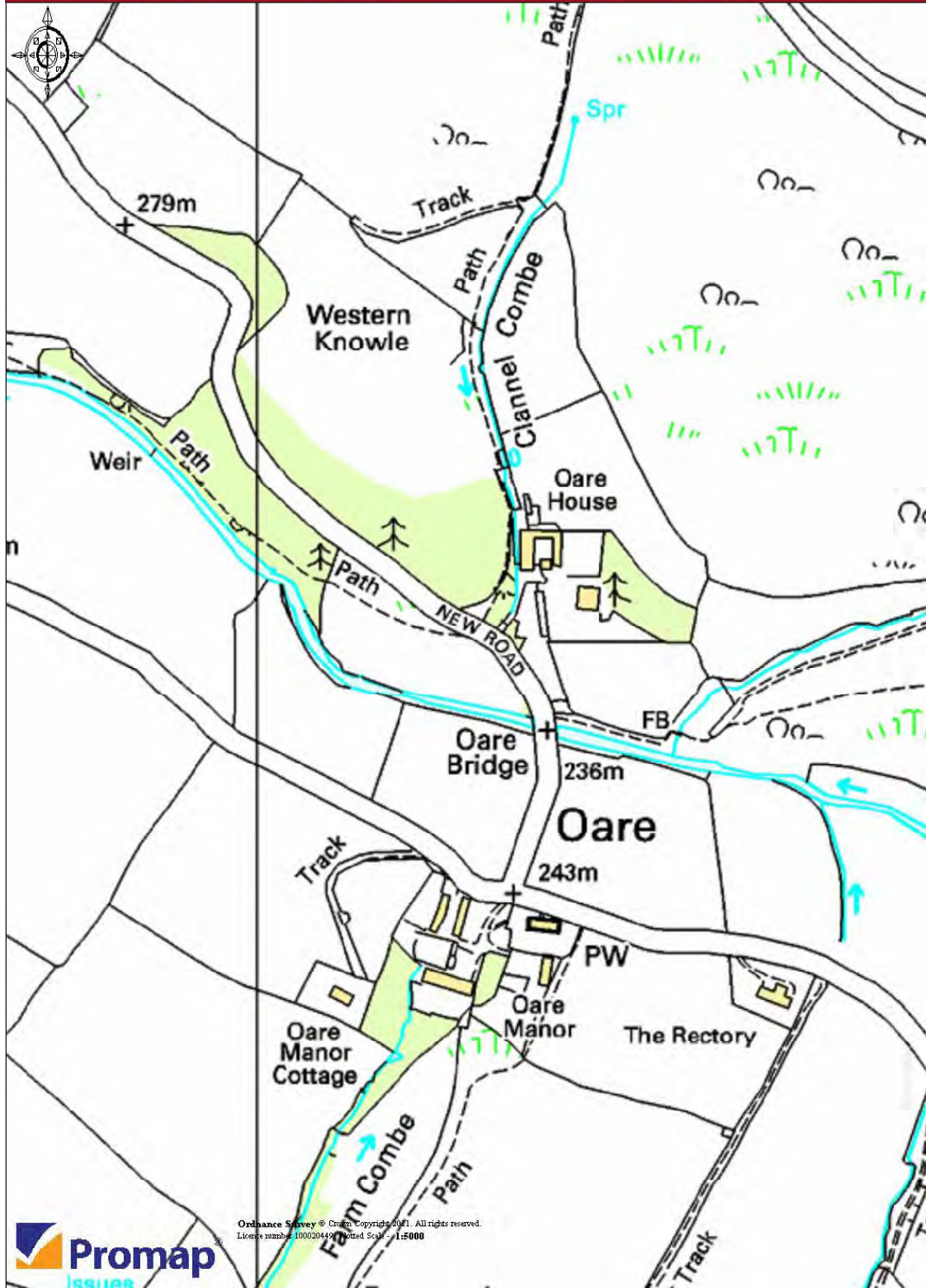


Figure 1: Location plan of Oare Bridge.

Historic Environment Record



Figure 2: (a) The top portion of the southeast spandrel panel, viewed from the east (2m scale).

(b) Post-excavation shot of the northern end of the bridge, viewed from the south (2m scale).

Historic Environment Record



Figure 3: (a) The northern part of repairs to the eastern parapet, viewed from the south (2m scale).
(b) The repairs to the southeast spandrel panel, viewed from the northeast (2m scale).
(c) The southern end of repairs to the southeast spandrel panel, viewed from the east (2m scale).