Report on investigations at Cart Gap, Eccles, Norfolk

Report prepared by Nick Ashton
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Site details

Site:	Eccles Cart Gap Slipway, Cart Gap Road, Happisburgh, Norfolk
Grid reference:	(TG 398 299)
NLA reference:	CNF42063
NHER:	51880

Introduction

The plans to build a new life-boat ramp at Cart Gap, Eccles, North Norfolk (Figure 1) involved, widening the width of the ramp through the cliff, removing old piles and driving in new piles into the cliff and on the foreshore at the base of the cliff. The cliff consists of Pleistocene sediments that include Anglian glacial sediments and potentially sediments beneath that might be attributable to the Cromer Forest-bed Formation (CF-bF). From previous fieldwork in the area, particularly towards Happisburgh, it is known that the Anglian glacial sediments contain no evidence of human activity, which is not surprising given the severity of this cold phase, when Britain would have been a polar desert. However, the series of organic muds, sands and gravels that form the CF-bF have been found beneath the Anglian sediments, less than 700m to the north-west of Cart Gap. Work on these sediments at several locations near Happisburgh has established the presence of humanly worked stone artefacts in association with cut-marked bone, beetles, pollen and plant-macro remains. These sites are amongst the earliest evidence for humans in north-west Europe, and in at least one case date back to over 700,000 years ago. The sediments are therefore of the utmost importance and need to be investigated when opportunities arise or when they are threatened by new development.

Preliminary investigations

Preliminary investigation of the Cart Gap location was initiated on behalf of the RNLI through borehole work and test-pits in May 2008. This established that the 7m high cliffs in this area consisted of recent wind-blown sand, overlying medium grey clay that is attributable to the Happisburgh Till. Two boreholes were put down and a test-pit excavated at beach level, adjacent to the location of the new ramp (Figure 2). the test-pit only revealed beach sand, while the two boreholes revealed a sequence of beach-sand, Happisburgh Till and coarse grey-sand. The Happisburgh Till was seen to a depth of c. - 2.8m OD and the sand was seen to a maximum depth of – 9m OD. The grey sand proved to be sterile and is similar in composition and colour to grey sand in the Happisburgh area that underlies the CF-bF. Here and at the other locations it is interpreted as marine in origin and therefore unlikely to contain archaeological evidence.

Over the last ten years there has been the interpretation that the Happisburgh Formation is earlier than previously thought, dating to Marine Isotope Stage (MIS) 16 (c.650,000 years ago; Lee et al. 2006), more recent fieldwork supports the original interpretation of this sediment as being MIS 12 in age (c. 450,000 years ago). The latter interpretation is preferred here.

Site monitoring

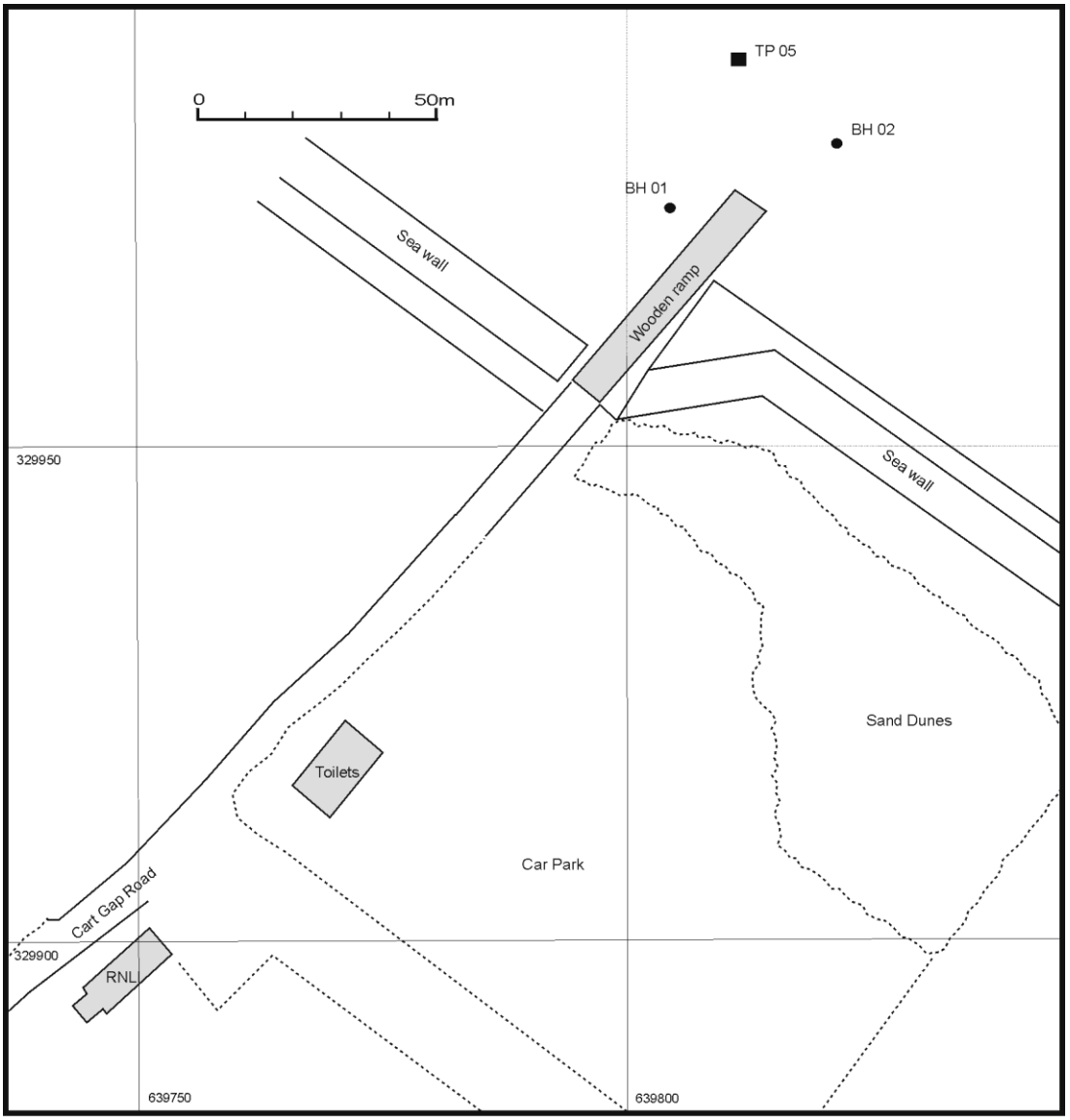
A further day's fieldwork was organised to monitor the progress of the development of the life boat ramp in November 2008. This established that there was little damage to the Pleistocene sediments from the extraction of the old piles as most of these were cut off at beach level. A machine trench was also cut to confirm the earlier findings. This trench again established that there were no CF-bF sediments in the locality, the likelihood being that they had been destroyed by Anglian ice 450,000 years ago. It was again seen that Happisburgh Till directly overlay sterile marine sand. It was also established that the any machining would only remove beach sand to the top of the Happisburgh Till, as the latter would provide an excellent anchor for the new piles.

Conclusion

It can therefore be conclusively stated that there was no opportunity to investigate any CF-bF at Cart Gap, or any associated archaeological and environmental remains.


Happisburgh
0
500m
331
330
Whimpwell
Green
Cart
Gap
Eccles
329
639
640
641

Figure 1



Cart Gap RNLI Slipway Eccles, Norfolk

Test-pit and borehole Survey, May 2008

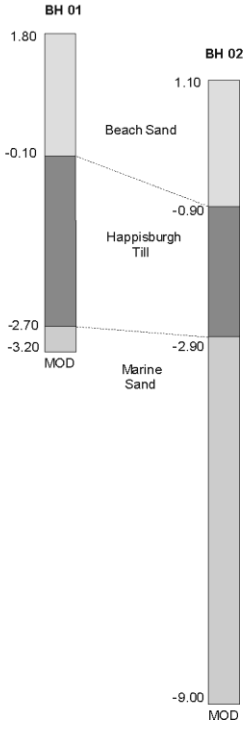


Figure 2