Langley Marshes Compartment 20 Broadland Flood Alleviation Project

Monitoring of Works under Archaeological Supervision and Control

ENF 129356

Heather Wallis November 2016

HW Report No. 201

Project name	Langley Marshes; Compartment 20
Parish	Langley with Hardley
Event No.	ENF 129356
Grid Refs	TG 3650 0260 to TG 3880 0131
Date of Work	16th April 2012 to 23rd July 2012

Introduction

Planning permission was granted to Halcrow Group Ltd, for flood alleviation work on the River Yare between Hardley Dyke and Langley Dyke (Compartment 20) (Fig. 1). This development formed part of the Broadland Flood Alleviation Project, a major project which will renew and strengthen banks and dykes along the Bure, Ant, Thurne, Yare and Waveney rivers.

A condition of the permission required that an archaeological watching brief was carried out during the construction works.

This report covers monitoring works associated with planning application BA/2011/0405.

The Works

Works were undertaken along *c*.5km of the right bank of the River Yare between Hardley and Langley Dykes (Fig. 1). The scale of the works varied; in some areas there was little change while in others major earthworks were undertaken. These works included the excavation of a new soke dyke up to 18m wide and 2m deep and the infilling of the old soke dyke, or the widening of existing dykes, with the existing floodbank being widened and heightened.

Geology

(http://mapapps.bgs.ac.uk/geologyofbritain/home.html)

The bedrock geology of Langley Marshes is the London Clay Formation made up of clay, silt and sand which formed 34-56 million years ago. This is an isolated area of London Clay which across most of eastern Norfolk is covered by Crag Group deposits. The Crag Group is formed of sedimentary material and is made up of shallow water marine and estuarine sands, gravels, silts and clays deposited up to 5 million years ago. The superficial geology is the Breydon Formation which is dominated by unconsolidated silt and clay, although peat is also present, particularly in the valleys of the River Yare and its tributaries.

Archaeological Background

Prior to work commencing the Norfolk Historic Environment Record was searched in order to identify sites which could have been affected by the works and an Environmental Statement prepared by Halcrow Group Ltd (2011). Within the Compartment twenty-seven sites were identified of which nine were located within the development corridor. The sites fall into two broad categories; Postmedieval sites (windpumps, brickworks and ferry locations), and occasional artefacts of various periods.

Three windpumps stand or stood along the bank of the Yare within the development area. Hardley Mill was built in the early 19th century but soon fell out of use and is not marked on the 1st edition 6 inch Ordnance Survey map (1879-1886) having been replaced by a new mill located *c*.0.5km further north. This new tower mill was built in 1874 and is a Grade II Listed Building which has recently been restored. To the north of this is the site of Langley Mill. The first mill here was probably built in the early 19th century as it is shown on Bryant's map of 1826. By the latter years of the 19th century this had been replaced by a steam pump as shown on the 1st edition of the 6 inch Ordnance Survey map. This has subsequently been demolished and replaced by a modern electric pump house.

Other post-medieval sites include a brickworks and two historic ferry crossing sites. A foot ferry (F1) is marked on Bryant's Map of 1826 and the modern Ordnance Survey 1:25000 map. It remained in service until recent years as a self-service rowing boat. A second foot ferry (F2) ran between a footpath from Langley Street to Cantley Staithe. This does not appear on the historic maps, although is mentioned in a gazetteer of 1894-5 and had possibly become established with the opening of the railway in 1844. During the 20th century these may have been used to transport workers to Cantley sugar beet factory which opened in 1912. (Halcrow 2011).

Very few artefacts have been recovered from the marshes themselves, the majority of finds having been recovered from the higher ground near Hardley Street and Langley Street. These cover many periods from Prehistory, through Roman, Saxon and Medieval to the Post-medieval period.

On the marshes towards Hardley Dyke the recovery of a horse skull (at a depth of *c*.2.5m) was reported in 1955 during dyke dredging. At the north of the Compartment near Langley Dyke two finds spots are recorded. From one a polished Neolithic axe and a 14th-century green-glazed jug were recovered from marshy ground. The second find spot produced a post-medieval pipeclay figurine. This was found on the footpath which runs along the bank adjacent to the dike. The presence of medieval and post-medieval finds is not so surprising in this locality as the remains of Langley Abbey lay just to the west of Langley Dyke.

The works were designed to avoid damage to the known windpump sites and Post-medieval brickworks.

Aims of the work

The watching brief was intended to identify and record any unknown sites as well as record any known remains which were disturbed by the works. Advice was also given where necessary to reduce the impact of the works on any archaeological deposits.

Watching Brief Methods

Regular visits were made to the site throughout the course of the excavations the timing varying depending on the speed of progress of the works. Where topsoil had been stripped a visual scan of the area was made in order to identify any archaeological deposits and retrieve any revealed artefacts. The sides of the new soke dykes were visually assessed in order to identify and record any features which may have been revealed. Monitoring was undertaken from the top edge of the new dykes as safety concerns prevented access into the new excavations. Site staff were briefed on the possibility of revealing archaeological deposits and were encouraged to report any artefacts or unusual deposits which they encountered.

All work was carried out in full accordance with national and regional guidelines for the treatment of archaeological remains and in particular the guidance set out in *Standards for Field Archaeology in the East of England* (Gurney 2003) and the Institute of Field Archaeologists *Standard and Guidance for an Archaeological Watching Brief* (2001).

Results of the Monitoring Works

Areas of topsoil strip were monitored but no archaeological features were identified. The deposits revealed in the sides of the new cut dyke were mainly naturally accumulating silts with some peat towards the inland end of Langley Dyke. The lower deposit of silty clay was very dark grey in colour overlain by an orange clayey silt. Once exposed to the air, oxygenation soon discoloured the exposed deposits.



Plate 1. Showing typical deposits.

One variation in the natural was particularly notable. Located in the new dyke alongside Hardley Dyke a linear area of peat was noted (Plate 2) (approx. Grid Ref TG 3900 0153). This ran at right angles to Hardley Dyke and was unusual as its upper horizon was convex within the surrounding silty clay. The formation of this deposit is not fully understood. It is possible that this was a surviving baulk of peat between areas two area of peat extraction which had later become infilled with silts. However, it might be expected that other similar baulks would have been recorded during the construction works if this was the case. The 1st Edition Ordnance Survey map shows a field boundary in this approximate location, although this is probably coincidental.



Plate 2. Showing unusual convex peat deposit. Looking south-west along new dyke parallel to Hardley Dyke.

Bibliography

Halcrow Group Ltd, 2011, Broadland Flood Alleviation Project Compartment 20. Environmental Statement.

Acknowledgements

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Figure 1. Site location showing line of new dyke (blue), mill sites (magenta), historic ferry crossings (green), other known archaeological sites (red) and linear peat deposit (orange).

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Project details

Project name	Langley Marshes
Short description of the project	Watching brief on flood defence works between Hardley and Langley Dykes. Nothing of significance was noted.
Project dates	Start: 16-04-2012 End: 23-07-2012
Previous/future work	No / No
Any associated project reference codes	129356 - HER event no.
Type of project	Recording project
Monument type	NONE None
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	Planning condition

Project location

Country	England
Site location	NORFOLK SOUTH NORFOLK LANGLEY WITH HARDLEY Compartment 20 Langley Marshes
Study area	5 Kilometres
Site coordinates	TG 3650 0260 52.569174867576 1.49032777728 52 34 09 N 001 29 25 E Line
Site coordinates	TG 3880 0130 52.556497379003 1.523266343797 52 33 23 N 001 31 23 E Line

Project creators

Name of Organisation	Heather Wallis
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Heather Wallis
Project director/manager	Heather Wallis
Project supervisor	None

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Norfolk Museums Service
Digital Contents	"none"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Norfolk Museums Service
Paper Contents	"other"
Paper Media available	"Notebook - Excavation',' Research',' General Notes","Report"

Project bibliography 1

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