

Dunwich Embankment



Archaeological Watching Brief Report



June 2009

**Client: Royal Haskoning on behalf
of the Environment Agency**

OA East Report No: 1117
OASIS No: oxfordar3-59154
NGR: TM 478 708

Dunwich Embankment

Watching Brief

Site Code: DUN 096

HER No. DUN096

Date of Works: 27/05/09 - 04/06/09

Report No: 1117

Excavator: James Drummond-Murray and Aileen Connor

Client: Royal Haskoning on behalf of the Environment Agency

Report Date: 5/6/09

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Fig. 1 Site location map

Summary

Between 27/05/2009 and 04/06/2009, OA East carried out an archaeological watching brief at Dunwich, Suffolk (TM 478 708). The monitoring was carried out during geotechnical site investigations by AEG Ltd. During the monitoring one undated archaeological feature (a possible pit or ditch) was observed in TP43. In addition a small number of finds were recovered from topsoil (TPs 33, 34 and 38) and a possible buried soil was noted in TPs 21, 22, 39 and 42.

1 GEOLOGY AND TOPOGRAPHY

- 1.1.1 Dunwich Village is built on a ridge of Norwich Crag material. The area on the southern edge of the village comprises Westleton Beds Gravels which are part of the Crag Formation. The Westleton Beds comprise well rounded flint pebbles, interbedded with sand layers or muddy bands, sometimes rich in iron. They were probably deposited in a wave dominated shore face environment such as a beach or coastal shingle. The Westleton Beds overly Norwich Crag Sands which are pale white or yellow sands with well developed current bedding. Muddy layers are often orange/brown stained. The sands were probably formed in a cold water tidal flat or estuary environment.
- 1.1.2 The northern edge of the village, where the new embankment is proposed, comprises Holocene alluvial material in the form of tidal mud flat. The mud is underlain by peat which outcrops upstream along the Dunwich River, which turns north to meet the river Blyth at Walberswick. Until the Middle Ages, a number of small estuaries existed; these are now cut off from the sea by shingle and sand barrier systems. The estuaries were formed as a result of early to mid-Holocene flooding of river valleys that were cut to a lower level during glacial low sea level stands (Pye and Blott 2006, 453). Following marine transgression during the early Holocene, sequences of marine, brackish, and freshwater sediments accumulated, in places up to 10m thick (*ibid*).

2 ARCHAEOLOGICAL BACKGROUND

- 2.1.1 The Suffolk Sites and Monuments Record (SMR) has been consulted and provides the majority of the information gathered under this section.
- 2.1.2 A Paleolithic hand-axe was found on the surface of cliff talus (DUN001-MSF1952). Two scatters of burnt flint (DUN017, DUN019) which may indicate prehistoric activity have been located within Area 1 of the proposed development.
- 2.1.3 It is postulated that a Roman settlement was located at Dunwich that now lies about a mile off the coast (SMR DUN001-MSF1953). Roman pottery, coins and other finds have been recovered from the Dunwich area including a large number of finds recovered during metal detecting and sieving after cliff collapse on the beach in 1996.
- 2.1.4 A Saxon disc brooch was found by metal detecting after a cliff fall (DUN022-MSF19705). Documentary evidence indicates that an East Anglian diocese was founded circa AD 630 by St Felix, who had been sent by Pope Honorius to convert the East Angles. With the help of King Sigeberht this was established at a place called 'Dommoc', which is thought to be either Dunwich or Felixstowe. In the latter part of the 7th century, this diocese was split into two, with bishops at 'Dommoc' and Elmham. Both bishoprics were swept away as a result of the Danish invasions circa AD 870 (Whitelock 1972; Wade-Martins and Rigold 1980, 3-11; Rigold 1961, 55-9; 1974, 97-102). The -wich part of the name Dunwich suggests that it was a Saxon trading post like Ipswich, Norwich and Hamwich (Southampton). In 1970 two simple upright rims of Ipswich ware type found in an excavation (Piper, Unpublished Archive Report). In 1996 a large group of finds found detecting and sieving recent cliff falls included two Late Saxon 'hooked tags' (Piper, Unpublished Archive).
- 2.1.5 Dunwich was a thriving town in the medieval period but is now almost completely destroyed due to coastal erosion. Most of the town now lies beneath the sea. By 1066

there were 120 burgesses in Dunwich, which had increased to 236 by 1086, even though a carucate (approximately 50 hectares) of land is stated to have been carried away by the sea between those dates. Herring fishing seems to have been a major industry (VCH 1911, 451, 452, 522). A charter was granted to the town by King John in 1199, with later charters of 1215, 1559 and 1690 (Cooper 1939, 230-5). The earliest map of the town was made by Ralph Agas in 1587 when the surviving part of the town was about 500 yards wide east to west and nearly a mile North to South. The map only survives as an engraved copy by Joshua Kirby, printed in 1753 (Gardner 1754). This shows the coast line in 1587 and in 1753. Features marked and lost between those dates included the Black Friars, St Peter's Church, St Francis' Chapel, the Old Key and hillocks or mounds called Cock Hills and Hen Hills (swept away in 1740). Since 1753 the Temple and All Saints Church (DUN 014) have also been lost. By 1970 the town was only 150 feet wide at St James' Street (West 1970). The Ordnance Survey showed it in 1977 as 50m wide at St James' Street and 480m north to south.

- 2.1.6 A short length of the town ditch 'Pales Dyke' survives as a visible earthwork at the south end of the town area and it is believed to underlie the precinct wall of the Grey Friars with Beach Road possibly aligned on the northern end of the ditch. The name is recorded as 'Palles Dike' and 'Palles Deike' in 1573 (Scarfe 1970, 34-7). A partial section of the ditch and a section of the rampart where it was overlain by Temple Hill (DUN 009) was excavated by H E P Spencer in 1935 (Spencer 1935, 198). This site now lies under the sea. A section was cut across the surviving earthwork by S E West in 1970 (TM 4784 7022). The ditch was 40ft wide and 15ft deep. What little survived of the rampart appeared to seal the remains of a building of probable 12th-13th century date (West 1970, 25-33). Another excavation by West in 1972 inside the line of the western defences just S of St James' Street revealed a large ditch running parallel to the main defence (DUN 001).
- 2.1.7 In 1066 there was one church and by 1086 there were three (Blatchley and Northeast 1982) the known churches are All Saints Church (DUN 014), St Bartholomew - lost about 1331, St John the Baptist pulled down about 1540, St Leonard - lost circa 1300. St Martin - lost soon after 1335, St Michael - lost about 1331, St Nicholas - lost before 1400 but last part of the churchyard was swept away in 1740 (Gardner 1754), St Peter - was lost about 1702 or soon after although the last part of the churchyard survived until 1729 (Gardner 1754).
- 2.1.8 There were also several religious houses in Dunwich (Knowles and Hadcock 1971) A cell of Benedictine monks, founded sometime after 1080 was destroyed by the sea in the time of Edward I (1272-1307). Black Friars (Dominican Friary) was founded before 1256 by Sir Roger de Holish and dissolved in 1538, its ruins still existed in 1587. Grey Friars Franciscan Friary (DUN003-MSF1988, SAM SF142) was founded before 1277 by Richard Fitz John and Alice, his wife, and afterwards by Henry III. The site of the friary was moved inland to the western edge of town by the gift of the burgesses in 1289. The chapel appears to have been rebuilt or repaired circa 1514 and suppressed in 1538 (Knowles and Hadcock 1971). Gardner (1754) records that the friary precinct had three gates, but that the eastward one was 'quite demolished'. The remains of the buildings had been converted 'into a good tenement and a Hall with apartments where affairs of the Corporation are transacted and a jail; having an east front built (of late years) with brick, affording a handsome prospect.' This building can be seen on the prospect drawing of Dunwich on the border of the 1753 map by J Kirby (Garner 1754). It survives as a ruin, is a scheduled monument and has been subject to a small number of field investigations (DUN016-MSF13175; DUN023-MSF19086; DUN024-MSF19087). Temple, a preceptory of Knights Templars was founded before 1199 and

suppressed 1308-12 when the property was transferred to the Knights Hospitaller of St John. Its ruins were still standing in 1587 and probably 1753. The remains of two medieval hospitals are located on the outskirts of Dunwich; the Leper Chapel of St James' hospital (DUN 005-SAM SF1990) located in the churchyard of St James' and the site of the Maison Dieu hospital (DUN 006-SAM SF1991), which lies below the beach car park. A new mint was established at Dunwich during Stephen's reign (1135-54) (Blackburn 1994, 153).

- 2.1.9 The Suffolk Sites and Monuments Record reveals that there are numerous other finds relating to medieval Dunwich including a 13th to 14th century cooking pot found in the cliff just outside the south end of the town, also two wells and a probable pit close together, exposed in the cliff face 15m to the S of St James' Street. Approximately 500 objects were recovered by sieving and metal detecting after a cliff fall in the vicinity of Greyfriars precinct (DUN 001 – ESF 18437). The finds included medieval and post-medieval pottery including imported wares, as well as numerous metal objects. Elsewhere in Dunwich several medieval pottery scatters have been identified (DUN 010, DUN 017, DUN 018, DUN 019, WLN 009) as well as a cropmark thought to be a possible post-medieval windmill (WLN 030).
- 2.1.10 Several remains relating to WW2 defences are located in and around the village including anti tank ditches, gun emplacements, pill boxes and a minefield (e.g. DUN 029, DUN 043-45, DUN 048, DUN 052-3, DUN 055-6, DUN 061-2, DUN 064).

3 METHODOLOGY

- 3.1.1 The objective of this watching brief was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.
- 3.1.2 The three areas of investigation were located in the vicinity of the village of Dunwich, Suffolk (Fig.1). Area 1 was located to the north of the village on tidal mud flats. Areas 2 and 3 were located to the west and north east (respectively) of the village on low hills.
- 3.1.3 All archaeological features and deposits were recorded using OA East's *pro-formas*. Test pit locations, plans and sections were recorded at appropriate scales, digital photographs were taken of all geotechnical test pits and archaeological features and deposits.
- 3.1.4 Site conditions were dry with bright sun, occasionally overcast. Test pits were excavated using a tracked mechanical digger fitted with a 3' wide toothed bucket. Mechanical excavation was carried out under the supervision and control of the geotechnical engineer (AEG). Access in to the test pits was not permitted due to Health and Safety considerations, therefore all observations and records took place from outside the test pits and included visual scanning of arisings from the test pits and the collection of samples as appropriate.
- 3.1.5 A total of 10 test pits were excavated in Area 1. The test pits were all a minimum of 3m deep and a maximum of 4m. They were approximately 1m wide (width of the bucket)

and approximately 4m long. A total of 13 test pits were planned for Area 2, a total of 10 were dug, a total of 20 test pits were planned for Area 3 with a total of 19 excavated.

- 3.1.6 Due to the potential of unexploded ordnance (UXO) in the area, a UXO specialist scanned each of the test pits prior to excavation.

4 RESULTS

A description of each test pit is recorded in Appendix B.

4.1 Area 1

- 4.1.1 Area 1 was located to the north of the village in tidal mudflats at approximately sea level. The river Dunwich now runs through the mudflats and joins the river Blyth. Two scatters of burnt flint (DUN017, DUN019) and a scatter of medieval pottery (DUN018) have previously been recorded within this area, along with a WW2 minefield (DUN052). The Maison Dieu, a scheduled ancient monument (DUN 006-SAM SF1991) is located immediately outside this area to the south east.
- 4.1.2 The depth of the test pits varied from 2.30-2.60m. The full depth of 4.00m was not reached in any of the test pits due to the presence of groundwater. No archaeological features, deposits or artefacts were observed in any of the 10 test pits and 3 boreholes that were observed in area 1.
- 4.1.3 Although varying slightly in detail, the sequence of deposits comprised (broadly) Dark Brown (7YR 3/2) peat deposits at 1.20m below ground level. Overlain by mid grey organic silt with frequent fibrous roots 0.30m-0.95m thick. Overlain by mixed peat/silt – 0.25m – 0.50m thick, no inclusions. Overlain by dark brown (2.5YR 2.5/3) topsoil, 0.20-0.25m thick.

4.2 Area 2

- 4.2.1 Area 2 comprised three small fields and was located on a low lying hill to the north-west of Dunwich and north of the Dunwich river at approximately 10m AOD. The ground here was undulating with evidence for a former river valley on an approximately east to west orientation in the easternmost field.
- 4.2.2 Within area 2 a circular ditch has been identified as a cropmark and may be the remains of a windmill (WLN 030). Immediately to the west of area 2 a scatter of medieval pottery has been recovered from an area within Dunwich Forest (WLN 009).
- 4.2.3 No archaeological features, deposits or artefacts were observed in any of the test pits. Two test pits (TP21 and TP22) contained an iron rich deposit that may be a buried soil sealed by possible hillwash, however no dating or evidence for human activity was recovered from this deposit.
- 4.2.4 The sequence of deposits observed in Area 2 was variable. Natural yellow sands and or gravels were observed at a depth of between 0.30m (TP13, where topsoil was directly overlying sand) and 1.20m below ground level. In most test pits this was overlain by a 0.20-0.50m thick pale brown (10YR 7/4) sandy subsoil although this varied to reddish brown and dark reddish brown in places (e.g. TPs 14, 15 and 20). In test pits located at the base of hill slopes (TPs 21 and 22), a 0.40-0.50m thick mixed very dark brown/black (10YR 2/1) iron panned sand was observed overlying the natural

yellow sand and sealed by a very pale grey sand, possibly a colluvium or hillwash deposit. Topsoil was pale greyish brown to mid brown sandy topsoil 0.30-0.50m thick.

4.3 Area 3

- 4.3.1 Area 3 comprised four fields and was located on low lying undulating hills at approximately 10 to 20m AOD to the south-west of Dunwich and south of Dunwich river. The ground sloped generally from north to south (towards the Dunwich river valley) and also sharply to the north-east towards St James' Church. Of the 19 test pits excavated, one (TP43) contained evidence of an undated archaeological feature (a possible ditch or pit), and three small fragments of pottery were collected from the surface, all were undiagnostic body sherds; a sherd of Roman grey ware from TP38, a fragment of Roman sandy ware from TP33 and a fragment of late Saxon or early Medieval pottery from TP34. No other archaeological features or finds were observed within the test pits although a series of parallel narrow linear earthworks were observed in the vicinity of TP27.
- 4.3.2 Although no archaeological deposits were identified in TP27, a series of four shallow linear features were observed following an east to west orientation. These features were approximately 20m long and 5 to 6 metres apart. Each was about 0.50m wide and 0.20m deep. It is postulated, but unconfirmed that they may relate to second world war defences.
- 4.3.3 TP43 was located to the rear (north) of a row of terraced houses each with long narrow garden plots. A 0.70m deep U-shaped feature was observed in the west face of the test pit. The feature was approximately 2m wide and contained three fills, the lower fill was a black greasy slightly silty sand this was overlain in part by a mixed red and black deposit, possibly raked from a fire, above which was a mid yellowish brown sand. The feature was sealed by dark yellowish brown sand subsoil. No finds were recovered from it and the feature did not appear in the east face of the test pit so may have been a discrete pit or possibly a ditch at an acute angle.
- 4.3.4 The pottery recovered is too small and fragmentary to draw any firm conclusions and may be the result of manuring of fields.
- 4.3.5 The sequence of deposits in Area 3 was variable, but basically comprised yellow sand or gravel natural overlain by a pale to dark yellowish brown subsoil varying to reddish brown iron rich sand overlain by dark yellowish brown topsoil. The topsoil was particularly variable in thickness, it was 0.30m – 0.50m thick on the higher ground increasing to 0.70 – 1.30m on the hill slopes and valleys. The sequence was particularly variable on hill slopes and valleys and in two test pits (TP39 and TP42) contained a deposit that may be a buried soil. The deposit in TP42 was 0.40m thick black iron panned sand sealed by a pale greyish sand, possibly a hillwash. The deposit in TP39 was similar in character but thinner (0.20m) and was sealed by an unusually thick layer of topsoil (1.30m). Both were similar to the possible buried soil observed in Area 2. No dating or evidence of human activity was recovered from these deposit.

5 DISCUSSION AND CONCLUSIONS

- 5.1.1 Despite the proximity of the important settlement of Dunwich, little archaeological evidence was observed in the test pits, the few sherds of pottery are likely to be related to field manuring rather than indicate settlement in the immediate vicinity. The one feature observed in TP43 may be related to habitation, particularly given its proximity to a row of (Victorian) cottages, although no dating evidence was recovered from it, it is unlikely to be recent as it was sealed below subsoil. Evidence for a possible buried land surface was observed in test pits in Areas 2 and 3, and although no dating or evidence for human activity was found associated with these they may prove to be archaeologically significant. The sample provided by the test pits is extremely small and therefore it can not be concluded that archaeological remains do not exist in the areas observed. The likelihood of archaeological deposits being present should be considered as high given the proximity of medieval Dunwich and the remains of Roman and prehistoric date that have been discovered in the area.

6 ACKNOWLEDGEMENTS

- 6.1.1 The author would like to thank Royal Haskoning Ltd who commissioned and funded the archaeological work. Advice on the geology was provided by Neil Seddon (Royal Haskoning Ltd). The mechanical excavator was provided by the Environment Agency. The principal contractor was AEG Ltd.
- 6.1.2 The brief for archaeological works was written by William Fletcher.
- 6.1.3 Sites and Monuments records and mapping were provided by Colin Pendleton.

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APPENDIX A. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-59154.		
Project Name	Walberswick Sluice and Dunwich Embankment		
Project Dates (fieldwork) Start	26-05-2009	Finish	26-06-2009
Previous Work (by OA East)	No	Future Work	Yes

Project Reference Codes

Site Code	XSFWDF09	Planning App. No.	NA
HER No.	WLB 072 and DUN 096	Related HER/OASIS No.	None known

Type of Project/Techniques Used

Prompt

Please select all techniques used:

<input type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input type="checkbox"/> Full Survey	<input type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input checked="" type="checkbox"/> Watching Brief

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
<input type="text"/>	Select period...	<input type="text"/>	Select period...
<input type="text"/>	Select period...	<input type="text"/>	Select period...
<input type="text"/>	Select period...	<input type="text"/>	Select period...

Project Location

County	SUFFOLK	Site Address (including postcode if possible)
District	SUFFOLK COASTAL DISTRICT	NA
Parish	DUNWICH and WALBERSWICK	
HER	SUFFOLK	
Study Area	4km	National Grid Reference
		TM499 746, TM 478 708

Project Originators

Organisation	OA EAST
Project Brief Originator	Will Fletcher, Suffolk County Council Archaeology
Project Design Originator	Aileen Connor
Project Manager	Aileen Connor
Supervisor	NA

Project Archives

Physical Archive	Digital Archive	Paper Archive
Suffolk County Council...	Suffolk County Council ...	Suffolk County Council ...
DUN 096	DUN096	DUN096..

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceramics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		<input type="checkbox"/>	<input type="checkbox"/>
Survey		<input type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Bone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Stone/Lithic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Digital Media	Paper Media
<input type="checkbox"/> Database	<input type="checkbox"/> Aerial Photos
<input checked="" type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input type="checkbox"/> Correspondence
<input checked="" type="checkbox"/> Images	<input type="checkbox"/> Diary
<input checked="" type="checkbox"/> Illustrations	<input type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input type="checkbox"/> Manuscript
<input type="checkbox"/> Spreadsheets	<input type="checkbox"/> Map
<input type="checkbox"/> Survey	<input type="checkbox"/> Matrices
<input checked="" type="checkbox"/> Text	<input type="checkbox"/> Microfilm
<input type="checkbox"/> Virtual Reality	<input type="checkbox"/> Misc.
	<input type="checkbox"/> Research/Notes
	<input type="checkbox"/> Photos
	<input type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes:

APPENDIX B GEOTECHNICAL TEST PIT DESCRIPTIONS

Depth below Ground Level	Description
AREA 1	
TP 1	
0-0.25m	Topsoil - Dark Brown 2.5YR 2.5/3
0.25- 0.60m	Mid-dark brown 5YR 4/4 soft peaty deposit horizontal organic rich banding
0.60-1.50m	Mid grey 10Y/6 soft silt, organic rich, frequent plant fibres
1.50-2.60m +	Dark brown 7.5YR 3/2 soft peat, no inclusions
TP 2	
0-0.25m	Topsoil - Dark Brown 2.5YR 2.5/3
0.25- 0.60m	Mid-dark brown 5YR 4/4 soft peaty deposit horizontal organic rich banding
0.60-1.50m	Mid grey 10Y/6 soft silt, organic rich, frequent plant fibres
1.50-2.60m +	Dark brown 7YR 3/2 soft peat, no inclusions
TP 3	
0-0.20m	Topsoil - Dark Brown 2.5YR 2.5/3
0.20-0.60m	Mid-dark brown 5YR 4/4 soft peaty deposit horizontal organic rich banding
0.60-1.55m	Mid grey 10YR 6/1 soft silt, organic rich, frequent plant fibres
1.55-2.40m +	Dark brown 7YR 3/2 soft peat, no inclusions
TP 4	
0-0.20m	Topsoil - Dark Brown 2.5YR 2.5/3
0.20-0.70m	Mid brown mixed organic peat and silt
0.70-1.00m	Mid grey 10YR 6/1 organic silt
1.00-2.30m +	Dark brown 7YR 3/2 soft peat
TP 5	
0-0.20m	Topsoil - Dark Brown 2.5YR 2.5/3
0.20-0.60m	Mixed clay/peat
0.60-1.25m	Mid grey 10YR 6/1 soft silt, organic rich
1.25-2.00m +	Dark brown 7YR 3/2 soft peat
TP 6	
0-0.15m	Topsoil - Dark Brown 2.5YR 2.5/3
0.15-0.30m	Thin bands of mid-dark brown organic peat/silt
0.30-0.60m	Mid grey 10YR 6/1 soft organic sterile silt
0.60m	Water entering at this depth
0.60-1.90m	Mid grey 10YR 6/1 soft organic sterile silt
1.90m +	Dark brown 7YR 3/2 soft peat

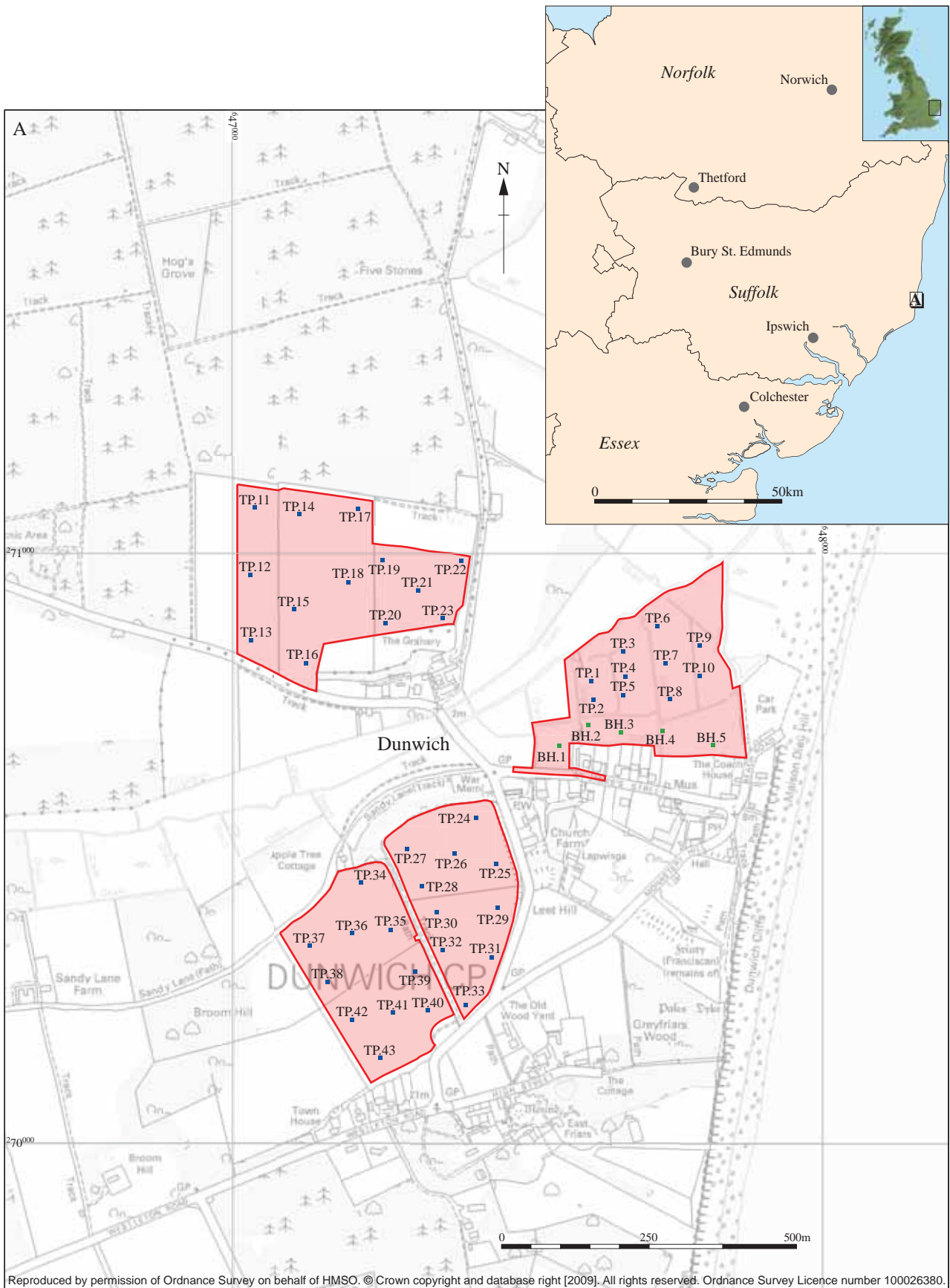
Depth below Ground Level	Description
TP 7	
0-0.25m	Topsoil - Dark Brown 2.5YR 2.5/3
0.25-0.60m	Mixed peat/clay
0.60-0.70m	Silt/clay
0.70-2.00m +	Peat
TP 8	
0-0.25m	Topsoil - Dark Brown 2.5YR 2.5/3
0.25-0.60m	Mixed peat/clay
0.60-0.70m	Silt/clay
0.70-2.00m +	Dark brown 7YR 3/2 soft peat
TP 9	
0-0.20m	Topsoil - Dark Brown 2.5YR 2.5/3
0.20-0.75m	Mixed organic peat/silt
0.75-1.20m	Mid grey 10YR 6/1 organic silt
1.20-3.30m +	Dark brown 7YR 3/2 soft peat
TP 10	
0-0.20m	Topsoil - Dark Brown 2.5YR 2.5/3
0.20-0.75m	Mixed organic peat/silt
0.75-1.20m	Mid grey 10YR 6/1 organic silt
1.20-3.30m +	Dark brown 7YR 3/2 soft peat
AREA 2	
TP 11	
0-0.40m	Topsoil- 10YR 5/2 Greyish brown sand
0.40-0.80m	Subsoil – 10YR 7/2 Mid-pale grey sand with frequent rounded pebbles, poorly sorted
0.80-1.20m	5YR 4/4 Reddish brown sand, frequent rounded pebbles, poorly sorted
1.20-4m+	Mixed sand and gravel, rounded pebbles, occasional clay pockets
TP 12	
0-0.50m	Topsoil – 10YR 6/2 Pale greyish brown sand with occasional rounded pebbles
0.50-0.90m	Subsoil – 10YR 7/4 Pale brown sand, rare rounded pebbles
0.9	Slightly gravelly sand, very soft, collapsed prior to full depth
TP 13	
0-0.30m	Topsoil – 10YR 6/2 Pale greyish brown sand with occasional rounded pebbles
0.30-3.8m	10YR 8/6 Clean pale yellow sand
3.8-4m+	Gravel
TP 14	
0-0.40m	Topsoil – 10YR 5/3 Brown silty sand with frequent rounded pebbles and flints

Depth below Ground Level	Description
0.40-0.80m	5YR 3/3 Dark reddish brown silty sand, frequent rounded pebbles, occasional angular flints
0.80-0.90m	Iron panned silty sand
0.90-2m	Sand and gravel
2-4m+	Sand with moderate rounded to angular flints
TP 15	
0-0.30m	Topsoil – 10YR 5/2 Greyish brown sand with very frequent small to medium rounded pebbles
0.30-0.70m	5YR 4/4 Reddish brown sand with frequent small to medium rounded pebbles
0.70-1m	10YR 5/6 Yellowish brown sandy gravel
1-4m+	10YR 7/5 Yellow sand with frequent rounded pebbles
TP 16	
0-0.50m	Topsoil – 10YR 5/2 greyish brown sand with very frequent small to medium rounded pebbles
0.50-0.90m	10YR 5/6 Yellowish brown sandy gravel with frequent small to medium rounded pebbles, occasionally slightly angular
0.90-4m+	10YR 7/3 Pale yellow sandy gravel with frequent small to medium rounded pebbles
TP 17	Not excavated
TP 18	
0-0.40m	Topsoil – 10YR 5/2 Greyish brown sandy silt with very frequent small to medium rounded pebbles
0.40-0.60m	10YR 7/4 Pale brown sandy silt with frequent rounded pebbles
0.60-4m+	Sandy gravel becoming sandier with depth
TP 19	Not excavated
TP 20	
0-0.40m	Topsoil – 10YR 5/2 Greyish brown sand with rare rounded pebbles
0.40-0.70m	5YR 4/4 Mixed reddish brown sand with rare rounded pebbles
0.70-0.75m	Thin red iron panned layer
0.75-2m	10YR 7/3 Soft pale yellow sand with occasional pebbles
2-4m+	Gravelly sand
TP 21	
0-0.30m	Topsoil – 10YR 5/2 Greyish brown sand with rare rounded pebbles
0.30-0.40m	10YR 7/1 Loose greyish white fine sand with occasional small pebbles, possible colluvium “hillwash”
0.40-0.80m	5YR 2.5/1 Black, fine soft sand, occasional small pebbles, contains iron pan lenses
0.80-4m+	10YR 8/6 Pale yellow Sand
TP 22	
0-0.30m	Topsoil – 10YR 4/2 Dark greyish brown sand
0.30-0.40m	10YR 7/1 Very pale grey sand, possible colluvium
0.40-0.90m	Mixed very dark brown/black 10YR 2.5/1 sand with iron panning and possible root activity

Depth below Ground Level	Description
0.90m+	10YR 7/6 Soft yellow sand with occasional clay lumps
TP 23	Not excavated
AREA 3	
TP 24	
0-0.40m	Topsoil – 10YR 5/3 Brown sand
0.40-0.90m	Greyish brown 10yr 5/2 Sand
0.90-1.50m	Mixed black/yellow 10YR 1/1 /10YR 7/6 indurated sand
1.50m+	10YR 7/6 Soft yellow sand
TP 25	
0-0.40m	Topsoil - 10YR 5/2 Greyish brown sand with moderate rounded pebbles, occasional angular flints
0.40-0.75m	10YR 5/6 Yellowish brown sand mixed with lumps of black indurated sand
0.75-0.80m	Layer of small – medium rounded pebbles
0.80- 1.30m	10YR 5/6 Yellowish brown sand
1.30m+	10YR 7/6 Pale yellow sand
TP 26	
0-0.35m	Topsoil – 10YR 5/2 Greyish brown sand
0.35-1.10m	Mixed black/yellow 10YR 1/1 /10YR 7/6indurated sand
1.10m+	Pale yellow 2.5Y 8/3 Sand
TP 27	
0-0.30m	Topsoil – 10YR 3/4 Dark yellowish brown sand
0.30-0.80m	Indurated black sand mottled with brown indurated sand and pebbles
0.80-1.50m	10YR 5/6 Yellowish brown sandy gravel, occasional small angular flint flakes
1.5m+	10YR 6/8 Brownish yellow sand
TP 28	
0-0.30m	Topsoil – 10YR 3/4 Dark yellowish brown sand
0.50-0.80m	Indurated black 5YR 2.5/1 sand mottled with brown indurated sand and pebbles
0.80-1.50m	10YR 5/6 Yellowish brown sandy gravel, occasional small angular flint flakes
1.5m+	10YR 6/8 Brownish yellow sand
TP 29	
0-0.30m	Topsoil – 10YR 3/4 Dark yellowish brown sand
0.30-0.45m	Small rounded pebbles within black 5YR 2.5/1 indurated sand matrix
0.45m - 4m+	Banded sand and gravels
TP 30	
0-0.45m	Topsoil – 10YR 3/4 Dark yellowish brown sand
0.45-0.90m	Indurated 5YR 2.5/1 black sand mottled with 10YR 5/6 yellowish brown sand

Depth below Ground Level	Description
0.90-3m+	10YR 6/8 Brownish yellow sand becoming yellower with depth
TP 31	Not excavated
TP 32	
0-0.85m	Topsoil – 10YR 3/6 Dark yellowish brown slightly clayey sand
0.85-1.70m	10YR 7/6 Yellow slightly clayey sand becoming more gravelly towards base
1.70-4m+	10YR 7/8 Yellow sandy gravel with occasional clay
TP 33	
0-0.50m	Topsoil – 10YR 3/4 Dark yellowish brown sand, occasional fragments of abraded tile just below turf. Small (3g) sherd of ?Roman pottery.
0.50-0.90m	10YR 5/3 Brown sand
0.90-4m+	2.5Y 8/4 Yellow sand with occasional small to medium rounded pebbles
TP 34	
0-0.70m	Topsoil – 10YR 4/4 Dark yellowish brown sand, rare stones
0.70-1.00m	10YR 5/3 Brown sand
1.00-4.00m+	10YR 6/8 Brownish yellow sand with lumps of harder sand (stone)
TP 35	
0-1.00m	Topsoil – 10YR 4/4 Dark yellowish brown sand, rare stones
0.70-1.60m	Laminated yellow brown sands with lumps of indurated dark brown/black sand
1.60-3.00m	10YR 7/6 Yellow sand
3.00-4.00m+	10YR 6/8 Brownish yellow sand with lumps of harder sand (stone)
TP 36	
0-0.50m	Topsoil – 10YR 4/4 Dark yellowish brown sand, rare stones
0.50-0.70m	Subsoil – 10YR 6/4 Mottled yellow/brown sand
0.70-4.00m+	10YR 7/6 Yellow sand, occasionally slightly clayey
TP 37	
0-0.60m	Topsoil – 10YR 4/4 Dark yellowish brown sand, rare stones
0.60-1.00m	Subsoil – Mixed blackish brown/10YR 5/6 yellowish brown/reddish brown sand
1.00-1.20m	10YR 3/4 Dark yellowish brown sand
1.20-4.00m+	10YR 7/6 Yellow sand, occasionally slightly clayey
TP 38	
0-0.45m	10YR 3/6 Dark yellowish brown sand
0.45-1.00m	Laminated yellow sand interspersed with reddish black 5YR 2.5/1 diffuse stripes, probably decayed roots
1.00-1.40m	10YR 7/6 Yellow sandy gravel
1.40-1.50m	10YR 2/2 Very dark brown sand
1.50-3.00m+	10YR 8/2 Very pale brown sand

Depth below Ground Level	Description
TP 39	
0-1.30m	Topsoil - 10YR 3/6 Dark yellowish brown sand
1.30-1.50m	5YR 2.5/1 Black sand, possible buried soil?
1.50-2.80m+	10YR 7/4 Pale yellow slightly clayey sand
TP 40	
0-0.60m	Topsoil- 10YR 4/4 Dark yellowish brown sand
0.60-0.90m	Subsoil – 10YR 4/6 Dark yellowish brown sand
0.90-4.00m+	10YR 6/4 Light yellowish brown sand with occasional lumps of pale greenish clay increasing with depth
TP 41	
0-0.40m	Topsoil- 10YR 4/4 Dark yellowish brown sand
0.40-0.85m	Subsoil – 10YR 6/3 Pale brown sand
0.85m+	10YR 6/4 Light yellowish brown sand
TP 42	
0-0.45m	Topsoil- 10YR 4/4 Dark yellowish brown sand
0.45-0.70m	10YR 6/2 Pale greyish brown sand
0.70-1.10m	5YR 2.5/1 Black mottled with reddish brown/10YR 5/6 yellowish brown sand, evidence of decayed plant roots. Possible remnant buried soil?
1.10-1.50m	10YR 5/6 Yellowish brown slightly clayey sand
1.50-3.20m+	10YR 7/6 Yellow slightly clayey sand
TP 43	
0-0.60m	Topsoil- 10YR 4/4 Dark yellowish brown sand
0.60-0.90m	Subsoil - 10YR 5/6 dark yellowish brown
0.90-1.60m	Possible feature, U shaped ditch or pit containing three fills, the lower fill was a black greasy slightly silty sand this was overlain in part by a mixed red and black deposit, possibly raked from a fire, above which was a mid yellowish brown 10YR 5/6 sand. No finds
0.90-4.00m+	10YR 6/8 Brownish yellow clayey sand



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Figure 1: Location map showing development areas and test pit and bore hole locations



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