Northey Island River Blackwater Maldon Essex

#### **ARCHAEOLOGICAL SURVEY REPORT**

Date 08/10/2015

Project Manager: Louise Davies



## Northey Island River Blackwater Maldon Essex

Site Code MDNI 15 NGR 587770 206530

Archaeological survey report

#### Sign-off History:

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## Summary

This report presents the results of an archaeological intertidal survey carried out by MOLA at Northey Island, River Blackwater, Maldon, Essex. The report was commissioned from MOLA by the National Trust.

In accordance with the Method Statement (MOLA 2015) a number of features were investigated on the 1st and 2nd of September. Some of these features had been previously identified from aerial photographs taken by a small unmanned aircraft (SUA) which flew over the site in August 2015.

Two barge hulks were observed to be in a disintigrating state, along with four 20th century oyster pits, a 20th century wharf, and a probable 20th century landing stage. The sea wall was seen to comprise an earthern bank north of the post 1897 maintained defences. A 20th century swimming pool was also recorded.

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## 1 Introduction

#### 1.1 Site background

- 1.1.1 An archaeological intertidal survey was carried out by MOLA at Northey Island ('the site') on the 1st and 2nd of September 2015 (see Fig 1). The area had previously been photographed from a small unmanned aircraft (SUA), to produce a photo orthomosaic for the purpose of identifying and recording archaeological features. The orthomosaic aerial photo can be viewed at: https://www.dronelab.io/map/public/view/c3dca965e0e8494aa6e0610897c7e37d
- 1.1.2 This document is the Report on the features identified from the aerial photos and from fieldwork.
- 1.1.3 A written scheme of investigation (method statement) was previously prepared, which covered the whole area of the site (MOLA 2015). This document should be referred to for information on the natural geology, archaeological and historical background of the site, and the initial interpretation of its archaeological potential.

## 2 Topographical and historical background

### 2.1 Topography

- 2.1.1 Northey Island is located in an area of London Clay, which outcrops in the higher, south-western part of the island. In other parts of the island the London Clay is overlain by Quaternary alluvial deposits of silt, sand and gravel. Ground level at Northey Farm is c 4m OD (MOLA 2015).
- 2.1.2 The island was formerly joined to the mainland by a spur of London Clay, with Southey Creek being a small stream. Rising sea levels since the end of the last glacial period (c 10,000 years ago) meant Northey Island was cut off from the main land, however it could still be accessed via a causeway since at least the early medieval period (MOLA 2015).

#### 2.2 Archaeology

- 2.2.1 A possible Neolithic settlement has been recorded on the southern edge of the island, with part of a Neolithic polished flint axe found nearby. Prehistoric pottery and flint implements were also reputedly found in a gravel pit in the central part of the island. The Essex Historic Environment Record contains two records of mounds on the island, historically described as tumuli. One mound was originally located in the south-eastern part of the island, but can no longer be found due to water erosion. The other mound in the north of the island still exists, albeit in poor condition. These features are undated, but could be late prehistoric or later burial mounds (MOLA 2015).
- 2.2.2 There are no known Roman finds from the island, however Roman pottery, salt workings and evidence for a Roman building have been found c 1km to the southwest on the mainland (MOLA 2015).
- 2.2.3 The the area around South House Farm, on the mainland to the south-west of the island, is the reputed site of the battle of Maldon in 991. This is listed in the Register of Historic Battle Fields maintained by Historic England. The causeway to Northey Island is thought to have been in existence by this date, when Southey Creek was only about half of its present width (MOLA 2015).
- 2.2.4 Sea levels rose quickly between the 12th and 14th centuries and sea walls may have been needed to maintain the pasture on the island. A commission dating to 1439 describes sea defences being built along the Essex coastline. The commission does not specify sea walls at Northey, however they may have existed at this time. There are no written records of the sea walls until the 17<sup>th</sup> century, when they were described as needing repair, therefore must have been in existence by this time. The sea wall is thought to have originally been a clay bank, possibly based on a revetment of stakes. It was strengthened with stone in the early 19th century. It was breached in several places during a storm in 1897, and only partially repaired, resulting in much of the interior of the island beginning to revert to saltmarsh despite attempts to reclaim the marshes being made up until the 1920s.
- 2.2.5 The hulks of two Thames Barges are located within the study area, these are the Mistley (1891) and the Gillman (1865). Both were recorded by the Nautical Archaeology Society in 1997, but have since deteriorated considerably (MOLA 2015).
- 2.2.6 Former oyster pits exist within the southern part of the study area, dating from the late 19th century or early 20th century, while an early 19th century farm house was destroyed by bombing and replaced by the current Northey Farm building in the

1920s. A number of other 19<sup>th</sup> and 20<sup>th</sup> century buildings surround it (MOLA 2015).

## 3 Survey methodology

### 3.1 Field methodology

- 3.1.1 An SUA undertook an aerial survey of the site in order to create a 2D and 3D orthomosaic.
- 3.1.2 This orthomosaic was subsequently ground-truthed using photography, sketches, measured plans and *pro-forma* recording sheets as appropriate.

### 3.2 Recording methodology

3.2.1 The archaeological ground survey was carried out in accordance with the Method Statement (MOLA 2015).

#### 3.3 Site archive

Number of feature/vessel record sheets	11
Number of sketches/plans	4
Number of photographs	168

## 4 Results of the survey

4.1.1 The site comprised an area of salt-marsh and mudflats, c 5.7 hectares in size in the north-western part of Northey Island. The entire site, apart from a small area in the south-western corner, was inundated at high tide; however the tide on the days of the survey was particularly high. The highest part of the site was the south-western corner, at a height of c 6.5m OD. A number of archaeological features were recorded during the survey and are described below and shown on Figure 2.

#### 4.2 Vessel 1

4.2.1 Vessel 1 is located on the south bank of a creek in the landward side of the sea wall. The national grid reference for the vessel is 587572 206492. This vessel was identified as a carvel-planked barge with a length of 27.20m (including rudder), a length of 25.00m (stempost to sternpost), a beam of 6.02m and an estimated visible height of 2.50m (site conditions precluded accurate measurement). The interior of the vessel had largely silted up and comprised saltmarsh.



Vessel 1 Starboard side, looking south

4.2.2 It was in a very degraded condition but the stempost, sternpost and rudder were substantially intact, some of the vessel sides were intact to deck level but the majority had collapsed to some degree or other. The stempost was molded at the head 0.28m and sided at the head 0.23m, while the sternpost was molded at the head 0.23m and sided at the head 0.20m while being sided at the foot 0.28m. One piece of rising deadwood was noted, while the salt marsh was partially removed to reveal a softwood keelson sided 0.42m. The frames were molded 0.14m and sided 0.17m and were spaced, centre to centre, at 0.56m. There were two layers of overlapping external planking, the outer planks being 0.25m wide and 0.06m thick ,

while the inner planks were of the same thickness but 0.20m wide.

- 4.2.3 Most of the deck and the hold coaming had collapsed inboard and only some deck planking was visible. The deck planking ran fore and aft, the planks were 0.15m wide and 0.06m thick; the deck itself being originally supported by iron hanging knees bolted through the ceiling planking and into the frames. One athwartship beam was still *in situ* above the area of the hold, 9.40m aft of the front of the stempost and was molded 0.18m and sided 0.20m. The hold itself was 15.70m long, the coaming being 0.39m wide and 0.09m thick. The ceiling planks of the hold were 0.24m wide and 0.04m thick, while the fragments visible forward of the hold were 0.23m wide and 0.012m thick and displayed traces of red paint.
- 4.2.4 The screw steering gear was observed although it had fallen from the rudder head. It had a name plate inscribed 'Taylor-Neath Rochester', presumably the manufacturer. Three chain plates for standing rigging were observed midships on the upper port strakes. Two iron bilge pump tubes were observed forward of the hold, the starboard one appeared to still be *in situ* and had an 0.18m external diameter and 0.12m internal diameter. Observed closer to the bow and considerably obscured by the saltmarsh was the anchor windlass.



Vessel 1 Screw steering gear and sternpost

### 4.3 Vessel 2

- 4.3.1 This vessel was almost entirely covered by salt marsh, only the rudder, sternpost and two extremely degraded frames being visible. The observed length was 2.85m and observed height 2.60m. The rudder and sternpost are located at NGR 587578 206439.
- 4.3.2 The sternpost was molded at the head 0.23m and sided at the head 0.15m. The rudder fan was studded with iron nails and a square iron collar measuring 0.34m by 0.33m was recorded on the rudder head. The rudder was not attached to the

sternpost by the usual gudgeon and pintle system but by straps from both sternpost and rudder around a vertical iron post. The two observed frames were too degraded to make any accurate measurements of their original dimensions but appeared to be spaced, centre to centre, 0.40m.



Vessel 2 Rudder and sternpost looking starboard

#### 4.4 Vessel fragment 3

- 4.4.1 This vessel fragment comprised six planks fastened to a deck beam with hold coaming attached above. The fragment was located at NGR 587565 206437.
- 4.4.2 The planks were 0.10-0.20m wide and 0.08m to 0.10m thick, the deck beam was molded 0.18m and sided 0.20m, while the coaming comprised two planks, the lower one being 0.30m wide and 0.10m thick, the upper being 0.10m wide and 0.10m thick. The lower part of the coaming was studded with copper nails.
- 4.4.3 The dimensions of the planks, deck beam and coaming are consistent with those recorded in Vessel 1; it is, therefore, considered that this is part of the deck of that vessel which has come adrift.



Vessel fragment 3, planks, deck beam, hold

#### 4.5 Oyster pits

- 4.5.1 Four former oyster pits were recorded in the south of the site, connected to each other by a drainage channel on the south and east sides, and by a number of pipes, most of which were ceramic but two of which were plastic. The central national grid reference for the group of oyster pits was 587580 206410.
- 4.5.2 The oyster pits ranged in size from 4.2m x 5.8m to 16m x 20m, were generally steep sided and c 0.8m deep. Some showed evidence of being revetted with small timber piles and planking. Most were square/rectilinear but some had irregular edges which may have been the result of subsequent flooding and silting. Where visible the bottoms of the pits contained gravel, some gravel also being recorded in the connecting drainage channel.
- 4.5.3 The oyster pits were recorded by measured archaeological survey and photography, and can be seen on Figure 4.



Southern end of north-eastern oyster pit showing timber revetments



Drainage channel on southern side of oyster pits

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Plastic drainage pipes in northern end of north-eastern oyster pit

#### 4.6 Sea wall

4.6.1 Most of the sea wall comprised an earthen bank with vegetation ranging in height from 0.75m to 1.50m on the landward side and from 0.30m to 1.20m on the seaward side. The southernmost side has been partially faced in concrete. The sea wall with levels is shown on Figure 2.

#### 4.7 Cultivation marks

4.7.1 The aerial photo of the site clearly shows the presence of parallel lines orientated north-south across the majority of the site, which are the remnants of cultivation marks. These were not obviously visible on the ground, and have been recorded from the orthomosiac photo and digital elevation model. The distance between the lines is largely similar, between 2m and 3m.



Cultivation marks visible on the digital elevation model (DEM) of the site

#### 4.8 Wharf

- 4.8.1 In the north-west of the site the remains of what appears to be an 'L' shaped wharf was recorded, measuring c 29m x 34m. The central grid reference of the wharf was NGR 587564 206623.
- 4.8.2 The wharf appears to have been constructed by dumping masonry and ferrous slag onto a raft of timber planks. The seaward side was revetted by a number of posts and planks driven into the foreshore, twenty four of these were observed during the survey.



Timber raft of the wharf, overlying fergous slag, looking north-west

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Wharf looking south-west showing timber revetments along western side

### 4.9 The landing stage

4.9.1 In the south-west of the site a linear structure was observed comprising thirty three posts and planks driven into the foreshore. The structure was 17.40m long and up to 1.40m wide and was interpreted as the remains of a possible landing stage. The central grid reference of the landing stage was NGR 587497 206463.



View of landing stage looking west

### 4.10 The swimming pool

- 4.10.1 A swimming pool was recorded in the trees in the south-west corner of the site, centered on NGR 587530, 206417. Measuring 7.50m by 4.60m it was built of light blue painted cast concrete with curved concrete capping stones, and was surrounded by a c 2m wide earthen bank.
- 4.10.2 To the south-west of the pool a slight bank and depression c 2m<sup>2</sup> suggests a feature associated with the pool, such as a building or terrace.

## 5 Archaeological potential and conclusions

### 5.1 General discussion of the survey

- 5.1.1 Vessel 1 had been previously been identified as the *Mistley*, launched in 1891 at Harwich, by the NAS survey undertaken in 1997. That survey demonstrated that the hull was largely intact except for considerable damage at the bow, and that the deck was largely still *in situ*. It also demonstrated that the vessel had two openings to the hold (Clarke *et al*, 1997). The vessel has now deteriorated to such an extent that this was not discernible, although it explains the presence of the athwartship beam recorded above the area of the hold. It seems highly likely that this beam was one of the deck beams of the forward hold opening. Vessel Fragment 3 is almost certainly part of the *Mistley's* deck, possibly from either forward or aft of the after hold opening. It is highly likely, once the deck had collapsed inboard, that the rate of degradation and disintegration increased, and that this increased rate of destruction will continue.
- 5.1.2 Likewise, Vessel 2 had been previously identified as the *Gillman*, launched in 1865 at Lambeth. This vessel was recorded as in considerably worse condition than the Mistley, only the floor timbers and some outer planking, along with the sternpost and rudder being visible (Clarke *et al*, 1997). Only the sternpost, rudder and ends of two extremely degraded floor timbers were observed during this survey. It is, however, likely that more of the bottom of the vessel survives under the salt marsh. Again, this vessel is likely to continue to disintegrate.
- 5.1.3 An area of oyster pits had been identified on the aerial survey; on investigation there proved to be five pits, connected by drainage channels and several ceramic and two plastic pipes. These pits are likely to post date the 1897 breach of the sea walls; as prior to this date this area would have been dry land and the pits would not have been filled with water as the tide rose. They appear to have continued in use into at least the mid 20th century and are visible on the 1975 Ordnance Survey map.
- 5.1.4 The majority of the sea wall observed comprised an earthern bank with vegetation, which is presumed to be the remains of the sea wall breached in 1897. The southernmost section had been partially faced in concrete.
- 5.1.5 The parallel lines recorded from the aerial photograph and DEM are the remnants of cultivation/plough marks relating to the site's former use as agricultural land. During the later 18th century an increase in demand for food lead to more land, including marsh land, being used for crop production. During this time it would have been economically viable to repair the sea walls and protect the land within the site so it could be used as arable land. It is likely that the cultivation marks date from this period.
- 5.1.6 An 'L' shaped wharf was recorded in the northwest of the site built of ferrous slag and masonry being dumped onto a timber raft. The wharf is first marked on 1924 Ordnance Survey map. It may have been used for moving agricultural products off the island or building materials on to it. The slag and masonry which were used to built up the wharf could have been brought to the island as ballast.
- 5.1.7 A linear timber structure was observed on the foreshore in the south-west of the site which possibly represents a landing stage. Historic photos show a timber landing stage in this area, which was constructed shortly after the island was bought by Norman Angell in 1923, and the posts visible today could be the remains of this structure.



View of landing stage looking west with Norman Angell's yacht, from Ardley, N. 2011 The Jottings of a Thames Estuary Ditch-Crawler

5.1.8 Another timber jetty is shown in the background of a photo of a houseboat moored on the 'beach' in the south-western corner of the site. No traces of this jetty or the houseboat could be seen during the site surveys.



Norman Angell's lighter, No. 527, Friends, in about 1930, from Ardley, N. 2011 The Jottings of a Thames Estuary Ditch-Crawler

- 5.1.9 A swimming pool was recorded in an area of trees just north of the maintained sea wall, presumably associated with the period when Eric Lane, nephew of Normal Angell, owned the island, from 1946 to 1978. It has an earthern berm raised around it to stop sea water flooding. As fairly substantial trees were growing in it, it must have fallen out of use a significant number of years ago.
- 5.1.10 A feature is shown on the 1975 Ordnance Survey map in the location of the swimming pool. This was originally interpreted as an oyster pit, however it is most

likely to be the pool, as it is the same size and on the same orientation as the pool recorded on site.

5.1.11 Earthworks recorded to the south-west of the pool, comprising a slight bank and depression c 2m<sup>2</sup>, could have been a platform for a small building or terrace. A photograph of the 'beach' in the south-western corner of the site looking towards the pool show a timber structure in the location of these earthworks, which may have been a changing room for the pool, or an unrelated outbuilding such as a storage shed. This photograph also shows timber revetments along the seaward edge of the sea wall, which can no longer be seen.



The final position of Norman Angell's accommodation lighter, showing timber structure in the background to the right, and timber revetments to the left, from Ardley, N. 2011 The Jottings of a Thames Estuary Ditch-Crawler

### 5.2 Significance

- 5.2.1 A review of the archaeological features identified from the aerial photograph, DEM and site survey work, combined with documentary research shows that the majority of the features surveyed date to the late 19th or early 20th century. Only the sea wall may pre-date this time, but this shows evidence for more modern repairs. No other features pre-dating the 19th century were recorded in the site.
- 5.2.2 Whilst the archaeological remains are of local significance there is nothing to suggest that they are of regional or national importance. The barges on Northey Island, like the remnants of the landing stage, wharf and oyster pits, are part of the history of the island relating to a time when it was owned by the Angell Lane family. The barges are badly degraded, however, and many examples of similar barges exist which are still in use.

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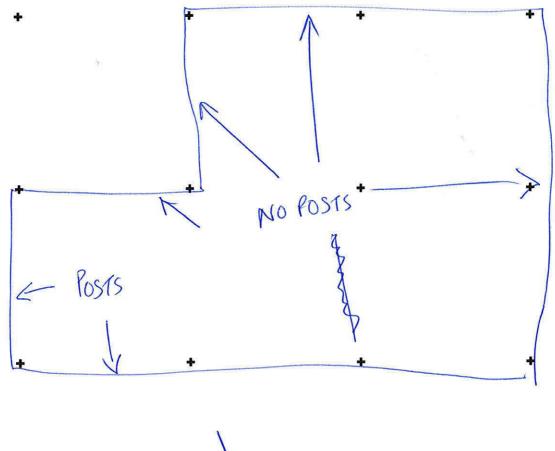
# 7 Appendix 1: Scanned site record sheets

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	+ SLOPING. APPROX DEPTH 1.5 M to N + E. AT W"SIDE						
ailed	THERE IS P	SSIBIT AD J	HAPED FEATURE AT N, + RECTANZUAR FEAT				
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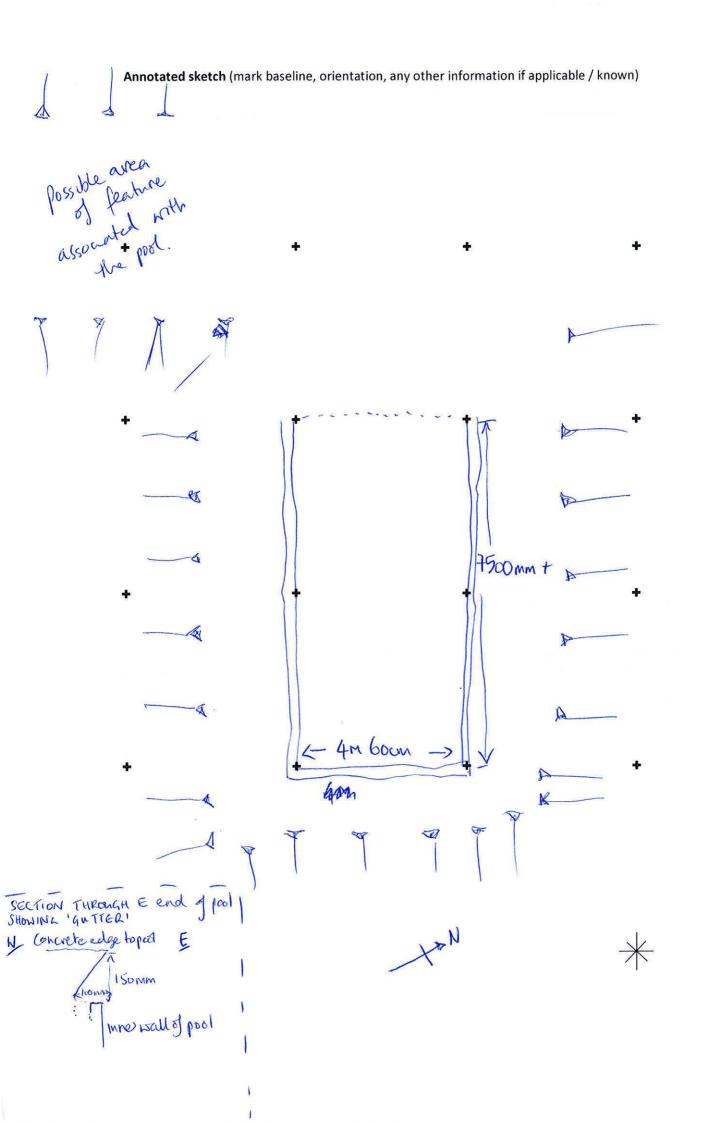
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3		ISSESTS' ISOLATED			
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Relationship to p					
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			n.		
			e anna - Anna - Anna Anna An Anna an Taonn an Anna Anna - 28-28		
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Annotated sketch / further notes overleaf

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CI	TIZAN	FEATURE RECORD								
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		Local Ref Norther	15LAND	HER/NRHE no.						
	Site conditions									
	Visible dimension	nsLxWxH(m)	X X	Circle one Measured Estimated						
cord	Construction (cire	cle)								
d Re	Roundwood		ick (Concrete) M	lasonry Composite Metal Other						
Rapi	NUMPERSON									
CITiZAN Survey Rapid Record	Function (circle)									
AN SL	Coastal Defer	nce Military Industr	ial Transport I	Nautical Fishing Ritual Other LEISURE						
CITiZ/	Swimming	and the second								
			and a second a second							
	Comments / iden		LIGHT PLIANT							
	(MRVED CONCRETE CAPPING STONES, BLUE PAINTED CAST CONCRETE SIDES VISIBLE THONGH MUCH OVERGROUN # 2 VISIBLE, MOST APPEAR-TO BEMISSING									
	Date range	20th centur	7. Drailage	entre Win rod at East end.						
	Detailed Descri	ption/Comments								
				en bank all the way						
	round Just to SW of pool Slight bank + depression									
	c 2m Suggests there may have been a building? terrace? or some other feature associated with the post									
			and the second							
ecord	in this area, though no vername visible + the area, again, Much overgrown - see over.									
	E End of Sun mas pool has internal "gutte" - See over									
etaile	CAPPING STORIES 48 cm × 32 cm × 4 cm, w curved edge to inner									
CITiZAN Survey Detailed R	Relationship to present day water levels and coast									
Surv	RACE + 1 in Breach + He Call + He wall									
izan	lool situated in the centre of the Scrub to the north of the Carparly area / bench. Not possible to survey in othe									
CIT	Carparky area / bench. Not possible to survey in ohne to under growth.									
	Relationship to assumed contemporary water levels and coast									
	Image nos	Plan G	Elevatio	n Profile(s)						
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	TIMBER-HULLED VES	SSEL / FRAGMENT RECORD							
	R Mobile Manual Other	CITIZAN no.							
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		ISSOCK GRASS MANY							
CHAINES.									
Visible dimensions	Visible dimensions Circle one								
LxWxH(m) 27.2 X 6.02 X 2.50 Measured LXL Estimated H									
Size class (circle)									
Barge Boat Ship Don't know									
Construction (circle)									
Carvel Cli Other:	nker Double-diagonal D	Dugout Don't know							
L x W x H (m) 2 / Size class (circle) Barge Bo Construction (circle) Carvel Cli Other: Propulsion (circle) Manpower Tox									
Manpower Toy	wed Sail P	addle Screw Don't know							
Comments / identifi									
	PREVIONLY IDENTIFIED AS MISTLEY								
Date range	CH44124								
Visible Elements	(Bow) (Midships) (Ste	rn Scantling: length x width x depth (m)							
	External planks 2 Lay EN J-D-20m x D-04m INNEN x x								
	Floor timbers 0.15 × 0.04 OVTEN. x x								
	Internal planks Holp 0.24mx 0 '04m FWD D. BAXDOUM								
Keel		X X							
	4000 0.42m SIDED	X X							
Knees IRON		x x							
Side frames	r ATA	× 0.17(s) 0.14 (m							
Stempost STEAN P Stern post MO ST	os j SATRO	0TD-23m x D. 20(SAH) D. 23(MA.							
Stem-post $STEAN r$ Stern-post $A^{A}$ $ST$ Deck $PLA\sqrt{kJ}$ O Deck structures $H^{A}$ Engine mountings Engine remains Frame spacing centre	cm 10/1 ATMEN	90 x P-23(S) x O.28(M) ggear Arlan Winness Ar Bod							
Deck) (LAV K) O									
Deck structures	Deck structures Hop is Amin by 0 39m (Rudder)								
Engine mountings	Engine mountings o								
Engine remains	Engine remains Other Hoch 10.10 /								
Engine remainsOtherHOLD10 10 7Frame spacing centre to centreP S6 m SURCH STEENIAR GCAN TAYLON NEATH ROLLee-boardMIDMIP/RISING DEADWOOD									
Lee-board MIDMIPS RISING DEADWOOD Mast/spars/rig 3(441~PLAR) PONTINE TWO BILGE PUMPS ONEIN									
Office and the second second second second		THO BILLE PUMPS , ONE IN							
Fastenings	Copper-alloy (Iron)	Trenail Other:							
Seam Waterproofing Toolmarks									
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		- <u>0</u> ,							
Contents	Plan Elevatio	on Profile(s)							
	Plan Elevatio	on Profile(s)							

## Annotated sketch / further notes overleaf

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Annotated sketch (mark baseline, orientation, any other location information if applicable / known)

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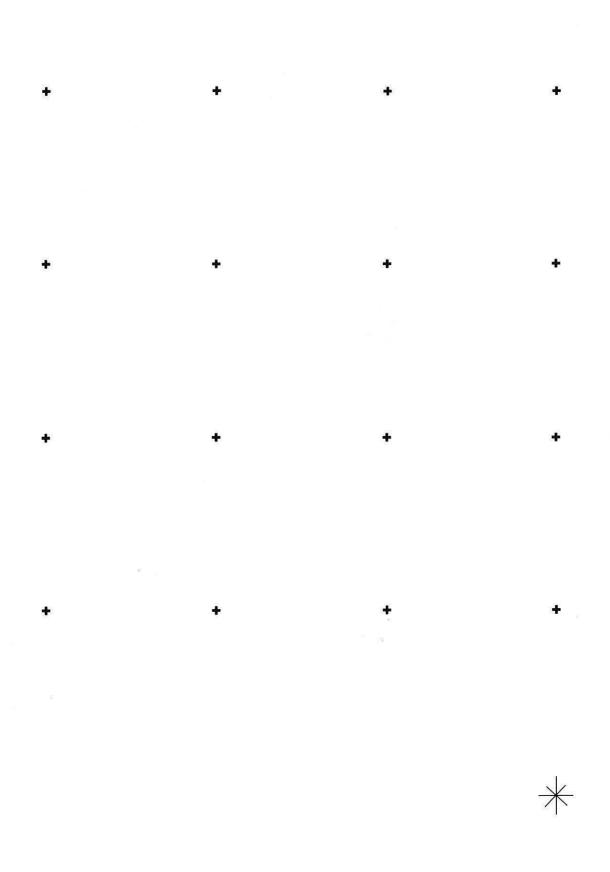
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•			ABER-HULI	ED VES	SEL / FRA	GMENT RECO	RD			
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SRAAD IS		i kei			HER/NRHE	: no.				
	Site conditions									
	<i>.</i>	SALT MANIN								
	SALT MARIN Visible dimensions Circle one									
σ	LxWxH(m) 2-85	- x	x 2.60		easured	Estimated				
ecor	Size class (circle)		~ ~ 60			Lotinuted				
Did K	(Barge) Boat		Ship	D	on't know	<u></u>				
/ Rap	Construction (circle)									
(avi	Carvel Clink	er	Double-diago	onal D	ugout	Don't know				
N Sr	Other:									
CITiZAN Survey Rapid Record	Propulsion (circle)	2			54 - 2621					
J	Manpower Towe	2014 B	Sail	P	addle	Screw	Don't know			
	Comments / identifica	tion marks								
			1							
	Date range (-19/204									
-	Visible Elements	Bow	Midships	Ster	n Sc	antling: length x w	vidth x depth (m)			
	External planks	2011	maships	oter		x	x			
	Floor timbers					x	x			
	Internal planks					x	x			
	Keel					x	x			
	Keelson					x	x			
	Knees					x	x			
σ	Side frames					x	x			
ecor	Stem post					x	x			
ed K	(Stern post			AT NEAD x D.23(m) x D.15(s)						
etau	Deck					Mooring gear				
CITiZAN Survey Detailed Recor	Deck structures			Budder? Not LUDHON AND PINTOS NOT LUDLie						
NUN	Engine mountings					Budder Not HOFFON AND PINTLE. NOT HUDLED Sterngear STUDDED LITH FLAM Other RISIN H DEAD WOND IRON SQUARE COLLAN ON RUDDED NEAD D.				
AN	Engine remains 0	o centre の	D EGNADED J	Other RILIAL DEAD						
	Frame spacing centre t	IRON SAVANE COLLAN ON RUDOR NEAD OF								
100	Lee-board				The count of the off the part of the part					
	Mast / spars / rig									
				Iron / Trenail Other:						
	Seam Waterproofing	copper-allo	<u>,                                    </u>		riendi	otilet.				
	Toolmarks									
	Surface Treatment									
	Contents									
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## Annotated sketch / further notes overleaf

Annotated sketch (mark baseline, orientation, any other location information if applicable / known)





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## TIMBER-HULLED VESSEL / FRAGMENT RECORD

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	Loca								
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L x W x H (m)   Size class (circl   Barge   Construction (construction (construction (circl))   Other:   Propulsion (circl)   Manpower	e)								
Barge	Boat		Ship	D	on't knov	v	- 10-10-10-10-10		
Construction (	circle)								
Carvel	Clink	er	Double-diago	onal D	ugout	Don't know	l		
Other:	Other:								
Propulsion (cir									
	Towe		Sail	P	addle	Screw	Do	on't know	
Comments / id	entifica	tion marks		01					
			$\sim$						
Date range				<b>V</b>					
Visible Elemen	CONTRACTOR OF THE OWNER.	Bow	Midships	Ster	n	Scantling: length x	width x de	epth (m)	
the second se	External planks					X	x		
Floor timbers	Floor timbers					x	х		
Internal planks	Internal planks					х	х		
Keel	Keel					x	х		
Keelson	Keelson					×	x		
Knees	Knees					×	x		
Side frames	Side frames					x	х		
Side frames Stem post	Stem post					x	х		
						×	х		
Deck 6 PLA	inks	0-10-0-08	THICK P-10-02	Mooring	g gear				
Deck structures	WIN				Rudder				
Engine mountin	Engine mountings				Stern gear				
Engine remains					Other				
	Frame spacing centre to centre								
Lee-board					DECK BEAM D. 18mmor LD 1 D. 20m SIDE HOLD COAMWA: 2 PLANKS, COWEN D. 30m X D. 10m				
LOUGH MATHEMATICS	Mast / spars / rig			$\mu_{0}$					
Fastenings		Copper-a	lloy)	Iron	Trer	nail Othe	er: 0	than FJ	
Seam Waterpro	ofing		1 CAVLKIN				TH	PENING TO	
Toolmarks								NOTHING	
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## Annotated sketch / further notes overleaf

Annotated sketch (mark baseline, orientation, any other location information if applicable / known)



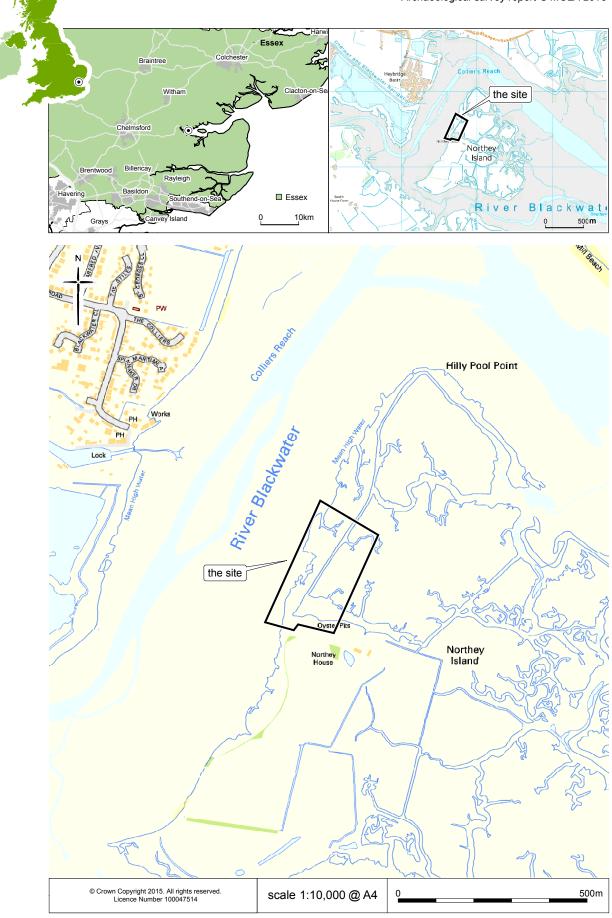
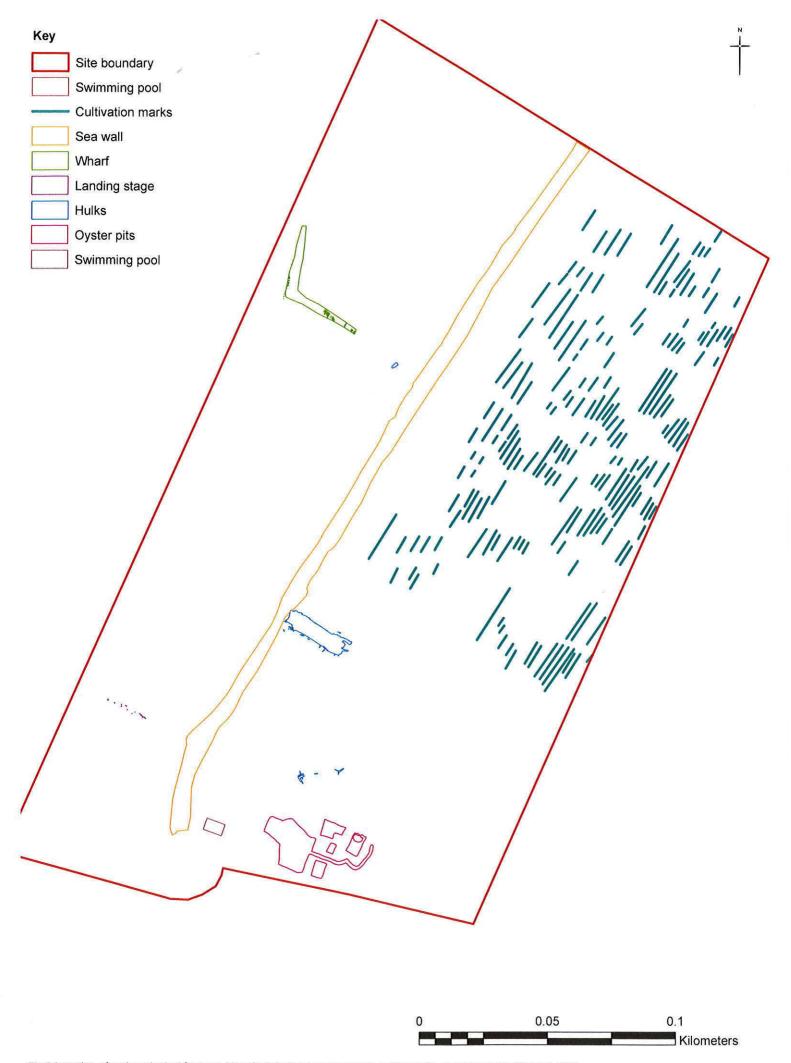
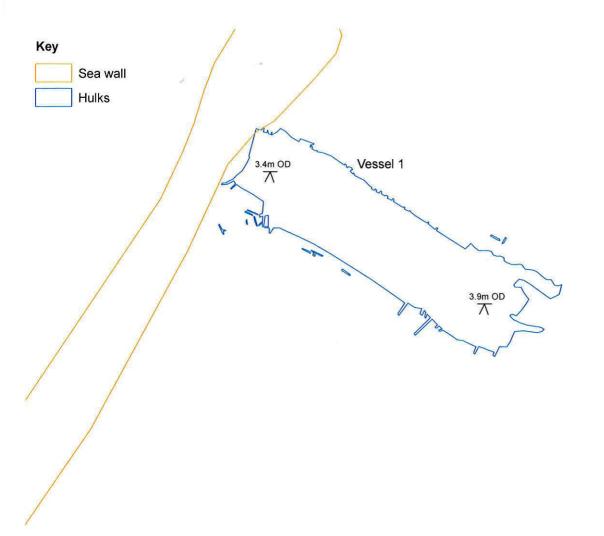


Fig 1 Site location

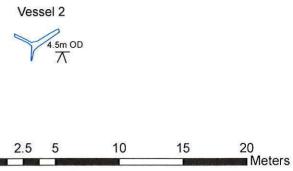


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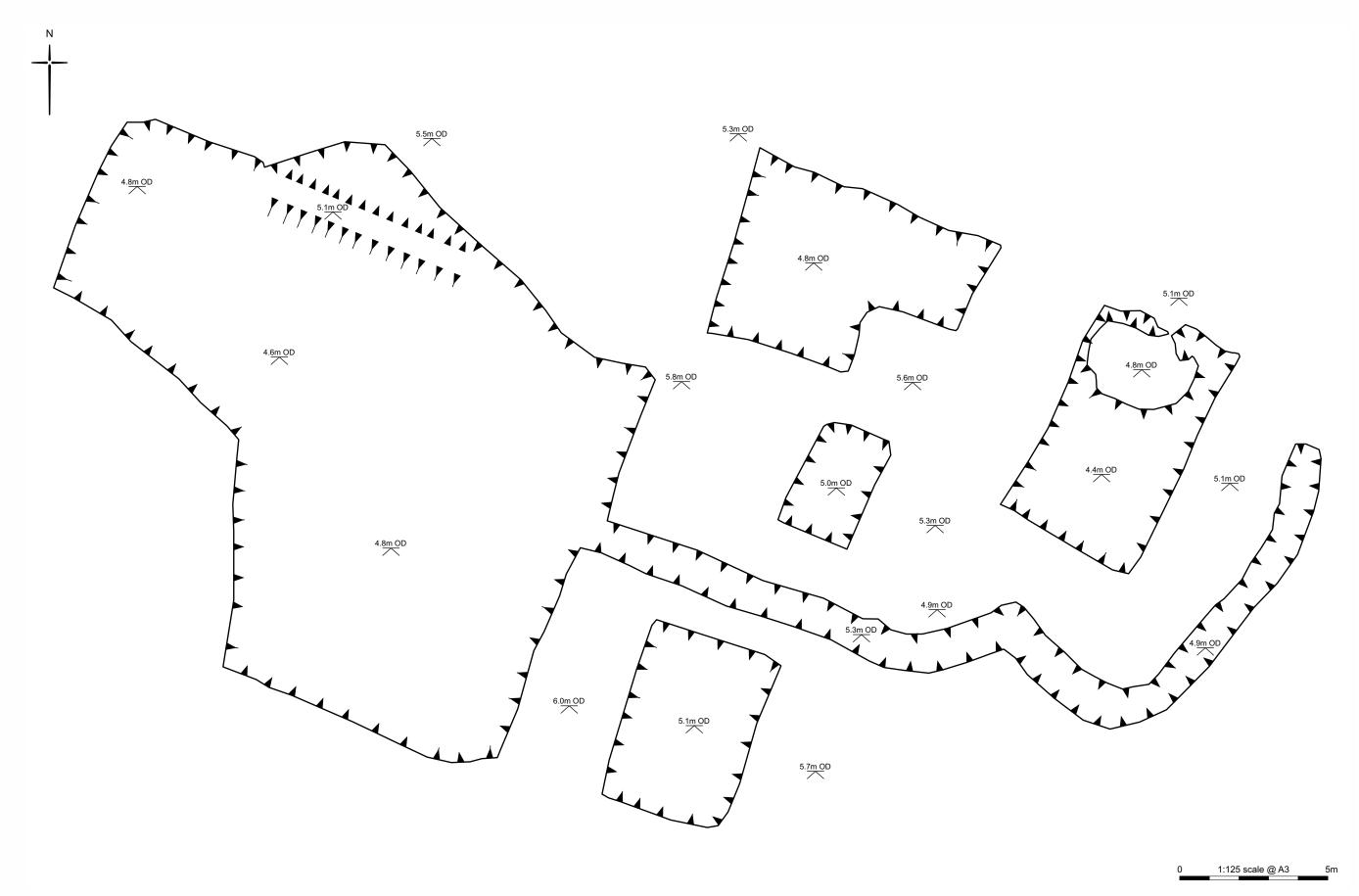


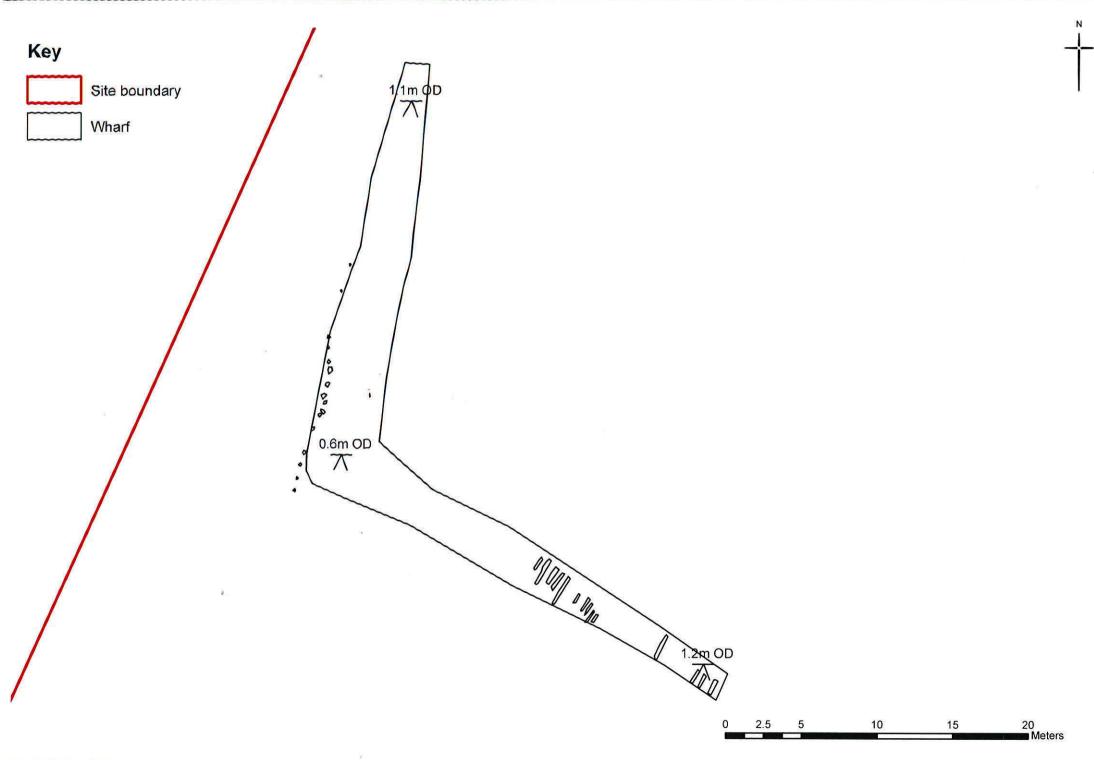
Vessel fragment 3 -4.9m OD

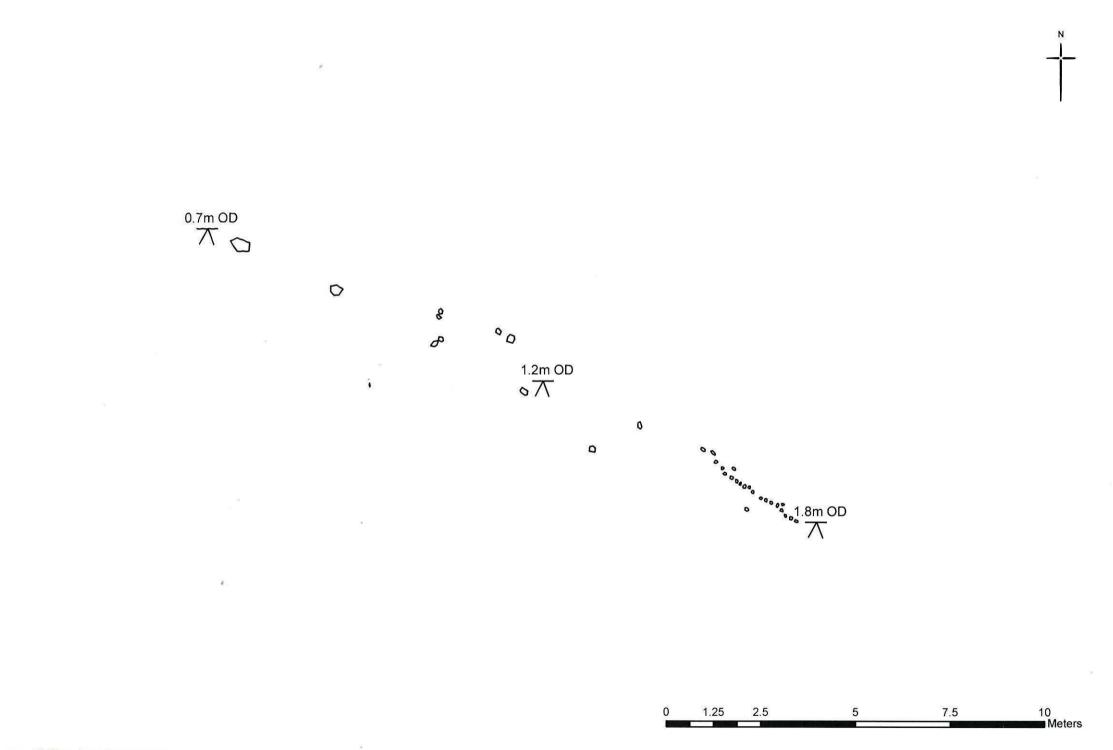
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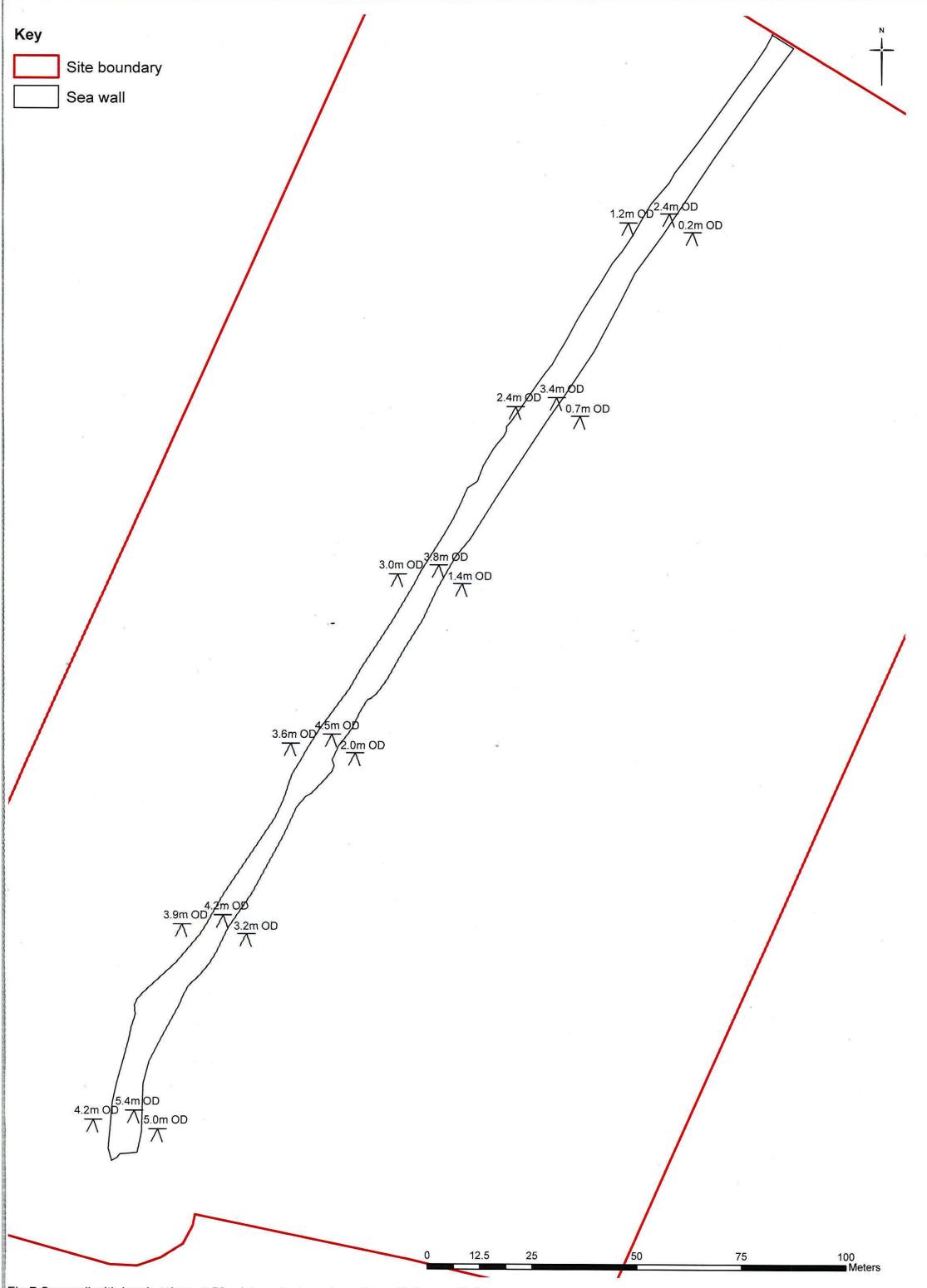


Fig 7 Sea wall with levels taken at 50m intervals, in metres above Ordnance Datum

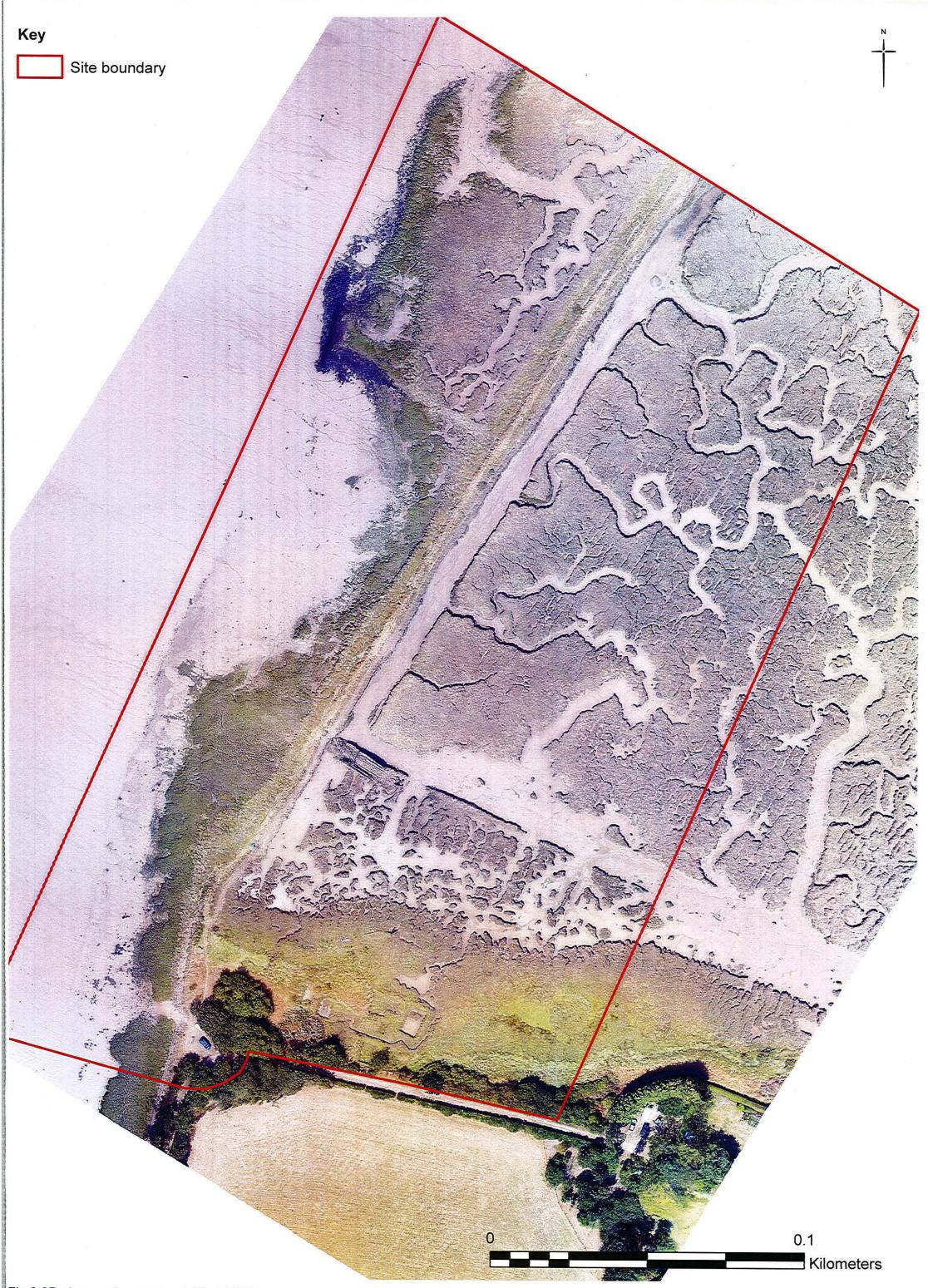


Fig 8 2D photo orthomosaic at A3, 1:1000

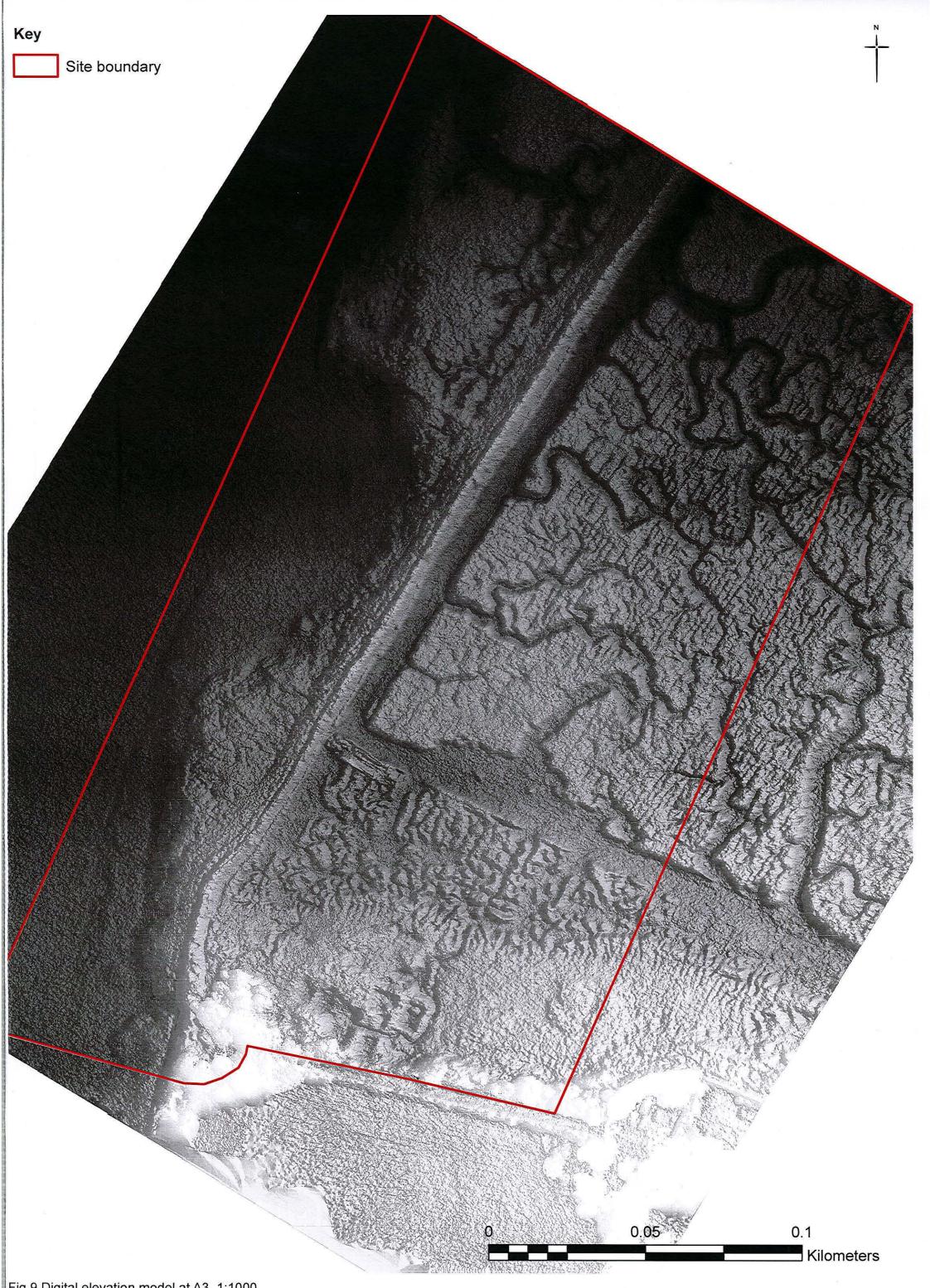


Fig 9 Digital elevation model at A3, 1:1000