

**NORTH PORTSEA ISLAND  
COASTAL FLOOD AND EROSION  
MANAGEMENT SCHEME – TIPNER  
LAKE (FRONTAGE 1)**

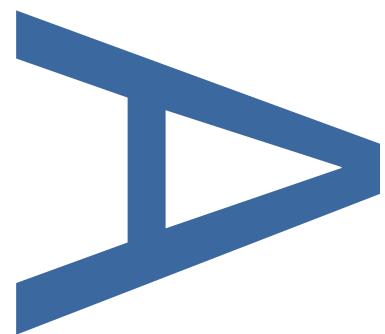
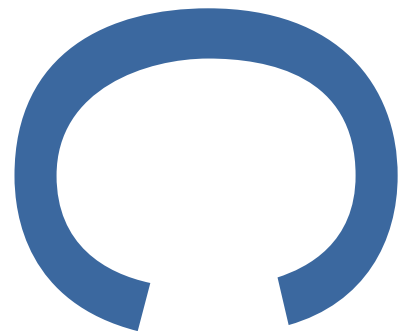
**AN ARCHAEOLOGICAL WATCHING  
BRIEF REPORT**

**LOCAL PLANNING AUTHORITY:  
PORTSMOUTH CITY COUNCIL**

**PLANNING APPLICATION NUMBERS:  
16/01820/FUL**

**PCA REPORT NO: R13783**

**SITE CODE: NPI 17**



**NORTH PORTSEA ISLAND COASTAL FLOOD AND EROSION MANAGEMENT  
SCHEME – TIPNER LAKE (FRONTAGE 1):  
AN ARCHAEOLOGICAL WATCHING BRIEF REPORT**

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**Local Planning Authority:** Portsmouth City Council

**Planning Reference:** 16/01820/FUL

**Site Code:** NPI 17

**Central NGR:** SU 64801 03903

**Commissioning Client:** East Solent Coastal Partnership

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## DOCUMENT VERIFICATION

**Site Name: North Portsea Island Coastal Flood and Erosion Management Scheme – Tipner Lake (Frontage 1)**

**Type of project: Archaeological Watching Brief**

**Report: R13783**

### Quality Control

<b>Pre-Construct Archaeology Limited</b>		<b>Project Code: K5026</b>
	<b>Name &amp; Title</b>	<b>Date</b>
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<b>Project Manager Sign-off:</b>	<b>T Hayes</b>	<b>02/09/2019</b>

<b>Revision No.</b>	<b>Date</b>	<b>Checked</b>	<b>Approved</b>

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Plate 9. West facing shot of ground works at the northern end of Zone 2.

## **1 NON-TECHNICAL SUMMARY**

Pre-Construct Archaeology Ltd (PCA) was appointed by the East Solent Coastal Partnership to undertake an archaeological watching brief on land at Tipner Lake, Portsmouth, Hampshire. The Site was the subject of a proposed development, as part of the North Portsea Island Coastal Flood and Erosion Management Scheme.

The watching brief formed part of a staged approach to addressing the archaeological implications of the development and was informed by the results of an archaeological Heritage Statement (PCA 2016a).

The watching brief was conducted during groundworks carried out between the 18th May 2017 and the 12th April 2019. No significant archaeological remains were revealed.

## **2 INTRODUCTION**

### **2.1 Project Background**

2.1.1 Pre-Construct Archaeology Ltd (PCA) was appointed by the Eastern Solent Coastal Partnership (ESCP) to carry out an archaeological watching brief on construction of the Tipner Lake (Frontage 1) section of the North Portsea Island Coastal Flood and Erosion Management (CFEM) scheme, hereafter 'the Site' (**Figure 1**). The scheme primarily consisted of the removal of an existing apron wall that spans the length of the Tipner Lake shoreline and the construction of a new reinforced concrete seawall to aid in flood and erosion risk management.

2.1.2 The archaeological watching brief was a requirement of the Local Planning Authority (LPA) Portsmouth City Council and was secured by conditions 19-21 of planning permission for the CFEM scheme (Planning reference: 16/01820/FUL). The requirement is based on the advice of the Hampshire County Archaeology Officer (CAO), advisor to the LPA. The watching brief was intended to ensure that, in the event archaeological resources were affected by construction of the new sea wall and related activities, those resources would be investigated and recorded.

2.1.3 This document reports on the results of the archaeological watching brief, which comprised the monitoring of groundwork in order to offset the possible impact of groundwork on buried archaeological resources.

2.1.4 This document has been prepared in accordance with the Chartered Institute for Archaeologists standard and guidance for archaeological watching briefs (CIfA 2014) and Management of Research Projects in the Historic Environment (Historic England 2015).

### **2.2 Location, Topography and Geology**

2.2.1 The Site (**Figure 2**) covers a 1.9km stretch of the north-west coastline of Portsea Island, Portsmouth. The coastline borders the body of water that adjoins Tipner Lake (to the west of the Site) with Ports Creek (to the north of the Site).

2.2.2 The Site lies above a varied chalk bedrock geological formation. Two superficial geological deposits are also present on site, divided between the coastline and the tidal zone; deposits on the coastline comprise Raised Marine Deposits (Clay, Silt and Sand) and the deposits on the tidal zone comprise Beach and Tidal Flat Deposits (Clay, Silt and Sand).

### **2.3 Archaeological and Historical Background**

2.3.1 The archaeological and historical background to the Site is set out in the Heritage Statement (PCA 2016a) and is not repeated here in detail. In summary, the Portsmouth Sites and Monument Record (Portsmouth City Council) contains archaeological records of sites, findspots and monuments known from the vicinity of the Site of prehistoric,

Romano-British, medieval, post-medieval and early modern date. These records, along with detailed archaeological studies such as carried out in Langstone Harbour (Allen, M.J. and Gardiner, J. 2000) provide a range of archaeological evidence of all major periods surviving in the contrasting environments of modern Portsea island and surrounding tidal zones.

2.3.2 As part of the design of the CFEM scheme an archaeological watching brief was carried out during geotechnical ground investigations. A general sequence of deposits was identified on the scheme frontages but no significant archaeological resources or artefacts were identified within the monitored window samples, boreholes or trial pits (PCA 2016b).

2.3.3 Of immediate significance to the Tipner Lake (Frontage 1) CFEM scheme are the remains of the nineteenth century Hilsea Lines, a Scheduled Monument (No. 1001861) and designated by Portsmouth City Council a Conservation Area (No. 27). The western extent of the Lines form the north-west corner of Portsea Island and a length of the waterfront that will be affected by the scheme. The Lines, erected on the northern shore of Portsea Island and, along with Portsbridge on the north side of Ports creek, remodelled and rebuilt over a period of 100 years from the mid-eighteenth century, formed a military defence of Portsea Island and its naval installations from a landward assault (following a long-feared invasion by France). The Lines comprise a curtain wall, moat and bastions augmented by forts to the rear (Mitchell, G. 2015). At its western end the Lines were formed of a Bastion (West Demi-Bastion), the remains of which flank Portsmouth Grammar School playing fields to the south-east, and the west end of the sluice controlled moat, which remains an open watercourse. These elements of the Lines will not be affected by the scheme although the works will pass close to the outer, western extent of the moat.

### **3 AIM**

#### **3.1 Archaeological Watching Brief**

3.1.1 The aim of the archaeological watching brief was to monitor groundworks for the proposed CFEM scheme work and investigate and record archaeological resources that were identified, taking account of the date, nature, extent, bio-archaeological and palaeo-environmental potential of the resources, as access to the scheme under construction allowed.

3.1.2 The watching brief aimed to address the following questions, as access to the scheme under construction allowed:

- What is the archaeological potential of the Tipner Lake frontage and can the results of previous CFEM scheme investigations be enhanced?
- What evidence is there for construction of the Hilsea Lines, such as remodelling of the Portsea Island frontage and the Ports creek?

3.1.3 This report on the results of the watching brief will aim to provide an assessment of any significant archaeological resources that were recovered in the context of local and regional research frameworks.



## **4 RESULTS**

### **4.1 Introduction**

4.1.1 The following presents a summary of the watching brief results based upon the Site archive, which comprises a Site diary and digital photographs. Photographs of the site appear in Appendix 1. The Site archive is held in Pre-Construct Archaeology's Winchester office under site code NPI17 and will ultimately be deposited with Portsmouth Museum.

### **4.2 Methodology**

4.2.1 The archaeological watching brief was undertaken following the methodology detailed in the Written Scheme of Investigation (PCA 2017).

4.2.2 The archaeological watching brief, undertaken between the 18th May 2017 and the 12th April 2019, comprised the intermittent monitoring of the intrusive groundworks associated with the construction of the sea wall and the development of the surrounding area.

### **4.3 Discussion**

#### **Zone 1**

4.3.1 The works monitored in zone 1 included trial pits in the foreshore, stripping of turf and limited excavations for service works and landscaping in parkland behind the sea wall (**Plate 1-2**). A total of 3 trial pits were observed (**Plate 3**).

#### **General Sequence**

4.3.2 Two stratigraphic sequences were observed within the area. One on the foreshore and the other in the parkland behind the sea wall.

4.3.3 The first sequence was visible in trial pits in the foreshore, excavated to reveal the concrete footing of the sea wall. The earliest deposits in the sequence were layers of black silt and brown gravel silty sand, both natural waterborne deposits, found at depths of 0.3-0.7m below ground level (BGL). Above these deposits was modern concrete, the footing of the old sea wall.

4.3.4 The second sequence was visible in groundworks carried out in the parkland behind the sea wall. The earliest deposit in the sequence was a layer of natural clay seen at a depth of 0.5m BGL, seen in some of the deeper groundworks. Above this were layers of disturbed topsoil and made ground, capped by turf.

## **Zone 2**

- 4.3.5 The monitored works in Zone 2 included trial pits and other groundworks along the foreshore, as well as ground works behind the sea wall (**Plates 4-7**). A total of 19 trial pits were observed, along with other works.
- 4.3.6 Parts of Zone 2 are adjacent to the Hilsea lines, a designated Scheduled Ancient Monument (SAM) and within the associated conservation area (**Plate 8**).

## **General Sequence**

- 4.3.7 Three stratigraphic sequences were observed within the area.
- 4.3.8 The first was visible in the works along the foreshore. The earliest deposit was a layer of brown sandy silt seen at a depth of 1m BGL. Overlying this was a layer of black silty clay seen at a depth of 0.18-0.6m BGL. Overlying this layer in some of the area was a layer of brown silty clay, seen at a depth of 0.1-0.5m BGL. The latest deposit in the sequence was a thin layer of black silt. All these deposits are natural waterborne deposits.
- 4.3.9 The second sequence was visible during stripping of the path behind the sea wall, uncovered disturbed natural clay, below made ground, comprising mostly of rubble.
- 4.3.10 The third sequence was visible during ground works on the northern limit of zone 2. These works revealed chalk overlain by made ground (**Plate 9**). Though the underlying bedrock of the site is mapped as chalk, it seems unlikely that natural chalk would be found at this height therefore it is suggested that this represents further made ground, no dating evidence was recovered for this event.

## **4.4 Conclusion**

- 4.4.1 No significant archaeological deposits, artefacts or ecofacts were identified on site during this archaeological watching brief. As this watching brief did not reveal any evidence of archaeological activity it is not possible to enhance any previous archaeological investigations. It also suggests that there may be limited archaeological potential of the Tipner Lake frontage, however this may not be typical for the wider area.
- 4.4.2 Some possible evidence of the remodelling of the Ports Creek was observed during the watching brief. The chalk encountered on the northern limit of the site (bordered by the Ports Creek) was likely brought in to remodel the area, but no dating evidence for this event was recovered.

## **5 ARCHIVE PREPARATION AND DEPOSITION**

### **5.1 The Site Archive**

5.1.1 The site archive, to include all project records and cultural material produced by the project, will be prepared in accordance with Guidelines for the Preparation of Excavation Archives for Long-term Storage (UKIC 1990) and the Institute for Archaeologists ‘Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives’ (ClfA 2014). On completion of the project PCA will arrange for the archive to be deposited with Portsmouth Museum on behalf of East Solent Coastal Partnership.

### **5.2 Copyright**

5.2.1 The full copyright of the written/illustrative archive relating to the site will be retained by Pre-Construct Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. Winchester City Council, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms to the Copyright and Related Rights regulations 2003. Further distribution and uses of the report either in its entirety or part thereof in paper or electronic form is prohibited without the prior consent of Pre-Construct Archaeology Ltd.

5.2.2 The licence extends to the use of all documents arising from this project in all matters relating directly to the project, as well as for bona fide research purposes (which includes the Portsmouth City Historic Environment Record).

5.2.3 Pre-Construct Archaeology Ltd has made every effort to ensure the accuracy of the content of this report. However, Pre-Construct Archaeology Ltd cannot accept any liability in respect of, or resulting from, errors, inaccuracies or omissions this report contains.

## **6 ACKNOWLEDGEMENTS**

Pre-Construct Archaeology is grateful to East Solent Coastal Partnership for commissioning the archaeological watching brief. And to East Solent Coastal Partnership and Knights Brown for their assistants on site. The watching brief was undertaken by Gareth Howland. This report was prepared by Gareth Howland with Illustrations prepared by Mark Roughley. The project was managed for PCA by Paul McCulloch.

## **7 BIBLIOGRAPHY**

Mitchell, G. (2015). *Hilsea Lines and Portsbridge*. Solent Papers No.4.

PCA. (2016a), *North Portsea Island Coastal Flood and erosion Risk Management Scheme: Heritage Statement – Tipner Lake (Frontage 1)*. Report ref 12585.

PCA. (2016b), *North Portsea Island Coastal Flood and erosion Risk Management Scheme: An Archaeological Watching Brief on Ground Investigation Works*. Report ref 12611.

## Appendix 1: Photographs



**Plate 1. Southwest facing shot of lighting trench in Zone 1.**



**Plate 2. Southwest facing shot of stripped area behind Sea wall, Zone 1.**





**Plate 3. Northeast facing shot of test pit, Zone 1.**



**Plate 4. Northeast facing overview of test pits, Zone 2.**





**Plate 5. Northeast facing shot of test pits, Zone 2**



**Plate 6. North facing shot of site works, Zone 2.**





**Plate 7. North facing shot of site, Zone 2.**



**Plate 8. Northeast facing shot of site, Zone 2. With Hilsea lines in background.**



**Plate 9. West facing shot of ground works at the northern end of Zone 2.**

## Appendix 2: OASIS Record

### 7.1 OASIS ID: preconst1-361691

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#### Project details

Project name	NORTH PORTSEA ISLAND COASTAL FLOOD AND EROSION MANAGEMENT SCHEME - TIPNER LAKE (FRONTAGE 1)
Short description of the project	Pre-Construct Archaeology Ltd (PCA) was appointed by the East Solent Coastal Partnership to undertake an archaeological watching brief on land at Tipner Lake, Portsmouth, Hampshire. The Site was the subject of a proposed development, as part of the North Portsea Island Coastal Flood and Erosion Management Scheme. The watching brief formed part of a staged approach to addressing the archaeological implications of the development and was informed by the results of an archaeological Heritage Statement (PCA 2016a). The watching brief was conducted during groundworks carried out between the 18th May 2017 and the 12th April 2019. No significant archaeological remains were revealed.
Project dates	Start: 18-05-2017 End: 12-04-2019
Previous/future work	Yes / Not known
Any associated project reference codes	NPI17 - Sitecode
Any associated project reference codes	16/01820/FUL - Planning Application No.
Type of project	Field evaluation
Site status	Conservation Area
Current Land use	Coastland 2 - Inter-tidal
Current Land use	Other 14 - Recreational usage
Monument type	NONE None
Significant Finds	NONE None

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#### Project location

Country	England
Site location	HAMPSHIRE PORTSMOUTH PORTSMOUTH TIPNER LAKE (FRONTAGE 1)
Postcode	PO2 9NU
Study area	0 Square metres
Site coordinates	SU 64801 03903 50.830468853468 -1.079761747305 50 49 49 N 001 04 47 W Point

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### Project creators

Name of Organisation	PCA Winchester
Project brief originator	Portsmouth City Council
Project design originator	Paul McCulloch
Project director/manager	Paul McCulloch
Project supervisor	Gareth Howland
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Eastern Solent Coastal Partnership

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### Project archives

Physical Archive Exists?	No
Digital Archive recipient	Portsmouth Museum
Digital Media available	"Database", "GIS", "Images raster / digital photography"
Paper Archive recipient	Portsmouth Museum

Paper Media        "Diary","Report"  
available

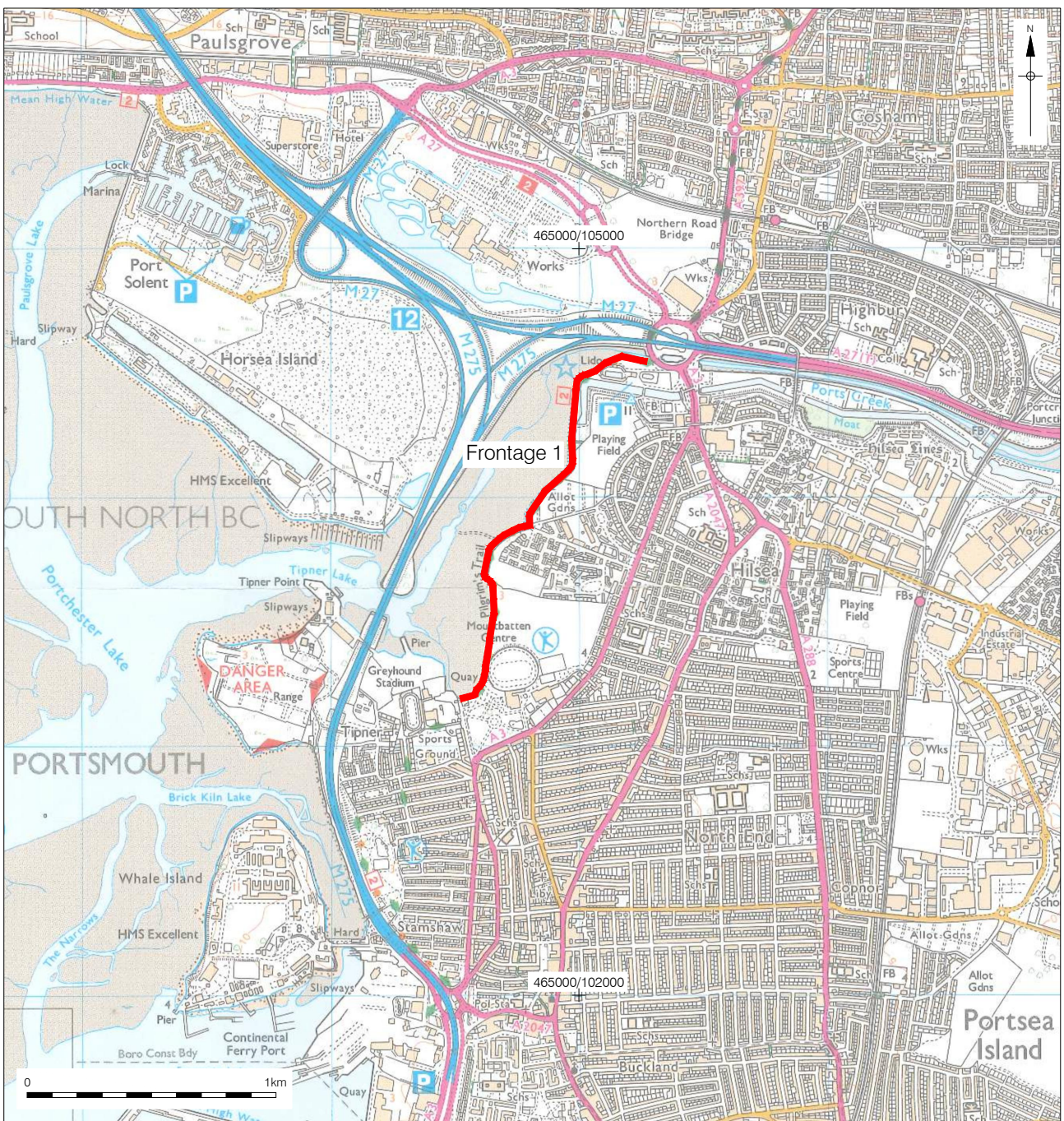
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Entered by        Gareth Howland (gareth.hatt@googlemail.com)

Entered on        31 July 2019

## Figures

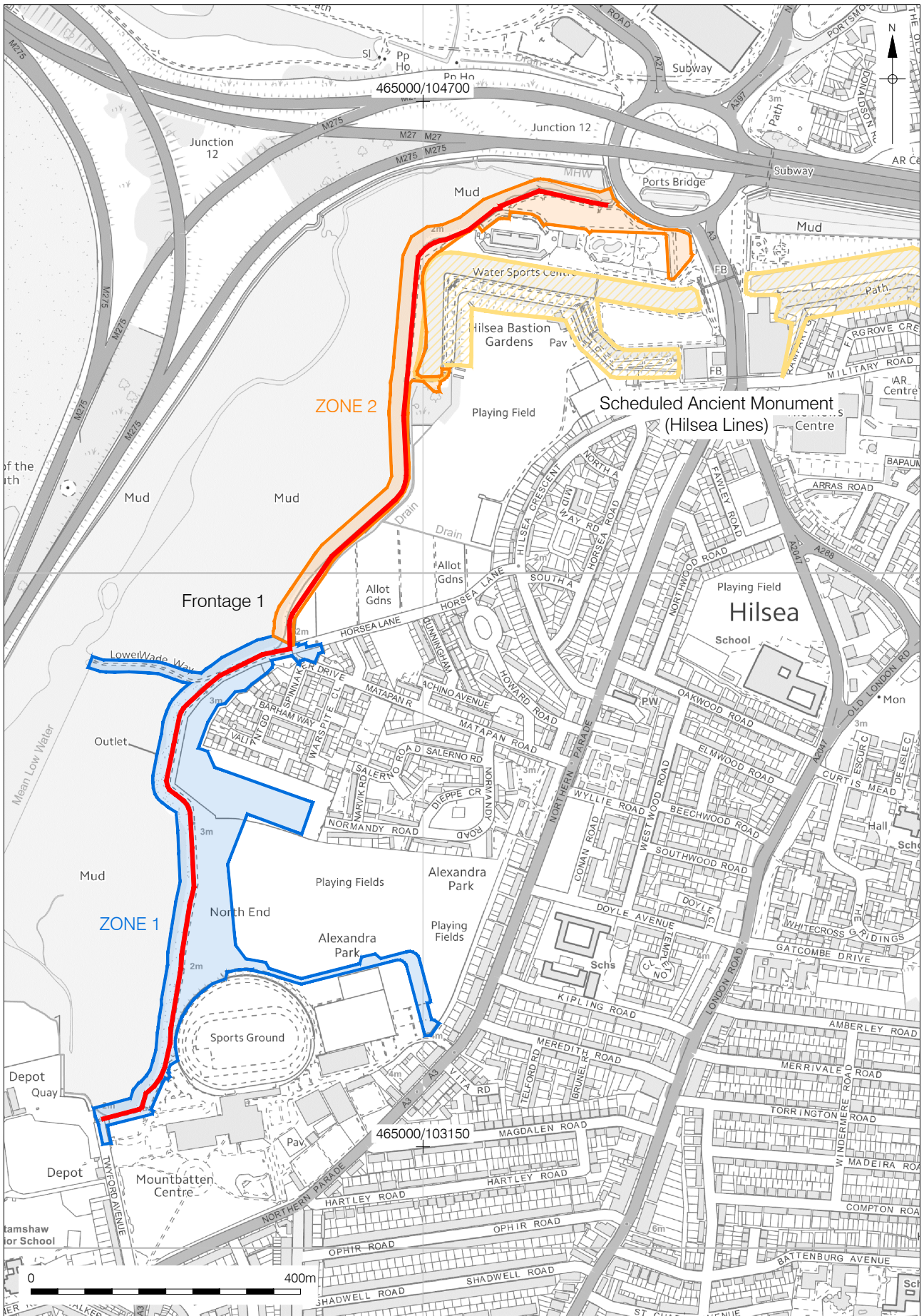




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Figure 1  
 Site Location  
 1:2,000,000, 1:500,000 & 1:25,000 at A4





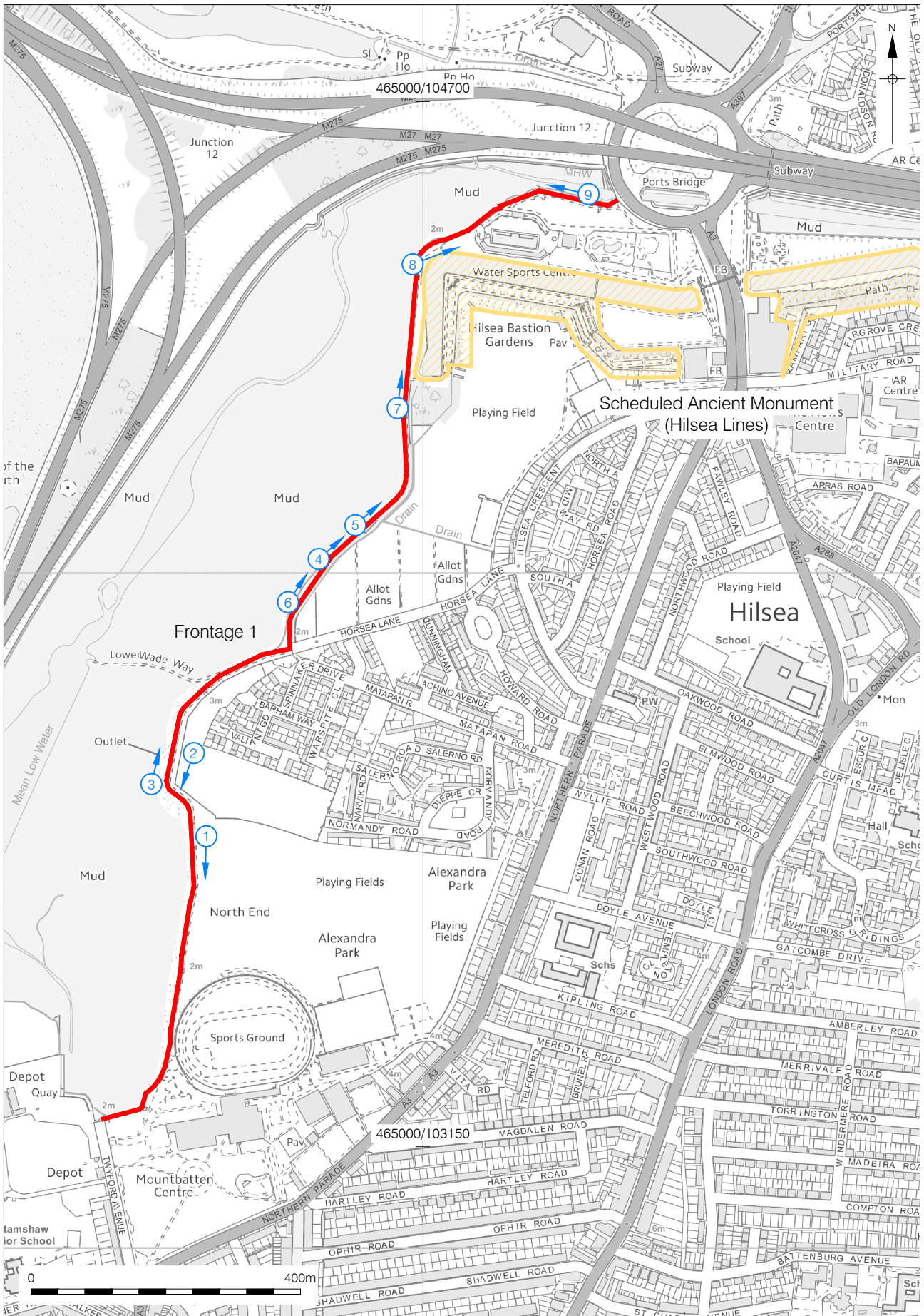
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Figure 2  
Detailed Site Location  
1:8,000 at A4





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Figure 3  
Plate Locations and Directions  
1:8,000 at A4

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