



Area 501 Archaeological Protocol

Factual Report

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Portway House
Old Sarum Park
Salisbury
Wiltshire
SP4 6EB

www.wessexarch.co.uk

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Client name Westminster Gravels Ltd
Address Westminster House
 Crompton Way
 Segensworth West
 Fareham
 Hampshire
 PO15 5SS
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Project management by Euan McNeill
Document compiled by Dr Robert MacKintosh
Contributions from
Graphics by Kenneth Lymer

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Summary

Wessex Archaeology was commissioned by Westminster Gravels Limited to act as Retained Archaeologist during dredging activities in Area 501 in the Outer Thames Region.

This document describes the outcomes of the implementation of the mitigation measures in place during the dredging of Area 501, which are set out in the archaeological Method Statement (Wessex Archaeology 2017), particularly the archaeological Protocol for the reporting of unexpected archaeological discoveries found during dredging activities.

A total of 1,482,591 tonnes of aggregate were dredged during dredging operations, however, no archaeology or anthropogenic artefacts were reported through the archaeological Protocol. 60 geophysical anomalies had been identified within Area 501, and 10 of these were within, or very close to, the area that was dredged. Some of these anomalies were identified by magnetometer, and so could still be buried in the seabed, or have been too small to be seen if disturbed during dredging operations. Larger anomalies identified in sidescan sonar and multibeam bathymetry data could have been geological or modern in nature, and in both these cases would not have been reported through the archaeological Protocol.

Acknowledgements

Wessex Archaeology was commissioned by Westminster Gravels Limited to prepare an overview of the archaeological encounters, discovered during implementation of the archaeological reporting protocol when undertaking dredging in Area 501. Wessex Archaeology is grateful to Ian Taylor in this regard.

This document was prepared by Dr Robert MacKintosh and Euan McNeill managed the project.



Area 501 Archaeological Protocol

Factual Report

1 INTRODUCTION

1.1 Project Background

- 1.1.1 Wessex Archaeology was commissioned by Westminster Gravels Limited (the client) to act as Retained Archaeologist during dredging activities in Area 501 in the Outer Thames Region. Under this role, Wessex Archaeology are to consult with Historic England regarding any interaction between the marine dredging and the marine historic environment to ensure that its management is in line with industry best practice and relevant governing regulations (Wessex Archaeology 2017).
- 1.1.2 This document describes the outcomes of the implementation of the mitigation measures set out in the archaeological Method Statement (Wessex Archaeology 2017), particularly the archaeological Protocol for the reporting of unexpected archaeological discoveries found during dredging activities.
- 1.1.3 The 2017 Method Statement was informed by an archaeological technical report as part of the Environmental Statement (Wessex Archaeology 2015). The archaeological assessment of geophysical survey undertaken by Wessex Archaeology in 2015 comprised the review of sidescan sonar, marine magnetometer data and multibeam bathymetry data acquired by Coastline Surveys Limited in November 2012. The Method Statement was written to fulfil a mitigation clause within the archaeological assessment (Wessex Archaeology 2015).

1.2 Dredging Activities

- 1.2.1 Area 501 is located to the east of the North Falls region of the southern North Sea abutting the median line between UK and Belgian waters; around 60 km northwest of the Belgian coast, and around 50 km ENE of Ramsgate, Kent (Figure 1).
- 1.2.2 The works comprised dredging of the Holocene post transgressive marine sandwave field, excluding areas where the resource was too thin and leaving at least 0.5m of resource over the substrate. The purpose of the dredging works was to extract sand to be used in the Dover Harbour works.
- 1.2.3 Reclamation from Area 501 was completed during the period 26 October 2017 to 26 June 2018. A total hopper measurement of 1,482,591 tonnes were dredged and 1,352,302 tonnes were measured in the reclamation after losses and compaction. The dredging intensity in Area 501 is shown in Figure 1.

1.3 Scope of Document

- 1.3.1 In format and content this document conforms with current best practice and to the guidance outlined in Management of Research Projects in the Historic Environment (MoRPHE, English Heritage 2009) and the relevant standards of the Chartered Institute for Archaeologists (CIfA) (CIfA n.d.).



2 ARCHAEOLOGICAL BASELINE SUMMARY

2.1 Introduction

2.1.1 Knowledge of the baseline archaeology of Area 501 derives from the 2015 archaeological assessment (Wessex Archaeology 2015). Area 501 has never previously been dredged.

2.2 Archaeological Assessment Areas

2.2.1 For the archaeological assessment, Area 501 and a buffer area of 1000m were studied (Wessex Archaeology 2015).

2.2.2 The area was subjected to geophysical survey conducted by Coastline Surveys Limited in November 2012 which was reviewed and assessed by Wessex Archaeology in the archaeological assessment (Wessex Archaeology 2015).

2.3 Summary of known and potential archaeological assets

2.3.1 The assessment of the geophysical survey data identified a total of 111 geophysical anomalies within Area 501, 60 within Area 501 and 51 within the 1000m buffer zone (Figure 1). Of these, three were confirmed as wrecks (designated as A1) and 108 classified as sites of archaeological potential (designated as A2). In addition to this two recorded wrecks were identified within the 1000m buffer zone from historical records, but were not identified in the geophysical survey data. It was recommended that a 100m exclusion zone was put in place around the wreck site of the *Rigel* within Area 501 (**7030**) and nearby debris (**7031**, **7032**, and **7033**).

2.3.2 The 2015 assessment also identified the potential for the presence of undiscovered archaeological features which included seabed prehistory, and maritime and aviation sites, although the potential prehistoric material was likely to be present in only untargeted sediments (Wessex Archaeology 2015).

3 MITIGATION

3.1 Introduction

3.1.1 The 2017 Method Statement set out a number of mitigation measures intended to limit the impacts of the dredging on known and potential aspects of the historic marine environment (Wessex Archaeology 2017).

3.2 Archaeological Exclusion Zone

3.2.1 An A1 wreck (of anthropogenic origin and of archaeological interest) was identified within Area 501 during the archaeological assessment (Wessex Archaeology 2015) (Figure 1). The appropriate mitigation was implemented in the form of an Archaeological Exclusion Zone (AEZ) with a 100m buffer (Wessex Archaeology 2017). The options of temporary exclusion zones and further AEZs were available if further features of archaeological interest were discovered during dredging activities.

3.3 Protocol for Archaeological Discoveries

3.3.1 For all unexpected discoveries of archaeological interest, the Protocol for Archaeological Discoveries was to be implemented so that all finds were dealt with in a proper, respectful and time appropriate manner.



- 3.3.2 The archaeological Method Statement set out the procedures of the Protocol, and the responsibilities of the various parties, including Westminster Gravels Limited, the dredging contractor, and the Retained Archaeologist (Wessex Archaeology 2017). The procedures will not be set out again here at length but rather relevant aspects will be highlighted.
- 3.3.3 The Protocol was implemented to reduce any adverse effects of dredging on the historic environment, by enabling people working on the project to report their finds in a manner that is convenient and effective for their particular work schedules. The Protocol was developed in line with existing dredging industry guidance (BMAPA and English Heritage 2005) and built upon the success of the methods set out in the Marine Aggregate Industry (MAI) protocol for reporting finds of archaeological interest (BMAPA Protocol) that has been running since 2005.
- 3.3.4 The Protocol sought to ensure that unexpected discoveries of archaeological material, whether on the seabed or recovered from the draghead were addressed in an appropriate and time considerate way. These finds would include but would not be limited to submerged prehistoric material, shipwreck material, aircraft remains and any other archaeological material. Two aspects of the Protocol required implementation to achieve this: awareness training provided to the dredging crew by the retained archaeologist, and the reporting and 'first aid' of discoveries by dredging staff through a Site Representative and Nominated Contact.

4 RESULTS

4.1 Awareness Training

- 4.1.1 The retained archaeologist provided awareness training to aid the implementation of the Protocol. The awareness training enables dredging staff working on the vessel to identify finds of archaeological potential, to report such discoveries, and to implement 'first aid' conservation for the finds.
- 4.1.2 A suitably experienced archaeologist undertook two separate training sessions. The first of these took place on 13 September 2017 at the site offices in Dover. There were 10 attendees and a representative from Historic England also was present. The second visit took place on 02 November 2017 on the dredging vessel and was attended by eight members of the dredging crew.
- 4.1.3 Training included an overview of the types of material likely to be discovered during the dredging operations, with examples of aircraft material, shipwreck material and prehistoric material. Training also included information on handling and storing archaeological discoveries.

4.2 Discoveries during dredging

- 4.2.1 The procedures to be followed when a discovery of archaeological material was made are set out in the Method Statement, and flow charts illustrating the process were also provided (Wessex Archaeology 2017: Appendix 1, 2 and 4).
- 4.2.2 No finds were reported through the Protocol during the dredging that took place in Area 501 between 26 October 2017 and 26 June 2018.
- 4.2.3 A total of 1,482,591 tonnes of aggregate were dredged during this period. Some archaeological material might have been expected to be encountered during such

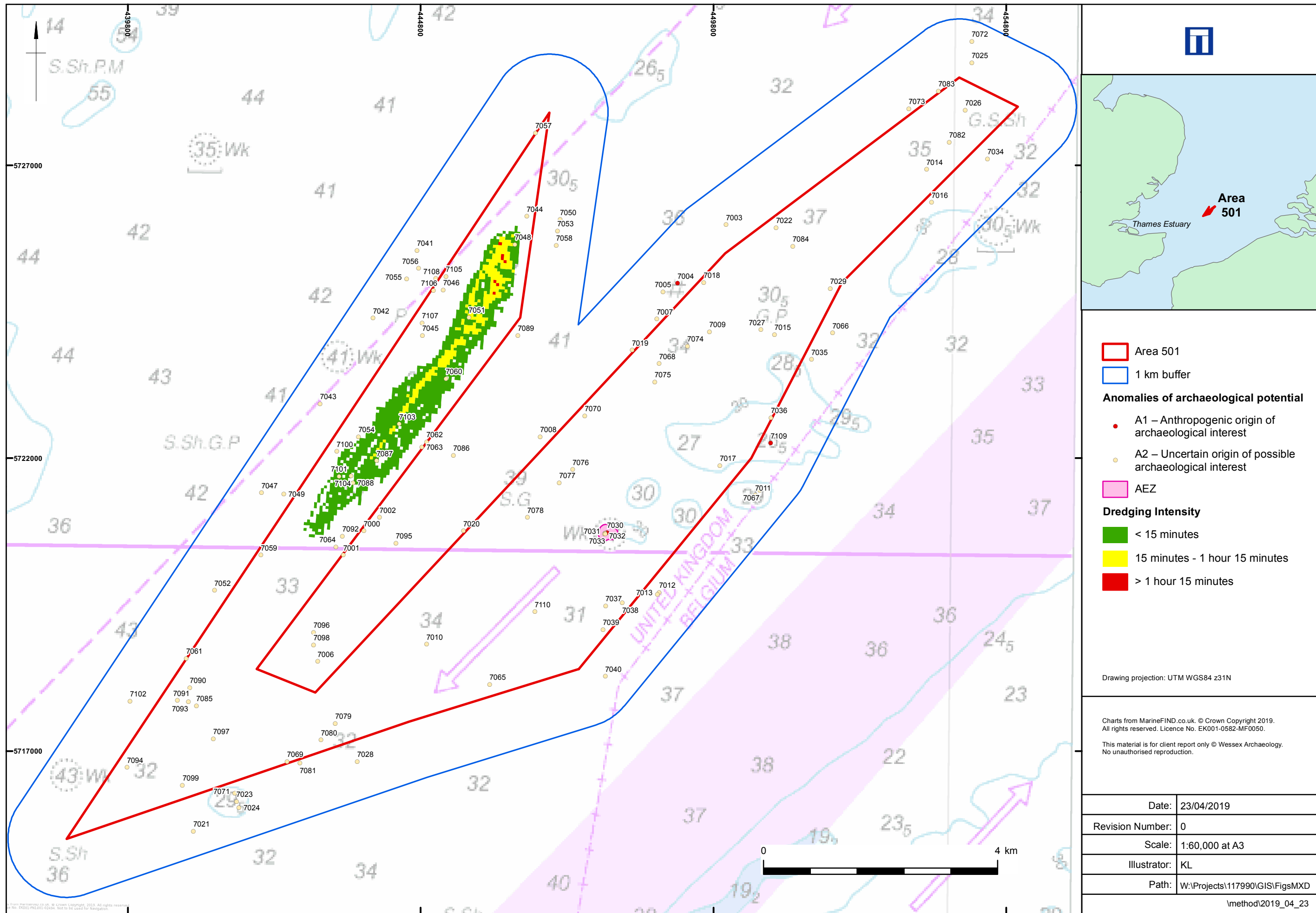


extensive dredging in an area in which 60 geophysical anomalies had been identified, and which had a high chance of containing unknown maritime and aviation archaeological features, as well as seabed prehistory. Within, or very close to, the area that was dredged there were 10 geophysical anomalies that were classified as having archaeological potential (Figure 1). Six of these were magnetic anomalies and so it is possible that they are still buried in the seabed, especially as they appear in areas where dredging intensity was low. It is also possible that they were small enough not to be recorded if disturbed during dredging operations. The dredged material was taken straight to be used in land reclamation in Dover and so there was no opportunity to check the material as it arrived at a wharf. Three anomalies, 7048, 7051 and 7060, classed as debris and dark reflectors, measured 5.0m, 4.7m and 2.8m in length respectively. It could be expected that these would have been encountered during dredging operations. However, they could have been geological in nature, or modern debris that was of no archaeological significance, and in both these cases would not have been reported through the archaeological Protocol.



BIBLIOGRAPHY

- BMAPA and Historic England 2005 Protocol for Reporting Finds of Archaeological Interest. Available at: <http://www.bmapa.org/documents/fullreportingprotocol2005.pdf> Accessed: 02 April 2019
- Cifa n.d. *Cifa regulations, standards and guidelines*. Available at: www.archaeologists.net/codes/cifa Accessed: 02 April 2019
- English Heritage 2009 *Management of Research Projects in the Historic Environment: The MoRPHE Project Manager's Guide*. English Heritage, Kemble (version 1.1)
- Wessex Archaeology 2015 Area 501: Outer Thames Region: Archaeological Assessment. Unpubl report ref 100620.05.
- Wessex Archaeology 2017 Licence Area 501 - Outer Thames Estuary: Method Statement for Dredging Activities. Unpubl. report ref T23685.01



Location of the Area 501

Figure 1



Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk

