



Historic England

HMS COLOSSUS	
Isles of Scilly	
Conservation Statement & Management Plan	
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Author	Kevin Camidge
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The *HMS Colossus* conservation and management plan was originally produced by Mark Dunkley for English Heritage in September 2007. In April 2015, part of English Heritage changed its name to Historic England. This updated management plan was commissioned by Historic England in December 2015 and was undertaken by Kevin Camidge in January 2016.

Executive Summary

The *Colossus* was a 74 gun *Courageux* Class Third Rate Ship of the Line launched in 1787, and wrecked off Samson in Scilly in 1798. There are two main areas of wreckage, lying over 300m apart. In 1975 part of the wreck (probably the bow) was designated under the Protection of Wrecks Act (1973). This designation was revoked in 1984. The current (stern) site was discovered by sport divers and designated in 2001.

This Conservation Statement and Management Plan has been produced to enable local and regional stakeholder involvement in our aspirations for the conservation management of the *Colossus*, so as to balance protection with economic and social needs. The principle aim of the Plan is to identify a shared vision of how the values and features of the *Colossus* can be conserved, maintained and enhanced.

The following management policies have therefore been formulated in accordance with achieving our principle aim:

Management Policy 1

We will continue to support and develop visitor access to the monument as a mechanism to develop the value of the Colossus.

Management Policy 2

Through liaison with the English Heritage Properties Presentation Team, we will seek to provide updates of the interpretative material for the marine historic environment and the Colossus at the Powder Store, Garrison Walls.

Management Policy 3

Through web-based initiatives, we will continue to develop the accessibility of related material and support appropriate links, as well as do more to enlist effective local support.

Management Policy 4

Mechanisms will be identified and implemented so as to develop shared ownership and partnership working.

Management Policy 5

Where projects are commissioned on the site we will encourage the use of the site as a training resource where this is appropriate.

Management Policy 6

Key gaps in understanding the significance of the monument's component parts should be identified, prioritised and addressed so that these significances can contribute to informing the future conservation management of the place.

Management Policy 7

We will seek to commission a staged programme of assessment and research to contribute towards a fuller understanding of the site in its entirety.

Management Policy 8

Through consultation, we will seek to re-designate the Colossus site to include the bow, stern and debris field within a restricted area.

Management Policy 9

Unnecessary disturbance of the seabed within the restricted area should be avoided wherever possible in order to minimise the risk of damage to buried archaeological remains.

Management Policy 10

Through liaison with the appropriate authorities, we will seek to stabilise, and afford preservation in situ to, elements at the stern.

Management Policy 11

The sale of artefacts recovered from the site should be monitored as far as possible. A permanent record of these objects should be made. The sale of objects from designated sites by licensees of those sites should be reviewed by Historic England with a view to formulating a management policy concerning this activity. The UK has adopted 'The Rules', an annex to the 2001 UNESCO convention which includes the principle that underwater cultural heritage should not be commercially exploited.

HMS COLOSSUS

Conservation Statement & Management Plan

1 Introduction

1.1 Background and Purpose

1.1.1 Wreck sites may contain the remains of vessels, their fittings, armaments, cargo and other associated objects or deposits and they may merit legal protection if they contribute significantly to our understanding of our maritime past. The Protection of Wrecks Act 1973 (PWA) allows the UK Government to designate, in territorial waters, an important wreck site to prevent uncontrolled disturbance. Although the National Heritage Act 2002 enabled English Heritage (now Historic England) to assist in costs relating to works under the PWA, the responsibilities of Historic England for the physical management of designated wreck sites must align with our strategic and research priorities.

1.1.2 This document seeks to set out a Conservation Statement and Management Plan for HMS *Colossus*, an archaeological site designated under the Protection of Wrecks Act (1973), lying off Samson, Isles of Scilly. There are two main areas of wreckage, lying over 300m apart. In 1975 part of the wreck (probably the bow) was designated under the Act. This designation was revoked in 1984 and the current (stern) site was discovered by sport divers and designated in 2001.

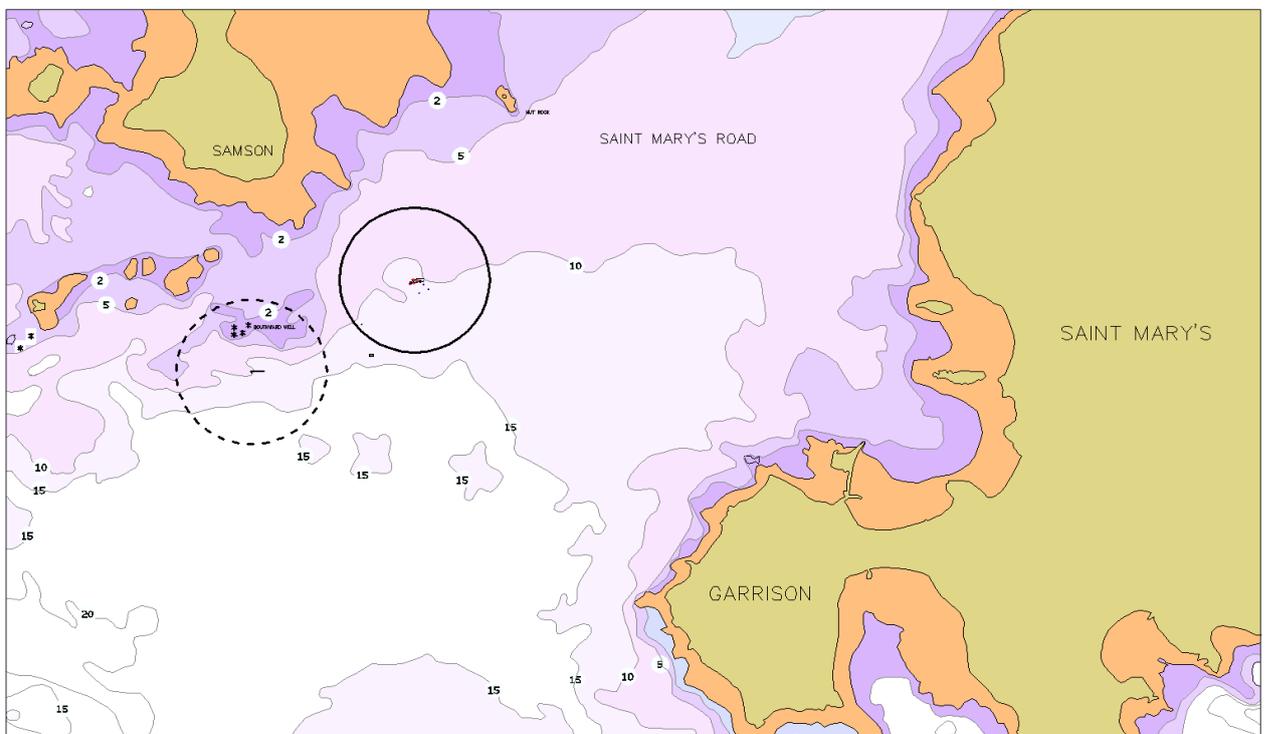


Fig 1

The designated areas for the wreck of HMS Colossus. The dashed circle shows the area designated from 1975 to 1984. The circle with the solid line shows the area designated in 2001. The circles have a radius of 300m.

- 1.1.3 The *Colossus* has two entries in the National Record of the Historic Environment – one for the bow and one for the stern:

	NMR number	Monument number
Bow	SV 81 SE 270	880070
Stern	SV 81 SE 441	1343769

The positions recorded are the centres of the designated areas. In the case of the bow designation, this was probably some distance to the east of the actual site (Wessex Archaeology, 2003).

- 1.1.4 English Heritage has published a set of *Conservation Principles, Policies and Guidance* for the sustainable management of the historic environment, designed to strengthen our credibility and the consistency of decisions taken and advice given (English Heritage 2008). These *Conservation Principles* are intended to support the quality of our decision-making, with the ultimate objective of creating a management regime for all aspects of the historic environment that is clear and transparent in its purpose and sustainable in its application. As such, *Conservation* is taken to be the process of managing change in ways that will best sustain the values of a place in its contexts, and which recognises opportunities to reveal and reinforce those values (English Heritage 2008).
- 1.1.5 This Conservation Statement and Management Plan has therefore been produced to enable local and regional stakeholder involvement in our aspirations for the conservation management of the *Colossus*.

1.2 Aims and Objectives

- 1.2.1 The principle aim of this Conservation Statement and Management Plan is to identify a shared vision of how the values and features of the *Colossus* can be conserved, maintained and enhanced.
- 1.2.2 This has been achieved through the following objectives:
- Understanding the *Colossus*
 - Assessing the significance of the *Colossus*
 - Identifying where the significance of the *Colossus* is vulnerable
 - Identifying policies for conserving the significance of the *Colossus*
 - Realising the public value of conservation

1.3 Scope

- 1.3.1 In 1995, the Archaeological Diving Unit sought to determine factors affecting the stability of Protected Wreck sites (report ref. 95/30). This assessment considered the exposure of archaeological material, the probability of active degradation, site dynamics (energy) and sediment covering. It concluded that many of the sites designated under the Protection of Wrecks Act (1973) are actively deteriorating.
- 1.3.2 This assessment was subsequently reconsidered by Historic England, which sought to place an understanding of the physical stability of (and therefore risk to) each designated wreck site against ongoing investigations (through incumbent licensees), ease of access for visitors and potential for wider awareness (publication, signage etc.). Practical measures that can conserve, maintain and enhance the values and features of the *Colossus* identified as being at risk will be delivered through this Conservation Statement and Management Plan.
- 1.3.3 Access to England's 49 Protected Wreck sites is managed through a licensing scheme and authorisation by the Secretary of State for Culture, Media and Sport. Of the 49 protected sites in England, five are in the Isles of Scilly.

1.4 Authorship

- 1.4.1 Contributions to this Conservation Statement and Management Plan, originally prepared by English Heritage, were sought through stakeholder involvement. Sixteen individuals and organisations were consulted (listed in section 9.2).
- 1.4.2 An update and audit of this conservation and management plan was undertaken in January 2016 for Historic England by Kevin Camidge.

1.5 Status

- 1.5.1 The final version of this report was adopted in September 2007. Notes on its status (in terms of revision) will be maintained.
- 1.5.2 An update of this report was undertaken in January 2016.

2 Understanding the *Colossus*

2.1 Historical Development of the Designated Site

2.1.1 The *Colossus* was a *Courageux* Class¹ Third Rate Ship of the Line launched in 1787, and wrecked off Samson in Scilly in 1798. There are two main areas of wreckage, lying over 300m apart. In 1975, part of the wreck (probably the bow) was designated under the Protection of Wrecks Act (1973). This designation was revoked in 1984. The current (stern) site was discovered by sport divers and designated in 2001.

2.1.2 Documentary research on the biography of the *Colossus* is extensive (notably Wessex Archaeology 2003 and Camidge 2005a) and there is no requirement here to extensively repeat known information other than the following particulars, presented as a *Ship Biography* which draws together the main attributes of the site and provides a statement of the site's archaeological interest:

Build	The <i>Colossus</i> was a 74-gun <i>Courageux</i> Class 3 rd Rate Ship of the Line, launched in 1787 by Cleverly at Gravesend.
Use	These 74 gun ships were one of the most successful types of the period. They were typically about 51m (170 feet) in length and had a crew of over 600. During her relatively short working life (eleven years) <i>Colossus</i> saw action at Toulon, Groix, Cape St Vincent and Cadiz. She also took part in the capture of two enemy ships in 1793: <i>Le Vanneau</i> , a French 6-gun ship; and <i>Vrai Patriot</i> . She had nine different captains during her relatively short career. She had a complete refit, which took six months, in 1796.
Loss	In December 1798 <i>Colossus</i> was on her way home to England with wounded from the Battle of the Nile and with cargo, including part of Sir William Hamilton's second collection of Greek pottery. She was sheltering from a gale in St Mary's Roads when the anchor cable parted and she was driven aground to the south of Samson. All but one member of the crew were taken off safely before <i>Colossus</i> turned onto her beam ends and proceeded to break up.
Survival	The <i>Colossus</i> has been salvaged in the past and many artefacts have been removed from the vessel. However, the survival on the seabed of a section of the port side stern and further artefacts, including small and delicate remains, is of importance.
Investigation	Although extensive historical and archaeological research has been carried out for the <i>Colossus</i> the remains are of moderate importance in that they have potential for further investigation. The long history of archaeological investigation also offers an opportunity to examine the crossover from amateur to professional archaeology within the discipline. Salvage by the Deane Brothers in the 19 th century is of additional interest. The involvement of local divers and the local community in the vessel's recent history and investigation indicates a local dimension of interest. Artefacts salvaged from <i>Colossus</i> are frequently to be seen for sale on e-bay and elsewhere.

¹ The *Courageux* class ships were built from the lines of the French vessel *Courageux*, captured by the *Bellona* in 1761 (Lavery 1983: 116).

2.2 Description of Surviving Features

2.2.1 The topography of the bow area comprises undulating sand-filled gullies and was discovered in 1974. Under licence and funded by the British Museum, over thirty-thousand pieces of Greek pottery (forming part of Sir William Hamilton's collection of antiquities) were recovered along with guns and possibly anchors. Work on the site ceased in 1983 as the project team stated that there would be no further finds of consequence. However, local divers have since recovered ceramics and other finds from the general bow area.

2.2.2 The current designated (stern) area lies in a mobile coarse sandy seabed at a general depth of 10-12m below chart datum. In 2001, an operation was mounted to recover a 3.30m section of stern carving of a neo-classical male figure. Traces of paint and gilding (sampled in 2006) were still detectable on the carving and the piece is composed of several pieces of timber (elm). The carving has now been conserved and is on display in the Tresco Gardens visitor Centre on the Island of Tresco.

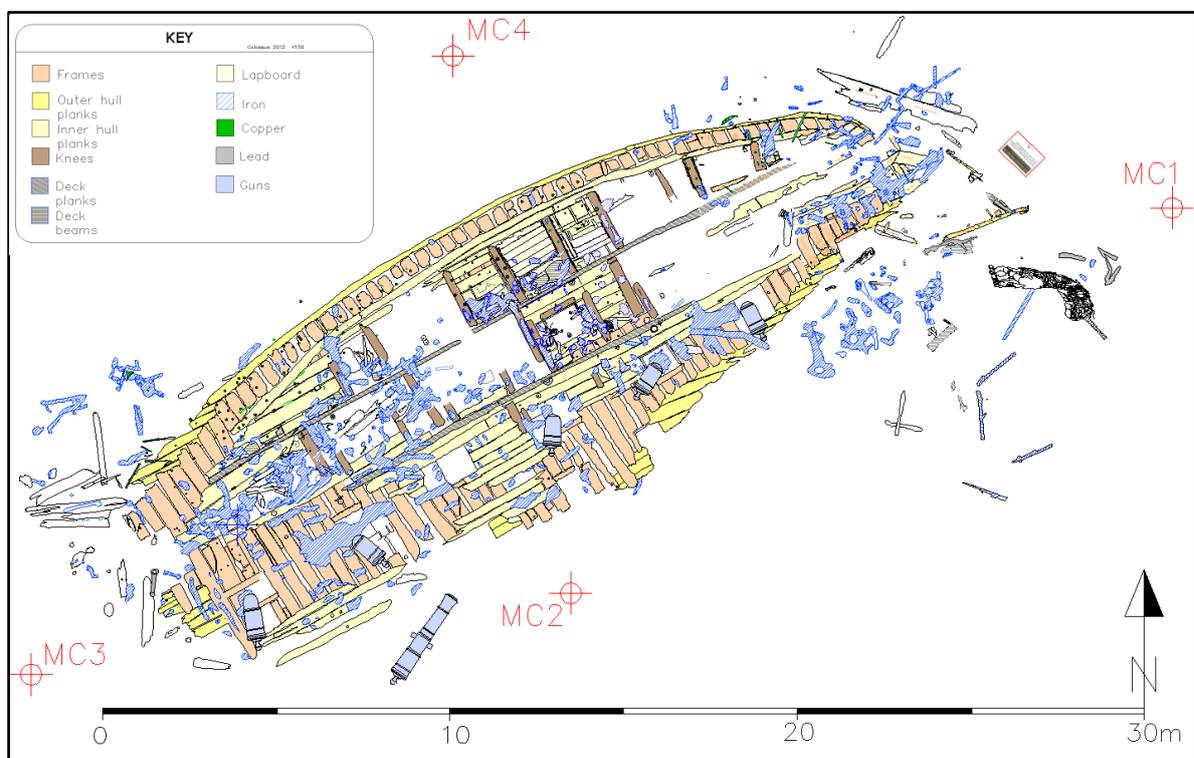


Fig 2

The main area of exposed stern wreckage. The remains consist of the port side of the vessel from the stern to the mainmast. (Plan produced by CISMAS in 2012)

2.2.3 In 2002, a small evaluation trench located towards the port quarter of the ship was excavated to determine the extent of hull survival and the degree of preservation. Archaeological deposits within the trench comprised articulated sections of the orlop deck, main gun deck and upper deck. Pine lapboard was recorded to be lining the exposed orlop deck, perhaps forming a small cabin,

while deck planking of the main and upper gun decks survived *in situ*. Hanging and lodging knees remained fastened to hull timbers and small finds comprised 32lb iron cannon balls, leather shoes, glass bottles, lead musket shot, rope and fragments of clothing (Camidge 2002). However, most of the finds from the intrusive investigations in 2001 and 2002 were reburied just off site.

- 2.2.4 Iron ordnance in position on the upper deck are 18lb guns of the Armstrong pattern. Five of these are standing proud of the seabed, still inside their respective gun ports with their muzzles buried in the sand. A sixth lies on the seabed close to an empty port. Three further guns lie in a small cluster to the south-south-east of the stern and comprise two 32lb Blomefield's and a single 9lb Armstrong. A third 32lb Blomefield gun lies 280m south-west of the stern (Camisge, 2005a).
- 2.2.5 Other, isolated, artefacts were recorded and verified during a survey of the debris field in 2004 and 2005, complemented by a magnetometer survey. These searches were designed to locate *Colossus*' anchors; one anomaly has been identified as possibly being her kedge anchor.
- 2.2.6 In addition, an extensive number of small finds have been recovered from the *Colossus* (outside the current restricted area) from 1999, including some that have disintegrated. None of these finds had their position and context accurately recorded prior to recovery.
- 2.2.7 The sediment levels on the site have been monitored since 2003. This has been accomplished by means of 14 fixed survey pins driven into the seabed at various locations around the site. This work has demonstrated that the sediment levels on the site have continued to fall since monitoring began. In 2015 the mean of the monitored levels had fallen by 66mm since 2003. The falling sediment level is likely to expose new features on the site.
- 2.2.8 In 2014 a scatter of newly-exposed material was discovered some 25-40m to the east of the stern site. This new material included rigging material (deadeyes, chains and large amounts of rope), Gun carriage parts (inscribed 'COLOSSUS'), sash weights from the stern cabin windows and copper sheathing and nails.

2.3 Ownership, Management and Current Use

- 2.3.1 As a former warship, the *Colossus* remains property of the Crown (MoD) for there is no evidence that the wreck has been disposed of. In addition, the seabed around the Isles of Scilly is also owned by the Crown.
- 2.3.2 Action for conservation management of the site, commissioned by English Heritage in 2003, sought to trial methods for *in situ* stabilisation (Camidge 2005b). This study also noted that patterns of local seabed erosion tended to be seasonal.

- 2.3.3 Although the historic interests of the site are taken forward by Historic England, and it was assessed by the Archaeological Contractor for Services in Relation to the Protection of Wrecks Act (1973) in 2006, on-going survey and monitoring work is largely undertaken through licensed activity by local community members, including professional archaeologists. However, areas of the site outside the restricted area remain vulnerable and the opportunistic recovery of material from these areas needs to be managed. Artefacts recovered from *Colossus* have been offered for sale, particularly via online auction sites such as e-bay. Some of this material was sold by a licensee of the site – this situation needs to be reviewed as part of the management of the site.
- 2.3.4 As physical access to the current protected section of the *Colossus* is restricted to licensed divers, the recovery of artefactual material can be managed and controlled. However, it would appear that material is still being salvaged from the undesignated parts of the site. Four principle collections of (historically) recovered material have been identified: material in private ownership, the collection in the Isles of Scilly Museum, a collection in the Charlestown Museum & Shipwreck Heritage Centre and the ceramic collection in the British Museum.
- 2.3.5 The *Colossus* is, understandably, an emotive subject at local level (see Section 3) and forms one of five Protected Wreck sites in Scilly. In addition, the site gained national interest in 2001 when the operation to recover the stern carving was the subject of a *Time Team Special* programme.
- 2.3.6 There has been considerable local investment in the site in recent years through licensed activity. 2105 divers have been licensed on the site since 2008.

Colossus Licensed Divers	
Year	Number of Divers
2015	383
2014	92
2013	359
2012	320
2011	218
2010	224
2009	283
2008	226
TOTAL	2105

- 2.3.7 An account of the stabilisation work undertaken on the stern site appeared in Conservation and Management of Archaeological Sites (Camidge, 2009). A popular publication was produced in 2005 by the Cornwall & Isles of Scilly Maritime Archaeological Society (CISMAS, 2005), preceded by an earlier publication on the *Salvage of the Hamilton Treasures* 1979 (re-published in August 2006). There is an archaeological summary by Fenwick & Gale (1998) and comprehensive digital dissemination of recent survey work on the

CISMAS web site. There are also popular and personal accounts (see, for example, Williams 1981 and Stevens 2007). A desk based assessment was produced by Wessex Archaeology (Wessex, 2003) – but as this was written over 12 years ago it does not reflect any of the more recent work on the site.

- 2.3.8 In terms of presentation, a set of posters was commissioned for the Isles of Scilly Museum in 2005 that sought to complement the existing collection display. The nearest English Heritage Property to the *Colossus* is Garrison Walls, located on St. Mary's; at least five mounted guns on the Garrison are consistent with ordnance recovered from the *Colossus* (Camidge 2005a). There is currently a small display in the Powder Store of the Garrison Walls summarising the wreck of *Colossus*. This display would benefit from an update and its site is a good location to mount information for all five of the designated wreck sites in Scilly.
- 2.3.9 Interpretation of the site has been enhanced by English Heritage's provision of display material for the Isles of Scilly Museum to complement their collection. The education pages of the English Heritage website once hosted the *Colossus* interactive activity. This game – initially developed for the 2005 SeaBritain initiative – provided the opportunity to explore the wreck and learn about six lost items.² There is a *Colossus* page on the Historic England web site <http://www.historicengland.org.uk/listing/what-is-designation/protected-wreck-sites/wreck/hms-colossus>. Consideration should be given to updating and reinstating the *Colossus* game on that page.
- 2.3.10 Public access to the site was greatly enhanced in 2009 when a dive trail was installed around the stern. At the same time a dive trail guide booklet was produced – these booklets are available on board the three dive charter boats which operate in the Isles of Scilly and are loaned to divers prior to them visiting the site. In 2013 the dive trail was updated. This work included an extension to the dive trail and an updated guide booklet. It should be possible to make the guide to the dive trail available on the Historic England webpage for *Colossus*. A YouTube video of the diver trail can be viewed at <http://youtu.be/wS5KURop104>
- 2.3.11 In situ preservation of underwater cultural heritage has been highlighted as the preferred option in most recent literature on the subject. 'UNESCO underscores the use of in situ methods in its 2001 convention on the protection of the underwater cultural heritage' and 'If in situ methods are to be used as the primary means of preserving underwater cultural heritage they must be explored in depth' (Ortmann, 2009, p.2). A number of studies have looked at aspects of reburial as a means of preserving underwater material. By far the most comprehensive long-term study undertaken to date is the Reburial and Analysis of Archaeological Remains (RAAR) in Marstrand, Sweden (Bergstrand et al., 2005). But all these trials make use of modern material in their trials. In 2012 a long term reburial trial for artefacts recovered in excavation from *Colossus* was initiated. Two separate repositories containing 30 objects recovered from *Colossus* were buried near the stern of

² Previously available at http://www.english-heritage.org.uk/upload/swf/maritime_game6.swf

the vessel – these objects were recorded in detail (including xray and chemical analysis) prior to burial. Recovery is planned for 2022 and 2037. This study will provide useful data on the reburial of archaeological artefacts.

2.3.12 A summary of the work undertaken on the site since 2007 appears in Appendix v.



Fig 3
Plan showing the existing dive trail around the stern of HMS Colossus. The numbered circles are the physical station markers and the arrows show the route of the dive trail.

2.4 Gaps in Existing Knowledge

- 2.4.1 The career of the *Colossus* is well documented (see Camidge 2005a: Appendix V) and the circumstances of her loss were reported in the *Naval Chronicle*. Therefore, the weakest part of the ship-biography is in her investigation and the archaeological synthesis of work undertaken since discovery in 1974.
- 2.4.2 The desk-based assessment of the *Colossus* undertaken in 2003 summarised the archaeological history of the site (Wessex Archaeology 2003: 15) and noted that a detailed study would be possible from available sources that could include recognition of nineteenth century salvage and early excavations; for example, material recovered during the 1970's had been on display in the Penzance Maritime Museum (see also Appendix I and II). This museum is now closed and the whereabouts of the collection is uncertain, though some material was recently recorded in the Charlestown Shipwreck and Heritage Centre, St. Austell, Cornwall (Camidge 2007).
- 2.4.3 Work undertaken in 2015 by CISMAS has highlighted problems in interpreting the distribution of the remains on the seabed, and an alternative theory of the wrecking process was proposed (Camidge, 2015). It is very rare that archaeology can discern the detailed wrecking process of a vessel and future work should include investigation of this new theory. If the wrecking process is understood, then the locations where new material will be exposed by falling sediment levels can be more reliably predicted.
- 2.4.4 The location of the work undertaken between 1974 and 1983 by Roland Morris was in some doubt; 'The exact location of Roland Morris' site remains uncertain' (Wessex Archaeology, 2003). The DBA identified a possible location for his work some distance from the 1975 designated position 'In this 'new' position the bow section designation does not cover the bow site...' (Wessex Archaeology, 2003). A designated site assessment carried out in 2006 by Wessex Archaeology appears to confirm this new location for the Morris investigations (Wessex Archaeology, 2006b).
- 2.4.5 A formal programme of staged assessment and research is required to contribute towards a fuller understanding of the site in its entirety.

3 Assessment of Significance

3.1 Basis for Assessment of Significance

- 3.1.1 *Significance* means *the sum of the cultural and natural heritage values of a place* (English Heritage 2008). Cultural heritage value has many aspects, including the potential of a place to yield primary information about past human activity (evidential value, which includes archaeological value), the ways in which it can provide direct links to past people, events and aspects of life (historical value), the ways in which people respond to a place through sensory and intellectual experience of it (aesthetic value, which includes architectural value) and the meanings of a place for the people who identify with it, and communities for whom it is part of their collective memory (communal value).
- 3.1.2 In addition, the historic environment is a cultural and natural heritage resource shared by communities characterised not just by geographical location but also by common interests and values. As such, emphasis may be placed upon important consequential benefits or potential, for example as an educational, recreational, or economic resource, which the historic environment provides. The seamless cultural and natural strands of the historic environment are a vital part of everyone's heritage, held in stewardship for the benefit of future generations.
- 3.1.3 The basis for assessing significance therefore enables consideration of the varying degrees of significance of different elements of the site. By identifying those elements which are vital to its significance and so must not be lost or compromised, we are able to identify elements which are of lesser value, and elements which have little value or detract from the significance of the site.

3.2 Statement of Significance

- 3.2.1 Four vessels were built in the *Courageux* Class of warship and the *Colossus* represents the only surviving vessel of this Class in the archaeological record. The three other vessels, and their fate, are as follows;

Carnatic	Renamed <i>Captain</i> in 1815; broken-up in 1825
Leviathan	Became a Prison Ship in 1816; sold in 1848
Minotaur	Wrecked in 1810 on Haak Sands, Texel

The 74 gun warship was one of the most successful and numerous types of the period. The *Colossus* is the only British 74 gun ship currently designated. The other designated 74 gun ship (*HMS Invincible*) was originally a French warship (built in France 1744, captured by the British in 1747 and wrecked in 1758).

- 3.2.2 The aesthetic value of the *Colossus* as a warship is therefore closely tied to its evidential value on the seabed. These two elements are fundamental to the site's significance as further historical information (including relationships

with the late eighteenth-century wars with France) may be derived from continued archaeological investigation and assessment.

- 3.2.3 For the *Colossus*, community values are also closely aligned. The body of Admiral Shuldham transported in the *Colossus*, for example, was recovered from the wreck and, 'after remaining for some time in the Citadel at St Mary's, [was] interred...in...Buckinghamshire' (*Naval Chronicle*, Vol.1: 176). Following the wrecking, part of the crew was stranded on Scilly for forty days at a cost of £44 for Tresco and £38 for Bryher, while Scillonian boatmen 'assisted' the Admiralty in the recovery of material from the site in the years following the wrecking event. In later years, a possible fragment of Hamilton's ceramic collection was found on St Martin's and presented to the Museum in 1967 (Acc. No. 937 / NMR ref. SV 91 NW 82).
- 3.2.4 In addition, the location of the *Colossus* is similarly valued for the reefs and rocky islets of Scilly form a named primary habitat within the SAC. Here, the south-westerly position of the islands leads to a range of warm-water species being present, including sunset cup-coral (*Leptopsammia pruvoti*), pink sea-fans (*Eunicella verrucosa*) and Weymouth carpet-coral (*Hoplanguia durotrix*), while the voluntary Marine Park is a recognised tourist feature. In 2013 a group of Marine Conservation Zones (MCZ) was designated in the Isles of Scilly see <https://www.gov.uk/government/publications/marine-conservation-zone-2013-designation-isles-of-scilly>
- 3.2.5 The local community therefore maintains a keen interest in the site (through its evidential value) and may be viewed as unofficial 'custodians'; some members of the community have even published personal accounts of research and investigation (see Stevens 2005 and 2007). In this capacity, the community investigates and to some extent monitors the site and self-regulates visiting divers. In addition, the *Colossus* may be seen to provide recreational (and therefore economic) resource by virtue of 'diving tourism' through use of the dive trail installed in 2008. Local educational value may be viewed in relation to interpretative material in St. Mary's Museum, the visitor centre on Tresco and the Powder Store at Garrison Walls. Wider educational value may be identified through online facilities and activities.
- 3.2.6 In addition, the contemporary recovery of material from the wreck site, later salvage by the Dean brothers, excavation and recovery throughout the 1970s and early 1980s as well as more recent activity offer a unique opportunity to examine the development of maritime archaeological techniques and the cross-over from amateur to professional archaeology within the discipline.
- 3.2.7 Whereas historical and communal values contribute to the assessment of significance of the *Colossus*, these values cannot stand alone. Without the continued enhancement of certain values, interest in the *Colossus* would be diminished. As such, extant material remains on the seabed are vital to the significance of the site and must therefore not be lost or compromised.

3.2.8 The following table seeks to summarise these values of the *Colossus* as a whole, by noting how those values relate to the surviving fabric and its constituent parts:

Evidential	Relating to the potential of the <i>Colossus</i> to yield primary information about past human activity, limited evaluation, excavation and chance recovery has indicated survival of substantial elements of hull structure, fittings, armaments, cargo and other associated objects or deposits.
Historical	Relating to the ways in which the <i>Colossus</i> can provide direct links to past people, events and aspects of life, the wreck is identified with famous naval engagements and personalities. Documentary evidence allows for a full comprehension of the wrecking event while archaeological material recovered from the site provides insights as to shipboard life.
Aesthetic	Relating to the ways in which people respond to the <i>Colossus</i> through sensory and intellectual experience of it, the wreck's strength lies in it being a Nelsonian warship. She was one of only four ships built in the Courageux Class and her design followed from the Invincible Class and influenced British warship design until late 1796. She is therefore of technological importance.
Communal	<p>Relating to the meanings of the <i>Colossus</i> for the people who identify with it, and whose collective memory it holds, places and community members have a long history of association with the wreck from the sheltering of survivors to more recent excavation and survey and the accession of material by the museum.</p> <p>Designation of the <i>Colossus</i> (under the Protection of Wrecks Act 1973) is, in itself, an expression of communal value.</p> <p>Economic, educational, recreational and other benefits which exist as a consequence of the cultural or natural heritage values of the <i>Colossus</i> may be identified in its value as a visited dive site, museum display and its accidental co-location within a marine SAC. Lying within the SAC and Marine Park, the <i>Colossus</i> can contribute to the natural heritage of Scilly. In 2013 a number of Marine Conservation Zones (MCZ) were designated in the Isles of Scilly.</p>

3.3 Gaps in Understanding Significance

- 3.3.1 Despite the acknowledged need for a formal programme of staged assessment and research, the assessment of significance has not been acutely hindered by any gaps in knowledge identified in Section 2.4 above. However, certain key gaps in our understanding of the significance of the component parts of the site may need to be filled so that these significances can contribute to informing its future conservation management. Most notable among these, would be the documentary identification of material salvaged from the site (contributing to our understanding of the evidential value of remaining components) and a comprehensive understanding of the community value of the *Colossus*.

3.4 Statutory and Other Designations

- 3.4.1 Statutory Instrument 2001/2403 affords protection to a circular area of seabed (radius 300m) around position 49° 55.471' N 006° 20.505' W (WGS84) under the Protection of Wrecks Act 1973. This restricted area relates specifically to the stern of the *Colossus*.
- 3.4.2 In 1975, an area surrounding what is believed to be the bow of the vessel had been protected (SI 1975/726), though this was revoked in 1984 following licensed excavation and recovery. Further, a known debris field between the bow and stern areas remains partly unprotected (see Camidge 2005a).
- 3.4.3 The Isles of Scilly were designated as an Area of Outstanding Natural Beauty (AONB) in 1975 while the Isles and marine areas around Scilly were designated on 1st April 2005 under SI No. 2716 as a Special Area of Conservation (SAC), Conservation (Natural Habitats) Regulations (1994), pursuant to the EC Habitats Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (1992). The Isles of Scilly inshore MCZ was designated in November 2013. Further, as the Isles of Scilly are a voluntary protected Marine Park, liaison with the Isles of Scilly Wildlife Trust will be required.
- 3.4.5 In addition, Section 40 of the Natural Environment and Rural Communities Act (2006) places a duty on all public bodies to have regard to biodiversity. Guidance for this duty is contained in 'Biodiversity duty: public authority duty to have regard to conserving biodiversity' by Natural England and DEFRA published in October 2014.

4 Issues and Vulnerability

4.1 Introduction

4.1.1 This section summarises the main conservation and management issues that specifically affect, or may affect, the significance of the monument and its component parts and elements. The ways in which the significance of the site may be vulnerable will also be identified.

4.1.2 Vulnerability (and therefore risk) may be assessed against environmental factors (such as natural processes) and human impact on the site, including the setting. Commissioned research is being undertaken to assess site specific marine environments to provide a better understanding of the level of risk to assets or whether a site is in a stable condition. Current assessment may indicate that such sites are at medium or high risk, unless they are completely buried below bed level during successive tidal cycles.

4.1.3 It is accepted that all wreck sites are vulnerable simply because of the nature of their environment, though sites will be considered to be at risk when there is a threat of damage, decay or loss of the monument. However, damage, deterioration or loss of the monument through natural or other impacts will not necessarily be considered to put the monument at risk if there is a programme of positive management. Practical measures that affect site stability, preservation *in situ* and increased visitor access will be addressed here, while the necessity to address the sites' post-excavation back-log is recognised (see also section 4.7).

4.1.4 Issues relate specifically to the values identified in Section 3.2 above and are presented here thematically rather than in order of severity or priority for remedial action. Relevant issues cover a wide range, including - but not restricted to:

- The physical condition of the site and its setting
- Conservation and presentation philosophy
- Visitor and other legal/ownership requirements
- The existence (or lack) of appropriate uses
- Resources, including financial constraints and availability of skills
- Lack of information or understanding about aspects of the site
- Conflicts between different types of significance

4.2 The Physical Condition of the Site and its Setting

4.2.1 Where identified, the fabric of the vessel is remarkably well preserved (as evidenced by the recovery of the stern carving in 2001). Given the likely preservation of buried archaeological remains, wherever possible unnecessary disturbance should be avoided. However once material is exposed (due to the sand of the surrounding seabed being eroded), deterioration due to biological decay is fairly rapid. While the precise reasons for this erosion are not known – though current studies indicate a pattern of seasonality (Camidge, 2009) - deterioration in exposed timber is marked. Timbers which appeared perfect in June 2001, for example, were visibly

gribbled and decayed by June 2002. Once the timbers are weakened by biological attack they may be subject to detachment and dispersal by the tide and wave surge during winter storms. Further, at least two of the iron guns on site are exhibiting signs of active corrosion.

- 4.2.2 Given that both the potential aesthetic value of buried hull remains and the evidential value of artefacts are of vital significance to the site, a site stabilisation trial was undertaken between 2003 and 2005 (Camidge 2005b). The results of the trial demonstrated that, of the three stabilisation methods, a Terram 4000 mat was clearly the most efficient and cost effective of the systems trialled (see Appendix III).
- 4.2.3 Following on from the stabilisation trials in 2008 a small area at the stern of the exposed wreckage was protected using a Terram 4000 mat. The protected area comprised 12 square metres at the rear of the stern. This area was chosen for in situ protection as it exhibited several areas of carved and decorative timber.
- 4.2.4 However, the demonstrable continued and gradual exposure of timber poses a challenging recording task. It has been proposed that the preferred method of recording the *Colossus* is to expose small sections of structure and record them while the timber is fresh and clear, followed by reburial (Camidge, 2009). This methodology could form part of a future stabilisation project.
- 4.2.5 The sediment levels on the site have been monitored since 2003; the monitoring has demonstrated a steady fall in sediment levels over the stern site. This has recently (2014) exposed a new area of wreck material to the east of the stern comprising rigging, hull fittings and personal items. This material was investigated in 2015 (Camidge, 2015).

4.3 Conservation and Presentation Philosophy

- 4.3.1 Re-designation, to protect the site in its entirety, was recommended in 2003 though not pursued as the precise location of the bow area had not been re-identified with confidence. However, in 2006 the location of the bow site was determined and the topography on the seabed reconciled with Roland Morris's site plan from the 1970s. Given that local divers have recovered related ceramics and other finds from this area, re-designation of the *Colossus* is considered necessary.
- 4.3.2 As noted in Section 2.3 above, Garrison Walls is the nearest English Heritage Property to the *Colossus*, and also overlooks two of the five Protected Wreck sites in Scilly; namely Bartholomew Ledge in St Mary's Sound, off Woolpack Point, and the *Colossus* itself. There is obvious opportunity to provide interpretative material and appropriate signage for the marine historic environment within the Garrison (in addition to that already provided in the Powder Store).
- 4.3.3 The Isles of Scilly Wildlife Trust led an AONB partnership project to develop an Interpretation Strategy for Scilly. As English Heritage was an AONB

partner, provision for interpretation of the marine historic environment will be developed following publication of this strategy. The *Interpretation Strategy: Isles of Scilly* AONB was published in 2008.

4.4 Visitor and other Occupancy Requirements

- 4.4.1 A dive trail was installed on the stern site in 2009. This has significantly increased public access to the site, as shown in 4.3 below. A guide booklet has also been prepared for the dive trail which is available to divers on the Isles of Scilly dive charter boats – from which the dive trail is usually accessed. The guide booklet is also available to download on the CISMAS website. It should also be made available on the HE *Colossus* web page.
- 4.4.2 Physical dive trails need to be maintained and the accompanying guide books/literature have to be periodically updated to reflect what is visible on the site. As such, the dive trail and dive trail guide booklet need to be periodically reviewed and updated to maintain them as useful assets.
- 4.4.3 The number of licensed visiting divers to the site is shown below. Note the effect of the dive trail (installed in 2008) on the number of divers visiting the site.

Colossus Licensed Divers	
Year	Number of Divers
2015	383
2014	92
2013	359
2012	320
2011	218
2010	224
2009	283
2008	226
2006	125
2005	9
2004	9
2003	90
TOTAL	2338

- 4.4.4 In addition, ‘virtual access’ has been enabled through a number of web-based resources. The *Colossus* page on the Historic England web site has background information and links to some reports. The now discontinued ‘*Colossus* game’ is much lamented and consideration should be given to updating and restoring this resource. The dive trail guide booklet should also be available on this page. The CISMAS web site has a comprehensive *Colossus* section including links to all the reports relating to CISMAS work on the wreck – this is a considerable resource and attracts many hundreds of downloads every year. There is a YouTube video showing a diver’s eye view of the whole dive trail and a Facebook page showing highlights of the most

recent CISMAS work on the site. Links to these resources are included in Appendix IV.

4.5 The Existence (or lack) of Appropriate Uses

- 4.5.1 Although unlicensed activity on the site has been reported in the past, recent local self-regulation has served to ensure that illegal diving on the site has been significantly reduced (if not completely removed).
- 4.5.2 In September 2006, reports were received that unauthorised small conical holes were observed on-site, in the stern area. Similar holes were again observed in 2015, along with the movement of heavy objects and sandbags. Although we do not know what causes such holes, similar observations have been made on the site at a number of different locations. While we do not rule out their origin as human activity, it is possible that they were caused by burrowing marine organisms.
- 4.5.3 A monitoring survey of artefacts lying on the seabed was undertaken in 2010 and 2012. The aim of this survey was to assess the impact of the dive trail on artefacts exposed on the seabed around the site. Of the 37 objects recorded in 2010, only 23 were recorded in 2012. Of these only nine were objects recorded in 2010. These nine had all moved distances between 0.3m and 20m from their original locations. The mean movement for the nine objects was 7.28m; in one case, a large lead scupper weighing over 15kg moved 15.4m between 2010 and 2012. This was almost certainly moved by visiting divers. The conclusion was that artefacts are being moved by visiting divers, and that smaller, more 'desirable' objects are possibly being expropriated, but that on balance the objects left on the seabed considerably enhance the visitor experience. The site should be monitored periodically to ensure that any important newly-exposed objects can be recovered for conservation and museum display. Common wreck items (blocks, sheaves copper fastenings and ceramic fragments) should be left on the seabed to enhance the visitor experience.
- 4.5.4 Regular and consistent information relating to the condition of the *Colossus* will be necessary to monitor the existence (or lack) of appropriate uses of the site.
- 4.5.5 As previously outlined (2.3.3), artefacts recovered from *Colossus* were regularly offered for sale throughout 2014 and 2015, particularly via online auction sites such as e-bay. Some of this material is being sold by a licensee of the site. While much of this material is probably recovered from the undesignated parts of the site, this activity probably constitutes an inappropriate use.

4.6 Resources, including Financial Constraints and Availability of Skills

- 4.6.1 There is no doubt that the recovery of the stern carving in 2001 and the limited excavation undertaken in 2002, 2012 and 2015 indicate the evidential value of the *Colossus* stern site and that interaction with archaeological material relates to both aesthetic and historical value.
- 4.6.2 It has been suggested that reburied archaeological material derived from the intrusive investigations of 2001 and 2002 (referred to in section 2.2.3 above) could be used as a research resource to determine the effects of the reburial of objects (Camidge, 2009, p 21.). As a result of the artefact reburial trials undertaken in 2012, the site is now part of a long term research project. The potential of the site to be used as a training resource is also recognised.
- 4.6.3 In line with developing Government policy for designated marine historic assets, we will seek to develop provision for flexible voluntary management agreements. The latter should enable greater partnership, better planning, a reduction in individual licence applications and a more holistic approach to the needs of the *Colossus*.
- 4.6.4 Between 2004 and 2015 the Cornwall and Isles of Scilly Maritime Archaeology Society (CISMAS) has undertaken numerous survey and excavation projects on the stern site and in the debris field. This work has been undertaken by volunteers supported by facilitating grants from the Heritage Lottery Fund and English Heritage. The result is a considerable pool of highly motivated and skilled underwater avocational archaeologists. The reports on all this work were produced promptly and can be downloaded from the CISMAS website (and are also held by the Cornwall HER and the IoS museum).

4.7 Lack of Information or Understanding about Aspects of the Site

- 4.7.1 *Taking to the Water* (English Heritage's Initial Policy for the Management of Maritime Archaeology in England) addressed the protected wreck site post-excavation backlog. Here, it is recognised that over the last twenty-five years many licenses have been issued for survey and excavation work within areas designated under the *Protection of Wrecks Act*. Few of the licences issued required the academic reporting of fieldwork results and, as the vast majority of this work took place on a voluntary basis, lacking adequate financial support for subsequent analysis and dissemination of the results, very little of this work has been formally published (Roberts & Trow 2002: 25). This problem is, however, not unique to maritime archaeology.
- 4.7.2 Inevitably, the standard of such work on the *Colossus* is variable and in different formats. Some of the projects were carried out to an extremely high standard, and have resulted in accessible archives, while others have resulted in less coherent records. The data from this work represents the only record of investigations and, therefore, is itself an irreplaceable resource.

5 Conservation Management Policies

5.1 Introduction

5.1.1 This section of the Conservation Statement and Management Plan builds on the Assessment of Significance and the issues identified in Issues and Vulnerability to develop conservation policies which will retain or reveal the site's significance, and which provide a framework for decision-making in the future management and development of the site or reveal the site's significance and also:

- Meet statutory requirements
- Comply with English Heritage and Historic England's standards and guidance

5.1.2 It is intended that the policies will create a framework for managing change on the *Colossus* that is clear in purpose, and transparent and sustainable in its application. Our aim is to achieve implementation through the principles of shared ownership and partnership working so as to balance protection with economic and social needs.

5.1.3 Policies are also compatible with, and reflect, English Heritage's *Conservation Principles for the Sustainable Management of the Historic Environment* and its published policies and guidelines, as well as the wider statutory framework.

5.2 The Colossus is a Shared Resource

5.2.1 The *Colossus* forms a unique record of past human activity which reflects the aspirations, ingenuity and investment of resources of previous generations. In addition, it is an economic asset, and provides a resource for education and enjoyment.

5.2.2 In addition, the conflict between the desire for access to the site and the restrictions imposed by conservation needs and legislative limitations will be reconciled through continued flexible and appropriate visitor management.

5.2.3 Therefore, we should sustain and use the *Colossus* in ways that allow people to enjoy and benefit from it, but which do not compromise the ability of future generations to do the same.

5.2.4 The dive trail installed on the site in 2008 has been a success, with over 2000 visitors by 2015. However, as the trail consists of physical markers on the seabed these will require periodic maintenance.

Management Policy 1

We will continue to support and develop visitor access to the monument as a mechanism to develop the value of the Colossus.

Management Policy 2

Through liaison with the English Heritage Properties Presentation Team, we will seek to provide updates for the interpretative material for the marine historic environment and the Colossus at the Powder Store, Garrison Walls.

5.3 Everyone can Participate in Sustaining the Colossus

- 5.3.1 Stakeholders and the Scillonian community have the opportunity to contribute to understanding and sustaining the *Colossus*. Judgements about its values and decisions about its future will be made in ways that are accessible, inclusive and transparent.
- 5.3.2 Practitioners should use their knowledge, skills and experience to encourage others to understand, value and care for their heritage. They play a crucial role in communicating and sustaining the established values of the wreck, and in helping people to articulate the values they attach to it.
- 5.3.3 Education at all stages should help to raise awareness and understanding of such values, including the varied ways in which these values are perceived by different generations and communities. It should also help people to develop, maintain and pass on their knowledge and skills. Where appropriate we will encourage the use of the site as a training resource as in the recent 2014 CISMAS investigation project (see Appendix V).
- 5.3.4 In acknowledging the communal value of the *Colossus*, recent local self-regulation (involving licensees, the harbour authority and constabulary) has served to ensure that unauthorised activity on the site has been significantly reduced (if not completely removed). In addition, the number of licensed visiting divers with little reported damage to the site serves to indicate the success of visitor management.
- 5.3.5 Building on this success, we will develop provision for a flexible voluntary management agreement for the *Colossus*. This will enable greater partnership, better planning, a reduction in individual license applications and a more holistic approach to the needs of the *Colossus*.

Management Policy 3

Through web-based initiatives, we will continue to develop the accessibility of related material and support appropriate links, as well as do more to enlist effective local support.

Management Policy 4

Mechanisms will be identified and implemented so as to develop shared ownership and partnership working.

Management Policy 5

Where projects are commissioned on the site we will encourage the use of the site as a training resource where this is appropriate.

5.4 Understanding the Value of the *Colossus* is Vital

5.4.1 The significance of the *Colossus* embraces all the interdependent cultural and natural heritage values that are associated with it. To identify and appreciate those values, it is essential first to understand the structure and ecology of the place, how and why that has changed over time, and its present character.

5.4.2 Judgements about values are necessarily specific to the time they are made. As understanding develops, and as people's perceptions evolve and places change, so assessments of significance will alter, and tend to grow more complex.

5.4.3 We acknowledge that records of previous activities on the *Colossus* form an irreplaceable resource to identify previous values and assist with maintaining a cumulative account of what has happened to the site, and with understanding how its significance may have been altered. Here, the reburied material derived from the intrusive investigations in 2001 and 2002, referred to in section 2.2.3 above, could be used as a research resource to determine the effects of the reburial of objects. There are also the formal artefact reburial trials established in 2012, scheduled for retrieval in 2022 and 2037.

5.4.4 Further, a formal programme of staged assessment and research is required, to contribute towards a fuller understanding of the site in its entirety. Such work will conform to the *Management of Research Projects in the Historic Environment* (Historic England, 2015) and is likely to comprise the following stages;

- Collation of the site archive
- Assessment to determine academic potential of the archive
- Determination of further work to fulfil this academic potential
- Preparation of a research archive
- Report text for publication, and finally
- Publication

Management Policy 6

Key gaps in understanding the significance of the monument's component parts should be identified, prioritised and addressed so that these significances can contribute to informing the future conservation management of the place.

Management Policy 7

We will seek to commission a staged programme of assessment and research to contribute towards a fuller understanding of the site in its entirety.

5.5 The *Colossus* will be Managed to Sustain its Values

- 5.5.1 Conservation is the process of managing change in ways that will best sustain the values of a place in its contexts, and which recognises opportunities to reveal or reinforce those values.
- 5.5.2 Following assessment by the government's archaeological contractor in 2006, and subsequent confirmation of the bow area location, re-designation of the *Colossus* will therefore be sought. It is anticipated that this will comprise a rectangle around the bow and stern area to encompass the majority of the site. Isolated material that may be associated with the *Colossus* may lie outside the proposed area for re-designation. It is suggested that this material be subject to field validation to determine its association, or otherwise, with *Colossus*.
- 5.5.3 Changes in the *Colossus* underwater are inevitable and it is acknowledged that all wreck sites are vulnerable simply because of the nature of their environment. As a response to quantify natural change, we commissioned the Stabilisation Project (Camidge 2005b). We will build on the recommendations set out in the project report (see Appendix III) to sustain heritage values, where these values represent a public interest in the *Colossus*, regardless of ownership. It is therefore both necessary and justified to use law and public policy to regulate the management of the *Colossus* as a place of established heritage value.
- 5.5.4 However, measures taken to counter the effects of natural change will be proportionate to the identified risks, and sustainable in the long term. The stern site, for example, is usually covered by weed during the summer months which restricts observation of visible remains. However, seasonal weed growth has not prevented the continued diminution of the sediment levels on the site. Historic England shall develop specific guidance on weed clearance.
- 5.5.5 Other changes will be devised so as to avoid material harm. Irreversible intervention on the *Colossus* may nonetheless be justified if it provides new information about the past, reveals or reinforces the values of a place or helps sustain those values for future generations – so long as the impact is demonstrably proportionate to the predicted benefits.
- 5.5.6 The effects of changes to the condition of the *Colossus* will be monitored and evaluated, and the results used to inform subsequent action. The ongoing monitoring of sediment levels on the site are a good indicator of the rate of uncovering and thus deterioration of the fabric of the stern site.
- 5.5.7 If retaining any significant part of the *Colossus* is not reasonably practicable, its potential to inform us about the past will be exploited. This involves the recovery of information through prior investigation, followed by analysis, archiving and dissemination of the results at a standard appropriate to its significance. This is most likely to consist of exposure and deterioration of the fabric of the partly buried stern due to falling sediment levels (sediment levels on the site have continued to fall since 2003 when monitoring began).

- 5.5.8 Where such loss is deliberate, the costs of this work should normally be borne by those who initiate the change.
- 5.5.9 Artefacts recovered from *Colossus* are frequently offered for sale particularly via online auction sites such as e-bay. Some of this material was sold by a licensee of the site – this situation needs to be reviewed as part of the management of the site. Monitoring of this activity should be undertaken so that details of these objects can be added to the finds record for the site. The situation is likely to continue as long as parts of the site remain undesignated.

Management Policy 8

Through consultation, we will seek to re-designate the Colossus site to include the bow, stern and debris field within a restricted area.

Management Policy 9

Unnecessary disturbance of the seabed within the restricted area should be avoided wherever possible in order to minimise the risk of damage to buried archaeological remains.

Management Policy 10

Through liaison with the appropriate authorities, we will seek to stabilise and afford preservation in situ to elements at the stern.

Management Policy 11

The sale of artefacts recovered from the site should be monitored as far as possible. A permanent record of these objects should be made. The sale of objects from designated sites by licensees of those sites should be reviewed by Historic England with a view to formulating a management policy concerning this activity. The UK has adopted 'The Rules', an annex to the 2001 UNESCO convention which includes the principle that underwater cultural heritage should not be commercially exploited.

6 Forward Plan

6.1 Projects Proposed in the 2007 CMP and their Outcome

6.1.1 In order to commence the implementation of the proposed Management Policies outlined in Section 5, English Heritage is seeking to commence the stabilisation and in situ preservation to elements at the stern of the vessel.

6.1.2 Following liaison with the appropriate authorities, it is anticipated that this project will commence in 2007/8 and will comprise timber recording prior to stabilisation.

A small area at the stern was protected in 2008 (Camidge, 2009)

6.1.3 In addition, we will work in conjunction with colleagues in the English Heritage Properties Presentation Team and seek to provide appropriate interpretative material at the Garrison.

The wreck of Colossus now features in interpretive material displayed in the Powder Store near the entrance to the English Heritage Garrison Walls property. We should endeavour to ensure that this is periodically updated.

6.2 Projects Proposed (2015 update)

6.2.1 The interpretive material currently on display at the Powder Store in the Garrison Walls needs to be updated. This would also afford the opportunity to add material relating to the other designated wreck sites in Scilly.

6.2.2 The sediment levels on the stern site have been monitored since 2003. To date, this has demonstrated a fluctuating but steady fall in the sediment levels around the stern. The sediment level monitoring is an objective and quantitative method of determining the level of likely deterioration of the articulated stern timbers and the probability of new material being exposed around the stern of *Colossus*.

6.2.3 Recent falls in sediment levels have preceded a scatter of newly exposed material to the east of the stern wreckage. Some of this material was investigated in 2015. New theories proposed in the 2015 concerning the wrecking process suggest that more material will be exposed to the south of the stern wreckage. It is proposed that a survey of newly exposed material be undertaken around the stern to determine its location and extent. This will enhance our understanding of the remains as well as helping us to understand the wrecking process and dispersal of the wreckage.

6.2.4 The current web-based resources for the *Colossus* site need to be enhanced and updated. Resources for non-divers in particular need to be improved.

6.2.5 An expert review of all the artefacts recovered from the site to date should be undertaken. This should include all the known material in museums as well as the objects which have been reburied on site.

7 Implementation

7.1 Consultation

7.1.1 An agreed draft of the original *Conservation and Management Plan* for HMS *Colossus* was submitted to the Government's Advisory Committee on Historic Wreck Sites (ACHWS) for approval. The document was also internally reviewed by English Heritage.

7.1.2 The original *Conservation and Management Plan* for HMS *Colossus* was circulated for a four-week stakeholder consultation to refine how the values and features of the *Colossus* can be conserved, maintained and enhanced. Responses to the consultation were considered and the *Plan* revised as appropriate.

7.2 Adoption of Policies

7.2.1 The original *Management Plan* was adopted in September 2007.

7.2.2 A programme that identifies a realistic timescale for implementing the updated plan - taking into account those areas which need immediate action, those which can be implemented in the medium or long term, and those which are ongoing - will be devised.

7.2.3 Responsibilities for implementation of the updated *Management Plan* lie with Historic England, though consultation with stakeholders will be maintained throughout. In addition, provision will be made for periodic review and updating of the *Plan*.

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Duchy of Cornwall
English Heritage, South-West Region
Harbour Master, Duchy of Cornwall
Isles of Scilly Wildlife Trust
Ministry of Defence
Natural England
Nautical Archaeology Society

Appendix I: Recommendations of 2003 Desk-based Assessment

- 1** Further geophysical survey of the whole site should be undertaken to include multibeam sonar, magnetometer, side-scan and sub-bottom profiler surveys. A complementary tracked diver survey would allow for the examination of specific targets and relate surviving archaeological material to the site plan.
- 2** Detailed monitoring of sand levels on the site, to establish patterns of sediment movement, with the aim of producing plans for the stabilisation of the site.
- 3** Designation of the bow, debris trail and stern as a complete site.
- 4** Appraisal of artefact distribution patterns to help the understanding of the wrecking and post-wrecking process.
- 5** Lapboard and sediment samples lifted from the site need analysing. Digital video, photographs and the 1970s finds need cataloguing.
- 6** Discussion should be initiated with respect to the future management of the stern carving and all the finds raised to date.
- 7** Full publication of the HMS *Colossus* site.

Appendix II: Recommendations from 2006 Designated Site Assessment

Re-designation The 2003 WA Desk Based Assessment on the *HMS Colossus* first recommended the re-designation of the *Colossus* site to include the debris trail and bow area.

Visitor Trail The *Colossus* stern site has been discussed as candidate for a visitor trail around the wreck.

Site Stabilisation The reduction of sediment over the wreck is the main threat to the site's survival. In addition, the cannons dubbed Gun 1 and Gun 5 have been damaged and are currently actively corroding. Methods of monitoring or stabilisation should be considered for the cannons as well as the timber on the site.

Finds Catalogue The 2003 Desk-based Assessment recommended collation of a finds catalogue for the site (WA 2003). The majority of the finds recovered by Todd Stevens reside in the Isles of Scilly Museum. The Curator has lists of all the finds in the museum which have all been declared to the Receiver of Wreck.

If the site was to reach a stage ready for full publication, it could include a complete finds catalogue for the site. If the local islanders could be persuaded to cooperate to produce a finds catalogue, they would not need to part with the finds themselves; just supplying measurements and photographs would be sufficient.

Publication The *Colossus* had an active service life which is well documented up until and including her loss. The subsequent salvage attempts and Roland Morris's search for the wreck in the 1970s have provided a wealth of information alone before the discovery of the stern section of the vessel in 2001.

Appendix III: Results of HMS *Colossus* Stabilisation Trial

The broad aim of the stabilisation trial was to determine suitable methods for stabilising the timbers of HMS *Colossus* exposed on the seabed. These exposed timbers have deteriorated considerably in the four years since survey began in 2001. The most obvious damage to the timbers is from wood boring organisms. Various strategies exist for protecting sites. The specific aim of the trial was to establish the efficacy and economic viability of different protection strategies in the conditions prevailing on this site.

Three different methods of stabilisation were employed in the trials. These were installed on an area of seabed to the south of the exposed timber where there are no visible archaeological remains. The stabilisation materials used were a Terram mat, a synthetic mesh mat and an artificial frond mat system. Each trial mat covered an area 5 x 2.5m and was left in place on the seabed for a period of two years. The trial started in May 2003 and was concluded in May 2005.

The final report for this project was delivered in October 2005. The report concluded that Terram 4000 matting proved to be the most efficient and cost-effective way of stabilising *Colossus*' remains on the seabed by achieving anoxic conditions within days of deployment.

For further information, see Camidge, K., 2005, *HMS Colossus Stabilisation Trial Final Report*, unpublished report for English Heritage

Appendix IV: Links to web-based resources

Historic England *Colossus* page:

<http://www.historicengland.org.uk/listing/what-is-designation/protected-wreck-sites/wreck/hms-colossus>

CISMAS *Colossus* pages:

http://www.cismas.org.uk/colossus_index.php

YouTube video of the dive trail:

<http://youtu.be/wS5KURop104>

Facebook homepage for the *Colossus* Investigation 2015 project:

https://www.facebook.com/pages/Cornwall-and-Isles-of-Scilly-Maritime-Archaeology-Society/843145725722673?ref=aymt_homepage_panel

Links last verified 02/01/2016

Appendix V: Projects Undertaken since 2007

The following is a summary of the projects undertaken on the *Colossus* site since the original *Colossus* Conservation Statement & Management Plan was produced in 2007:

Sediment level monitoring 2003-2015

The sediment levels on the site have been monitored since 2003. This is currently accomplished by means of 14 fixed survey pins driven into the seabed at various locations around the site. The results of the sediment monitoring have been reported every year in the annual licensees' report. The mean of the sediment levels (relative to the sediment levels measured in 2003) was 66.19mm lower in July 2015. This represents an average annual fall of 5.51mm. The annual level change varies and seems to be related to the severity of the winter storms.

We do not know why the sediment levels on this site have continued to fall since monitoring began in 2003. The excellent preservation of the timber on this site when first recorded in 2001 suggests that it was newly exposed in 2001. By 2003, these timbers were exhibiting considerable areas of attack by wood boring organisms. This exposure and degradation continues to occur – the situation will only change when the sediment levels stop falling. The annual mean of the sediment levels gives a good indication of how much new wreck material has been exposed and is an objective measure of the risk to the site.

Protection 2008

A small area at the stern of the wreck was stabilised using in situ preservation techniques. The stabilisation trials conducted in 2005 established that covering with a geotextile mat of Terram 4000 was effective on this site. Accordingly, 12 square metres at the stern were protected using a Terram mat secured with sandbags. This area was selected as it had exhibited several areas of decorative carved timber which was judged to be at risk from falling sediment levels. Prior to installation of the *in situ* protection, detailed recording of the area to be protected was undertaken. An adjacent area, where no protection was installed, was similarly recorded to enable the long term efficacy of the protection to be assessed at some future date. Thus not only was part of the wreck protected from the falling sediment levels but a valuable research exercise was also enabled. An account of this work appeared in *Conservation and Management of Archaeological Sites* (Camidge, 2009).

Dive trail installed 2008

In 2008 a dive trail was installed on the site, consisting of nine numbered markers placed on the seabed around the wreck at points of interest. At the same time a dive trail guide booklet was produced – these booklets are kept on board the three dive charter boats which operate in the Isles of Scilly and are loaned to divers prior to the divers visiting the site. Since the trail was installed, over 2000 divers have visited the site (2015). This has undoubtedly enhanced the public access to the site. A policy of leaving small objects exposed on the seabed in place greatly enhances the appeal of the dive trail to visiting diver (Camidge, 2008).

Surface artefact monitoring survey 2010 & 2012

A monitoring survey of artefacts lying on the seabed was undertaken in 2010 and 2012. The purpose of this survey was to assess the impact of the dive trail on the surface artefacts on the site. Of the 37 objects recorded in 2010, only 23 were found in 2012. Of these only nine were objects recorded in 2010. These nine had all moved distances between 0.3m and 20m from their original locations. The mean movement for the 9 objects was 7.28m. In one case, a large lead scupper weighing over 15kg moved 15.4m between 2010 and 2012. This was almost certainly moved by visiting divers. The conclusion was that artefacts are being moved by visiting divers and that smaller, more 'desirable' objects are possibly being expropriated. However, it was concluded that on balance the objects left on the seabed considerably enhance the visitor experience. The site should be monitored periodically to ensure that any important newly-exposed objects can be recovered for conservation and museum display. Common wreck items (blocks, sheaves copper fastenings and ceramic fragments) should be left on the seabed to enhance the visitor experience (Camidge, 2010).

Investigation and Reburial trials 2012

A small excavation was undertaken by CISMAS on the central part of the stern site. There were a number of reasons for this undertaking: investigation of the main gun deck ordnance, recording of a MGD port, and detailed recording of the post-wrecking stratigraphy present on the wreck. In addition to these site specific enquiries, a number of more general aims were achieved. These included investigation and appraisal of different excavation methods and recording regimes, and the initiation of a long-term reburial trial on the site using real archaeological objects rather than modern tokens. Finally, an opportunity to gain experience in underwater excavation was offered to two separate 'trainees', who were able to gain experience in underwater excavation and recording. There were a considerable number of applicants for the trainee places, perhaps demonstrating the dearth of opportunities available for gaining this experience in underwater excavation.

A number of previous studies have looked at aspects of reburial as a means of preserving underwater material. But by far the most comprehensive long term study undertaken to date is the Reburial and Analysis of Archaeological Remains (RAAR) in Marstrand, Sweden (Bergstrand et al., 2005). But all these trials make use of modern material in their trials. In 2012 a long term reburial trial for artefacts recovered in excavation from *Colossus* was initiated. Two separate repositories containing 30 objects recovered from *Colossus* were buried near the stern of the vessel – these objects were recorded in detail (including x-ray and chemical analysis by Ian Panter at York Archaeological Trust) prior to burial. Recovery is planned for 2022 and 2037. This study will contribute to our understanding of the reburial of archaeological artefacts (Camidge et al, 2012).

A selection of objects recovered in the excavation was conserved at York and are now on display at the Isles of Scilly museum. This material will help to bring the site to the attention of the non-diving public and enhances the poster display previously installed at the Isles of Scilly museum.

Dive trail extension & sediment level monitoring point renewal 2014

In 2014 CISMAS undertook renewal of the sediment monitoring points installed around the stern site in 2003. Many of the original points had been attached to the exposed timbers of the wreck; these had been dispersed as the timbers were destroyed by decay. The new points were long stainless steel pins driven into the sediment. It is anticipated that these should have a much longer life and enable the continued monitoring of the sediment levels around the stern site.

As part of the same project, the station markers on the existing dive trail were renewed. At the same time the dive trail was extended by adding three extra dive stations to include some of the cannons lying to the south of the stern wreck. The extension of the dive trail was undertaken to enhance the dive trail and to help to maintain interest in the site for visiting divers who had already experienced it (Camidge, 2014).

Investigation 2015

During the work to extend the dive trail in 2014, an area of newly-exposed wreck material was found, partly buried in the seabed some 25m to the east of the stern of the vessel. This previously unsuspected material consisted of parts of the ship's rigging including rope, and a collection of personal items. The objective of this project was to determine the nature and extent of this new material and to rescue any artefacts in imminent danger of dispersal due to the falling sediment levels on the site.

Three small trenches were excavated in the area where newly-exposed material had been discovered in 2014. A number of important objects were recovered for conservation, including several pieces of a 9lb gun carriage, one of which was inscribed with the ship's name. An upper deadeye, complete with attached rope shrouds and lanyard, was also recovered. This was most probably one of the mainmast deadeyes/shrouds. A corresponding lower deadeye, complete with attached iron chains, was also recorded but left *in situ*. A significant quantity of rope was found, especially in trench two. These ropes were recorded and samples taken for further study. A small, localised collection of personal items was also found in 2014. This included 56 pewter uniform buttons, a bone brush and a small area of fabric. Sadly, this area had been disturbed by the time the excavation took place in 2015. Nevertheless, three further pewter uniform buttons, parts of a leather shoe and a remarkable miniature bronze cannon were recovered in 2015. This collection of items was confined to a very small area (less than 0.3m diameter) and as such was probably originally contained within a small bag. These items will be displayed in the Isles of Scilly museum once conservation is complete. A report on these items is currently being prepared by Angela Middleton for Historic England.

A number of questions were raised by the material found in 2015; this has led to a reappraisal of the wrecking process of *Colossus*. A new theory of how the current disposition of remains came about has been suggested – along with suggestions as to how this new theory can be tested (Camidge, 2015).

The full reports for these projects are available at www.cismas.org.uk