

**BERRY HEAD FORT, BRIXHAM
AN ARCHAEOLOGICAL ASSESSMENT**

by

**A.R. Pye, with a
contribution by S.C. Timms**

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1. INTRODUCTION

1.1 General background

Berry Head is a Carboniferous limestone headland protruding out into the English Channel at the southern extremity of Torbay. It shelters the bay from the prevailing south and south-westerly winds, contributing towards the importance of Torbay as a naval and civilian anchorage in the 18th and 19th centuries and before. Indeed, when a gale is blowing ships of all sizes still use it as a refuge.

Due to its location on the south-western approaches to Torbay and the use of the latter as an important naval anchorage in the wars against France in the late 18th and early 19th centuries, Berry Head was selected as a site for batteries to defend the anchorage, a role it also fulfilled in the Second World War. Moreover, as a promontory, flanked with precipitous cliffs, it was (and is) also naturally suited for defence in its own right. Thus it was probably utilised for defence in the Iron Age (see Section 2.1) and was fortified in the Napoleonic Wars to protect some of the batteries against land attack. Its prominence and location has also made it a suitable site (past and present) for navigation and communication facilities and look-outs.

Apart from the fortifications and some agricultural activity (including partial and temporary enclosure of some of the common in the mid 19th century), the other major man-made features of the headland are a series of quarries on the northern side of Berry Head and towards Brixham. The limestone of the headland has been quarried for building stone and lime from at least the mid 18th century (see section 2.3), and earlier this century much was also used as flux in blast furnaces in the lower Thames valley. Quarrying ceased in 1969, when Torbay Borough Council purchased the headland and converted it into a Country Park.

1.2 Previous work

1.2.1 *Historical research*

Much documentary research has been carried out by Dr David Evans for the Bridge Agency, and has been published in manuscript form (Evans 1986a, 1986b). This is extensively referred to throughout this report, and is based on material from the Devon Record Office, the Public Record Office (Kew) (Board of Ordnance papers), and in the Royal Engineers' Library, Brompton Barracks, Chatham (letter books from Royal Engineers' Office at Plymouth). Other accounts and summaries have been produced (Blenkin 1931; Blewitt 1832; Brixey, n.d.; Gregory 1896; Horsley 1988 and Saxton 1962) but do not generally give sources. Neither does the current official guide book 'Berry Head'.

1.2.2 *Excavations* (Fig. 18, nos 4, 11 & 13)

Small excavations were carried out in the early 1960s in the kitchen of Fort 1 by the Brixham Museum and History Society under the direction of John Horsley. The latter also carried out a small investigation of one of the 'quarrymen's cottages' (section 9.9) in the early 1970s. Much more extensive excavations, however, were undertaken by the Society in Fort 3 in the mid 1970s, under the direction initially of John Horsley and later of John Durston. These consisted of the excavation of the rubbish dumps downslope of the musketry wall on the south side of the fort (Fig. 18, no. 13) and the partial excavation of an extensive tunnel system running into the fort from the south, and under the guardhouse (the present cafe). Finds from these investigations are mostly stored at Brixham Museum, and there are some on display in the

museum and in the cafe in Fort 3. The site and finds records are listed in Appendix I. To date none of the excavation results or finds have been published.

1.3 The present survey

This has been carried out by the Exeter Museums Archaeological Field Unit, on behalf of Torbay Borough Council, with the following objectives:

- (i) An assessment of the accessible original historical material relating to Berry Head, including cartographic, documentary, antiquarian and pictorial sources, and photographs (sections 3, 4, 5, 6 and 7).
- (ii) The identification of the man-made landscape features within the Berry Head area, including buildings and fortifications. A brief summary history is provided for each (section 9).
- (iii) The evaluation of the accessible finds and site records emanating from the 1960s and 1970s investigations carried out by Brixham Museum. Recommendations are made regarding the work necessary to bring this material to publication. (Section 10.2 & Appendix I).
- (iv) A general photographic coverage of Berry Head including aerial views. The bulk is stored separately in a readily accessible archive.
- (v) An assessment of the fieldwork and recording which would be necessary prior to any future consolidation and clearance of the features and buildings, and which would enhance their understanding and presentation (section 10.1). The carrying out of this fieldwork would be the second stage of the project as proposed in January 1989.
- (vi) The provision of suggestions as to the future management and conservation of the historical features of the Country Park. This has been carried out by Simon Timms, the County Archaeologist for Devon (section 11).

2. HISTORICAL BACKGROUND

2.1 Prehistoric, Romano-British and Medieval activity

This period of Berry Head's history has been the subject of much comment in the past. Most of this, however, where no references are given, must necessarily be treated as speculation. An admittedly extreme example is the theory prevalent in the late 19th century that Vespasian and Titus landed at Berry Head during the Roman conquest (Crawford *c.* 1890; Davy 1989, 450). Also present is the 19th-century propensity to ascribe to the Romans fortifications and enclosures which have subsequently been dated to the Iron Age (or earlier in some cases). The Danes were sometimes used in a similar fashion. Thus the 'Roman rampart' (Blewitt 1832, 202) at Berry Head should be seen in the context of prehistoric hillforts being called 'Roman Camp' and 'Caesar's Camp' elsewhere in southern England at this time.

Apart from speculative identification in the last century of Berry Head with various 'classical' topographical features (for example, Blewitt (1832, 200-201) thought that it was the Phoenician 'Hellenis Promontorium' and Worth (1885, 363) that it may have been the 7th-century AD 'Masona'), and the prehistoric and later finds made by the Reverend Lyte in Ash Hole Cavern in the 1830s (Blewitt 1832, 147-8; and in *Arch. J.* (1852) Vol. ix, p. 93), most comment has centred on the 'Roman rampart' which apparently ran across the neck of the promontory prior to the construction of the Napoleonic fortifications.

The earliest reference to this feature is in the questionnaire section of D. Milles' 'Parochial History of Devon' (1747-62) (section 6.1.2), where it is described as 'a large heap of stones and rubbish about $\frac{1}{4}$ mile in length, commonly called the 'Berry Walls' crossing the headland about a furlong from the point and 'said to be thrown up by the Danes'. In 1822 D & S Lysons (section 6.1.8) refer to a walled fortress on Berry Head, probably, they thought, constructed by the Romans, since Roman coins were found there in *c.* 1730. Blewitt refers to it in 1832 (p. 202), stating that it was destroyed during the construction of the fortifications 40 years ago, that it was 18' high and that General Mercer (who designed and built the forts) considered it 'a decided relic of Roman art'. The antiquary Davidson, writing in 1861 (section 6.1.10), mentions a large entrenchment, the north 'vallum' of which was 18' high and partly consisted of 'Roman masonry'. He does, however, conclude that although he thought the camp had been occupied by the Romans, they may not have originally constructed it.

Further primary evidence for the presence of a rampart on the line of the wall of Fort 3 is provided by its depiction on several late 18th-century charts and maps of Torbay held by the Ministry of Defence, the Public Record Office and the British Library (sections 3.6, 3.7, 3.9, 3.10, 3.13, Figs 5.2, 5.3, 6, 7.1, 7.3). Most was probably destroyed when the present wall of Fort 3 was built (Blewitt 1832, 202), and incorporated into it. However, there is a hint that a portion may have survived until *c.* 1850 when (according to the 'Dartmouth Chronicle' of 9 June 1871) the Revd. Hogg apparently used shipwrecked German emigrants to level its site (Pike 1973, 2). Nothing is now visible on the ground.

Thus, there is evidence of a probable Iron Age promontory fort at Berry Head, similar to others in the South-West such as the 'Rumps' in Cornwall. Moreover, although its rampart was described as containing 'Roman' masonry (Davidson 1861, section 6.1.10), substantial masonry walls are common in Cornish Iron Age hillforts such as Chun Castle, and also stone revetment is a common feature of Iron Age ramparts elsewhere. Evidence of earlier prehistoric activity in the area includes the occupation of Ash Hole Cavern, a heavy concentration of prehistoric lithics in the field south-west of Fort 1 (OS plot no. 443; pers. comm. J. Horsley), and a Bronze Age palstave axe found in Fort 3 some 25 years ago (pers. comm. J. Horsley), now on display in Brixham Museum. However, this axe and the Roman coins found in the 18th century (Lysons 1822, section 6.1.8) may be little more than stray finds, and do not in themselves constitute evidence of Bronze Age or Romano-British occupation.

There is also a ruined 'Danish Castle' marked by Donn in 1765 (Fig. 4) on the site of the later Castle Hill Battery above Ash Hole Cavern. This is also marked on Swete's 1781 sketch (section 6.1.4) and is described in 1832 by Blewitt (p. 202) as a small (Roman) fort. Horsley (1988, 7) believes that it is on or near the site of one of two Anglo-Saxon castles in Brixham, but cites no source for this. The site became a battery in 1780 (section 3.7), and has since been partially quarried away and overlain with a modern house ('Round Top').

During the medieval period the area to the west of Berry Head ('Landscape', now a holiday village) was probably cultivated communally, as the presence of strip fields on the 1838 tithe map and 1st edition (1865) OS 1:2500 map suggests (Shorter 1950). Moreover, strip fields are present on the southern edge of Berry Head Common on the 1794 Ordnance map (Fig. 19), suggesting that the communal arable originally extended up to the edge of the common.

In summary therefore, there seems to be a probable Iron Age promontory fort under Fort 3, earlier occupation debris in the field to the SW of Fort 1 and in Ash Hole Cavern, a scatter of Bronze Age and Roman material over the headland, and a possible enclosure of indeterminate date on Castle Hill. There are also the remnants of a strip field system to the west, suggesting the land was farmed communally in the medieval period.

2.2 16th century proposed fortifications (Fig 1)

During Henry VIII's reign, as a result of intermittent war with France and the consequent fear of invasion, various schemes of defence were proposed for S.W. England, including Torbay. Two major cartographic sources exist for these. One is a map variously dated to *c.* 1536 or to between 1540 and 1545 (Oppenheim 1968; see section 3.1, Fig 1). This shows a castellated tower with 4 protruding cannon upon Berry Head, which is labelled 'not made'. Others are shown at various points round the bay, for example at Torre Abbey. This latter is unlabelled and may possibly have therefore been at least partially built. Indeed Brixey (n.d., 35) quotes a 1540 reference to 'charges to the King for bulwarks ... at Torbay' (although he gives no reference). The idea of fortifying strategic coastal points was first mooted at least as early as 1535 (Oppenheim 1968, 25-6) and possibly as early as 1522. Brixey (p. 33) quotes a letter dated 1522 from the Earl of Surrey to Henry VIII as follows: 'To avert this (the sending of fire ships into Torbay) write to the Bishop of Exeter saying you are informed they are making a blockhouse beside Brixham within Torbay and if they would make another at Churston you would help them with ordnance and powder.' Again no reference is given. There is no evidence however that any of these bulwarks or blockhouses were ever completed, or indeed started (Oppenheim 1968, 26).

The other major cartographic source is a map of 1588 showing proposed fortification of the coast against enemy landings (section 3.2). Proposed entrenchments (with groups of soldiers behind) are shown along exposed parts of the coast, including round Torbay and across the neck of Berry Head, and cannon (presumably indicating batteries) are shown on the headlands, including Berry Head. However, again there is no evidence of either the entrenchments or batteries having been constructed (Oppenheim 1968, 41). Although Horsley (1988, 21) contends that a battery was built above Ash Hole Cavern in 1586, and closed down in 1666, and Saxton (1962, 17) states that bulwarks which lasted until the late 18th century were built on Berry Head in Henry VIII's reign, no physical or documentary evidence is produced for any of these contentions.

2.3 18th century (Figs 2, 5, 6, 7.1, 7.2)

2.3.1 *Fortifications*

The declarations of war by France in 1778 and by Spain in 1779, and the consequent fear of invasion, resulted in a further spate of interest in coastal defence. This was justified, as an invasion of England and the form it should take was being seriously discussed in France at the time (Patterson 1960). Torbay was variously discussed as an object of attack (along with Plymouth, Dartmouth and Harwich), as an anchorage for the French fleet should a proposed attack on the Isle of Wight fail, and as a possible landing site for the French army (Patterson 1960, 20, 50, 208, 211, 226). In 1779 southern England was divided into districts for defence, Torbay falling within no. 5 District, which consisted of Dorset, Devon and Cornwall. In the same year (Jones 1959, 51) instructions for the construction of new batteries were issued by the Board of Ordnance, including four batteries of 25 24-pounder cannon for Torbay.

Unlike the 16th century proposals, which seem never to have been realised, there is clear cartographic (sections 3.7-3.10, 3.13, & Figs 5.2, 5.3, 6, 7.1, 7.2) and documentary evidence (Evans 1986a, 1-2, 1986b, 7-10) that batteries were built in 1779-1780 at the tip of Berry Head and along the southern shore of Torbay. A 1780 plan of Torbay (section 3.7; Figs 2 & 5.2) shows a battery at the tip of Berry Head (10 guns) with a powder magazine behind it, a howitzer battery (2 guns) to the north (now quarried away), and batteries on Hardy's Head (3 guns), above Ash Hole Cavern ('Castle' or 'Danish Castle' battery - 3 guns), and on Furzedown just to the south-east of Fishcombe Cove (now Churston Cove) (5 guns). Others were proposed on Paignton Head (8 guns) and near Daddy's Hole (5 guns), but there is no evidence that they were built. Three buildings (a guardhouse and storehouses) are also shown behind the 'embankment' on Berry Head, and an encampment of the 50th Regiment on Furzedown, west of Brixham. At least two charts of Torbay were produced the following year by Lieutenant Mackenzie (Sections 3.8, 3.9, Fig 5.3) which show to varying degrees the same detail, as does an undated late 18th-century map in the Public Record Office (Fig 6). Another chart of *c.* 1785 (Fig 7.1; section 3.10) reproduces the information shown on the 1780 and 1781 charts, with the difference that the battery to the west of Brixham is shown as being on Fishcombe Point, pointing north (rather than east) across Torbay. This battery is described as embrasured (i.e. the gun barrels protruded through the parapet walls) whereas the others are described as being 'en barbette', meaning that the guns protruded over the top of the parapet walls. Unless based on an earlier survey, this map is about contemporary with the dismantling of the batteries soon after the end of the war in 1783.

From the documentary evidence (Evans 1986b, 7-10) the Board of Ordnance's original intention in November 1779 was that 4 batteries were to be built by the militia around Torbay, two on the NE side and two on the SW side. The land was not bought, but compensation was to be paid to the owners after the end of the war. Guardhouses were to be erected for shelter, and the batteries armed and manned from the men o'war they were there to protect. Consequently magazines were considered unnecessary, although one was in the event built on the Head (see Figs 5.2 and 6). Work began in February 1780, and was completed in November 1780, except for those batteries on Paignton Head and Daddy's Hole (which seem never to have been built). Twenty-five 20-pounder guns were apparently sent from London in May 1780, followed by two 8-inch howitzers in June. After the end of the war, all the guns and material from the buildings were removed in Autumn 1783 to Plymouth, except those at Fishcombe.

From the cartographic sources the late 18th-century defences of Torbay consisted of 5 batteries containing a total of 23 guns, 2 of which were howitzers. The documentary sources however indicate (Evans 1986b, 8) that twenty-seven guns were sent from London to Torbay in 1780, consisting of twenty-five 20-pounder cannon, and two howitzers. Thus neither source conforms to the original Board of Ordnance instructions for 4 batteries of 25 24-pounders (Jones 1959, 51).

2.3.2 *Quarrying*

Evidence that the limestone of Berry Head was quarried for lime and building stone since at least the mid 18th century is provided by D. Milles 'Parochial History' of 1747-1762 (section 6.1.2i & ii). At this time stone appears to have been quarried from both sides of the headland (i.e. from the northern and southern flanks of the later Fort 3) and transported away by boat. There is no reference to purpose-built quays, instead the boats seem to have been loaded directly

from the shore and from thence took the stone to Exeter. Furthermore, although Milles' description concentrates on the quarrying of the promontory, there are several small 'scratch' quarries along the northern flank of the headland towards Brixham (of which the so-called 'quarrymen's cottages' (section 9.9) and water tanks (section 9.10) are probably examples), which were certainly worked in the early 19th century (section 5.1.1) and may well have been earlier. Lastly in 1783 (Evans 1986b, 10) it was noted that the six quarries under the (unspecified) batteries had been rendered useless by the presence of the latter, and had previously produced 86 boatloads per annum, worth 5s per load to the proprietors. Evidence for quarrying later in the 18th century is discussed below (section 2.4.2).

2.4 Napoleonic

The main feature of this period is the construction of Forts 1 and 3, and the re-activation of some of the 1780 batteries. This occurred in response to the outbreak of war with France in 1793 and the subsequent perceived threat of invasion and the necessity of protecting the important naval anchorage of Torbay. Much effort was involved in fortifying the promontory batteries (rather than leaving them open as before), largely because the Commanding Officer of the Western District at the time had no faith in batteries unless they were mobile or in strong redoubts defended by at least 200 infantry (Jones 1959, 94).

Quarrying also continued, providing a useful source of income for the Board of Ordnance.

2.4.1 *Fortifications* (Figs 3, 7.3, 8, 9, 10, 21, 22, 23; Plates 1-13)

These consist of two garrisoned redoubts (Forts 1 and 3) built to protect the promontory batteries against land attack, and three re-activated 1780 batteries (unprotected by redoubts) along the S coast of Torbay at Hardy's Head, above Ash Hole Cavern (the former 'Danish Castle' battery) and at Furzeham, west of Brixham. As Evans (1986a & 1986b) has already given a detailed history of their construction only a brief summary will be given here.

By an Act of Parliament dated 11th June 1794 (34 Geo III) the whole of the Berry Head promontory, including the common and parts of adjoining fields (about 120 acres in total) were purchased in preparation for the construction of the fortifications (Fig.19; section 3.24). In October that year a commission consisting of the Board of Ordnance trustees examined all the relevant deeds and assessed the values of the various interests in the land. The results were issued as an Ordnance decree on 20th May 1795 (section 5.2).

Prior to the passing of the Act Lieutenant Colonel Alexander Mercer, the Commanding Engineer at Devonport, was instructed in April 1794 to formulate plans for the erection of batteries on Berry Head and for their defence (Evans 1986a, 2). This latter was to consist (Evans 1986a, 2) of enclosures (i.e. redoubts) garrisoned by 600 men in ten barracks, each containing 60 men and 2 officers. These barracks were to be 100 feet long by 22 feet wide (Evans, 1986b, 11). Separate kitchens and water tanks (to be covered in slate) were also to be included. Mercer produced his plans in July 1794, and although none of his original drawings appear to survive (bar his design of a shed for artillery wagons, Fig. 20, section 4.2) copies made in 1803 do (Figs 21-3; section 4.4). As originally conceived, the battery at the tip of the headland was to be protected by a defensive line across the neck of the promontory and held by the majority of the garrison (Fort 3). The landward approach to this line was to be protected by

redoubts to the south of and astride the main line of approach (Forts 1 and 2 respectively). (This latter was approximately on the site of the later smallholding (section 9.11)). A defensive line was also to be built to the north, protecting the access to Hardy's Head Battery and the approach to Fort 3. A 'couvre port' to strengthen the defence of the entrance to No. 3 was also proposed (Figs 22, 23). However, only Forts 1 and 3 (without the 'couvre port') were in the event built.

In the years between the production of the designs in 1794 and the temporary suspension of work in December 1796 (Evans 1986b, 23), considerable progress was made in the construction of the defences and buildings. Clearance of the site began in summer 1794 and the construction of the earthworks (redoubts) began the following summer. By April 1796 several buildings were complete enough to be glazed (Evans 1986b, 23), including some of the prefabricated wooden barracks. Furthermore much of the redoubt of Fort 1 seems by implication to have been complete by 1798, when material from its 18 unoccupied gun platforms was utilised to repair those of the batteries at the Head and at Fishcombe Point (Evans 1986b, 24). However, there was much still to be completed, judging from a letter of Oct 8th 1798 sent by Colonel Bastard (the commander of the 1st Devonshire Militia Regiment which was garrisoning Berry Head at the time) to the Board of Ordnance (Evans 1986a, 17). In this he states that the barracks need whitewashing and that 'there is no Mess room, or Kitchen, no store room for the regimental Stores, not even for powder, no Hospital, no place for the coals which are flung loose about the Kitchens.' He also mentions that the tank doors are beginning to decay and that some of the guttering is unhealthy and offensive. These comments suggest that some barracks had been built and possibly some (but not all) of the kitchens, judging from the comment about the coals. Also water cisterns were in existence at this time. Although these are mentioned as being 'in decay', it is unclear whether this decay resulted from faulty workmanship or, as Evans suggests (1986a, 18) because they in fact dated from the earlier fortification of the site in 1780. Lastly, in the late 18th century and 19th century the term 'guttering' usually meant deliberately constructed surface drains to carry off water, especially in an agricultural context. Whether, for instance, such channels or drains which were constructed underground for all or part of their length would be called 'guttering' is a matter for debate. There does, however, appear to be a drainage system of some kind in operation at this time.

Thus, in 1798 the buildings considered necessary to the garrison which had not been built included the (Officers'?) Mess room, the powder magazine, coal stores, Regimental stores, hospital and possibly some of the kitchens.

Between the summer of 1798 and the end of 1799, at Mercer's instigation an Officers' Guard Room was approved for no. 3 fort, and an artillery store and guardhouse, and expense magazine for no. 1 fort (Evans 1986b, 24, 29). The Board of Ordnance also made clear (Evans 1986b, 29) that although the completion of the fieldworks had been postponed, four small furnaces for heating shot at the sea batteries were to be built, and furthermore that the Barrack Dept (rather than the Ordnance) should provide the messhouse, coal yard, beer cellar, and other 'accommodations' which had been requested.

The situation in 1800 is described briefly by Dunsford (section 6.1.6, and Evans 1986a, 21), who states that there were 5 barracks for 500 men within the fortifications on the summit of the hill, and that there was a battery of 12 42-pounder guns on the promontory, and 2 or 3 smaller batteries on the descent into Brixham. As there is only one probable barrack in Fort 1

on both the original design (Figs 21 & 22) and on the plans (Figs 9 & 10) of the forts as built, at least four of these barracks must have been located in Fort 3. The batteries referred to were presumably those at the Head, on Hardy's Head, and above Ash Hole Cavern (Fig. 8).

After the renewal of the invasion threat in 1801, the decision was made the following spring to complete the forts (Evans 1986b, 44, 46). This was to include the replacement of the wooden gun platforms with stone ones (a task which was only finally completed in 1809 - Evans 1986b, 53), but not the completion of the proposed palisades fronting the redoubts. Mercer was requested in March 1802 to produce estimates of the cost of the necessary work and materials, which he duly did the following month.

These are confined to the main redoubt walls of nos. 1 and 3, the musketry walls on the flanks, and to the proposed redoubts nos. 2 and 4 (Evans 1986a, 23-6). The costs of internal structures (such as the guardhouses and magazines) are not included, suggesting that they were largely complete. Exceptions, however, were the 'Field Train Shed' or 'Shed for Artillery' (Figs 11, 19) and the hospital (Plate 14). The former, although probably originally designed in 1794 (section 4.2) was not built until after October 1805, when the plans for it were sent by Mercer to London and approved (Evans 1986a, 28). The latter (now the Berry Head Hotel) was not built until 1809-10 (Evans 1986a, 29), there being no direct evidence (see below) for the earlier one proposed by Blenkin (1931, 6-7, Fig 25) within Fort 3. Thus, with the exception of these buildings and of the 'lines of musketry' on the flanks of Fort 3, the defences seem to have been largely completed by summer 1804, according to a (presumably reliable and accurate) memorandum sent by Mercer to the Board of Ordnance (Evans 1986a, 27).

This sequence of development is generally supported by the cartographic evidence. The OS surveyor's sketches of 1803-4 (Fig. 8), although of very small scale, do show the main fortifications complete, and the musketry walls on the flanks of Fort 3 incomplete (see Mercer's 1804 memo above). Moreover it indicates the northern set of 'barracks' in Fort 3 but not the southern (though they may be obscured by the label: 'Barracks'). A map by Dessiou dated 1804 (Fig. 7.3) also shows four buildings on the site of the northern barracks (and nothing on the southern), and a fortification line on that of Fort 3. These are presumably the fortifications and barracks mentioned by Dunsford. However, it does not show Fort 1 at all, and was therefore probably surveyed before 1804, when according to the OS sketches (Fig. 8) and Mercer's 1804 memo Forts 1 and 3 were largely complete (Evans 1986a, 27). It may indicate that the redoubt of no. 3 was begun before that of no. 1, or alternatively the fortification line shown may be the 'Roman' rampart depicted on earlier 18th-century charts (see section 2.1 above and Figs. 5.2, 5.3, 6, 7.1, 7.3).

The cartographic evidence also indicates that the northern barracks in Fort 3 were built before the southern ones. Moreover the latter are not included in Mercer's original design (Figs 21 & 22), and are of a different design to the northern ones. However, although not apparently present in 1803-4 (Fig. 8) they do appear on Mercer's 1807 plan (Fig. 9). Thus the construction of the southern barracks appears to be largely an afterthought, and may have been occasioned by the need to accommodate those men who were originally intended to garrison redoubts 2 and 4, which were never built.

Thus in summary many of the internal buildings of the redoubts were constructed between *c.* 1795 and 1802, as well as the batteries and some elements of the redoubt fortifications. This was then followed by the completion of redoubts 1 and 3, between 1802 and 1804, and the subsequent construction of the southern barracks of no. 3 (between *c.* 1804 and 1807), the ‘field train shed’ (between 1805 and 1807) and the hospital (1809-10).

There is little direct evidence regarding the identification of particular structures within the redoubts. The current identifications (for instance in the official guide book, ‘Berry Head’) seem to be based on a plan in Blenkin’s 1931 guide (p. 6-7; Fig. 25). Although this is labelled as being copied by Blenkin by ‘kind permission of the War Office’, it does not exactly reflect any of Mercer’s plans now available (Figs. 9, 10, 21-23). The only faint possibility is that Blenkin saw Mercer’s original 1794 designs (which do not survive) and that these were different from the 1803 versions (which do - Figs 21-23). Moreover, it is unclear to what extent the building identifications on his plan are based on an original source or on his own interpretation. Thus, as no source is given, it should not be used as a base for interpreting either the present remains or those quarried away before 1969.

However, there are original sources which do label some of the buildings, and identifications based on these are provided on the 1989 composite plan of the site (Fig. 18). Nothing is labelled on the 1803 copies of Mercer’s original designs (Figs 21-23) and although various buildings are numbered on his 1807 plan (Fig. 9) no accompanying schedule survives. The first plan to contain labels is his 1811 one (Fig. 10) of the forts, presumably as they were built. In Fort 3, the powder magazine is labelled, as is a long ‘shed for artillery’ to the south. This presumably is the ‘field train shed’ designed in 1794 (Fig. 20; section 4.2) for 106 artillery wagons, and built soon after 1805. The only other structure labelled is a ‘storehouse’ to the west of the magazine. In Fort 1, the powder magazine is labelled, along with the Guard and Storehouse immediately to the east. As in Fort 3, other structures are shown, but are not labelled. The same buildings are labelled, all with the same captions, on maps produced to accompany Col. Morshead’s 1828 report (section 5.1.1), Col. Birch’s reports of 1831 and 1833 (Fig. 11) and on one produced by Col. Hoste in 1839 (section 3.27). In Fort 3 the 1811 ‘powder magazine’ is simply the ‘magazine’, the ‘shed for artillery’ is the ‘Field Train Shed’, the ‘storehouse’ is the ‘Artillery Store’. Also labelled is the Guardroom near the entrance. Other buildings which remained standing were depicted but not labelled. Apart from the OS 2" to 1 mile 1803-4 surveyor’s sketch (Fig. 8) which shows and labels as ‘barracks’ the northern set of the same in Fort 3, there is no other direct indication of building function, except in the case of the 1809-10 hospital which is labelled as such on the 1828, 1831, 1833 (Fig. 11) and 1839 maps. An 1834 plan of it also exists (section 4.5)

With regard to the other buildings shown on Mercer’s plans of the forts (Figs. 9, 10), according to Mercer’s original design there should have been barrack accommodation for 600 men, at 60 men to a barrack, and thus in total 10 barracks or their equivalent. However, in 1800 Dunsford (section 6.1.6) says that there were 5 barracks and 500 men. Assuming this is accurate, either the barracks were larger than first intended, were heavily overcrowded, or 200 men lived in tents. In any case, given the number of barracks necessary and that they would probably have been of standard sizes and designs, it is logical to identify the 2 sets of 4 buildings in the northern and southern halves of Fort 3 (Figs 9 & 10) as barracks. The one remnant of wall belonging to the building immediately north of the westernmost of the northern

barracks, possesses a fireplace and two ovens, suggesting that it, and those accompanying the other barracks, was a kitchen. In Fort 1, the structure shown at the southern end of the redoubt was also probably a barrack, since it is of very similar dimensions to the northern barracks of Fort 3, and moreover has a building which is clearly a kitchen immediately to the south. The interpretation of the other buildings within Fort 3 is more problematical, although a set of roofed cisterns belonging to the southern barracks are visible and are still largely full of water (N. Smallbones, pers. comm.). In 1798 Bastard mentions the following as being absent: regimental stores, powder store, coal stores, (Officers'?) Mess, hospital, and kitchens to some extent (Evans 1986a, 17). However, although all these were doubtless necessary to a military garrison, Bastard would not necessarily have listed all that was included in Mercer's design, and moreover provided no indication of how many of each (eg. store buildings) he (or Mercer) considered necessary. Thus one can make assumptions (as perhaps Blenkin did) that the kitchens would not have been too far from the barracks they served, the coal stores would be separate from (but not far from) the kitchens, and that the latrines would be separate from both.

Thus the barracks and kitchens, the powder store (magazine), the (artillery) store, the field train shed, cisterns (tanks) and the guard house can be firmly identified, which leaves the regimental store, coal stores, Officers' Mess as unidentified, as well as any other buildings not listed by Bastard (such as latrines, other stores etc).

Lastly, Blenkin (Fig. 25) marks an (old) hospital as being present in the SW corner of Fort 3, and states that it was used between 1803 and 1809 (p. 10), although no source for this is given. Brixey (n.d. p. 73) refers to a surgeon being sent to Berry Head in 1798, but again no source is given. Furthermore, although a surgeon was quite a senior doctor in the 19th-century context, his presence does not necessarily imply the existence of a hospital and operating theatre, as it would perhaps today. Moreover, in all the papers studied by Evans (1986a, 28) relating to discussions in 1808 about a site for a hospital there is no indication at all that such already existed. Thus Mercer states on April 23 1808 that: 'a situation, for a Hospital, cannot be given within either of the Works at the Berry Head, as the Defences are already Choked by Barracks, and Buildings, of every description', and goes on to describe its present site, which, after some debate, was accepted in 1809. The clear implication of Mercer's remarks is that prior to 1809 there was no hospital on Berry Head, and if there was then surely he would have mentioned it, even if it was solely to dismiss the possibility of extending it.

With regard to the armament of the batteries and redoubts, the sources vary. Colonel Birch, in his inspectional report of 1832 (Evans 1986a, 36-8) states that the batteries (now dismantled) consisted of 12 heavy guns at the Head looking entirely to seaward, 3 on the right of the rampart (i.e. the N end of the redoubt of Fort 3) looking across the bay, and 2 sea batteries on the cliffs outside the fort (i.e. Hardy's Head and above Ash Hole), together of 7 guns, and one of 5 guns at Furzesham beyond Brixham. He stated that there were thus '27 pieces in sea battery, with nine lighter guns, 12-pounders, on the ramparts of the 2 Forts - altogether 36 pieces'. However, Jones (1959, 97), presumably from the records of the Royal Artillery Institution, lists Berry Head as having the following guns between 1793 and 1815: 12 42-pounders, 16 32-pounders and 12 24-pounders. In conclusion, however the sums are done, they do not appear to tally, although the 42-pounders, the heaviest guns to be used in the South-West in such batteries, would seem to be those twelve at the Head. Further study of any records in the Royal Artillery Institution might clarify the situation.

The relevant cartographic evidence consists solely of the OS 2" to 1 mile surveyor's sketch of 1803-4 (Fig. 8). This shows batteries at Berry Head ('Half Moon Battery'), on Hardy's Head, above Shoalstone Point (Ash Hole) and just south of Fishcombe Point ('Fishcombe Battery'). No equivalent sea-facing battery is shown in Fort 1, and it is clear from Birch's report that the primary object of Fort 1 was to provide a flank defence for Fort 3 from land attack: 'this work must be reckoned almost solely as an advanced protecting and flanking work to no. 3 ...' (Evans 1986a, 38). It is also clear from Birch's report (see quote above) that light cannon were to be used in the defence of the redoubts against such attack. This is further supported by the cannibalisation of 18 gun platforms in 1798 (in Fort no. 1) for the repair of those belonging to the sea batteries (Evans 1986b, 24).

However, by the time the war ended in 1815, neither batteries nor redoubts had apparently been used in anger. The batteries were dismantled in September 1817 (Evans 1986b, 62), as were the barracks. However, several of the more substantial buildings remained standing (see Fig. 11) and the forts remained in the hands of the Board of Ordnance, ready to be re-armed and re-activated should the need arise.

2.4.2 *Quarrying*

On the basis of the contents of Col. Morshead's 1828 report (section 5.1.1), quarrying seems to have carried on throughout the construction and occupancy of the fortifications, and probably indeed provided much of the necessary stone. Morshead states that an average of 200-240 bargeloads of stone had been taken yearly from quarries on both the northern and southern sides of Fort 3 since 1798. This was worth between £50 and £60 per annum to the Board of Ordnance, which was paid to the Devonport Storekeeper. The first payment (to the Board) was £50 15s and was made on 17 September 1798 when the levy per bargeload was 5s. As this was also the year when Berry Head first became operational (Evans 1986a, 16), it may have been the earliest practical opportunity for collection of such dues, rather than the earliest incidence of quarrying. Morshead further comments that most of the stone was taken to Exmouth to be burnt for lime, and gives no indication that quarrying was ever halted during the war.

Stone was also quarried by Roger Hyne of Brixham to build the hospital in 1809-10, and he was also allowed to build a small limekiln and dig sand in order to produce the necessary mortar (Evans 1986a, 29). It is clearly stated that this was to be on the land where the hospital was to be erected, and thus it seems logical to identify the quarry and limekiln (section 9.7; Fig. 16; plate 15) immediately to the south of the hospital (now Berry Head Hotel) with Hyne's.

2.4.3 *Miscellaneous*

Given its location, Berry Head has been an important site for communications and navigation facilities since at least the late 18th century, and has remained so. The earliest evidence is Dunsford's 1800 description (section 6.1.6), in which he mentions that a telegraph had lately been erected, which communicated with that at Exmouth. This seems to have been part of a general Admiralty programme of establishing signal stations on headlands, beginning in 1794 (Oppenheim 1968, 117). A probable telegraph (pers. comm. D. Mann) is also shown at the tip of the headland on an undated late 18th-century or early 19th-century naval chart (section 3.22). Furthermore, a signal staff of some kind is depicted on Dessiou's 1804 map (Fig. 7.3) and appears on the 1803-4 OS surveyor's sketch (Fig. 8). In 1809 the construction of a lighthouse behind Half Moon Battery on the point was proposed by G. Spence (Fig. 3; section 3.19) but

was never built. As part of the same scheme Spence also proposed a breakwater across Torbay to protect the fleet from easterly gales (Fig. 3). This scheme had in fact originated in the previous year (section 3.17) and was to be resurrected again in 1822 by Mr Whidbey (section 3.21), and as late as 1836 (section 3.25). Blewitt (1832, 3) in fact states that a Mr Whidbey proposed a breakwater across the bay in 1799, but a chart of that year produced by a Mr Joseph Whidbey (section 3.12) does not show it.

2.5 Subsequent history

After the end of the Napoleonic war the batteries and barracks were dismantled in Autumn 1817 (Evans 1986b, 62) and the garrison removed. However, buildings such as the powder magazines were left standing, and Berry Head was still regarded for a time as a potential part of the coastal defences, should another war arise. From 1823 most of the Ordnance land was let for pasture, firstly to R. Hyne and then to the Reverend Lyte. This included most of the fort interiors, although in 1838 Fort no. 1 was still in the occupation of the Government (Fig. 12, section 5.3.1). All the land, including the former hospital, was sold off in 1886 to A.A.M. Hogg (formerly A.A. Maxwell Lyte) (section 5.4.2). It remained in private hands until the common and the forts were bought by Torbay Borough Council in 1969 (section 5.4.5), although the c. 20 acres of enclosed land to the west of the ‘bungalow’ still remain privately owned.

2.5.1 *Fortifications* (Figs 11, 17)

Although left dormant after the end of the Napoleonic wars, Berry Head was still maintained as a military establishment at least until 1832 (see below), and nominally at least thereafter until its sale to Hogg in 1886. Thus, in 1826 (Evans 1986a, 31) it was still listed as one of the coast defences, although it only had accommodation for 12 men and only one in occupation. Furthermore in 1828 the Duke of Clarence expressed concern that the quarrying on the flanks of no. 3 fort was (literally) undermining its defensive usefulness, and as a consequence the quarrying was at first halted altogether, and then permitted in a more limited fashion after a storm of protest from the local community (Evans 1986a, 31-3; section 5.1.1). Also, although Col. Birch advocated some four years later that Fort 1 and the main rampart of Fort 3 could be dispensed with, and that the 20 acres of enclosed land (to the west and north of the present ‘bungalow’) could be disposed of, this is in the context of his proposal of a more economic and, in his view, effective defence of the batteries should they be re-established. He thus proposes that the battery at the Head should contain 6 guns to defend the approaches to Torbay, and that it should be protected by ‘a loop-holed wall from cliff to cliff connecting the present Store House and Gun Shed (i.e. the ‘Field Train Shed’), the latter to be converted into a Barrack and Guard House and embracing the present magazine’ (Evans 1986a, 40-1). He also proposed that batteries ‘B’ and ‘C’ (those at Hardy’s Head and above Ash Hole and Shoalstone Point) should only have 6 guns between them (as opposed to 7), and be reconstructed so that all the guns bore upon the anchorage and not along the shore, and should be protected by guardhouses and ‘enclosures’. He further proposed re-siting battery ‘C’ on a platform ‘that lies underneath it on the shore, or somewhere thereabouts’ (Evans 1986a, 40). He notes that only part of this proposed site belongs to the Board, which suggests that it was located on the western boundary of the Ordnance lands, just below Ash Hole. Furthermore, Evans (1986a, 42) quotes a minute which suggests that the Board seriously considered modernising the battery defences and setting up battery ‘C’ in its new position. This may well have happened, since there is later 19th-century cartographic evidence of a battery having been set up on Shoalstone Point. This consists of an 1886 plan (Fig. 24; section 4.6) showing an ‘old gun battery’ in this position.

This is probably the ‘Drill Battery of the Naval Reserve’, right of War Dept access to which is included in the conveyance of Berry Head to Hogg in 1886 (section 5.4.2). Thus in the 1830s Berry Head was still seriously considered a potential part of the coastal defences, even though its only occupant in 1832 was an old veteran cultivating ‘his potatoes and cabbages among the ruins’ (Blewitt 1832, 144; section 6.1.9).

In the 1860s according to Horsley (1988, 22) a parade ground was cut in Fort 1 by the Devon Artillery Volunteers, and used intermittently until 1908. However, no source is produced to support this contention, and none has arisen during this survey or is referred to by Evans, although future study of any records in the Royal Artillery Institution might reveal one. However, there was a rifle range on the Head (presumably that immediately north of Fort 1) in the later 19th century, since access to (and use of) it was reserved by the War Dept when the land was sold to Hogg in 1886 (section 5.4.2). It is mapped on the O.S. 2nd edition 1:2500 of 1906, but not however on the 1st edition of 1865, which suggests it was set up between 1865 and 1886.

During the First World War Torbay was protected by an anti-submarine net (section 3.3.4) and there was also apparently an Observation Balloon on Berry Head manned by the Royal Flying Corps (according to an ex-member of the latter, *pers comm.* via John Horsley).

Its last phase of use for defence was during the Second World War (Fig 17). As yet no records relating specifically to Berry Head have been found. It did possess anti-aircraft guns and a Royal Observer Corps post, but was not designated a Fort and therefore does not possess ‘Fort Record Books’ (section 5.1.3). Sources vary as to how many anti-aircraft guns there were, and where they were and when. Horsley (*pers. comm.*) states that there was one U.S. Bofors gun at the point, one British Bofors gun on the northern end of the redoubt of Fort 3, and 6 British 4.7" guns on the site of the present car-park. A report (unsourced) (1976) on a visit by the UK Fortifications Club to Berry Head gives the armament as: 1 or 2 40mm Bofors guns on the point, 1 on the N end of the rampart, and 4 3.7" Vickers guns established on the pasture between the two forts in 1944 to protect troops embarking for D-Day. The current guide leaflet indicates one U.S. 40mm Bofors gun at the point in 1944 only, a British 40mm Bofors on the northern end of the rampart between 1941 and 1945, and 8 British 4.7" guns in the present car-park during the D-Day preparations. Thus it seems clear that there was one (U.S.) gun at the point, one (British) one on the northern end of the Fort 3 rampart, and from 4 to 8 on the site of the present car-park, or slightly to the NE. The ROC post seems originally to have been established near the beginning of the war on the rampart walk of Fort 3, immediately north of the entrance. However, it was later moved to its present position (Fig. 17) either in 1943 (according to the present guide leaflet) or in 1944 (J. Horsley *pers. comm.*). Its site seems only to have been formally leased by the Air Ministry as late as 1956 (section 5.4.5). It has not been used since 1972, when it passed into the hands of Torbay Borough Council.

2.5.2 *Quarrying*

Quarrying on both the northern and southern flanks of Fort 3 continued until 15 August 1828, when it was halted by the Board of Ordnance. This was in response to concern expressed by the Duke of Clarence that it was undermining the defences (section 5.1.1). It resulted, however, in several petitions of protest from the local business and landowning community, stressing the importance of the quarries in the local economy. One of these (Evans 1986a, 32-3) maintains

that there were at this time about 50 sloops and lighters transporting limestone from the Torbay quarries to Topsham, and that the transportation of culm (for burning the limestone) from Wales was also important to the coasting trade. It then goes on to stress the importance of lime in the local farming economy, saying that 100,000 hogsheads of lime were used annually on the improvement of *c.* 20,000 acres which produced 400,000 bushels of grain and pastured 65,000 sheep and cattle. In true political fashion however, it does not disclose either the source of these figures or to what area they refer.

The resumption of quarrying was permitted from the end of that year (Evans 1986a, 33), although on the northern flank only, and to limits clearly defined by Colonel Morshead on his plan of 13 December 1828 (section 5.1.1iii). Quarrying continued into the 1830s, when the stone was still, according to Blewitt (1832, 13) ‘much employed for building and agricultural purposes’, and when quarrymen were the only living beings on the headland, apart from sheep and the veteran tending his cabbages in Fort 3.

Details concerning quarrying activity in the rest of the 19th century and the early part of the 20th are sparse. However, from a summary history of the quarry probably drawn from Brixham Council files in the late 1950s (Appendix I, Box File 4, no. 12) it appears that it was run on a small scale by Hurdle & Co between *c.* 1880 and 1922, and by Heywood of Exeter from 1922 to 1939. Cranes and a small shed in the western half of the quarry are marked on the 1906 OS 1:2500 map (but not on the 6" version), and a disused stone cutting shed on the 1906 deed for the lighthouse site (sections 3.33 & 4.7). The latter also labels the small shed at the NW corner of the lighthouse enclosure as the ‘quarry magazine’.

2.5.3. *Miscellaneous*

Berry Head has continued to perform a ‘lookout’ and communications role up to the present day, although it is unknown for how much of the 19th century the telegraph Dunsford saw in 1800 (section 6.1.6.) remained in use. A possible signal staff or flagstaff of some kind is marked on the 1838 tithe map, on the first edition O.S. 6" map of 1869, and on the 1895 lease of footpath rights (section 5.4.6.). In each case it appears to be on the site of the later lighthouse. A 16' high semaphore is also marked in the S.E. corner of Half Moon Battery in 1906 (section 5.4.3.).

After a proposal to build a lighthouse on the Head in 1808 came to nothing (section 3.17), the present one was built in 1906. This was set within its own enclosure, and its construction involved the demolition of a small rectangular structure to the N.E. (labelled a ‘lookout’ on the 1906 coastguard station deed), and of the northern wall of Blenkin’s ‘Guard house’ (1937, 6-7, Fig 25) to the west. These perhaps obstructed the range of the light, or were simply deemed unsafe.

In December of the same year the old powder magazine in Fort 3 was leased for a coastguard lookout (section 5.4.4.), as was a block of land on the point for a flagstaff (this included the semaphore). Although the latter has now gone, the coastguard station has remained in use, with the height of it being raised and internal improvements made in 1963 (section 4.9.).

More recent developments have included the establishment of the R.O.C. post in the 1940s (disused since 1972), the siting of a cloud searchlight behind the eastern end of the

entrance to Fort 3 in 1967 (section 5.4.(v)), which has since been removed, and the construction of a Civil Aviation Authority navigation beacon on the common in 1965 (section 5.4.5.(iv)), which remains in use.

With regard to the land, the enclosed fields along the western boundary (marked by Col. Birch in 1830 with boundary stones, and along which he recommends building a wall in 1832 (section 5.1.2.)) were let to several different tenants in 1832 (Evans, 1986a, 43). These were then sold as one lot to the Reverend Lyte on 29 August 1835 (section 5.4.1.). The common, hospital and one cottage were let by the Board to Hyne in 1823, a lease which was renewed after some debate in 1830. These were then let to Lyte in 1835, were assigned by him to A.M.Maxwell Lyte (later Hogg) in 1846, and finally bought outright by Hogg in 1886 (sections 5.4.1. & 5.4.2.).

A small part of the common is shown as an enclosed plot in 1838 (Fig12), and several enclosed fields are depicted on a chart of 1853 (Fig 14, section 3.30). This is probably the area of the common referred to by Gregory (1896, 77) as having been cultivated 50 years ago. However, this was only a temporary enclosure, since the fields do not appear on the 1st edition 1865 O.S. 1:2500 map. Some of the common was also apparently cultivated in the 1920s for a time (see Appendix I, Box file 4, no. 12).

The cottage and garden in the centre of the common (Fig 18, no. 6) have been in existence at least since 1823, when it was let to Hyne (Evans, 1986a, 33). It was probably the 'shed at Berry Head' listed in 1810 as being occupied by the Foreman whilst the forts were being constructed (Evans 1986b, 58). It is referred to as 'sheds let with common' on Morshead's 1828 map (section 5.1.1.(i)) and on Birch's 1831 & 1833 plans (section 3.24, Fig 11) (who states (Evans 1986b, 81) that it was formerly the Engineer's Office and mess room, prior to the latter within the fort being built) and as a 'cottage and garden' in 1838 (Fig 12). It was still standing in 1906, but had been demolished by 1938.

To the south of the present warden's bungalow (Fig 18), but within the same plot, was a cottage (and garden). This was built between 1831 & 1833, since it appears on Birch's 1833 map but not on his 1831 one (section 3.24, Fig 11). It was being let in 1838 to James Foster as a cottage and garden (section 5.3.1.), and was still upstanding in 1906. However, by 1938 it had been demolished and the present bungalow built to the north.

Regarding the other buildings, the hospital after the end of the Napoleonic wars was first occupied by Hyne (who built it), and from 1835 was tenanted by the Reverend Lyte, followed by A.A.Maxwell Lyte (later Hogg) in 1846. She bought it, along with the common, in 1886. It is now a hotel. Its walled grounds extended towards Hardy's Head, and also include a limekiln and quarry behind it to the south. These are probably contemporary with the construction of the hospital in 1809-1810. Another limekiln ('let with the common') is marked on the 1838 tithe map just below Ash Hole Cavern (Fig 12), but appears in no other source. Berry Head Farm, within the fields bought by Lyte in 1835, is mid 19th century in date, since it does not appear on either the 1835 deed or on the 1838 tithe map (Fig 12). It first appears in 1853 (Fig 14).

At present within Fort 3 the coastguard station, lighthouse, and guardhouse (now a cafe) are still occupied, with the 'artillery store' being used as a store for the Country Park, and the R.O.C. post remaining unoccupied. Foundations of several of the barracks, and of the field train

shed remain, as does a sentry box and walls belonging to a kitchen and so-called ‘guardhouse’ (Fig 18, no. 15) (Blenkin, 1937, 6-7). In Fort I there are the shells of the kitchen, magazine and guard/storehouse, as well as partly visible foundations of a barrack block. Outside the forts, the batteries at Hardy’s Head and Ash Hole are still visible, as are the ruins of the cottage and garden on the common, and the limekilns. There are no remains of the cottage adjoining the later bungalow however, nor of the 19th century fields, though these may become evident when and if any vegetation is cleared. The most recent features are the visitor centre and car park constructed by Torbay Borough Council.

3. CARTOGRAPHIC SOURCES

These are listed in sequence by date of publication with summaries of the information they contain. A representative selection have been reproduced (Figs. 1, 4-17). The fortification designs produced by Alexander Mercer in 1794 have been listed separately (Section 4).

3.1 **Date: c. 1536 or 1540-5** Source: BLDMss. Ref: Cott. Aug. I.i.39 (Fig. 1)

This consists of a chart of the S.W. coast from Land's End to Exmouth showing coastal defences proposed during the reign of Henry VIII, when England was periodically at war with France. Although listed as ‘not dated’ in the relevant British Library index, Oppenheim variously dates it as *c.* 1536 (1968, xxiv, plate 3) and to between 1540 and 1545 (1968, 25). It shows castellated towers with protruding cannon at various points along the coast, including Berry Head. Most are labelled ‘not made’, some ‘half made’, and some not at all, perhaps implying that the latter were actually built. Around Torbay there are four towers labelled ‘not made’, and one unlabelled. Of the former one is on Berry Head (and has 4 cannon), one immediately west of ‘Paynton key’, one on ‘brockyng cliff’ just west of ‘Paynes mede’, and one immediately south of ‘Torre key’. The unlabelled one appears on ‘torr sand’ on the seaward side of Torre Abbey. It consists of two round towers, the smaller containing one cannon and the larger three.

3.2 **Date: 1588** Source: BLDMss. Ref: Cott.Aug.I.i.6

This has been reproduced in Oppenheim (1968, xxiv, plate 4). It is entitled ‘A Plott of all the Coast of Cornwall and Devonshire as they were to bee fortyfied in 1588 against the landing of any Enemy’. A line of fortification with small groups of soldiers behind it is depicted along several segments of coastline, in several places being almost continuous. It is present around Torbay, across Berry Head, and round to Dartmouth and beyond. Cannons are also shown at various places, but are not so numerous as the earlier towers (see above, 3.1), nor necessarily in the same location. One is shown on ‘Berry pointe’ (Berry Head) pointing north across ‘tor baye’.

3.3 **Date: 1681-1688** Source: M.O.D. Ref: B.885 (Hist. Press)

This is a chart of Torbay surveyed by Captain Greenville Collins. Nothing is shown on Berry Head, though predictably the landing place of William of Orange at Brixham is indicated.

3.4 **Date: 1765** Source: Ravenhill (1965) (Fig. 4)

This is Benjamin Donn’s map of Devon. Nothing is marked on Berry Head except for the ‘Ruins of a Danish Castle’ on the site of the later ‘Danish Castle Battery’ above Ash Hole Cavern.

3.5 Date: n.d. (after 1774) Source: M.O.D. Ref: 1.45 (Hist. Press) (Fig. 5.1)

A map of Torbay, probably surveyed by Des Barres at some time in the late 18th century after his return from North America in 1774 (pers. comm. D. Mann). It shows one red coloured star-shaped 'enclosure' on the site of the 1780 battery at the tip of the headland, and another smaller one on that of the howitzer battery. Also three buildings seem to be represented on the site of those shown on the 1780 and 1781 maps (see sections 3.7 and 3.9, and Figs. 5.2 and 5.3). Nothing however is shown on the sites of the other 1780 batteries, which may imply that the latter were built slightly after those on the headland.

3.6 Date: 1779 Source: M.O.D. Ref: B.8. (England folio 1). Another copy at M.O.D. Ref: A.666 (Di).

These are two copies of a chart of Torbay surveyed by Lieutenant Murdoch Mackenzie in the year before the construction of the batteries in 1780. A 'wall' is depicted across the neck of the headland.

3.7 Date: 1780 Source: BLDMss Ref: Add.15496 (Fig.5.2)

This is an unsigned plan of Torbay, at a scale of 800 yards to an inch. It depicts an embankment across the neck of the headland, with three buildings (guardhouse and storehouses) behind it to the east. Batteries are shown at the tip of Berry Head (10 guns) (which has a powder magazine behind it to the west), on the north side of it (2 howitzers), on Hardy's Head (3 guns), on Castle Hill (3 guns) and on Furzedown just south of Fishcombe Cove (5 guns). Proposed batteries are also shown on Daddyhole (5 guns) on the north side of Torbay, and on Paignton Head (8 guns). Also shown is an encampment of the 50th Regiment on Furzedown and a naval reservoir at Brixham.

3.8 Date: 1781 Source: PRO.K. Ref: MPH 692/2

Map of Torbay, surveyed by Lieutenant Murdoch Mackenzie. It shows batteries at the tip of Berry Head (but not the howitzer one to the north), and at Hardy's Head, 'Danish Castle' at Shoalstone Point, and at Fishcombe Point to the west of Brixham. Later lettering has been added, including [O], representing the hospital, which is placed near Hardy's Head. The hospital is not in its final position and this may either be an error, or alternatively may imply that this map was used during the discussions in 1808 about a suitable site for the hospital (Evans 1986a, 28-9).

3.9 Date: 1781 Source: M.O.D. Ref: 689 (Di) (Fig. 5.3) Also 2 other almost identical copies at: BLDMss Ref: Add.38076. A.6. and MOD Ref: L50 (Qe)

Chart of Torbay surveyed by Lieut. M. Mackenzie. This shows all the batteries, including the howitzer one. The 'wall' or embankment across the neck of the headland is shown, although only one building (the northernmost) is depicted behind it.

3.10 Date: c. 1785 Source: PRO.K Ref: MPH 716 (Fig. 7.1)

Chart of Torbay by R. Beatson, Lieutenant of Engineers. It shows a battery (10 guns) at the tip of Berry Head (although there is no accompanying powder magazine depicted), a howitzer one (2 howitzers) just to the north, and batteries at Hardy's Head (3 guns) and Ash Hole (Castle Battery - 3 guns). All these are described as 'en barbette', meaning that the gun barrels protruded over the top of the parapet walls rather than through embrasures within them. A 5-gun embrasured battery at Fishcombe Point is marked, pointing north across Torbay (on all the

other maps (see above) it points east). There is also an encampment of the 50th regiment marked at Furzedown and two other (proposed) batteries on Paignton Head and Daddy's Hole. The 'wall' across the neck of Berry Head is depicted, with three buildings behind it.

3.11 Date: 1786 Source: BLDMss Ref: Add.15742 (Fig. 7.2)

This is a chart of Torbay, drawn to a scale of *c.* 2" to 1 mile by N.W. Clements. No batteries are depicted, although it does show in a diagrammatic form fortifications round the headland and labels them as 'Berry Head and Fort'. Assuming the date is correct, this either represents a very diagrammatic depiction of the 'wall' and the battery parapets, or alternatively the fortification of the headland some 19-20 years before the completion of Mercer's forts between 1805 and 1807 (Evans 1986a, 27-8). However, as there is as yet no other evidence to support the latter interpretation, the former is the most likely.

3.12 Date: 1799 Source: M.O.D. Ref: 146 (Oi).

A chart of Torbay, surveyed by Jos. Whidbey. Nothing is depicted at Berry Head, nor is any other shore detail except quays at Brixham and Torre Abbey.

3.13 Date: n.d. (late 18th century) Source: PRO.K. Ref: MPH 126 (Fig. 6)

A map showing batteries at the tip of Berry Head and at Hardy's Head, Castle Battery and Furzedown. There is also a Howitzer battery just to the north of that on Berry Head, and a powder magazine behind the latter. Sections are provided through each of the battery emplacements, showing their height above sea level and the slope of the cliff below them. There is an embankment across the neck of the headland with a guardhouse and two storehouses behind it to the east.

3.14 Date: 1803-4 Source: WCSL Ref: OS 2":1 mile surveyor's sketches, sheet 22E (Fig. 8)

This shows the main land-facing defensive walls of Forts 1 and 3 as being complete, though the musketry walls on the north and south seaward sides of Fort 3 do not extend right to the point. Although detailed discussion of the fort interiors is precluded by the smallness of the scale, the northern set of barracks and the guardhouse are clearly evident in Fort 3, though the southern barracks are not. Likewise in Fort 1 all the buildings appear to be present, except perhaps either the magazine or guardhouse. Batteries are shown at Berry Head (Half Moon battery), Hardy's Head, above Shoalstone Point and on Fishcombe Point (facing east). Also a Signal Staff is marked at the tip of Berry Head.

3.15 Date: Sept 16th 1804 Source: M.O.D. Ref: A687 (D6) (Fig. 7.3)

Entitled 'A Survey of Torbay', by Jos. Dessiou. This shows a wall across the neck of the headland, which either represents that of Fort 3 or the earlier one depicted on the late 18th-century maps (see sections 3.6-3.10). Three buildings are depicted on the north side of the promontory to the east of this wall and may represent barracks. No other buildings or batteries are shown, except a flagstaff or signal staff at the tip of Berry Head. The promontory area is labelled as a 'garrison'. Fort 1 however is not shown, suggesting that this map may represent the initial late 18th-century phase of fortress construction, when little was apparently built except for some prefabricated barracks (Evans 1986a, 17, 20-1).

3.16 Date: 1807 Source: PRO.K Ref: MPH 677(7) (Fig 9)

This is a plan of the Ordnance land at Berry Head by Alexander Mercer, including the forts

which were built (nos 1 and 3 and their contents), the batteries at Hardy's Head and above Shoalstone Point, and Fort 2 and a landward defence of Hardy's Head battery (neither built). Some buildings are numbered, though there is no accompanying schedule. The interior detail of the forts is different from that on the 1811 plan (section 3.20, Fig 10) and may therefore still represent the forts as designed rather than as built.

3.17 **Date: 1808** Source: M.O.D. Ref: L850/1 (QC) N/A
Same scheme as in section 3.19 below.

3.18 **Date: 1809** Source: WCSL Ref: OS 1":1 mile, Sheet 91. 1st edn.
This shows the same detail as the 1803-4 2" to 1 mile surveyor's sketch (Fig 8, section 3.14) on which it is presumably based.

3.19 **Date: 1809** Source: M.O.D. Ref: 688 (51b) (Fig. 3)
A copy of Mackenzie's 1781 survey (see section 3.9), used by G. Spence to illustrate a projected breakwater across Torbay which was intended to protect men o'war from east winds. The ships are arranged in divisions ('Blue', 'Red', and 'White') behind it. There is also a lighthouse proposed for Berry Head, sited behind the main battery (Half Moon Battery) on the point.

3.20 **Date: 1811** Source: PRO.K. Ref: MPH 233(11) (Fig. 10)
A plan of Fort nos 1 and 3, presumably as they were built, accompanying Mercer's inspectional report of 31st March 1811. Includes the batteries on Hardy's Head and Castle Hill, but not the hospital (finished in 1810) (Evans 1986a, 30, 34), which lies just off the map.

3.21 **Date: 1822** Source: M.O.D Ref: E275 (Db)
A small-scale copy (published in 1808) of Mackenzie's 1781 survey (see section 3.9) which has been used by a Mr Whidbey to illustrate a proposed breakwater across Torbay. This is in effect an attempted resurrection of the similar scheme proposed in 1808-9 (sections 3.17 and 3.19 above).

3.22 **Date: n.d.** (pre 1826, could be either late 18th-century or early 19th-century - pers. comm. D. Mann) Source: M.O.D. Ref: K.94 (Oh)
A chart showing the coastline from Berry Head to Bolt Tail. Depicts a probable telegraph (pers. comm. D. Mann) on Berry Head and on other headlands also. No other features shown on Berry Head, but not necessarily within the purpose of the chart to do so.

3.23 **Date: 1828** Source: PRO.K. Ref: WO 40 307
This file includes two sketch plans by Col. Morshead showing the location of quarrying prior to 1828, and the limit of permitted quarrying after 1828.

3.24 **Date: 1831-5** Source: PRO.K Ref: MPH 692/1,3,4,6-17 (Figs. 11 & 19)
Includes several sketch plans of the Ordnance lands at Berry Head, accompanying letters in the file WO 44 12 (also at PRO.K). These deal mainly with various land disputes and transactions (see Evans 1986a, 43-5). They include a copy of the plan made when the lands were bought in 1794 (692/4 and 6; Fig. 19), and plans accompanying Col. Birch's inspection reports of 1831 (692/1) and 1833 (692/3; Fig. 11).

3.25 **Date: 1836** Source: M.O.D. Ref: L850/2 (Qc)

N/A Identical scheme to those proposed in 1808-9 (sections 3.17 and 3.19) and in 1822 (section 3.21).

3.26 **Date: 1838** Source: DRO Ref: Brixham parish tithe map (Fig 12)

Although heavily damaged and faded, this shows significant detail regarding the standing buildings and building foundations within the forts, the hospital, the 19th-century smallholdings, the limekiln below Ash Hole Cavern and the two batteries on Hardy's Head and above Shoalstone Point.

3.27 **Date: 1839** Source: PRO.K Ref: MPH 692/18

A sketch plan of the Ordnance lands, works and buildings at Berry Head by Col. G.C. Hoste, 15 July 1839.

3.28 **Date: 1846** Source: M.O.D. Ref: L5515 (England folio 1) (Fig. 13)

This is a plan of the northern part of Berry Head and Brixham drawn by John Ellis to illustrate a proposed 'harbour of refuge with Docks' and including a proposed breakwater out into Torbay from Shoalstone Point. None of this proposal was realised although the present breakwater was later built to the west.

3.29 **Date: 1848** Source: PRO.K. Ref: MPH 692/19

A sketch of the Ordnance boundary on Berry Head and the hospital premises, dated 7th February.

3.30 **Date: 1853** Source: M.O.D Ref: L9730 (15a) (Fig. 14)

This is a chart covering the coastline from Berry Head to Start Point, drawn by Lieutenant H.L. Cox at a scale of 6" to one (nautical) mile. Forts 1 and 3 are shown, with some details of their interiors, but the batteries are not. It also shows the partial (and in the event temporary) enclosure of part of the common.

3.31 **Date: 1865** Sources: TBC; BLML Ref: OS 1st edn. 1:2500, sheets Devon CXXII.15 and CXXVIII.3

On the sheets produced for public consumption the areas of Forts 1 and 3 were left completely blank, although this was not so on one produced for War Office use only (Source: PRO.K. Ref: WO 78/589)

3.32 **Date: 1869** Source: WCSL Ref: OS 1st edn. 6", sheets Devon 122SE and 128NE. (Fig 15)

This does contain Forts 1 and 3 and details of their interiors, except the magazines. Four-Gun Battery (Hardy's Head) and Horseshoe Battery (Castle Hill) are marked. It is thus in effect the reduced version of the 1865 1:2500 War Office copy.

3.33 **Date: 1906** Source: WCSL Ref: OS 1:2500 2nd edn. Sheets Devon CXXII.15 and CXXVIII.3 Also OS 6" 2nd edn. sheet 128NE (Fig 16)

Unlike the 1st edition this does contain details of the forts and their interiors, including both standing buildings and visible foundations.

3.34 **Date: 1918** Source: M.O.D Ref: C.7874 (9ca)

A very small-scale map of Torbay, showing the position of the submarine net protecting the anchorage. The net starts just south of Shag Stone, goes east as far as the Ore Stone and then goes southwards towards Berry Head, arcing out into the Channel en route. It then goes parallel to the coast as far south as Sharkham Point. There are also passages for ships, one just to the east of Berry Head and one south of the Ore Stone.

3.35 **Date: 1926** Source: TBC (NS)

This is a sale catalogue map based on the 2nd edition OS 6" map (the same in a reduced form as the 1906 1:2500). Shows several lots of land for sale within Brixham, including within the area of strip fields immediately to the west of Berry Head Common. However it is unknown whether this represents one fragmented holding or parts of several separate ones.

3.36 **Date: 1938** Source: WCSL Ref: Revised edition of OS 1:2500, Devon sheets 122.15 and 128.3 Also OS 6" sheet 128NE (Fig 17)

This was revised in 1936 and published in 1938. The main difference from the 1906 edition is that most of the foundations of the demolished barracks were presumably no longer visible and have not been mapped. Also the SW corner of Fort 3 is divided off and, with the former guardhouse, forms a separate property. The extent of the quarry has changed little since 1906.

3.37 **Date: 1946** Source: TBC (NS) (Fig 17)

Plan drawn by Brixham U.D.C. showing the present extent of the quarry and the buildings therein, and extents in 1906 and 1936. The map as a whole is based on the 1938 OS 1:2500 (section 3.36 above).

3.38 **Date: 1949** Source: TBC Ref: C68

This map is based on the 1938 OS 1:2500, and is a copy of that accompanying a 1949 supplement to the 1945 lease of the north part of Fort 3 and the Common to the 'Berry Head Lime and Stone Co'. It shows the present extent of the quarry, future permitted quarrying and the land leased by the quarry company.

3.39 **Date: 1953** Source: WCSL Ref: OS 1:2500, Sheet SX 9456

This shows a similar degree of detail as the 1938 edition, the main differences being the inclusion of the R.O.C. building and the greater extent of the quarry. The quarry buildings are also more numerous and are shown in more detail.

3.40 **Date: 1957-9** Source: TBC (NS)

Map based on 1953 OS 1:2500, showing the present extent of the quarry, the limit permitted in June 1949 (see section 3.38) and the attempted expansion of the quarry into the common area (permission for which was finally refused in 1959).

3.41 **Date: 1949-59** Source: E.C.C. Ref: File 7028B

A collection of maps relating to the series of planning applications made between 1949 and 1959 for permission to extend the quarry.

4. FORTIFICATION DESIGNS AND BUILDING PLANS

4.1 **Date: 1794** Source: PRO.K Ref: MPI 688 (1-4)

Original line drawings of plans and sections to accompany Mercer's letter of 21 Nov 1794. Includes:

- (i) Proposed couvre port in front of 'the Line no. 3'. Line drawing with section and measurements (as coloured version MPH 381, section 4.4 below). Note: 'ditch in front of no. 3 already excavated 4 feet - proposed to enter the Escarp at 8 feet from the bottom of the Ditch'. Is 76' across (never built).
- (ii) 'Casemate for Lodging Troops under a Rampart whose Parapet is 26' above the bottom of the Ditch'. Copy from His Grace the Master General's plan. Scale 5' to 1". As coloured version (MPH 381) except for section A-B which is in a different location, and two 'pillars' (never built).
- (iii) As (1), except is 50' across.
- (iv) Proposed casemates in the flank of no. 2 (never built).

4.2 **Date: 1794** Source: PRO.K Ref: MPI 688 (5) (Fig 20)

Plan, elevation and specifications for a shed for 106 artillery wagons (Field train shed). Scale 5' to 1". Mercer, 1st Oct 1794.

4.3 **Date: c. 1800** Source: PRO.K Ref: MPH 400

Mercer's line drawings of proposed works. MPH 381 (5-11) are coloured versions of these.

4.4 **Date: 1803** Source: PRO.K Ref: MPH 381 (5-11) (formerly WO 78 1492/5-11) (Figs 21-23)

Coloured versions of Mercer's 1794 design for fortifications (nos. 1 & 3) and for redoubts (no. 2) and casemates which were not built.

4.5 **Date: 1834** Source: PRO.K Ref: MPH 692/5

Plan of hospital (now Berry Head Hotel), to accompany Birch's report of 11.1.1834.

4.6 **Date: 1886** Source: PRO.K Ref: WORK 30/3151 (Fig. 24)

Plan of the proposed coastguard buildings (which were built) located on the shore below Ash Hole Cavern and to the west of Shoalstone Point. They consist of a gun battery, pay office, cottages, an officer's house and an 'old gun battery' to the east, directly below Ash Hole. Plans of the individual buildings are also present (WORK 30/3152-3160).

4.7 **Date: 1906** Source: TBC Ref: deed C68

A plan of the lighthouse and surrounds which accompanies a deed of conveyance (dated 17 Aug 1906) of the property from A.M.M. Hogg to Trinity House.

4.8 **Date: 1906** Source: TBC Ref: deed C68

A plan of the coastguard lookout (the former magazine of Fort 3) and the flagstaff which accompanies a deed of conveyance (dated 28 Dec 1906) of the property from A.M.M. Hogg to the Admiralty.

4.9 **Date: 1963** Source: TBC (NS)

Architect's plan of the new Coastguard lookout (including the heightening of the existing magazine building) dated 30.5.63.

5. DOCUMENTARY SOURCES

The bulk of these have been recently studied by Dr David Evans and to avoid unnecessary duplication have not been incorporated in this survey. Instead extensive reference is made to the texts he produced for the Bridge Agency in 1986, copies of which now reside in the County Sites and Monuments Record (Evans 1986a, 1986b) and in the Westcountry Studies Library (Evans 1986b).

The present survey seeks to concentrate on those sources relating to the physical features of the headland, and thus records relating to the militia for instance have not been studied. However, much work has already been done on this by Evans, and is incorporated in his studies.

Lastly, other possible out-county sources of material not consulted at the time of writing are listed in Appendix II.

5.1 **PRO (Kew)**

The bulk of this material consists of Board of Ordnance papers referring to the establishment of the Forts in the late 18th and early 19th centuries, to boundary disputes regarding the Ordnance property, and to the leasing thereof. This has largely been incorporated into Evans' study, although some information is reproduced below.

The class marks containing 19th-century Berry Head material are:
 WO 44 12, WO 44 307, WO 44 308, WO 44 533, WO 44 534, WO 44 540, WO 44 716, WO 55 797, WO 55 1548, WO 55 2281, WO 55 2331.

5.1.1 *Ref: WO 44 307 Material regarding the limestone quarrying*

i) 1st Aug 1828. Colonel Morshead's report re the quarrying. Quarries have been worked on both the northern and southern sides of the headland since 1798. An average of 200-240 barge loads of limestone taken per annum, which were worth £50-60 per annum to the Board of Ordnance. In September 1798 the price per barge load was 5s, which was then paid to the Devonport Storekeeper. The first payment of £50 15s was made on 17 September 1798. The stone was mainly taken to Exmouth to be burnt for lime. He also mentions quarries on adjoining non-Ordnance land (presumably those around and to the west of Shoalstone Point). An accompanying sketch map shows quarries on the northern side of Fort 3 extending from the defences eastward to below the magazine, and on the south side of Fort 3. This latter is restricted to the eastern end, below the Field Train Shed and the musketry wall. Buildings depicted within Fort 3 consist of the Magazine, Artillery Store, Field Train Shed and a small building to the south, the Guardroom (the present cafe) and a small building to the south-west. The so-called guardhouse/cistern (Blenkin 1931, 6-7, Fig 25) to the NW of the artillery store is shown in outline. The musketry wall with the land-facing defences forms a complete circuit. In Fort 1 the expence magazine is depicted, along with the artillery store and guardhouse. Also the smallholding on the common (section 9.11) is shown, labelled as 'sheds let with common'.

- ii) 20 Oct 1828. Letter. Mentions that quarrying halted on 15 August 1828 due to concern expressed by the Duke of Clarence on a recent visit to the effect that it was undermining the defences.
- iii) 13 Dec 1828. Another plan by Col. Morshead, which shows the extent of permitted quarrying. This is restricted to the northern quarry, located to the north of the musketry wall. The rest of the detail is the same as the August 1828 plan.

5.1.2 *Ref. WO 44 307. Material regarding boundary disputes*

1832 A letter from Col. Birch to the Board of Ordnance, regarding the western fields and the Ordnance boundary. He mentions that he set up boundary stones in 1830, and recommends constructing a wall along the line of the boundary. He also refers to a dispute regarding the boundary at the southern end, where Hyne (who was leasing the Ordnance lands and common at the time) claims that the boundary should be further to the west. There is an accompanying sketch plan.

5.1.3 *Material regarding the Second World War*

There is a huge bulk of Air Ministry records (ref. AIR 16, and 708/5/1). These include reports of air defence activity, which are arranged by date and are not indexed by place. This would render the extraction of any material relating to Berry Head extremely time-consuming. There is a Fort Report (ref: WO 192/141) dated 1940-3 for the Brixham Battery. This however refers to guns located west of Brixham, and no mention is made of the anti-aircraft guns on Berry Head or of the ROC post.

5.2 **PRO (Chancery Lane)**

Ordnance Decree Ref E171/12 Date May 20th 1795

This is entitled 'Devonshire' and refers to the Act of Parliament of 8th September 1794 which enabled the Board of Ordnance to purchase the land at Berry Head. It lists the trustees of the Board in which this land was to be vested as: John Sargent, John Aldridge, Thomas Baillie, Alexander Mercer, Alexander Schaw and Andrew Long. It states that the trustees examined all the relevant deeds to the land between 6th and 8th October, 34 Geo III (1794) and assessed the values of all the various interests. It lists the boundaries of each plot as being those set out in the Act of Parliament, and can also be directly related to the copy of the 1794 map reproduced by Col. Birch in 1834 (section 3.24; Fig. 19). Plots are listed as follows:

- (i) Area: 1ac Owner: Jane Collyer. Occupier: Jn Underhay
Value: £40.6s Held by will of 1781.
- (ii) Area: 3 roods 8 perches; 2 roods, 23 perches. Both owned by Wm Gillard (since 1786) and occupied by Nicholas Gillard. Part of a messuage called Coyds tenement. Total value: £60.9s. Total rent: £50.
- (iii) Area: 2 roods 32 perches; 36 perches. Both plots owned (since 1762) and occupied by Wm Browse. Total value: £44.3s.6d.
- (iv) Area: 1 rood 29 perches. Owner: Ph. Gillard. Occupier: Jas Shears
Area: 1 rood 36 perches (*not* 1r 17p as in Act). Owner: Ph. Gillard Occupier: Jn Crewse. Total value: £42.8s.7½d.
- (v) Area: 2 acres 3 roods 11 perches. Owner: Ph. Gillard (since 1782)
Occupier: Jn Crewse. Value: £156.11s (and £5.5s to Crewse for leasehold)
- (vi) Area: 38 perches (*not* 1r 17p as in Act). Occupier: Saml. Calley
Area: 1 rood Occupier: Jn Crewse Owner of both: Chas Hayne

- Total value: £13.1s (and £9.8s.6d to Calley for leasehold)
- (vii) Area: 1 acre 2 roods 3 perches Owner: Chas Hayne Esqr
Occupier: Rd Crowte (*not* Jn Crewse as in Act) Value: £64.6s.6d
- (viii) Area: 1 acre 1 rood 3 perches Owner: Ch. Hayne Occupier: ?Carlisle (leased to Crewse on 18 Oct 1779) Value: £30.8s (+ leasehold £28.10s)
- (ix) Area: 2 acres 31 perches. Owner: Chas Hayne Occupier: Fr Crewse by lease of 8 June 1741. Value: £74.11s (+ leasehold £35.10s)
- (x) Area: 1 rood 8 perch Owner: (since a Henry VIII Act): Duke of Bolton
Occupier: Geo Browse Value: £6.16s Copyhold interest of Wm Croute is £1.12s and of Wm Richards £4.
- (xi) Area: 1 acre 1 rood 11 perches Owner: Duke of Bolton
Occupier: Sarah Toss by lease of 12 July 1782
Value: £45.2s.6d (and of leasehold £28.10s)
- (xii) Area: 1 acre 2 roods 15 perches. Owner: Duke of Bolton
Occupier: Chris Jordaine Value: £12.16s (and of leasehold £12)
- (xiii) Area: 1 acre 34 perches Owner: Rd Crowte Occupier: Wm Crowte
Value: £21.14s
- (xiv) Area: 1 acre 9 perches; 1 acre 36 perches; 2 acres 22 perches
All owned and occupied by Wm Crowte. Part of a tenement called 'Redhams'
Total value: £184.9s

Other owners listed are: Ann Grant, Rd Andrews, Eliz Wheaton, Wm Clarke, Hayne, Gillards, and the Lords of the Manor of Brixham and the Duke of Bolton.

5.3. DRO (Exeter)

There is little in this source except for the documents relating to local defence and the Militia, which have already been studied by Evans (1986a & b).

5.3.1 1838 Brixham tithe map apportionment (Fig 12)

Note re land use: (A) - arable
(G) - garden
(P) - pasture
(F) - furze
hs - him(her)self

Plot No	Owner	Tenant	Property	Use	Land	
					Acreage	A.R. P
1444	Nich Gillard	hs	Land adj Theral or durl land	A	1.24	
1441	- do -	Rev H Lyte	- do - + waste(1r)	A	2.2.37	
1464	- do -	- do -	Castle Land	A	2.2.36	
1484	Jane Hoare	Wm Perrett	Founderlay Bottom	A	3.13	
1453	Govt	Govt	Fortress W of B Hd		5.2.27	
1455	"	"	B Head Quarries & Cliff	Rock	3.1.00	

Plot No	Owner	Tenant	Property	Use	Land
					Acreage A.R. P
1451	Govt	Jas Foster	Cottage & garden	G	.20
1452	"	"	- do -	G	.24
1454	"	Rev H Lyte	B Head Common & Garrison	F & P	24.1.33.
1456	"	"	B Head Common	P	79.1. 15.
1457	"	"	B Head Plot	A	2.21.
1458	"	"	Cott & garden	G	35.
1459	"	"	Walled garden	G	1.07.
1460	"	"	House, offices & farmyard at BH		2.07.
1461	"	"	Lawn	Shrubs	1.1.02
1462	"	"	Limekiln incl in Common measure		

5.3.2 *Date: c. 1758 Ref: Z15/39/2/52*

An account of fines received on renewal of leases of Duke of Bolton's property.

Date of lease	Manor of Brixham Lessee	Fine
29 Nov 1754	Thos Jones	£20
5 Aug 1758	Allen Griffen & wife Christian	£8
5 Aug 1758	Peter Sharpham	£14
29 Nov 1755	Jn Lawrence, husband of Mary Aplor	£20
13 Aug 1737	Thos Clarke	£24

Should any further research take place on the ownership of lands at Berry Head prior to their purchase by the Ordnance in 1794, some of the above may be relevant.

5.4. Deeds in the possession of Torbay Borough Council

5.4.1 *Date: 1835 Ref: C288*

A copy of part of the lease of the common and the western fields by the Board of Ordnance to the Rev Henry Lyte. This was assigned in 1846 by Lyte to A.M. Maxwell Lyte (later A.M.M. Hogg).

5.4.2 *Date: 1886 Ref: C68*

A copy of the conveyance of the whole of the Ordnance property to A.M.M. Hogg and the Revd. E. Field, from the War Dept. It included Berry House (the former hospital, now Berry Head Hotel), the 19th-century smallholding (section 9.11), a building immediately south of the present Bungalow (9.12) and access to Halfway House.

Exceptions: access to and use of the rifle range (section 9.16) and to the Drill Battery of the Naval Reserve, adjoining the N entrance. (This last is probably the 'old gun battery' marked on the 1886 plans of the proposed coastguard buildings (section 4.6; Fig. 24).

5.4.3 *Date: 17 Aug 1906 Ref: C68*

Deed of conveyance from A.M.M. Hogg to Trinity House of land for lighthouse, including the right to demolish some adjoining ruins which would obstruct the light. These consist of a small structure at the NE corner of the lighthouse enclosure, and the north wall of the so-called Guard House to the NW of the Artillery Store (Blenkin 1931, 6-7, Fig 25). Includes a plan.

5.4.4 *Date: 28 Dec 1906 Ref: C68*

Deed of conveyance from A.M.M. Hogg of Berry Head House to the Admiralty of land for a flagstaff on the headland and of the old magazine on Fort 3 for a coastguard station. Includes a plan.

5.4.5 *Various modern deeds*

- (i) *Date: 31 Oct 1969 Ref: C68 Source: TBC*
Sale of the property (107.02ac) to Torbay Borough Council for £22,500. Sold by E.M. Walters and L.A. Martin. Coastguard station and flagstaff site on point conveyed to TBC on 9 July 1973 by Dept of Environment. Refers also to 1886 and 1906 deeds (see above).
- (ii) *Date: 7 April 1956 Ref: C68 Source: TBC*
Lease of plot for ROC post (and right to erect it) to Air Ministry from D. Waterson and R. Reynell. Includes a plan.
- (iii) *Date: 27 April 1964 Ref: C68 Source: TBC*
10-year lease of cafe in Fort 3 and surrounding property. G.M. Walters to F. Limmer.
- (iv) *Date: 1 June 1965 Ref: C68 Source: TBC*
Conveyance of land and 750' circle of exclusion for C.A.A. radio beacon. From G.M. Walters and L.A. Martin to Minister of Aviation.
- (v) *Date: 25 May 1967 Ref: C68 Source: TBC*
Lease of plot for a cloud searchlight behind the eastern end of the entrance to Fort 3. From Walters and Martin to the Secretary of State for Defence.
- (vi) *Date: 1981 Ref: C288 Source: TBC*
Purchase of 'bungalow'. Includes references to and copies of the 1835 and 1886 conveyances (see above).
- (vii) *Date: 22 Aug 1945 Ref: C68 Source: TBC*
28-year lease of quarry to the South Hams Quarry & Concrete Co Ltd.
Date: 18 Sept 1949 This lease assigned (with supplement) by Waterson, Reynell and Martin to the Berry Head Lime and Stone Co.
1960 Lease assigned to English China Clays
1971 Lease surrendered to TBC
- (viii) *Date: 21 July 1954 Ref: C68 Source: TBC*
Lease - Waterson and Reynell to Berry Head Lime & Stone Co.
Property: house, offices, garden, land and grazing within and on E side of wall of No. 1 Fort (surely No. 3?) Berry Head.

5.4.6 *Date: 7 Oct 1895 Ref: C68 Source: TBC*

Lease of footpath rights. A.A.M. Hogg to Brixham U.D.C. Plan shows guardhouse in Fort 3, a flagstaff on the site of the later lighthouse and the smallholdings on the common (sections 9.11 and 9.12).

6. PRINTED SOURCES

6.1 Antiquarian

Most of those relevant to Devon have been collected by Pearse Chope (1967). Others however, such as Swete (1781), exist separately in the WCSL, DRO and British Library. Those containing information relevant to Berry Head are listed below, by date.

6.1.1 *Date: 1534-43* ‘The Itinerary of John Leland the Antiquary’. Source: Pearse Chope, p. 66) Berry Head called ‘Byri’.

6.1.2 *Date: 1747-1762* D. Milles: ‘The Parochial History of Devon’. Source: DRO

(i) Vol I Questionnaire (answers by Revd Mr Penrose, brother-in-law to Mr Vinneycomb, Vicar of Brixham). He describes the ‘wall’ across Berry Head as ‘a large heap of stones and rubbish about $\frac{1}{4}$ mile in length, commonly called the Berry Walls, it crosses that neck of land called the Berry about a ffurlong from the Point and is said to be thrown up by the Danes’ (p. 95). He also mentions the ‘ruins of an ancient castle, in the Manor of Brixham facing Torbay’ (p. 95). The geology of the cliffs is described thus: ‘blue marble and slatt, ffrom ffishcombe on the N of Brixham Key to the Berry Head, which is about a mile and half, and on the S side of the Berry to Mustone Cove, is marble. All round the cove is slatt for a $\frac{1}{4}$ of a mile, and from the S side of the cove round to a point called Sharpham point to a little Creek about $\frac{1}{2}$ a mile is again Marble, and from thence to Mansand Cove slatt and from the S side of Mansand Cove all round to the Entrance of Dartmouth Harbour is marble’ (p. 97). He comments (p. 96) that stone is used for ‘lime and building’.

(ii) Vol II Parochial Collections (probably collated by Milles personally). Berry Head is described thus: It ‘rises up perpendicular from the sea to the height of some 100’, and if coast is so bold it the greatest man of war may sail close under it. On each side of this headland the stone boats are continually loading the limestone, which they carry to Exeter. There is no port or shelter nor place where they can ride at anchor whilst they are loading, but are obliged to bring their vessels close to the perpendicular rocks which they can only do in calm weather, and if workmen, who have broken off the stone from the solid rock, roll it down into the vessels. On the least gust of wind, or prospect of foul weather, they are obliged to slip away and run into Brixham Key.’

6.1.3 *Date: 1750* Dr R. Pococke ‘Travels through England’ (Source: Pearse Chope p. 186) ‘this side of the bay [Torbay] is limestone, which is carried from this place along the shoar to the east’.

6.1.4 *Date: 1781* Revd J.B. Swete: ‘Picturesque Sketches of Devon’, Vol. 2 (Source: DRO) Nothing of relevance in his text, although there is a sketch map of Torbay (p. 101) showing the disposition of the Fleet (position of ships, their names, and number of guns) against a possible French attack. It also depicts a circular ‘Danish Castle’ on the approximate site of the contemporary Danish Castle Battery (section 3.8) and a diamond-shaped ‘Camp’ to the west of Brixham, which may represent the contemporary encampment of the 50th regiment on Furzedown (sections 3.7 and 3.10).

6.1.5 *Date: 1797* Richard Polwhele: ‘The History of Devonshire’. (Source: WCSL) Mentions that the cliffs around Torbay entirely limestone and that the ‘quarries discover that

this marble does not lie in so large beds as the Chudleigh'. On the coast 'boats are continually loading with this stone, which is either used in building, or burnt into lime.' Does not mention any particular quarries though.

6.1.6 *Date: 1800* M. Dunsford: 'Miscellaneous observations in the course of 2 tours through several parts of the West of England' (Source: WCSL) p. 123-4.

Mentions that the promontory of Berry Head 'is several hundred feet perpendicular from the sea, and affords a very extensive prospect of land and water; here was a battery of 12 pieces of cannon, 42 pounders, each gun 65cwt, and 2 or 3 smaller batteries at several different places, on the descent towards Brixham, with the guns pointed in different directions towards the bay. A telegraph has been lately erected on this high ground which communicates with that at Exmouth: within the fortifications on the summit of the hill, are 5 barracks for about 500 men, the Berkshire militia were in them at this time and had a fine band of music, their motto 'Patria cava, cavior Libertas''.

6.1.7 *Date: July 1809-Dec 1810* 'The Diary of Joseph Farington', Vol X. Edited (1982) by Cave, K. (Yale Univ. Press) (Source: WCSL) p. 3569.

Oct 1809. The East Somerset militia were in barracks at Berry Head since July last.

6.1.8 *Date: 1822* D & S Lysons: 'Magna Britannia' Vol VI (London: Thos Cadell) (Source: WCSL)

p. cccxlix. Mentions Berry Head as an encampment occupied by the Romans 'from the coins of that nation found in them'.

p. cccl. Berry Head 'a considerable camp ... commanding Torbay.'

p. cccli. 'The ancient encampment at Berry Head was constructed on a promontory projecting into Torbay: this fortress was walled. It was probably constructed by the Romans soon after their conquest of this part of Britain. Roman coins were found there about the year 1730.'

No comments regarding the Napoleonic fortifications or the quarries.

6.1.9 *Date: 1832* O. Blewitt: 'The Panorama of Torquay' (Source: WCSL)

Although largely written in the format of a guide book, this was produced when the Berry Head Forts, although dormant, were still very much under the control of the Board of Ordnance, ready to be possibly re-activated in the event of another war.

p. 3 Mr Whidbey proposed a breakwater across the Bay in 1799.

p.8 'Berry Head ... is also composed of secondary limestone with the exception of a narrow course of argillaceous schist which crosses the limestone from N to S and runs out to sea at Mudstone Bay'.

p.13 'The limestone of Berry Head is much employed for building and agricultural purposes.' Mr Lyte excavated Ash Hole Cavern to a depth of 70', and concluded that it 'was the burying-place of the Roman Garrison'.

p.144 'The marble from its quarries is much employed for building'.

2 fortifications erected in the last war, and garrisoned by 1000 men - barracks of timber now gone.

- guardhouse, magazine and Gun-shed still remain, 'having been erected, at a much smaller expense, with the stone of the promontory'.

An old veteran resides in 1 of them 'as the guardian of the place, and cultivates his potatoes and cabbages among the ruins. The only other living beings here are the quarry-men who work round the base of the rock, and a few sheep and wild birds that wander above.'

'The fortifications of Berry Head are thought to be very inadequate to the defence of the Bay, from their elevated position and their distance from the anchorage-ground.'

p.147-8 Account of Lyte's excavations in Ash Hole 2 or 3 years ago.

p.200-1 Thought that Berry Head was the Phoenician's 'Hellenis Promontorium.'

p.202 Vespasian said to have landed at Brixham.

'There was formerly a fine Roman rampart running across Berry Head from sea to sea, and cutting off about 3 acres of the Headland, which was destroyed about 40 years ago when the present fortifications were erected there. This rampart was about 18' high, and Gen. Mercer who was employed on the works considered the old foss a decided relic of Roman art.'

'A small fort, misnamed Danish (i.e. O.B. thinks it Roman) directly over the Ash-hole cave, has given place to a modern horse-shoe battery.'

6.1.10 *Date: 1861* J. Davidson: 'Notes on the Antiquities of Devonshire, which date before the Norman Conquest' Exeter (Source: WCSL)

p. 18 Mentions a 'large entrenchment' on Berry Head, which was occupied by the Romans (lot of coins found in it) if not originally constructed by them. 'The north vallum of this camp was partly formed by Roman masonry: it was 18' in height and stretched entirely across the promontory in a direct line ...' Davidson's comments are reproduced in Varwell (1886).

6.1.11 *Date: 1885* R.N. Worth 'Notes on the Ancient Recorded Topography of Devon', TDA, XVII.

p. 363 Referring to a 7th-century AD list of cities and camps of Britain, given by the Chorographer of Ravenna, he mentions of 'Masona' that 'very likely it is Berry Head, which must have had an older name than that which it has taken from its ancient earthworks'.

6.2 Newspaper reports

These are all 20th-century and refer mainly to the efforts of the quarry companies from the late 1940s through to the late 1950s to expand the quarry on the northern side of Fort 3.

6.2.1 *Date: 9.1.47* Source: WMN (WCSL)

Regarding application for extra 30 acres of land. Quarry could produce *c.* 200,000 tons p.a. 36 workmen employed - this could be 150-200 if the application were approved. Quarry machinery worth £100,000, quay worth £25,000. Would need new area in January 1949. Output - *c.* 95% disposed of along S coast and London area; *c.* 15,000 tons of lime sent away per annum.

Report includes photo of quarry from its eastern end, which takes in the quay, coastguard station, artillery store and a building to the north-west (the so-called 'guard house' (Blenkin 1931, 6-7)).

6.2.2 *Date: 25.5.49* Source: SDJ (ECC)

40 locals employed and lime still used on farms from Cornwall to N. Devon. Includes 2 photographs of works, from east.

6.2.3 *Date: 22.11.55* Source: WMN (ECC & WCSL)

50-60 locals employed - wages bill of £25-30,000 p.a. Mentions that an 'ancient British' necklace (part of) had been found. Also that in wartime the quarry had produced material for the D Day embarkation works, and lime for farmland.

6.2.4 *Date: 14.9.57* Source: WMN (ECC)

States that permission refused for quarry extension and that there had been a quarry for more than 150 years. The quarry had fallen into disuse until 1942 when it was re-opened for roadstone. 'National interest' argument put forward by Quarry Co, i.e. apparent problems in limestone supply.

6.2.5 *Date: 21.10.59* Source: SDJ (ECC)

Only 3 other sources exist of limestone of a high enough purity for use as flux in the lower Thames blast furnaces. This latter is Berry Head Quarry's main market. The other 3 sources are ('Paignton News', 17.10.59) Buxton (Derbys), Somerset, and North Wales. Berry Head is particularly important because of low transport costs via sea.

6.2.6 *Date: 24.1.77* Source: WMN (WCSL)

Reports on the discovery of an 'Iron Age' system of passages at Berry Head, thought to have been used by the residents as a refuge or as a foodstore. Eighty out of a possible 800 metres had been opened up.

7. PICTORIAL SOURCES

These consist of prints and drawings from the 19th and early 20th centuries, most of which are held in the DRO and WCSL, and of photographs from the late 19th century and up to the present day. Some are held by the DRO and WCSL and others by ECC and TBC (NS). Those presently unavailable for study or lost are listed in Appendix II.

The 19th-century material consists of small-scale coastal views, which contain little detail of the forts and are therefore of limited use. The 20th-century material, however, is of more use, since it largely consists of aerial and ground level photographs. These show elements of Fort 3 since quarried away and detail of the quarry itself and its buildings.

7.1 Drawings and prints

7.1.1 *Date: June 1st 1846* Ref: SC no. 250 Source: WCSL

This is a print entitled 'Berry Head and Brixham' and published by J. Harwood. It is a view of the headland from Torbay, and shows the hospital, the wall of Fort 3 and some buildings within it. The latter, however, are extremely small in scale and distinctly diagrammatic, and thus are representative of the presence of buildings but not their exact location or appearance. A wall is visible running down the slope to the sea from the N end of the main fortified all of Fort no 3, presumably protecting the N flank from attack from the west.

7.1.2 *Date: 1835* Ref: B.BRIX (LD) P & D 40,121. Source: WCSL

A watercolour of the N coast of Berry Head, viewed from near the hospital. It shows the main

wall of Fort no 3, and the guard house roof. The latter has a steep gable end. However, how accurate such details are is debatable.

7.2. Photographs

7.2.1 *Date: c. 1890* Ref: Crawford, J (c. 1890) 'Brixham'. Source: WCSL

This contains 2 photographs of Fort no 3, one of its N side viewed from just below Hardy's Head Battery, and one of its S side from Fort no 1. Although the detail on the headland is largely 'washed out', the musketry wall along the northern flank of Fort 3 is discernible, along with several buildings along it (Blenkin's 'necessaries' (1931, 6-7, Fig 25)).

7.2.2 *Date: pre 1899* Ref: Chapman Plate no 2426 Source: DRO

View of Fort 1 and coast from Fort 3. Shows portion of wall of Fort 1, including the entrance, in the background.

7.2.3 *Date: c. 1900* Ref: B.BRIX (SPh) P & D 40,G 948,(another copy: 40.949) Source: WCSL

This is another view of the N flank of Fort 3 from the west, and has been taken from below Hardy's Head Battery. It shows the N end of the fortification wall, a wall continuing north down to the sea, and the musketry wall and 'necessaries'.

7.2.4 *Date: c. 1904* Ref: Chapman Plate & Print no 5312 Source: DRO

View of coast towards Sharkham Point from Berry Head Fort no 3. Shows most of Fort no 1 in the background, with the fort walls, entrance and kitchen being visible.

7.2.5 *Date: c. 1910* Ref: 2605/Z2 Source: DRO

Photograph in the form of a postcard. View of the northern flank of Berry Head from just below Hardy's Head Battery. Similar to the photographs of c. 1890 and c. 1900 (sections 7.2.1 and 7.2.3) but taken from a higher vantage point. Consequently the magazine and store building (the artillery store, Blenkin 1931, 6-7, Fig 25) of Fort 3 are visible, as well as its main wall and the musketry wall (the central section of which has possibly been quarried away). The flanking wall protecting the N side from an attack from the west is also present. No quay, buildings or machinery is visible in the quarry in this or the earlier photographs.

7.2.6 *Date: 1947* Ref: CAL/UK5 and 14/1947 D.J.S. & (on back) 2288 BBP. Source: TBC (NS)

An aerial view of Fort 1, from the SE. The kitchen, magazine and guard/storehouse are clearly visible, as is the outline of the 19th-century smallholding enclosure (section 9.11).

7.2.7 *Date: late 1940s* Refs: 2304, 2305 BBP Source: TBC (NS)

Two views of Berry Head from the north, showing the quarry and its buildings, Fort 3, and Fort 1 in the background. From the extent of the quarry they probably also date to c. 1947.

7.2.8 *Date: 1950* Ref: 2328 BBP (5002; V58 RAF554: 14 Aug 50) Source: TBC (NS)

An RAF vertical (c. 1:10,000 scale) of Fort 3. It clearly shows the outlines of the demolished southern barracks and field train shed and also the 'bank' (Blenkin 1931, 6-7, Fig 25) running

E-W down the centre of the fort. Sketchy outlines of some of the northern barracks (now quarried away) are also visible immediately north of the 'bank'.

7.2.9 *Date: late 1940s* Ref: File:7028 Aero Pictorial Ltd, Ref 11686 Source: ECC (Plate 1)
Oblique aerial view of Fort 3 from the east, probably of very similar date to 7.2.7 above. Clearly shows the remaining upstanding buildings, but not the outlines of those demolished.

7.2.10 *Date: 1955* Ref: 17/1955 P.T. ('The Times') Source: ECC (Plate 2)
Panoramic ground view of the defences of Fort 3, the quarry and the quay from the west. Taken from a similar position to the late 19th and early 20th-century photographs above (sections 7.2.1, 7.2.3, 7.2.5). Shows the quarry in full swing.

7.2.11 *Date: 1959* Ref: File 7028 Source: ECC
A set of *c.* 20 photographs showing parts of the interior of Fort 3 and general views of Berry Head. A particularly useful one (5/1959 P.T.) is of the interior of Fort 3 from the west. It shows the southern musketry wall, the ROC post with the remains of a building to the west and the magazine, storehouse and so-called guard-house (Blenkin 1931, 6-7, Fig 25) in the background.

8. INVESTIGATIONS CARRIED OUT IN THE 1960s AND 1970s by the Brixham Museum and History Society (Fig. 18) (see Appendix I for lists of relevant records)

8.1 Fort 1 (Fig 18, no 11)

In 1961/2 an (incomplete) survey of Fort 1 was carried out and a small excavation undertaken of the kitchen. The position of the trenches is shown on this survey, and according to it were about 2ft wide. One was aligned east-west down the centre of the building, and one north-south, slightly off-centre. This latter continued northwards for about 20' from the north wall of the kitchen. The area between the kitchen and the musketry wall to the south also appears to have been excavated. However, no plans survive of any features (such as the small building abutting the musketry wall) found within these excavations. According to John Horsley (pers. comm.) a barrack block was found, extending northwards from the kitchen into the area of the 'parade ground'. However, this barrack block is shown on Mercer's 1811 plan (Fig. 10) of the forts as built as being aligned east-west, and located immediately north of the kitchen. Intermittently visible foundations of a building are moreover present in this location and not further north. A box of finds (no. 40) is in Brixham Museum. These are mostly numbered but this is of little use since no context descriptions have so far been found.

8.2 The 'Quarrymen's Cottages' (see section 9.9, Fig 18, no 4)

A small investigation of the easternmost of these features was carried out by John Horsley in the early 1970s (J. Horsley pers. comm.). Two roughly built walls were discovered, and finds included ceramics, bottle glass and brick (stored in Brixham Museum) and a half penny dated 1756. No records of this excavation have so far been traced, apart from some black-and-white photographs, one of which shows a stone-built 'alcove' with a cobbled surface in the foreground. This would seem to represent some kind of structure, although the features presently appear as little more than quarries. Thus although most of the features were probably originally quarries, there is a hint also of some walls being built and surfaces laid.

8.3 Fort 3 (Fig 18, no. 13)

Extensive excavations were undertaken between 1973 and 1977 in Fort 3, initially directed by John Horsley and later by John Durston. However, apart from some finds records, no other site records (such as layer descriptions, plans and photographs) have so far been traced. The excavations were located in the area of the 19th-century rubbish dumps to the south of the musketry wall, with some trenches being cut later in the area of the walled garden to the south-west. In c. 1975 a tunnel system was discovered running into the fort from the south, under the musketry wall, and extending under the former guard-house. This was apparently mainly filled with stone rubble and is largely constructed of dry stone walling, and in places utilises pre-existing cave systems. A portion of the tunnel wall is mortared near its junction with one of these caves. According to a newspaper report of the time (section 6.2) some 80m of a possible 800 metres of tunnel had been cleared in 1977. Although it was thought at the time to be Iron Age in date, this is unlikely given the mortared portion of wall. The function and date of the system will only become clear with a full survey and the examination of any structural relationships with the fort buildings. Another tunnel system also exists to the south, in the area of the R.O.C. post.

The finds from these 1970s excavations form the bulk of those stored and displayed in Brixham Museum.

9. INVENTORY AND BRIEF HISTORY OF VISIBLE FEATURES

A full referenced discussion of the place of the individual features in the historical development of the Head is given in Section 2 above.

9.1 Fort 1 (see section 2.4.1) (Plates 4-7)

This is located on a small headland to the south of the main promontory. All the landward facing walls survive and are fronted by a dry moat (Plate 5). Portions of the musketry walls on the seaward sides remain. The fort was entered from the north, originally across a drawbridge, and settings in the masonry for this and for the gate are still visible (Plate 4). In the interior are the remains of a powder magazine (Plate 6), a guardhouse/storehouse, a kitchen (Plate 7), and another small building immediately to the south of the latter, abutting the musketry wall. To the north of the kitchen are the intermittently visible foundations of the barrack block depicted on Mercer's 1811 plan (Fig. 10), and a large level area (left empty in Mercer's plan) which Horsley (pers. comm.) interprets as a late 19th-century parade ground for the Devon Artillery Volunteers. However, no reference to this was found in the sources consulted for this survey (although such may exist in the records of the Royal Artillery Institution).

The original purpose of this fort was according to Col. Birch's report of 1832 (Evans 1986a, 36-44) to protect the access to Fort 3 by providing flanking fire. There is as yet no evidence for it having housed a seaward facing battery. If so, Birch would have mentioned it, since he discusses those in Fort 3 and along the northern coast in some detail. Birch also states that small cannon were to be used on the ramparts of nos. 1 and 3 to repel a land attack.

The construction of its rampart had probably begun before 1798 and was complete in 1804. The internal buildings do not figure in Mercer's 1802 estimates of the work still to be done, and therefore may already have been complete by 1802.

9.2 **Fort 3** (see sections 2.4.1, 2.4.3, 2.3.1, 2.1 and 2.5.1, Plates 8-13)

This occupies the main headland and during the Napoleonic wars contained the bulk of the garrison. The main land-facing defensive wall (containing gun embrasures) survives intact (Plate 9), as does the western portion of the southern sea-facing musketry wall. The northern part of the interior has been quarried away, however. The fort was entered from the west via a drawbridge (now replaced by an earthen bank) across a dry moat. Settings still survive in the masonry of the entrance of the drawbridge posts and of the gate posts and hinges (Plate 8).

The following identifiable buildings survive in the interior (Fig. 18, Plates 12 & 13). The powder magazine (since 1906 a coastguard station) remains, as does the artillery store, a sentry box, and the foundations of the field train shed. The guardhouse near the entrance is now a cafe. Foundations of the four southern barrack blocks are intermittently visible, as are cisterns located in between them. One wall of one of the kitchens belonging to the northern barracks survives on the lip of the quarry. Ruins and foundations of buildings for which there is no clear evidence of identification survive to the NW of the artillery store (Fig 18, no. 15), in between the two pairs of southern barracks, at the east end of the musketry wall, and to the south of the R.O.C. post. There is also an apparent walled garden to the SE of the guardhouse and a lighthouse built in 1906 on the point. The tunnel system found in the 1970s under the cafe will have to await a full survey before it can be interpreted, but the presence of some mortared walling suggests it is not Iron Age, as had previously been thought.

The main purpose of the sea batteries was to defend the Torbay anchorage against the French fleet, and that of the fort was to protect the batteries themselves against land attack.

Earlier (Fig 2) there had been two batteries on the headland during the American War of Independence from 1780 to 1783. One was of 10 guns, and was on the site of the later Napoleonic battery at the point. Another was sited to the north, and consisted of 2 howitzers. A powder magazine, a guardhouse and 2 storehouses were also present, as well as 3 other batteries to the west (Hardy's Head, Castle Hill and Furzedown/Fishcombe Point). Earlier still, during the Iron Age, there was probably a promontory fort on Berry Head, with its main defensive rampart perhaps partially revetted with stone. It was subsequently incorporated into the Napoleonic rampart of Fort 3.

During the Second World War (Fig 17) the two Napoleonic battery sites were occupied by anti-aircraft guns, and a Royal Observer Corps post (no longer in use) was built between the two pairs of southern barracks (after having been moved from its original site on the rampart to the north of the main entrance).

9.3 **Berry Head Quarry** (Figs. 16-18) (see sections 2.3.2, 2.4.2, 2.5.2, & Appendix I, Box File 4, nos 12 & 18) (Plate 2)

The limestone of Berry Head had been quarried for building stone and lime (to spread on farmland) since at least the mid 18th century. Until 1828 quarries existed on both the northern and southern flanks of the promontory (Fort 3) as well as along the northern coast towards

Brixham. However, in 1828, due to worries about the undermining of the Fort 3 defences, quarrying on the promontory was halted altogether. Only later that year, after much protest, was quarrying allowed to continue in a restricted form on the northern flank. This northern quarry continued in use, acquiring by 1906 cranes, a stone-cutting shed and a magazine (see section 5.4.3). After a period of apparent disuse, the quarry was re-opened during the last war to produce roadstone and material for the D-Day campaign. The quay was built at this time. During the following years conveyors and processing plant were installed and the quarry after 1949 expanded to the west, taking in the area of common to the NW of Fort 3, and also removed the northern part of the interior of the fort. Production increased from 70,666 tons in 1947 to *c.* 150,000 tons in 1954. In the 1940s its main market was the traditional one of lime and building stone, with the addition of roadstone, but during the 1950s most of the stone was increasingly sent to the lower Thames valley for use as flux in blast furnaces, and the production of lime for farmland improvement ceased. After several unsuccessful attempts to gain more land the quarry ceased working in the late 1960s, when Berry Head was finally bought by Torbay Borough Council.

9.4 **Hardy's Head Battery** (Fig. 18, no. 3) (see sections 2.3.1, 2.4.1)

This was originally built in 1780 at the beginning of the American War of Independence. It was 'en barbette', meaning that its armory of 3 24-pounder cannon (or 20-pounders) protruded over, rather than through, the parapet. Although it was dismantled soon after the end of the war in 1783, it was resurrected in 1794 to form part of the Napoleonic defences. During the latter period it was armed with four 24- or 32-pounder cannon (or a mixture of both) again 'en barbette'. Although finally dismantled soon after the end of the war in 1815, as late as the 1830s it was still (along with the two sea batteries in Fort 3 and those at Castle Hill and Furzedown) considered a candidate for re-activation should the threat arise. The wooden gun platforms were replaced by moorstone ones in 1809.

9.5 **Castle Hill Battery** (Fig. 18, no. 1) (see sections 2.3.1, 2.4.1)

This is located above Ash Hole Cavern and Shoalstone Point, and is at present private property. Along with Hardy's Head, Furzedown (Fishcombe Point) and the two batteries at Berry Head itself, this was also built in 1780. It was 'en barbette' and possessed three 24-(or 20-)pounder cannon. Although dismantled soon after 1783 it was recommissioned in *c.* 1794 as part of the Napoleonic defences, and contained three 24- or 32-pounder cannon, or a mixture of both. It was again 'en barbette', and although dismantled after the end of the war in 1815, was still considered a candidate for re-activation as late as the 1830s. The wooden gun platforms were replaced by moorstone ones in 1809.

There was also an earlier undated enclosure of some kind on the site, labelled as a 'Danish Castle' by Donn in 1765 (Fig 4) and Swete in 1781.

9.6 **Hospital** (Fig. 18, no 2) (see section 2.4.1) (Plate 14)

This was built in 1809-10 by Roger Hyne, a local builder, on the shore between (and below the lines of fire of) Hardy's Head and Castle Hill Batteries. Stone to build it was quarried from the site it was to occupy. The mortar was also manufactured from sand and lime produced on-site (see section 9.7 below). The building only saw a very limited period of use as a hospital, since in 1815 the war ended and soon after the garrison was removed and the batteries dismantled.

Thereafter it was let as a private residence to Hyne (at least from 1823) and then from 1835 to the Reverend Lyte. It then, as 'Berry Head House' passed to A.A.M. Hogg (nee Lyte) in 1846. Its walled garden included the limekiln and quarry used during the construction of the hospital and an area towards Hardy's Head. It is now a hotel (and privately owned) and several structural additions have been made to the original building since its conversion.

9.7 **Limekiln** (Fig. 15) (see section 2.4.1) (Plate 15)

This is located within a small quarry immediately to the south of (and within the grounds of) Berry Head House (formerly the garrison hospital, now a hotel). It is complete, but inaccessible to the public. It was almost certainly that built by Hyne in 1809 to provide the lime needed to produce the mortar for the hospital building. How long (if at all) it continued in use after the hospital was finished remains unclear, as it continues to be marked on OS maps until 1938. However, it does not appear on the 1838 tithe apportionment (Fig 12) (whereas the other does - see below), suggesting it was disused at this time.

9.8 **Limekiln** (Fig.12)

This is located below Ash Hole Cavern just within the original Ordnance boundary. Only a small fragment is now visible and it is not within the country park. It makes its first and only appearance in the historical record on the 1838 tithe map (Fig 12), where it is stated as being included in the common and let to the Reverend Lyte. Unlike the other kiln, it does not appear on the 1st edition 1865 OS 1:2500 map, suggesting that it had become disused by then and that the small quarry in which it appears to have been built had been filled in by 1865.

9.9 '**Quarrymens' cottages'** (Fig. 18, no 4)

These are located to the north of the ruined smallholding ((no. 6);section 9.11 below). Although investigations in the early 1970s by Horsley revealed a roughly built wall and cobbled surface (section 8.2), their present appearance is of small scratch quarries, with sides of bare rock and mounds of upcast on the downslope side. No walls, building stone or domestic debris are now visible, suggesting that most of these features are probably little more than small 18th and 19th century quarries.

9.10. '**Water Tanks'** (Fig. 18, no. 5)

These are located just to the south west of the so-called 'quarrymens' cottages', on the slope above Berry Head Farm to the west. Although interpreted in the past as 'water tanks' (Horsley, *pers.comm.*) they are more likely to be small 18th and 19th century quarries. The sides are of unlined bare rock, with some mounds of upcast on the downslope side. No walls are visible. Their regularity of outline is possibly due to the regular jointing of the limestone (a comment which also applies to the 'quarrymens' cottages'). Furthermore, although they were interpreted as 17th or 18th century watertanks belonging to Berry Head Farm below, it is clear (section 2.5.3 above) that the latter was not built until the mid 19th century.

9.11 **19th-century small holding** (Fig.18, no. 6)

This is located in the centre of the common, and is completely ruined and overgrown. It is probably the shed listed in March 1810 as having been occupied by the foreman during the construction of the forts, and is let in 1823 with the common to Roger Hyne. It does not appear in the schedule of the land bought by the Board of Ordnance in 1794-5, and therefore was probably built soon after construction of the forts began in 1795. In 1833 Birch notes that it was

formerly the Engineer's Office and mess room before the latter in Fort 3 was built. It is variously described as sheds or a cottage 'let with the common'. It was still standing in 1906, but had been demolished by 1938.

9.12. **The Bungalow** (Fig. 18)

This and a garden plot are located on the west side of the Common. The present building was constructed between 1906 and 1938. However, prior to this there was another cottage in the southern part of the plot, which was originally constructed between 1831 and 1833. The necessary land was taken in from the Common, and not from the enclosed fields to the west.

9.13. **The Lighthouse** (Fig. 18)

This was built in 1906 on the probable site of an earlier 19th century signal staff of some kind (Figs 7.3, 8), and an earlier building (see Figs 14 & 15). It is still in operation. The small shed at the N.W. corner of its enclosure was the quarry magazine in 1906.

9.14. **The Coastguard station and lookout** (Fig. 18, no. 17)

This was established in 1906 within the shell of the Napoleonic powder magazine. It was heightened in 1963, and is still in operation.

9.15. **Royal Observer Corps post** (Fig. 18, no. 14)

This was moved to its present position in 1943-44 from its original location on the rampart of Fort 3, just to the north of the entrance (Fig 17). It remained in use for a time after the war, and in 1956 the land it occupied was formally leased. It was later dismantled, and then handed over to Torbay Borough Council in 1972.

9.16. **Miscellaneous**

9.16.1. *Other small quarries*

Probably of 18th and 19th century date and exist along the northern flank of the promontory between Hardy's Head and the Hospital, to the south of the hospital and downslope from the 'quarrymen's' cottages' and above and to the west of Shoalstone Point. One of those located to the south of the hospital appears as an enclosure on the 1st edition O.S. 1:2500 map (1865), and the 6" (1869) (Fig 15).

9.16.2. *Wall between Hardy's Head and the Hospital* (Fig. 18, no. 8)

This is part of the wall of the mid to late 19th century walled garden of Berry Head House (formerly the hospital). Upslope of it to the south is a partially infilled small quarry.

9.16.3. *Rifle range* (Fig. 16)

This is located between Forts 1 & 2, with the targets being below the northern rampart of Fort 1. In 1906 there were firing positions (butts) at 200 and 300 yards. The latter was removed early in the 1970s (*pers comm.* J.Horsley). It dates to between 1865 (the date of the 1st edition O.S. 1:2500 map, on which it does not appear) and 1886, when access to it (and use of it) by the War Office was stipulated in the deed of sale of the common and forts to Hogg. It went out of use between 1906 and 1938.

9.16.4. *Civil Aviation Authority Beacon* (Fig. 18, no. 7)

This was built in 1965 in the centre of the common, adjoining the now ruined 19th-century smallholding (no. 6). It has a 750' 'circle of exclusion', and is still in operation.

9.16.5. *Ordnance boundary stones*

These were set up along the western boundary of the Ordnance land by Colonel Birch in 1830 (see section 5.1.2.). No reference was found in the present survey (or in Evans, 1986a, b) for the earlier setting up of such stones. Thus the present ones, such as that immediately outside the warden's office, date to 1830 and not to 1794-5. The extent to which the others survive will be assessed as part of the archaeological survey.

9.16.6. *The anti-aircraft batteries* (see section 2.5.1.) (Fig 17)

Sources vary as to exactly how many guns there were. However, there seems to have been one, or possibly two, American Bofors gun(s) on the point, one British Bofors gun on the northern end of the Fort 3 rampart, and from 4 to 8 guns on the site of the present car park, or just to the north east of it.

10. RECOMMENDATIONS FOR FUTURE WORK

These are largely those proposed in January 1989 as the second stage of the current project (this report being the first).

10.1. **Fieldwork**

This should consist of the following:-

- i. Detailed descriptions of the historical and archaeological features described in this report (these are listed in section 9), including statements on their current condition.
- ii. Measured drawings of the principal structures, concentrating on the fortifications.
- iii. A full survey of the tunnel systems, which would include the limited recording already undertaken prior to the recent infilling of the 1970s excavations.
- iv. Any further archaeological investigation or clearance of foundations envisaged would have to take into account the likelihood of remains of other periods being discovered (especially the Iron Age), and the subsequent cost of the necessary processing and publication of these.

10.2. **The finds and records from the 1960s and 1970s investigations**

The results of these investigations should be published. Since the accessible site records are few in number and of limited use, the bulk of this would consist of a report on the finds (see section 8 and appendix I). This could usefully be divided up into reports on the lithics, ceramics, clay pipes, and militaria (such as uniform buttons etc).

10.3. **Interpretative materials**

- i. An archive of material suitable for use in future displays, interpretation, and publication, to be collated from the historical data in this report, from the results of the

study of the finds from the previous investigations, and from the archaeological survey (section 10.1).

ii. The production of reconstruction drawings from this archive for displays and publications.

11. RECOMMENDATIONS FOR FUTURE MANAGEMENT AND CONSERVATION

11.1 Introduction

11.1.1 It is clear that the Berry Head Country Park has enormous potential (to date largely untapped) as a 'heritage attraction'. Not only do the 19th-century fortifications of Fort 1 and Fort 3 survive as very impressive visible features, but also there is an extensive source of further evidence in old documents and maps as this report makes clear. Overall there is an overwhelming case for promoting Berry Head as an historic exhibit which should attract regional and even national attention.

11.1.2 At present some 150,000-200,000 visitors come to Berry Head each year, and it may already be classified as a major visitor attraction. However most visitors would appear to come for informal recreation, for the views, or out of interest in the bird life of the Head. It is at present hard for the average visitor to obtain a clear picture of the history of the fortifications, and their importance in regional and national terms is not apparent.

11.1.3 Against this background it is opportune to consider ways of promoting Berry Head's history and improving visitor services. Various short-term and long-term suggestions are put forward below for consideration by the Borough Council. These suggestions should be viewed against the fact that several anniversaries are approaching around which Berry Head may be promoted. These are:

1993 200th Anniversary of the declaration of war with France (this led to the fortification of Berry Head)

1994 200th Anniversary of the Act of Parliament empowering the Board of Ordnance to take on the ownership of Berry Head.

1995 50th Anniversary of the end of World War II.

11.1.4 This report is concerned with the historical aspects of Berry Head. It must however be borne in mind that the headland is an important nature conservation area with exceptional ornithological interests. Any promotion of the Berry Head Country Park will need to give full consideration to the implications of this natural heritage. The provision of adequate road access for coaches and increased car traffic to the site will also need to be considered.

11.2 Conservation of upstanding structures

11.2.1 An essential prerequisite of any successful plan for promoting the history of Berry Head will be a complementary programme of consolidation and conservation of the surviving structures and features. The Borough Council has an on-going programme for this work, but this will require revision in the light of the forthcoming archaeological survey which will provide detailed descriptions of individual structures and features (including assessments of

current condition). Only with this knowledge can a comprehensive management plan be drawn up.

11.2.2 For the purpose of the present assessment, it is only necessary to highlight certain conservation/consolidation suggestions. These are selected mainly for the value they will have in promoting the public interpretation of the history of Berry Head. Some of these suggestions the Borough Council already has in hand.

11.2.3 The suggestions for Fort 1 are:

- (i) consolidation of parts of the rampart, gun emplacements and walls of the moat ditch.
- (ii) installation of timber bridge at SW corner of fort.
- (iii) improvements to north entrance to fort. Ditch silts might be removed to give a better impression of the rampart defences. A drawbridge across the ditch might be installed.
- (iv) repairs to the magazine and the guard/storehouse inside the north entrance. Roofing might be appropriate depending on the future use of these structures.
- (v) repairs to the kitchen block at the south end of the fort.
- (vi) vegetation control.

11.2.4 The suggestions for Fort 3 are:

- (i) consolidation of parts of the ramparts and other walls.
- (ii) removal of ditch silts and installation of drawbridge at entrance.
- (iii) conservation of storehouse adjacent to coastguard lookout. The provision of doors or windows will depend on the use of the building.
- (iv) improved delineation and display of structural foundations within the interior.
- (v) vegetation control.
- (vi) Tunnels: at this stage it is premature to comment on the tunnel system.

11.3 Promotion and Public Interpretation of the history of Berry Head

11.3.1 The positive promotion of Berry Head should be based on the selection of one or more leading historical themes. The following may be suggested:

- (i) *The history of fortification in general*: with primary evidence of prehistoric and later fortification, Berry Head could be a very good place for explaining the ‘story’ of English fortification, especially coastal defence. Berry Head would thus be displayed in a national context. Substantial on-site exhibition material would be required.
- (ii) *The Torbay Story*: The extensive views across Torbay could be exploited to explain to visitors the whole story of Torbay, beginning with prehistoric settlement and going right through to the present. Interpretation material would concentrate on what could be seen from the headland and also on the naval history which the headland has ‘seen’.
- (iii) *The 18/19th-century Forts*: This is of course an essential theme and provides exceptional potential. In the short-term this is the most suitable theme for promotion.
- (iv) *World War II*: Evidence survives of the military use of Berry Head in World War II. Although part of our recent past, there is growing interest in the history of this war and it could be developed as a strong, if subsidiary, theme.
- (v) *The Quarries*: The headland has been quarried for over 200 years and the stone put to a wide range of uses. The quarries still form a striking feature and could be interpreted as part of Torbay’s industrial past.

11.3.2 The above broad themes lend themselves to interpretation in a variety of ways. The following can be suggested for discussion.

(i) *Short-term opportunities*

- production of a simple but informative guide leaflet, similar to those produced by the Devon Archaeological Society
- erection of three or four 'historical markers', boards giving historical information on particular aspects of the site. These boards should be sited so as not to be too conspicuous. Sites might be at the existing information centre, at the cafe, on the inside wall of the storehouse next to the coastguard lookout in Fort 3, and on the inside wall of the storehouse/magazine in Fort 1.
- promotion of a regular programme of guided walks aimed specifically at the history of the headland. This might be done with volunteer staff. A 'definitive' version of the history of the headland would have to be prepared for the use of such guides.

(ii) *Long-term opportunities*

- any further archaeological excavations, designed either to answer specific research questions or to improve the display of the site to visitors could be a big public attraction in its own right and should be planned with a strong interpretation element.
- a 'history tape' could be prepared either for visitors to take home with them or for visitors to hire (along with a cassette recorder) for a self-guided walk around the site. Hired tapes have been successfully introduced at a number of heritage sites in recent years.
- appropriate historical re-enactments could be performed during the summer season. Again these have attracted increasing numbers of spectators at other heritage sites, particularly those owned by English Heritage. Berry Head could also be considered for 'son et lumiere' displays.
- on-site guides could be dressed up in replica military costume to give visitors more of a feel for the site. Replica weapons could be demonstrated by these guides. Period costumes would also be provided for visitors to dress in for having their photos taken by a 'Victorian' photographer.
- any intensive promotion of Berry Head would highlight the need for an expanded visitors centre both for enlarged exhibition purposes and for dealing with increased visitor numbers. This would have to be carefully sited, probably in the vicinity of the existing centre.

11.4 **The integration of Berry Head with other features in the Torbay area**

11.4.1 Berry Head Country Park is physically divorced from the modern centre of Torbay and is therefore somewhat 'off-the-beaten-track' for visitors. The fact that so many local people and holidaymakers already find their way to the Country Park despite its location serves to emphasise its potential for the future. As a starting point, the Berry Head fortifications might be promoted alongside other major heritage sites in Torbay. At the forefront of these would seem to be Kent's Cavern, Torquay Museum, Torre Abbey and possibly Kirkham House. Of these, major improvements for visitor services are underway at Kent's Cavern, Torquay Museum and Torre Abbey, whilst Kirkham House is an English Heritage guardianship monument. This group of attractions covers the full span of Torbay's past from earliest prehistoric times through the Middle Ages to the 19th and 20th century. A joint promotion scheme would need the agreement and support of the different parties involved in each site. At its simplest it might

consist of a 'Torbay Heritage Passport' with visitors to each feature receiving a special stamp. Some form of combined admission ticket could also be considered.

11.4.2 Promotion of Berry Head in the context of Torbay as a whole would also need to involve improved access arrangements for visitors without their own cars. An experimental bus tour scheme might be organised for the summer season. Were access to and/or from Berry Head by boat possible, this would undoubtedly increase the headland's accessibility and attraction.

11.4.3 Some thought might also be given to promoting Berry Head in conjunction with other features of historic interest close to the Country Park. Examples of these (currently not accessible to the public) are Ash Hole Cavern and the former hospital, now the Berry Head Hotel. A limekiln stands in the grounds of the hotel.

11.5 Implementation

11.5.1 Further analysis is obviously required before any detailed scheme can be drawn up for implementing the various suggestions outlined above. The views of interested bodies at local and national level will need to be canvassed. The results of the more detailed Archaeological Survey will also be important in establishing choices and priorities.

11.5.2 In advance of such further discussions, the following points might be worth consideration.

- (i) a guide leaflet (11.3.2 (i)) could be prepared immediately if funds are allocated. Costs should be less than £500 for 2-3,000 copies which might sell at 25-30p per copy.
- (ii) any future promotion of Berry Head or other historic sites in Torbay should be based on accurate and up-to-date archaeological data. The temporary appointment of an Archaeological Heritage Officer to provide the expertise should be considered at an early stage in planning the future of the Country Park.
- (iii) the intensive promotion of Berry Head will obviously have significant financial implications. The desirability of charging for particular services and events or for access to a particular part of the Country Park is a principle which should be addressed at an early stage.
- (iv) the recent improvements undertaken by English Heritage at several of its coastal fortification sites along the south coast should be viewed as they may well give ideas for the promotion of Berry Head.

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APPENDIX I: Inventory of relevant records held at Brixham Museum

These consist of a mixture of 'site' and finds records, which are immersed in a mass of general material mainly relating to Berry Head and Brixham. The useful elements have been extracted and copied and are listed below.

Box File I (labelled 'Berry Head')

1. Sketch showing location of kitchen and adjacent barrack block in Fort 1.
2. Scaled architect-style plan and exterior elevation of kitchen in Fort 1.
4. Sketch of kitchen plan, Fort 1, showing location of trenches ('cuts').
5. Sketch of unidentified building, possibly barrack block in Fort 1.

6. Copy of OS 1:2500 (reduced) for 1936/7, showing site of ROC post, so 1940s or *c.* 1956 in date. (see TBC deed C68; section 5.4.5)
14. Transcription from Ptolemy re Berry Head from Worth, TDA 1885.
15. Berry Head Fort 1. List of buttons and regiments they belonged to.
28. List of regiments and possibly numbers of buttons found for each?
29. Photocopy of plan of vegetation, showing sketched position of 'cottages' (section 9.9).
30. Miscellaneous, including I.D. of material in case (museum or cafe?) and notes from secondary sources re Militia.

Box File 2 (labelled 'Berry Head Site I')

8. List of items loaned to cafe for display.

Box File 3 (labelled 'Berry Head Site 1A 1975')

1. Sketch map showing 'village of tiny cottages' (section 9.9) and 'water-tank system' (section 9.10).
4. Site plan of Fort 1 produced after a survey by Brixham Museum & History Society in 1961/2. Shows kitchen and 2 trenches, but little else (section 8.1).
8. Summary of squares dug and not dug - Site 1A (section 8.3)

Box File 4 (labelled 'Berry Head & Brixham')

3. Report on lecture by John Durston re discoveries - principally the tunnel system (section 8.3).
12. History of Berry Head Quarry and of output in 1947.
18. Berry Head Quarry. A summary history. Early 1960s.

Loose ('Dig' records)

A roll of plans relating to Site 1A (section 8.3), consisting of a general plan showing the arrangement of the grid squares, and several distribution plans of the various types of find: buttons, clay pipes, etc. However, as the finds themselves no longer have labels attached to them and are not marked, they cannot now be related to these distribution plans, or to the site grid.

APPENDIX II Primary sources which were either unavailable at the time of printing or which would merit further study

Cartographic

- 1715 Source: PRO.K Ref: FO 925/3959 f.14
‘Devonshire’ by Robt Morden. Scale 5mls to 1"
- 1724 Source: PRO.K Ref: FO 925/4174 f.4
‘Devonshire’ by H. Moll. Scale 10mls to 1"
- 1792 Source: PRO.K Ref: S.P. Vol of charts no. 18 (PRO Library M.5xx)
‘Tor Bay’
- 1805 Source: PRO.K Ref: MPI 152 (8)
Coast of Devon and Cornwall, by Captain Dacres. Scale: 3 miles to 1"
- 1815 Source: PRO.K Ref: MR 34.
Chart of English Channel, including one of Torbay.
- c. 1830 Source: PRO.K Ref: FO 925/4188
‘Devonshire’ by Sidney Hall. Scale 10 miles to 1"
- 1895 Source: PRO.CL Ref: MPEE 138 (2)
OS 1/6 mile to 1" map of coast from Meadfoot Sands to Berry Head.
- 1903 Source: PRO.CL Ref: MPEE 140
Lease (including map) of land at Berry Head to Miss Hogg.

Documentary

- Any material in the Royal Artillery Institution.
- The full text (including boundary clauses) of the Act of Parliament enabling the Ordnance to purchase the lands at Berry Head. It is available in the House of Lords Record Office in London (full reference: CAP LXXVI (C.76) 11th June 1794 (34 Geo III).
- some of the lands purchased in 1794 were the property of the Duke of Bolton, and any documents which relate to these lands prior to 1794 may be held at the Duke’s Estate Office at: Bolton Hall, Leyburn, W Yorkshire (Enquiries have been made, but to date no reply has been received).
- there may also be material relating to the Manor of Brixham and the Duke of Bolton’s estates in the PRO (Chancery Lane), although probably a lot of searching through indices would be required to determine this.

- Brixey's sources for the proposed 16th century fortification of Torbay (section 2.2.) could be followed up. A good place to start would be the relevant 'Letters and Papers' in the P.R.O. (Chancery Lane).

- a reference exists re Berry Head in the Naval & Military Magazine of June 1827, p. 372.

Pictorial

1799 (SC no 239) View of the Berry Head. By Wells after N. Pocock. Located in the Naval History Dept, Plymouth Central Library, Drake's Circus, Plymouth. In Vol I of the 'Naval Chronicle', published by Joyce Gold.

c. 1830(SC no 246) Brixham. View from Torbay showing intended breakwater. By C. Hullmandel (Source unidentifiable by WCSL)

c. 1848(SC no 251) Brixham, by Rock & Co (WCSL - lost)

c. 1865(SC no 252) Berry Head, West Brixham. Published by J.S. & Co. (Views) (Source unidentifiable by WCSL)

Abbreviations

Arch. J	: The Archaeological Journal
BL	: British Library, Gt Russell St
BLDMss	: " " , Dept of Manuscripts, Gt Russell St
BLML	: " " , Map Library, Gt Russell St
BM	: Brixham Museum
DRO	: Devon Record Office, Exeter
D & CRS	: Devon & Cornwall Record Society
ECC	: English China Clays PLC, Exeter
ECL	: Exeter Central Library (Reference Section)
EUL	: Exeter University Library
MOD	: Ministry of Defence Hydrographic Dept, Taunton
N/A	: Not available at time of printing
PRO.C.L	: Public Record Office, Chancery Lane'
PRO.K	: " " " , Kew
RAI	: Royal Artillery Institution
SC	: Somers Cocks, J.V. (1977) 'Devon Topographical Prints 1660-1870' Devon Library Services
SDJ	: South Devon Journal
TBC	: Torbay Borough Council (deeds etc held in Parks Dept)
TBC (NS)	:Torbay Borough Council (material held by Nigel Smallbones, Countryside Warden, Berry Head)
TDA	: Transactions of the Devonshire Association
TQLHL	: Torquay Local History Library, Torquay
WCSL	: Westcountry Studies Library, Exeter

WMN : Western Morning News