



**ARCHAEOLEG CAMBRIA ARCHAEOLOGY**  
**DYFED ARCHAEOLOGICAL TRUST**

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# **CALDEY ISLAND**

**ARCHAEOLOGICAL WATCHING BRIEF ON THE  
TEST PIT EXCAVATIONS,  
AUGUST 1996**

**Dyfed PRN 33215**

Report prepared for W S Atkins and  
Pembrokeshire County Council  
by I M Darke

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# **CALDEY ISLAND**

## **ARCHAEOLOGICAL WATCHING BRIEF ON THE TEST PITS PRIOR TO THE REALIGNMENT OF THE ROAD FROM THE JETTY TO THE LIGHTHOUSE, AUGUST 1996**

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## **1.0 INTRODUCTION**

### **1.1 Summary**

In August 1996 W S Atkins undertook a programme of various projects to improve the infrastructure on Caldey Island. The work included the excavation of a five test pits prior to the realignment of the present N-S concrete road across the island from the jetty to the lighthouse.

An archaeological watching brief was undertaken on the excavation of the five pits, being in a potentially archaeologically sensitive area. It was considered probable that the locations of the pits, a low lying area at the eastern end of Priory Bay, may once have been an inlet, subjected to sand-blow in the earlier post-medieval period and now choked by dunes.

The pits displayed little evidence of the origin or nature of the sand-blow mainly due to their small size. Artificial deposits were all of later post-medieval, probably 20th century, date.

### **1.2 Planning history**

At a meeting between W S Atkins and PCNP Planning Dept in June 1996 a number of planning implications were discussed in relation to the proposed island infrastructure improvements. These were outlined in a letter from C Milner, PCNP to A Bleasdale, W S Atkins, of 26 June.

The initial phase of the works was to be carried out by W S Atkins in conjunction with Pembrokeshire County Council. M Williams of Pembrokeshire County Council, acting island agent, agreed that Cambria Archaeology/Dyfed Archaeological Trust undertake a watching brief on the test pit excavation component of the enhancement works and a programme was subsequently agreed with D Fenn of W S Atkins.

### **1.3 Content and scope of the watching brief**

An archaeological watching brief is defined by the Institute of Field Archaeologists as a formal programme of observation and investigation conducted during an operation carried out for non-archaeological reasons - normally a development or other construction project - within a specified area where archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

The watching brief will be intended to allow, subject to resources, the preservation by record of archaeological deposits in advance of their disturbance or destruction and to provide an opportunity, if necessary, for the watching archaeologist to alert all

interested parties to the presence of an archaeological find for which the resources allocated to the watching brief are insufficient to support satisfactory treatment.

The watching brief is not intended as a substitute for contingent archaeological excavation.

The client will be supplied with 3 copies of an archaeological report of the results of the watching brief. The report will be fully representative of all the information recovered. A copy of the report will also be deposited with Dyfed Sites and Monuments Record.

#### **1.4 Purpose and methodologies of the watching brief**

The purpose of the watching brief is to undertake as complete a record as possible of any archaeological features affected by the client's scheme of works. In the case of larger archaeological sites it will seldom be possible or necessary to undertake a record of the entire site; the record will be undertaken only on those areas of the site that may be affected.

The primary stage of the watching brief for any scheme involves consultation of the consultation of Dyfed Sites and Monuments Record, which is maintained by Cambria Archaeology/Dyfed Archaeological Trust's Curatorial Section, the client will normally advise Cambria Archaeology/Dyfed Archaeological Trust's Field Section of any changes in the proposed works of any which may be affected by the scheme. The client will also provide the Field Section with a proposed schedule of works in order that a full field study may be performed on any affected site prior to the commencement of the works.

Work on or around those affected sites will be subject to the watching brief. The work will be closely observed by an archaeologist from the Field Section who will also undertake a full drawn, written and photographic record of any archaeological features which may be disturbed by the scheme, and any artefact or find exposed during the works. Recording will be carried out where necessary and when convenient: it is the Field Section's aim to minimise any disruption to the client's schedule. However, if archaeological features may be lost during the scheme, it may be necessary for the Field Section to request a postponement of the works in order that the archaeology may be recorded. Larger areas affected may require fuller excavation and/or survey.

## **2.0 RESULTS OF THE ARCHAEOLOGICAL WATCHING BRIEF**

### **2.1 Site description**

The site description and history below are based largely on Ludlow, forthcoming. Caldey Island lies off the South Pembrokeshire coast 1.25km from the resort of Tenby separated from the mainland by a channel, Caldey Roads, averaging 13m in depth. The island, 2.5km E-W by 1.25km N-S, is irregular in outline, its predominately rocky coastline displaying a number of inlets and bays, the largest of which, Priory Bay, occupies the north coast. A small islet, St. Margaret's, lies off the tip of a projecting peninsula to the NW.

Caldey Island is fertile and well drained. The solid geology is predominately Old Red Sandstone to the north, from which the bulk of the soils are derived, and Carboniferous Limestone to the south. The aspect of the land is in the main a gentle northerly slope downhill from the high cliffs which form the southern coastline to the low lying dunes to the north. A number of springs rise in a depression roughly at the centre of the island at a junction of the sandstone and the limestone, and feed a stream which flows northwards through a low lying area to the sea. It is considered probable that the low lying area on the southern leeward side of the sand dunes at the eastern end of Priory Bay may once have been an inlet, subsequently choked by blown sand.

Within this low lying area, predominantly lying beneath the blown sand deposit, five test pits were machine excavated and they and their resulting sections were examined for archaeological evidence. The pits largely follow the course of the concrete road from the jetty on Priory Bay to the centre of the island, a routeway unchanged from at least 1887 (Ordnance Survey 1:2500, second edition, Pembs. Sheet XLIV.4).

### **2.2 Site history**

Caldey Island attracted settlement from the earliest times. A number of caves on the coastline have produced evidence of occupation from the Palaeolithic period onwards. Until sea-level changes in the Mesolithic Period the island was connected to the mainland; the present channel, Caldey Roads, is at the most only 8,000 years old.

Evidence suggests that the island was the location of a religious community as early as the 6th century. The medieval Tironian priory ('The Old Priory'), a cell of St Dogmaels Abbey, occupies a central position on the island and is a well preserved complex of masonry buildings adapted for domestic, secular use in the early post-medieval period. During this period it is thought that the area of dunes behind and to the south of priory bay was an inlet, and that the present dunes were deposited as a result of sand-blow during the earlier post-medieval period. The coastline of the island had assumed its present form by 1800 (NLW, Admiralty Chart 1165 fo.13, Lewis Morris, 1800)

Caldey remained predominantly a small agricultural community until the 18th century when four quarries were established. In 1798 the island was purchased by Thomas

Kynaston of Pembroke in order to further exploit its limestone resources. He developed the workings at High Cliff, 20,000 tons of limestone per year eventually being produced, most of which was exported. From at least the mid 19th century the jetty at which the stone was loaded was in its present location on Priory Bay, while a row of cottages, that still survive, was constructed for the quarrymen to the south of the quarries.

Quarrying remained an important component of the island economy through the major part of the 19th century, supplemented by market gardening after the acquisition of the island by James Hawkesley in 1867. However, in 1897 the Rev. W Done Bushell purchased Caldey as a retreat for his handicapped son and who granted the Old Priory to a community of Anglican Benedictines. The monks purchased the island in 1906 and soon began then construction of the present Caldey Priory, a task completed by the present Cistercian order after they in turn acquired the island in 1928.

## **2.3 Observations**

Five test pits (TP 1-5) were excavated, four along the line of the proposed realignment of the road, and one to the north within the sand dunes that have formed behind the beach, on the line of the proposed sewage outfall. The location of the test pits is shown in Fig.2.

The aim of the watching brief was to establish whether any information could be retrieved from the pit sections concerning the nature of the blown sand deposits within the suggested former inlet. In particular the date and rate of sand blow, and the nature of the substrate below the deposit, are of great archaeological significance and it was hoped that evidence of one or all of these factors might be revealed. However, the small size of the test pits appears to have mitigated against their displaying the necessary information.

### ***TP1***

This pit measured 2.0m W-E, 0.65m N-S and was excavated to a depth of 0.6m. The upper layer consisted of light yellow sand to a depth of 0.34m. Below this lay a 0.14m band of brown sandy clay loam. The remaining 0.12m of the excavation was through the natural subsoil which was made up of brownish orange clay with a 50 % inclusion of angular stone.

### ***TP2***

This pit measured 3.0m W-E, 0.65m N-S and was excavated to a depth of 1.20m. The upper layer of this pit was again of light yellow sand to a depth of 0.24m. Below this was a 0.30m layer of sand stained black by coal dust containing a 20% inclusion of small round stones. Below this lay four narrow alternating bands, each approximately 0.08m thick, two of sandy clay with inclusions of small stone and two of black stained sand with inclusions of coal fragments. The lowest of these layers also contained fragments of modern drainage pipe. The remaining 0.34m of the excavation was

through the natural subsoil which was made up of brownish orange clay with a 10% inclusion of angular stone.

#### ***TP3***

This pit measured 1.7m NW-SE, 0.85m NE-SW and was excavated to a depth of 0.90m. The upper layer, 0.16m deep, consisted of a mixture of orange clay and light yellow sand with a 30% inclusion of small and medium sized round and angular stones. Below this was a 0.06m layer of reddish black sand. The three lower layers of this pit consisted of varying shades of sand, 0.28m of light yellow, 0.12m of dark yellow and 0.28m of very dark yellow respectively.

#### ***TP4***

This pit measured 2.4m NW-SE, 0.75m NE-SW and was excavated to a depth of 0.80m. The upper layer, 0.18m deep consisted of dark brown sandy loam with a 30% inclusion of small round pebbles. Below this lay a 0.10m band of reddish yellow sand. The rest of the excavation consisted of 0.52m of light yellow sand.

#### ***TP5***

This pit measured 2.00m W-E, 1.50m N-S and was excavated to a depth of 1.00m and was found to be made up entirely of light yellow sand.

## **2.4 Conclusions**

None of the pit sections displayed sufficient evidence to attempt any analyses of sand deposition, and in three pits (TP2-TP4) the deposits were found to be largely artificial, but of post-medieval date and probably associated with 20th century activity. TP1 and TP5 both displayed natural deposits, but bereft of banding or any physical evidence of cycles of deposition.

The location of TP1 was close to a rocky outcrop and the natural was found close to the surface, overlain with bands of sand.

TP2 was located within the site of the former High Cliff quarry in a sheltered position. The presence of coal fragments and modern drainage pipe suggest that this area has been used quite recently as a coal storage area for the Cistercian Priory.

The upper layers in TP3 relate to the makeup of the existing concrete road as the excavated pit lay adjacent to the road itself.

Within the upper layer of TP4 the high percentage of small pebbles within a sandy loam indicate that this was formerly a footpath although no indication of its direction could be ascertained.

TP5 was located behind the sand dunes at the eastern end of Priory Bay.



### **3.0 THE FINDS**

No finds were encountered during the watching brief.

### **4.0 ARCHIVE DEPOSITION**

The archive, indexed according to the National Monuments Record (NMR) material categories, will be deposited with the Dyfed Sites and Monuments Record curated by Cambria Archaeology/Dyfed Archaeological Trust. It contains the following:

- A.** Copy of the final report
- B.** Field notebook
- J.** Final publication drawings
- L.** General admin.
- M.** Project correspondence

There is no material for classes **C, D, E, F, G, H, I, K,** and **N.**

### **5.0 ACKNOWLEDGEMENTS**

Acknowledgements to Nick Brown, on-site Geotechnical Advisor, for his kind co-operation, and Neil Ludlow, Cambria Archaeology/Dyfed Archaeological Trust, for editing this report.

## **6.0 REFERENCES**

### **Unpublished maps**

NLW, Admiralty Chart 1165 fo.13, Lewis Morris, 1800

### **Printed maps**

Ordnance Survey 1:2500, second edition, Pembs. Sheet XLIV.4

### **Published works**

Ludlow, N. D., forthcoming, *A Structural Analysis of Caldey Priory, Pembrokeshire*

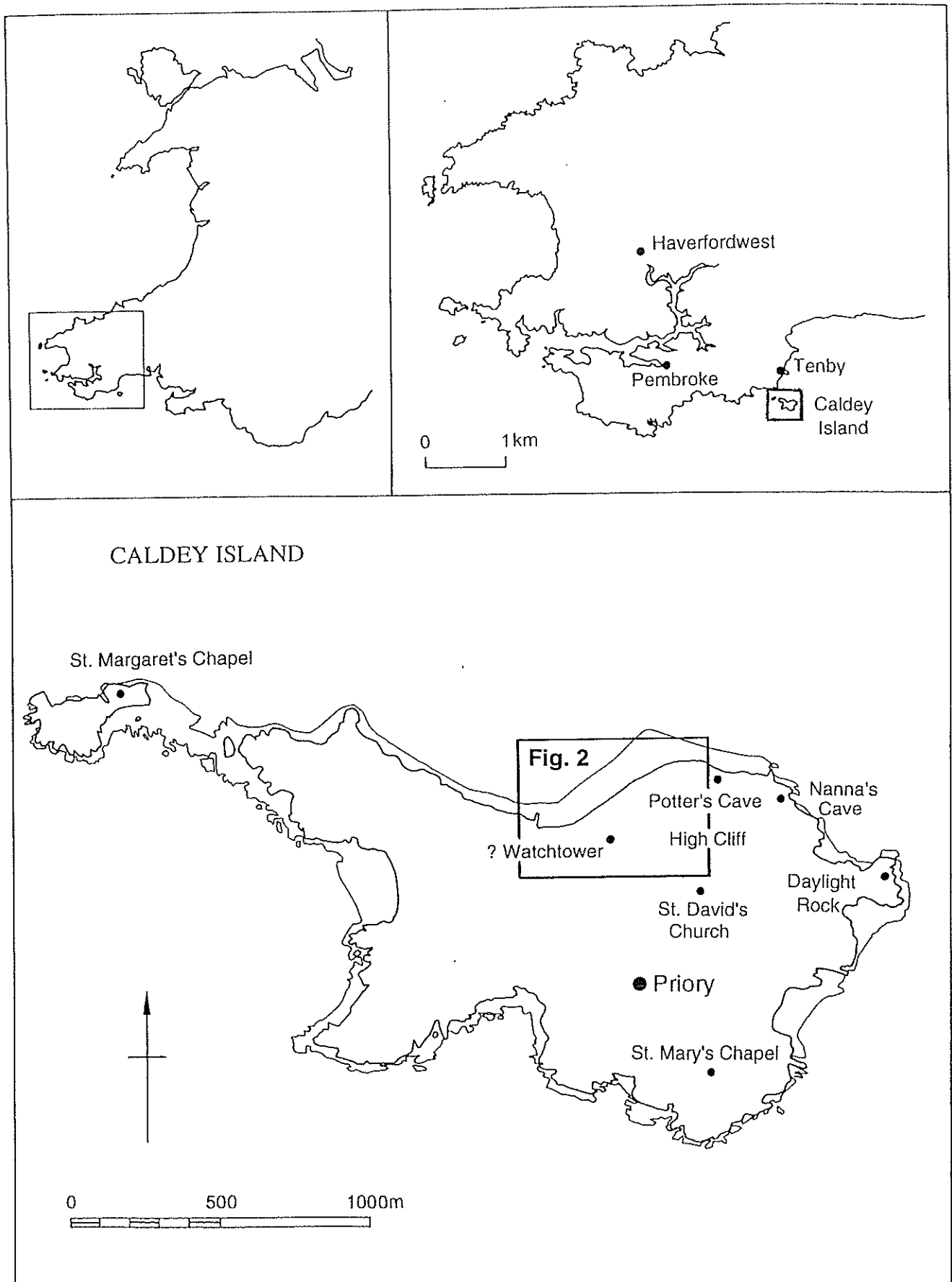


Fig. 1 Caldey Island: Location Map

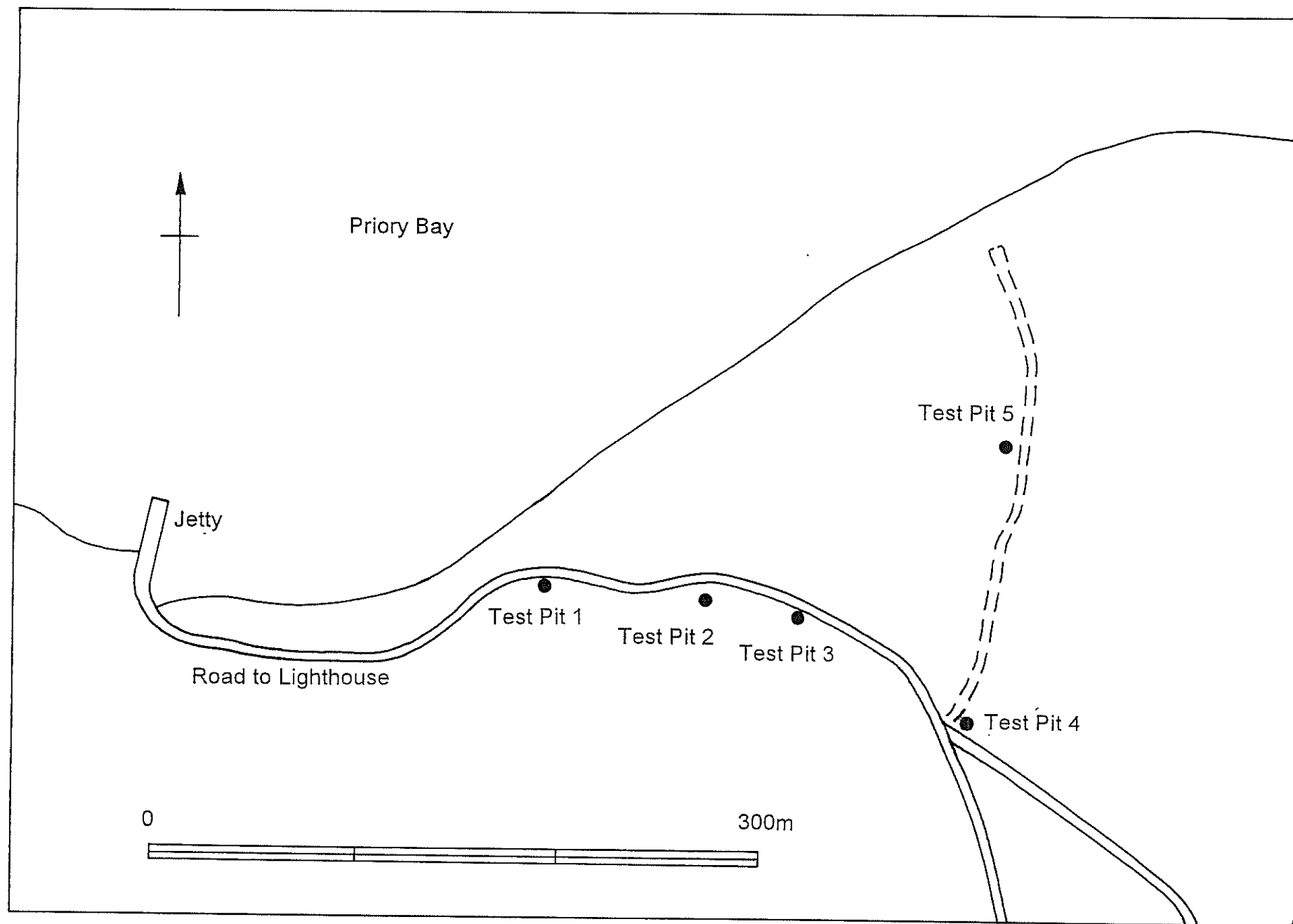


Fig. 2 Location of Test Pits 1-5