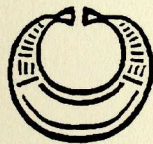
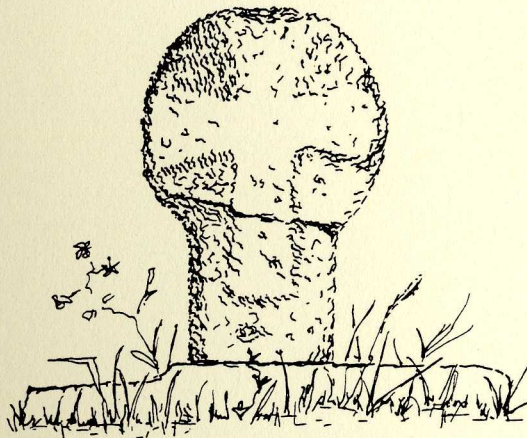


# Pendrea Cross, St Buryan, Cornwall

## Restoration and repair



Cornwall Archaeological Unit

**Pendrea Cross, St Buryan,  
Cornwall**

**Restoration and repair**

Ann Preston-Jones  
Andrew Langdon

January 2004

Report No: 2004004

CORNWALL ARCHAEOLOGICAL UNIT  
Historic Environment Service, Planning Transportation and Estates,  
Cornwall County Council  
Kennall Building, Old County Hall, Station Road, Truro, Cornwall, TR1 3AY  
tel (01872) 323603 fax (01872) 323811 E-mail cau@cornwall.gov.uk

## **Acknowledgements**

The restoration of the cross was organised and funded through Cornwall Archaeological Unit's Scheduled Monument Management Project. English Heritage, Cornwall Heritage Trust and Cornwall County Council contribute to the project's budget. Cornwall County Council's Area Surveyor, Graham Phipps, gave consent for the work, and advised on roadside safety.

On site, the work was carried out by Adrian Thomas and David Cutting, with Geoff Hoad driving the digger.

Within Cornwall Archaeological Unit, the report was edited by Peter Rose.

## **Cover illustration**

The Pendrea Cross

© Cornwall County Council 2004

No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the prior permission of the publisher.

# Contents

<b>1</b>	<b>Summary</b>	<b>5</b>
<b>2</b>	<b>Introduction</b>	<b>6</b>
2.1	Project background	6
2.2	Aims	6
<b>3</b>	<b>Background</b>	<b>6</b>
3.1	Location and setting	6
3.2	History of the monument	7
3.3	Description of the Pendrea Cross	7
3.4	Condition of the monument prior to restoration	8
<b>4</b>	<b>Recording</b>	<b>8</b>
4.1	Results of the recording	9
<b>5</b>	<b>The conservation work</b>	<b>9</b>
<b>6</b>	<b>Conclusion</b>	<b>10</b>
6.1	Recommendations	10
<b>7</b>	<b>References</b>	<b>11</b>
7.1	Primary sources	11
7.2	Publications	11
<b>8</b>	<b>Project archive</b>	<b>11</b>

## **List of Figures**

1. The location of the Pendrea Cross
2. The movements of the Pendrea Cross
3. The Pendrea Cross when it was located on a wall outside Pendrea Farm
4. The Pendrea Cross before restoration in June 2003
5. The cross-base at the entrance to Pendrea Farm: Laura Rowe's drawing and a recent photo
6. Drawings of the Pendrea Cross now, and as it may have looked originally
7. Restoration work in progress
8. The restored cross

## **Abbreviations**

CAU	Cornwall Archaeological Unit
EH	English Heritage
HER	Cornwall and the Isles of Scilly Historic Environment Record
NGR	National Grid Reference
OS	Ordnance Survey

# 1 Summary

The Pendrea Cross is a medieval granite wayside cross, located on the verge of the B 3283 road 0.3 km to the south-west of St Buryan. It is a Scheduled Monument, number 24296; is number 28741 in Cornwall County Council's Historic Environment Record, and is located at SW 4059 2534. It was discovered in 1943 and set up on a modern base in 1959, in its present location. In 2001, it was noted that the cross was loose on its base, that the base had become buried beneath a build up of earth and vegetation and that the cross as a whole was practically invisible beneath the overhanging boughs of a nearby hawthorn tree.

In August 2003, work took place to rectify these problems. The cross was lifted and its base moved forward (to the north-west) by about one metre, to a more prominent position on the verge. The cross was then securely re-bedded on its base and the overhanging tree was cut back.

In the course of carrying out this work, it was discovered that since the original restoration of the late 1950s, the cross had been re-set on a plinth of concrete. It was thought that this could have been as a result of some unrecorded damage: perhaps the damage which also caused the cross to become loose. A likely context for this would be the activity of the various utilities which have been busy along this road within the last five years, digging trenches, laying cables, setting up temporary traffic lights and generally causing chaos in this part of Cornwall. Lines and manhole covers in the tarmac of the road adjacent to the cross indicate that cables pass within a very few metres of it, while there may well be further unrecorded trenches along the very verge on which the cross is located.

It should be noted that although the restoration described in this report resulted in the successful stabilisation of the cross, this should be regarded as a temporary measure only. The cement plinth on which the base is bedded was not renewed and the central steel pin fixing the cross to the base not replaced, because it was very securely bedded in the cross-shaft and only suffering minor corrosion as a result of the recent damage. These are aspects that a better-resourced project may wish to tackle in the future. It should also be noted that the granite base onto which the cross was bedded in 1959, which was possibly created from part of an old gate post, is of inadequate size to support the cross properly. If further repairs are ever made at some time in the future, consideration should be given to supplying a new granite base-stone of more substantial proportions.

## 2 Introduction

The Pendrea Cross is a typical Cornish wayside cross, located beside the B 3283 road, just to the south-west of St Buryan Churchtown. Prior to work taking place, the cross was loose on its base, and engulfed by vegetation growing out of the adjoining hedge. This report describes the work that took place to restore the Pendrea Cross, both from the point of view of its conservation and long-term survival and as a feature in a parish which is notable for the number and variety of its medieval wayside crosses.

### 2.1 Project background

Steve Edwards and Katy Hooper, conservation officers with Penwith District Council's Planning and Building Control Department, first drew the attention of the English Heritage Field Monument Warden to the problems from which this cross was suffering. Following this, it was agreed that Cornwall County Council's Historic Environment Service should co-ordinate a project to restore the cross.

Because the cross is located within the lateral extent of the Highway, Cornwall County Council's Transportation and Estates Section are nominally the owners of the cross. Acting Surveyor Graham Phipps was first approached about the problem in the spring of 2002, at the same time as plans were being drawn up with contractor Adrian Thomas to repair the Boskenna Cross, another damaged wayside cross in St Buryan parish (Preston-Jones 2002). In the event, however, the project had to be postponed until the financial year of 2003 – 4.

### 2.2 Aims

The aims of the project are quoted from the project proposal (Preston-Jones 2003).

The primary objective of the recent management work was to secure the Pendrea Cross for the future. A secondary objective was to re-instate it as a distinctive roadside feature in a parish which is notable for the number of surviving medieval wayside crosses.

It was proposed that these objectives should be achieved by

- Cutting back engulfing vegetation
- Lifting the cross, removing and replacing the central pin (if this proved to be of iron, and corroded)
- Excavating out the base and re-setting it at its original level
- Re-mortaring the cross securely onto its base

The work, which was carried out in August 2003, is described in section 5 below, after first describing the topographic and historical background of the cross, in section 3.

## 3 Background

### 3.1 Location and setting

The parish of St Buryan lies on the southern side of the West Penwith granite peninsula, with the parish church at its heart. Roads radiate out like the spokes of a wheel from the parish church and its churchtown to surrounding farms, and the Pendrea Cross is located on one of these, only 300 metres or so from the churchtown (Cooke 2000, 59 and 71 – 3). It sits on a broad ridge carrying an ancient route south-westwards through Anciently

Enclosed Land towards the Penberth Valley which forms the parish boundary, and on to the church of St Levan, formerly a chapelry of St Buryan.

### 3.2 History of the monument

The Pendrea Cross is one of a significant group of medieval granite crosses in the parish of St Buryan (see Preston-Jones and Langdon 1997). The earliest of these crosses, in the parish churchyard, is of late 10<sup>th</sup> century date, and was probably connected with the collegiate church which existed on the site of St Buryan Church in pre-Norman and medieval times (Henderson 1925, 67). The Pendrea Cross, however, like most of the other wayside crosses in the parish, is more likely to be of 12<sup>th</sup> or 13<sup>th</sup> century date. It is named after nearby Pendrea Farm, first recorded in a charter of Athelstan of the first half of the 10<sup>th</sup> century (Hooke 1994, 22 – 27), whose name means ‘top of the village’ (Padel 1985, 180). The cross, however, is not recorded until 1943, when it was discovered in two pieces, part-buried in the foot of a hedge on the left-hand side of the entrance to Pendrea Farm (Langdon 1997, 18), by Tom Angove (Hosking 2002, 26). It was then moved, and lay on top of the hedge opposite Pendrea House until 1959 (Fig 3), when the head and upper part of the shaft *only* were mounted on a modern granite base, in the present location on the wide verge of the road leading south-west out of St Buryan (Anon 1960, Langdon 1997, 18) (Fig 2). Why the present location was chosen, instead of a location closer to original find-spot by the entrance to Pendrea Farm, is apparently not known.

Jim Hosking, in his book on *People, Places and Past Events in St Buryan* (2002, 26) records that the cross was knocked over and then restored by himself, Joe Richards, and James Hosking, in the early 1980s. The reason for the damage on this occasion is not known, although it is assumed to have been hit by a vehicle: it was simply found lying on the ground (Jim Hosking *pers comm*).

Hence the precise original location of the cross remains uncertain, although it must have been somewhere near the entrance to Pendrea Farm. It has been linked with a cross-base, first mentioned by Langdon (under the name Pendray: 1896, 422), recorded on the second edition OS map of 1907 (although not on the first edition of c. 1880), and now built into a hedge at the entrance to Pendrea Farm (SW 4033 2515) (Fig 5). Both, whether in origin united or separate, must have stood by the road they are on now, marking the way to and from St Buryan. Perhaps they also marked a boundary of the chartered sanctuary for which St Buryan was at one time famous (Crofts 1955; Anon 1960) but as the exact extent of this is uncertain, this is now unprovable (Preston-Jones and Langdon 1997, 114 - 5)

### 3.3 Description of the Pendrea Cross

The Pendrea Cross is a granite wheel-headed (round-headed) cross with no decoration other than a relief-carved cross with slightly splayed arms on both front and back faces. The head is badly worn and the cross on the back is particularly difficult to make out. In its present form, the Pendrea Cross stands 0.81 metres high, has a shaft 0.3 metres wide and a head 0.43 metres wide, and is 0.2 metres thick. However, we know from the fact that the lower part of the shaft was not used when the cross was restored, that the cross was once considerably taller, and may originally have stood up to 2 metres high. The base at the entrance to Pendrea Farm (Fig 5) is a large, roughly circular slab of granite, and substantial enough to support a cross of this size, although the mortice, which measures only 0.29 by 0.15 metres seems too slight for the purpose.

On the other hand, the Pendrea Cross may have been fated to be supported by an inadequate base, for the new base which was provided when the cross was originally restored in 1959 was a block of granite, possibly part of an old gatepost, approximately 0.9 metres long by 0.35 metres across and 0.25 metres high.



Figure 6 includes drawings of the cross and its base as they are now, and the cross as may have been if originally fixed to the Pendrea cross-base.

### 3.4 Condition of the monument prior to restoration

When the Pendrea Cross was Scheduled by English heritage (EH) in 1994 it was considered to be 'stable under its present management regime' (Kestle 1994). Yet by 2001, when problems were first reported by Katy Hooper of Penwith District Council, its condition had deteriorated markedly. Fig 4 shows the cross before conservation. The following were the main points of concern:

1. The cross was loose.

Close examination of a photo taken when the cross was restored in 1959 (Anon 1960) shows that it was simply pinned to its new base (rather than being socketted in) and the joint cemented. However, by 2001, the cement had partly broken away, and the cross was able to rock slightly on its pin. This was of concern in itself, but there was the additional worry that the material the pin is made of was not known. It was assumed that water would be getting into the open joint, and if the pin was of iron this would be corroding and expanding and could eventually split the stone.

A further threat to the cross in this condition was that of theft: a possibility highlighted by Kestle in 1994, before it had even become loose.

2. The base of the cross was completely buried.

Photos taken in 1959 when the cross was restored show that at the time, the new base stood about 0.25m high above the ground. By 2001, and in fact for some years previously, it had been completely invisible, the top being just below the turf and detectable only by probing. This was assumed to be the result of a gradual accumulation of leaf litter, etc, over the years, or of a deliberate raising of the level of the verge in line with road surfacing and improvements.

3. Vegetation growing from the nearby hedge was starting to overwhelm the cross: in particular a hawthorn hung over and obscured it.

Of these problems, the most serious was the first. The reason why the cross became loose is not known. It is known from EH reports to have been stable until relatively recently. However, a potential context for this damage might have been one of the many cabling and trenching operations carried out along this road within the last five years. The cross could have been knocked over and dislodged from its base by one of the many telecommunications companies which have recently been laying fibre-optic cables along here. Because it had become so obscured by vegetation, it could have been righted and a rapid repair made, before the problem was even noticed.

## 4 Recording

As the restoration did not involve any substantial change to the cross, the recording needs were limited to photographs and notes. In particular:

1. A full set of photos (colour prints, colour slides and black and white prints) was taken of the cross before restoration, as work proceeded, and on completion of the work.
2. Full notes were made of the procedures involved in the restoration. These are described in detail in section 5 below.
3. Any observations relevant to the conservation of the cross were recorded – for example, the nature of the old fixings and dowel holes and methods used to re-fix the

central pin. One of the problems in approaching this project was that until the cross was actually lifted, we did not know exactly what to expect, because no details were recorded at the time, even though there is a note about the 1959 restoration in *Old Cornwall* (Anon 1960).

#### 4.1 Results of the recording

The following observations were made in the process of carrying out the conservation work to the Pendrea Cross.

1. It was found that the 1959 restoration of the Pendrea Cross had involved levelling the bottom of the shaft, drilling a hole into both the bottom of the shaft and the piece of granite employed as a base-stone, and uniting the two with a three-quarter inch (2 cm) square steel pin (possibly six inches long altogether, if it is assumed that a similar length was sunk into the cross-shaft as was set into the base) bedded in cement. The joint was mortared with cement, into which coarse chippings were bedded.
2. The 1959 granite base-stone was surprisingly narrow: at approximately 0.35 metres wide, it is basically the same width as the cross. Given the similarity in the proportions of the two, it was at first thought that the lower part of the cross-shaft might have been re-used as the new base-stone. But in fact, differences in the degree of wear of the two make this unlikely. The new base-stone was perhaps manufactured from a broken granite gate-post.
3. From the outset, this gate-post cross-base must have been potentially unstable as a base for the Pendrea Cross, because of its narrow cross-section, and because it is also of less bulk than the cross itself. With hindsight, it is therefore perhaps not surprising that it was knocked over again in 1980 (see above, page 7). Evidence for this 1980 restoration was found in the form of a substantial raft of Ready-Mix cement laid on granite chippings.

## 5 The conservation work

The Pendrea Cross was restored by Adrian Thomas and David Cutting, with the help of a digger driven by Geoff Hoad, on the morning of 15<sup>th</sup> August 2003 (Fig 6).

First of all, branches of the overhanging tree were cut back, to make the operation easier, and to help display the cross more fully. Using strops, the cross was then lifted to test how securely or otherwise it was attached to its base. In the event, it lifted easily, to reveal a three-quarter inch square steel pin, protruding three inches from the bottom of the shaft. It could now be seen that when the cross was set up in 1959, the bottom of the shaft had been cut level, and bedded in cement, to help it fit snugly on the new base.

The steel pin was found to be set very securely into the shaft but by contrast was loose in the base, and in fact pivoting slightly on the pin, perhaps because the pin-hole had not been cut quite deep enough when the cross was set up in 1959. At the centre, at the point where shaft and base were united, there was some very slight corrosion to the pin. This was considered to be of very recent origin, and probably the result of water penetrating the joint, following the recent damage to the cement mortar joint. As the pin was still so securely fixed into the shaft and was otherwise in good condition, it was decided that this pin should be retained for the time being: the risk of damage in actually removing it being possibly as great as the damage likely to be incurred by leaving it. So long as the joint between shaft and base remains water-tight, there should be no further corrosion: although this is a point which *must* be monitored in the future.

The old cement bedding mortar was chipped from the base of the shaft and the top of the base, and both were then lightly dressed to provide a good surface for the new mortar to key to. The cement, which had been fixing the pin into the base, was drilled out, and the pin-hole deepened slightly, so that the cross would not rock on its pin in future.

Work then turned to the base, and the cross was temporarily laid aside, until its final restoration. The ground around the granite base was excavated away to reveal the concrete plinth which has been described above. As this appeared very modern and was considered to be doing a useful job in helping to stabilise the potentially unstable granite base, it was decided to retain the concrete and move the base and plinth as a whole. They were lifted and dragged forward by about one metre, to a position on the verge where the cross would be more visible, less likely to become engulfed by vegetation again, but would still be safe from traffic. After considerable manoeuvring, the base was satisfactorily positioned so that it would provide a firm and level base for the cross, and so that as much as possible of the granite base remained visible, while the cement plinth stayed hidden beneath the ground.

At this point, the cross was lifted back onto the base for a trial fitting. After manoeuvring to ensure that both cross and base were as upright/level as possible, the cross was lifted off again and preparations made for the final fitting. This involved filling the pin-hole in the base with a stone glue and spreading a very thin layer of fine lime mortar over the base, to bed the cross on (which was already a very close fit). The cross was then lifted back onto its base for the last time, and after further careful adjustment to ensure that it was properly vertical, the joint between base and cross was mortared with a hydraulic lime mortar (NHL 5, with a mixture of New Milton, Doble and Clevedon Farm sands).

## 6 Conclusion

Following the conservation work, the Pendrea Cross is a far more prominent feature on the verge of the road leading from St Buryan to Porthcurno and St Levan (Fig 7). With its base, it now stands 0.9 metres high, is set back 1.5 m from the edge of the road and a metre out from its former position. Following the care that was taken to ensure that it is firmly bedded and levelled, securely pinned and mortared, it should also be stable for many years to come. However, there are a number of recommendations for future monitoring and management, which will help ensure that it remains this way.

### 6.1 Recommendations

1. The cross must be monitored to ensure that the joint remains mortared. Although the pin is of steel, not iron, it is not stainless steel, and will therefore be more vulnerable to corrosion if water were to get into the joint.
2. Under normal circumstances, the cross should be safe from vehicles encroaching on the verge. However, if there is any further intensive roadside work of the sort that took place in St Buryan a few years ago, this cross could again be vulnerable. The situation should be regularly monitored and if there is any fear for the safety of the cross, further boulders could be placed on the verge to provide a better degree of protection.
3. The granite base onto which the cross was bedded in 1959, which was possibly created from part of an old gate post, is of inadequate size to support the cross properly. If further repairs are ever made at some time in the future, consideration should be given to supplying a new granite base-stone of more substantial proportions, together with a new section of shaft. Together, these would restore the original proportions of the cross.

4. The vegetation growing from the hedge at the rear of the verge, though cut back on this occasion, is all too likely to grow out again. This should be monitored, and when necessary, should be trimmed back so that the cross remains visible.
5. Finally, it should be noted that although the cross has been moved slightly, it is considered that it is still within the two metre constraint area that applied to the former location, and that the cross is therefore still protected by Scheduling.

## 7 References

### 7.1 Primary sources

Ordnance Survey, c1880. *25 Inch Map* First Edition

Ordnance Survey, c1907. *25 Inch Map* Second Edition

### 7.2 Publications

Anon, 1960. 'Pendrea Cross, St Buryan', *Old Cornwall* **V**, 478.

Cooke, IM, 2000. *Crosses and Churchway Paths in the Land's End Peninsula West Cornwall: Volume 3 St Buryan*, Men an Tol Studio, Bosullow, Newmill, Penzance.

Crofts, CB, 1955. *A Short History of St Buryan*, West Cornwall Field Club, Camborne.

Henderson, CG, 1925. *Cornish Church Guide*, Truro.

Hooke, D, 1994. *Pre-conquest charter bounds of Devon and Cornwall*, Boydell Press, Woodbridge.

Hosking, J, 2002. *People, Places and Past Events in St Buryan*, Penzance.

Kestle, J, 1994. *English Heritage Record of Scheduled Monuments, monument number 24296*.

Langdon, AG, 1896. *Old Cornish Crosses*, Truro.

Langdon, AG, 1997. *Stone Crosses in West Penwith*, Federation of Old Cornwall Societies, Cornish Cross Series 4.

Padel, OJ, 1985. *Cornish Place-Name Elements*, English Place-Name Society, Volume LV/LVII.

Preston-Jones, A, and Langdon, AG, 1997. 'St Buryan Crosses', *Cornish Archaeology* **36**, 107 - 128.

Preston-Jones, A, 2002. *The Boskenna Cross, St Buryan, Cornwall: restoration*, CAU report.

Preston-Jones, A, 2003. *Proposal for repairs to the Pendrea Cross, St Buryan*.

## 8 Project archive

The CAU project number is **2003016**

The project's documentary, photographic and drawn archive is housed at the offices of Cornwall Archaeological Unit, Cornwall County Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing site records and notes, project correspondence and administration.

2. Black and white photographs archived under the following index numbers: GBP 1590, 3a - 11a; 1593, 29 - 32; 1595, 13 - 19
3. Colour slides archived under the following index numbers: GCS 34345- 34352
4. This report held in digital form as: G:\CAU\DOCUMENT\HEProjects\Sites\Sites P\Pendrea Cross\Final Pendrea Cross report

Oasis: Cornwall 2 - 118062

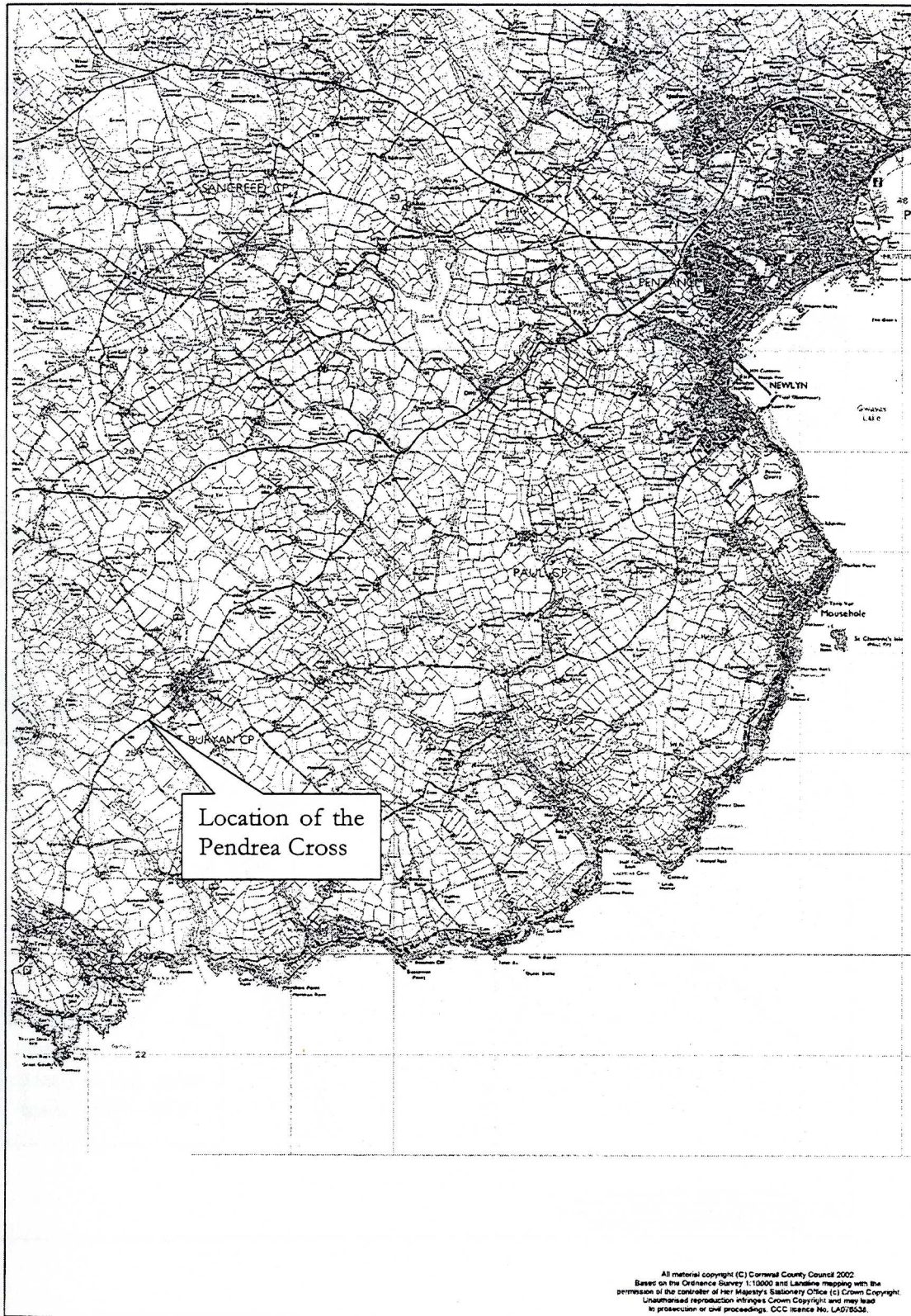


Fig 1. The location of the Pendrea Cross

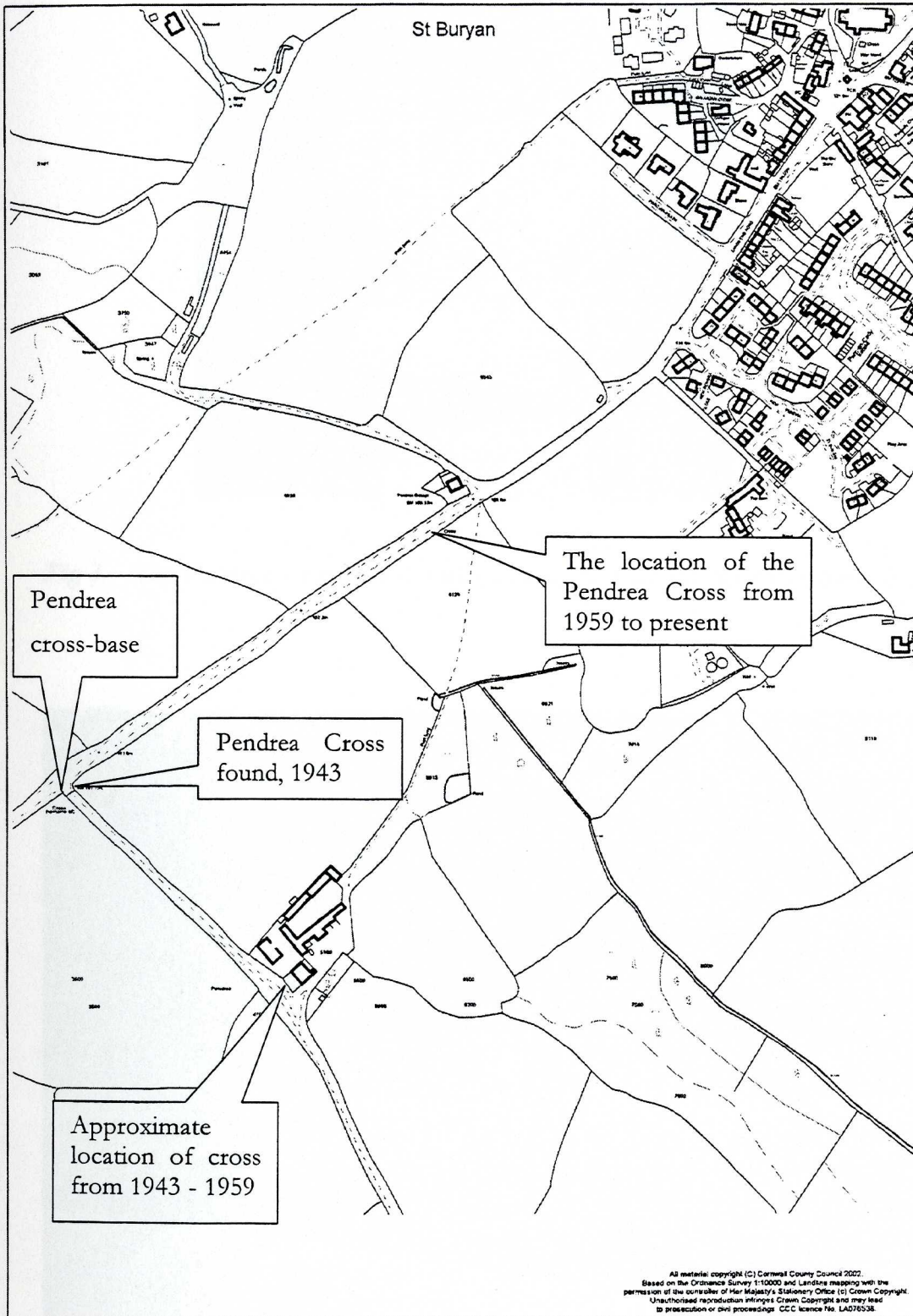


Fig 2. The movements of the Pendrea Cross



*Fig 3. The Pendrea Cross when it was located on a wall outside Pendrea Farm*



*Fig 4. The Pendrea Cross before restoration in June 2003*



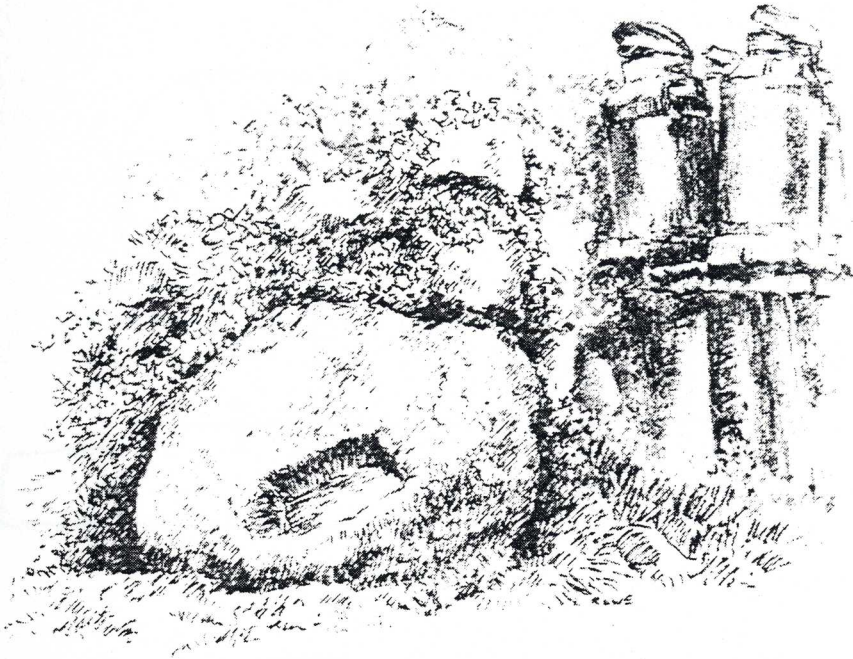
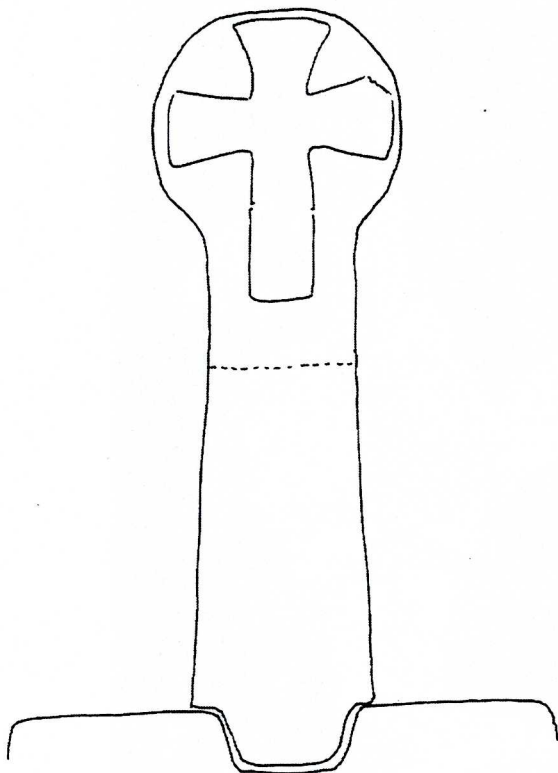
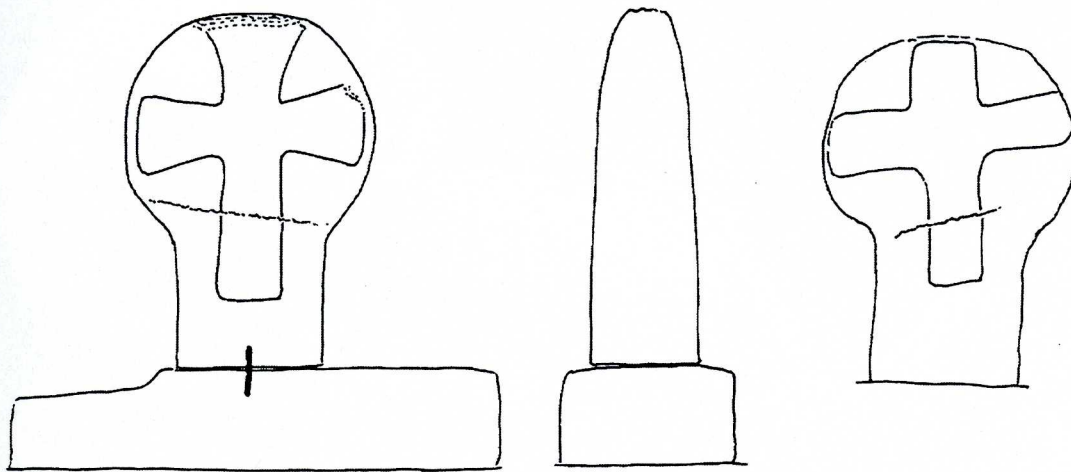
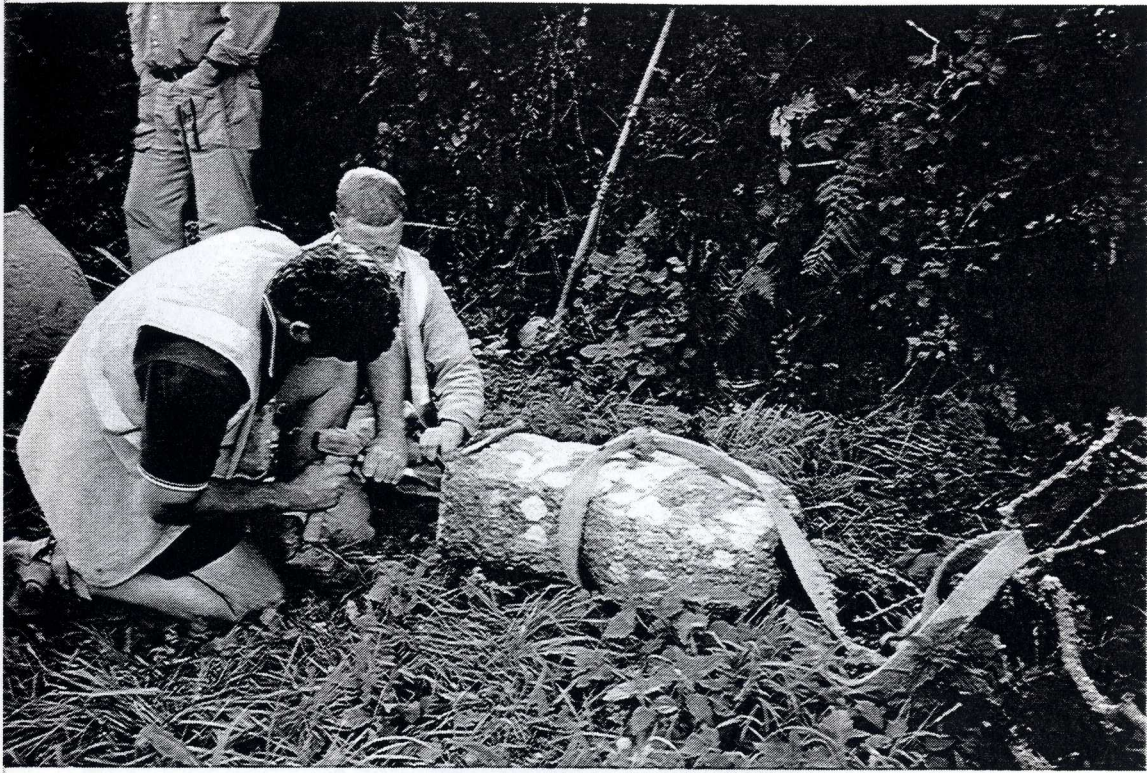


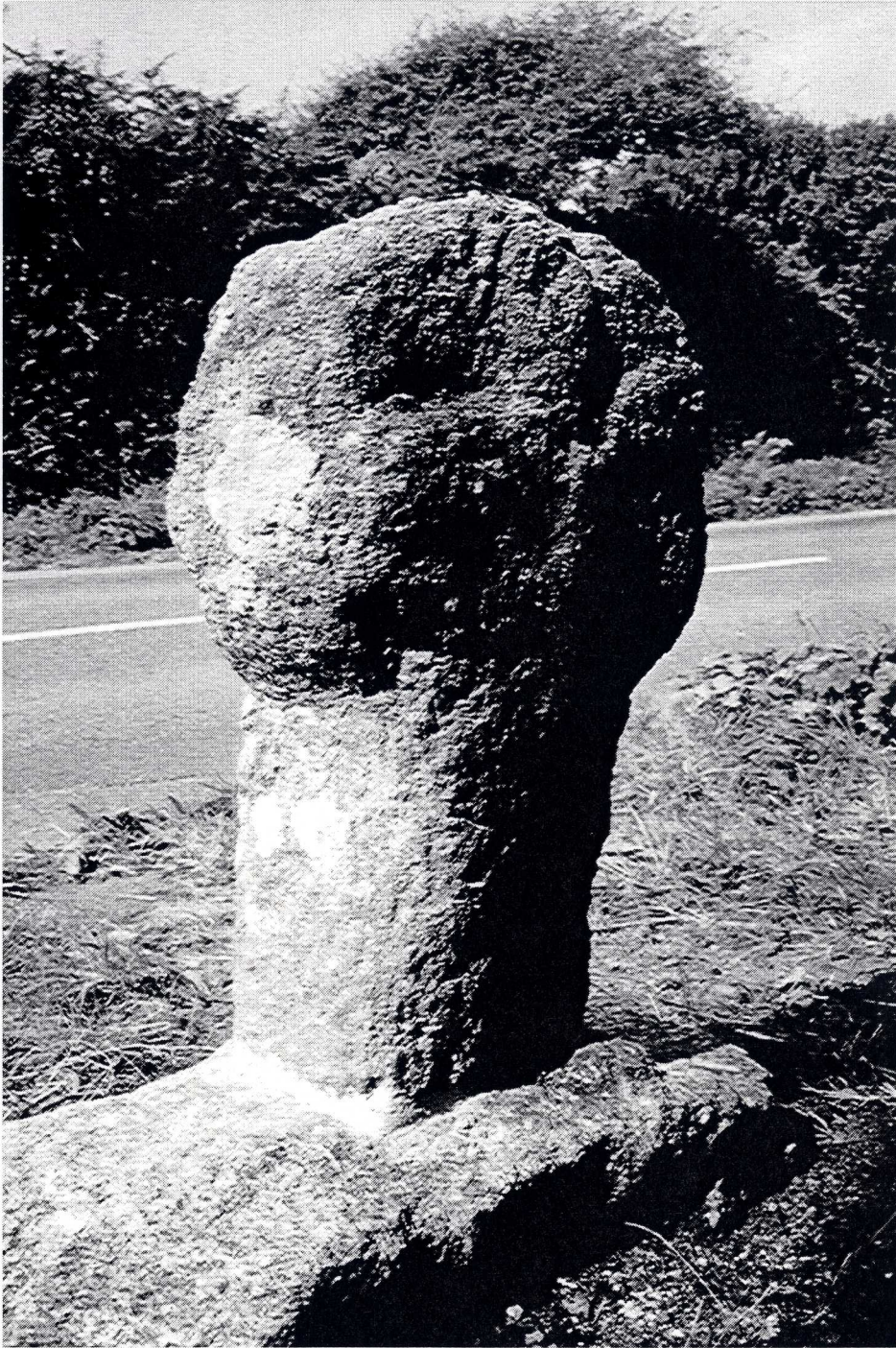
Fig 5. The cross-base at the entrance to Pendrea Farm: Laura Rowe's drawing (above) and a recent photo (below). Laura Rowe's drawing was probably made from a photo of Mary Henderson's of 1956. The original is in the possession of Andrew Langdon.



*Fig 6. Drawings of the Pendrea Cross now (above), and as it may have looked originally (below)*



*Fig 7. Restoration work in progress*



*Fig 8. The restored cross*