

## MAP 1: CARRICK POINT TO MARY POINT BAY

**Hinterland Geology and Coastal Geomorphology:** This section includes the peninsula of the Mull of Galloway which forms the most southerly point of Scotland. The underlying geology consists of the Wenlock Series that includes greywacke and shale. On the Mull of Galloway the hinterland comprises a shallow layer of soil derived from till deposits that overly sheer precipitous cliffs. Further north at Carrickcoil, less steep cliffs continue and again these are covered with till with shallow podsol formations. An isthmus has been formed between West and East Tarbet bay and a platform of land divides the two. The foreshore at East Tarbet is predominately shingle. The intertidal zone becomes much shallower towards Maryport Bay with sand bars, shingle and boulders. The hinterland comprises raised beach deposits with relict shore platforms on which are developed shallow brown forest soils. Fluvioglacial deposits (primarily sands and gravels) outcrop at Maryport Bay. Immediately north of the bay, raised beach deposits occur and continue to Cailness Point.

**Erosion Class:** This section of coastline is exposed to north-easterly gales. The base of the cliffs are being eroded by wave action and boulder fall is common at their base which suggests past and on-going cliff-edge erosion. Coastal retreat is, however, predicted to be relatively slow owing to the fairly resilient nature of the greywacke cliffs. Folding of the lithology exposes units of different strengths. Weaker units such as mudstones are being preferentially eroded, forming deep gullies. East Tarbet is trapping shingle that is probably derived from the raised beach area further north. A shallow intertidal zone continues northwards from Back Bay (NX 142330) and continues to Cailness Point. The intertidal zone between these locations consists of poorly sorted fluvioglacial pebbles and cobbles. Sandy spits occur where shingle is absent. Shingle is banked at the HWM but longitudinal grading is not evident. Accretion is occurring in parts and on the whole the HWM area appears to be stable.

**Built Heritage & Archaeology:** The archaeology of this section is varied, ranging from later prehistoric monuments, such as The Dunnan promontory fort and possibly the earthworks at the Mull of Galloway, to early Christian/medieval monuments, such as St Medan's Chapel and Chapel Wells, and to more recent monuments such as the nineteenth century cottage and quay at East Tarbet Bay (Graham, 1979, 46). A cluster of monuments are situated at or close to the isthmus of the Mull of Galloway while other sites are distributed in a more scattered fashion along the coast. There is no indication of coastal erosion affecting the recorded sites, with the exception of the earthwork (NX13SW 17) which is suffering from minor erosion derived from wave abrasion of the coastal edge at that point. Of greater significance to the survival of sites in this section is natural deterioration, and particularly for the monuments comprising earthworks, the detrimental action of animals; principally cattle and rabbits.

## Map 1: Hinterland Geology and Coastal Geomorphology

---

### 1. CARRICKCARLIN POINT, CARRICKCOIL AND BACK BAY

NX 155 307

1.4km

Mainly rock platform

Cliffs (> 10m)

*Till over visible rock*

An exposed rocky promontory headland consisting of precipitous dipping Silurian greywacke and slate overlain by till and shallow humus-iron podzols. A narrow isthmus has been formed at East Tarbet where graded shingle banks are backed by a steep grassy slope. Steep till slope overlies incised rock platform at Carrickcoil. Cliff and rock platform give way to a boulder and shingle beach at Back Bay.

### 2. MARYPORT BAY

NX 146 350

4.5km

Cliff (< 10m)

*Raised beach/relict shore platform*

Irregular high terraced raised beach deposits at Carrickundle above shingle and boulder beach. The raised beach is indented at Maryport where glacially derived sand and gravel are exposed and meet a sand, shingle and boulder strewn shoreline. Towards Cailness Point, an exposed promontory headland is backed by marine sands and shingle with fairly shallow brown forest soils.

---

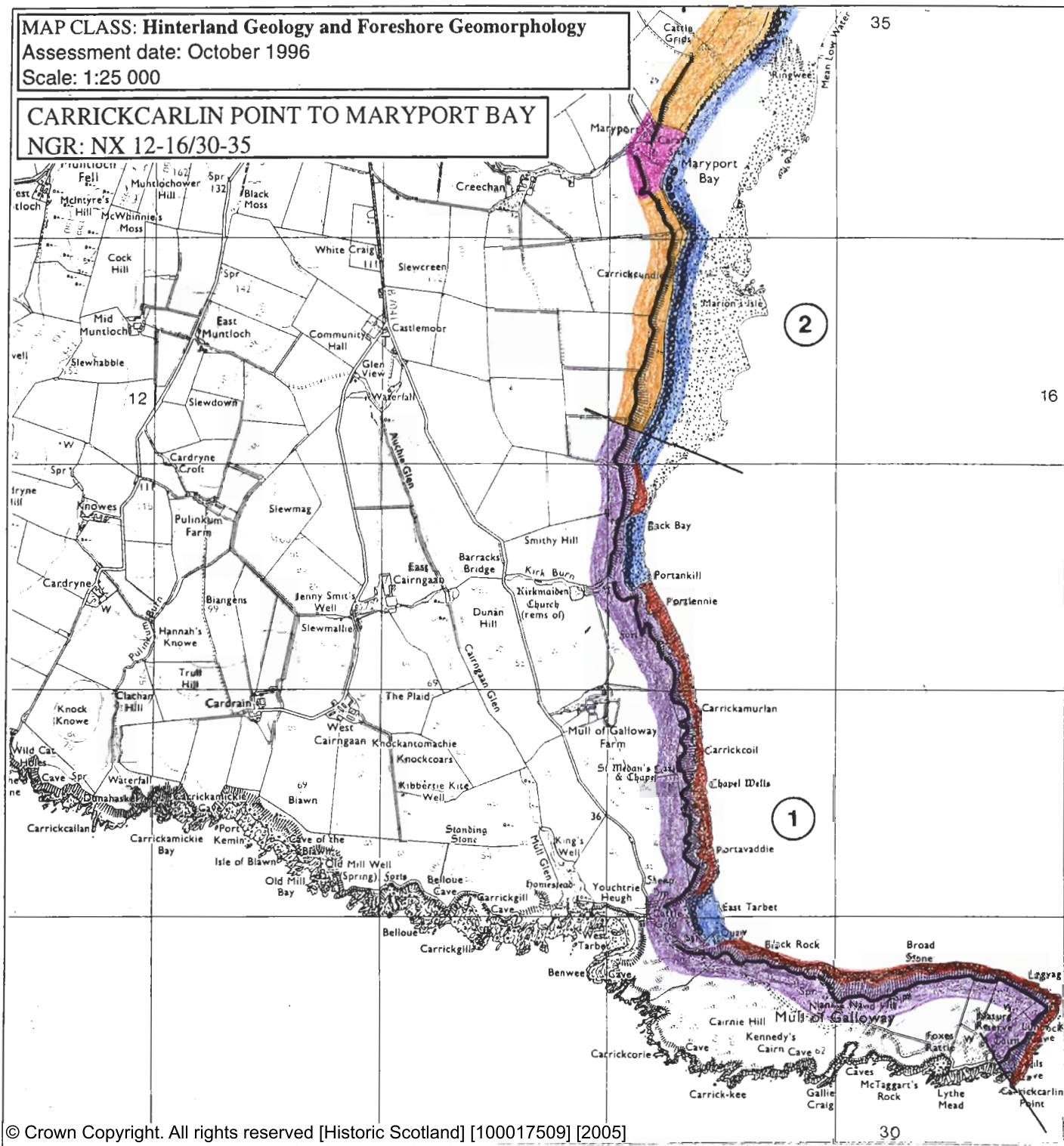
**MAP CLASS: Hinterland Geology and Foreshore Geomorphology**

Assessment date: October 1996

Scale: 1:25 000

**CARRICKCARLIN POINT TO MARYPORT BAY**

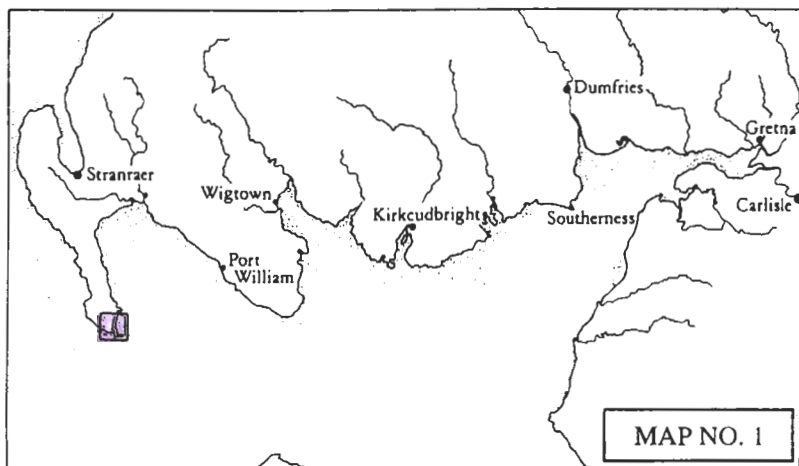
NGR: NX 12-16/30-35



© Crown Copyright. All rights reserved [Historic Scotland] [100017509] [2005]

**KEY**

| Hinterland Geology                    | Derwent Code           | Colour |
|---------------------------------------|------------------------|--------|
| Drift, boulder clay                   | French Grey            |        |
| Drift, boulder clay over visible rock | Dark Violet            |        |
| Raised beach and marine deposits      | Golden Brown           |        |
| Blown sand                            | Pink Madder Lake       |        |
| Glacial sand and gravel               | Magenta                |        |
| Alluvium                              | Emerald Green          |        |
| Coastal Geomorphology                 |                        |        |
| Mainly rock platform                  | Deep vermilion         |        |
| Mainly sand                           | Ultramarine            |        |
| Mainly alluvial/marine mud            | Venetian Red           |        |
| Marsh                                 | May Green              |        |
| Coast Edge                            |                        |        |
| Low edge (<5m)                        | Thin black line        |        |
| Cliff (>5m)                           | Solid black line       |        |
| Man made barrier                      | Black line with spines |        |
| Shingle beach                         | Small circles          |        |
| Human disturbance                     | Black carats           |        |



MAP NO. 1

## MAP 1: EROSION

---

### 1. CARRICKCARLIN POINT, BLACK ROCK

NX 155 307

1.4km

*Eroding or stable*

This unit has an exposed north-easterly aspect. The cliff base comprises deep gullies that are being scoured and continually abraded by wave action. Erosion is predicted as occurring only slowly due to the fairly resilient nature of the greywackee.

### 2. EAST TARBERT BAY

NX 144 310

0.4km

*Accreting or stable*

An exposed bay consisting of boulders and shingle that is banking up against the base of a quay and against a cattle eroded back slope. There is no evidence of longitudinal grading along the beach but the bay is apparently forming a re-entrant trap for shingle along the inshore wave zone. Storm run-off and cattle are eroding the steep slope down to the beach.

### 3. CARRICKAMURLAN

NX 144 320

1.7km

*Eroding or stable*

This stretch of indented cliff is incised with numerous deep gullies between steeply dipping slates that are continually scoured and abraded. Boulder accumulation within the gullies attests to rock fall but the process is considered to be very slow.

### 4. MARYPORT BAY, CAILNESS POINT.

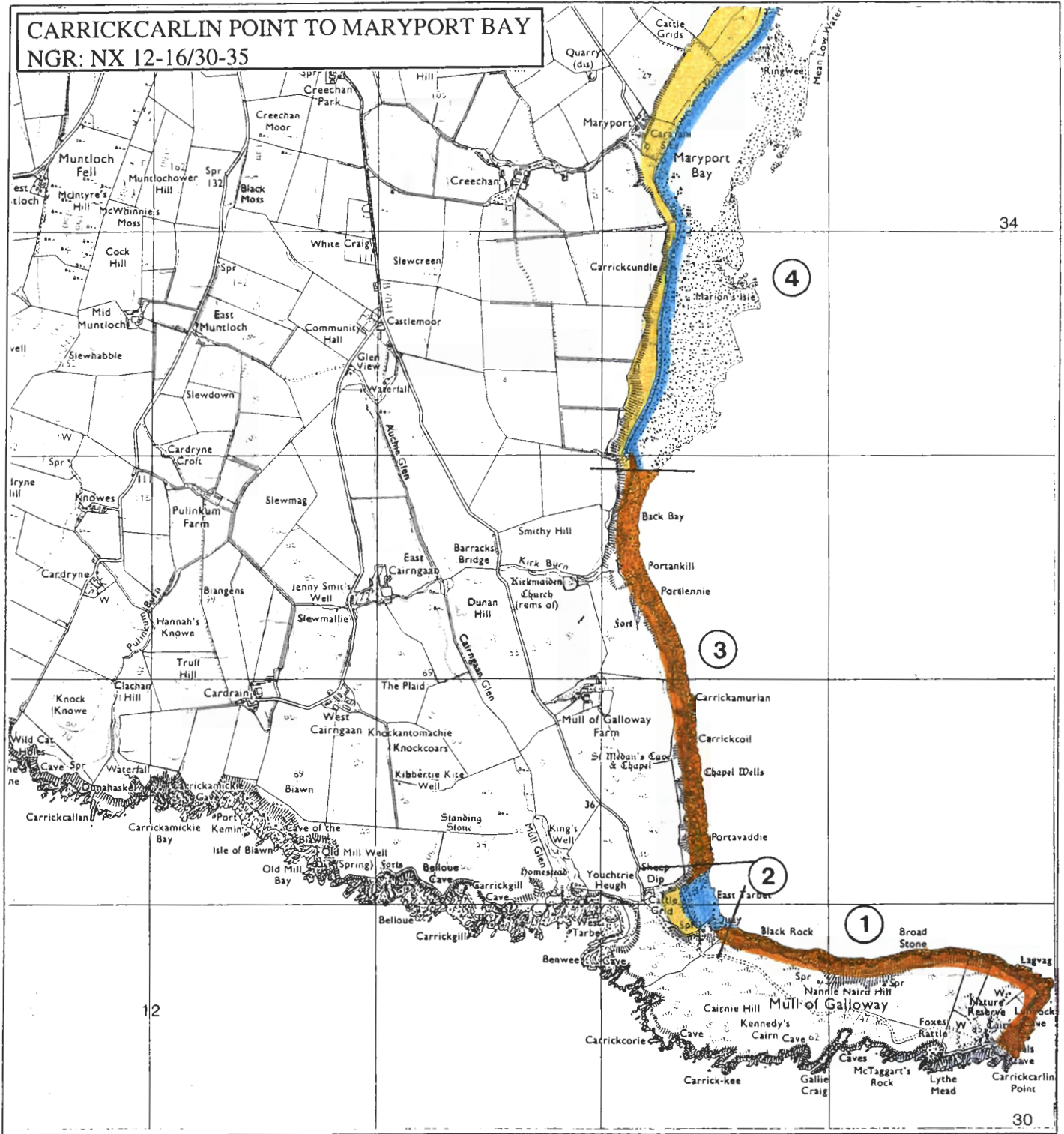
NX 146 350

*Accreting or stable*

An exposed beach with an easterly aspect. The wide intertidal zone contains numerous sand and shingle bars. The beach is predominantly shingle that forms a gradual incline to the HWM. A very wide intertidal zone continues north of Cailness Point. The higher shore margin is consolidated with grass cover and suggests that this region of coast is at the present stable.

---

**CARRICKCARLIN POINT TO MARYPORT BAY**  
 NGR: NX 12-16/30-35



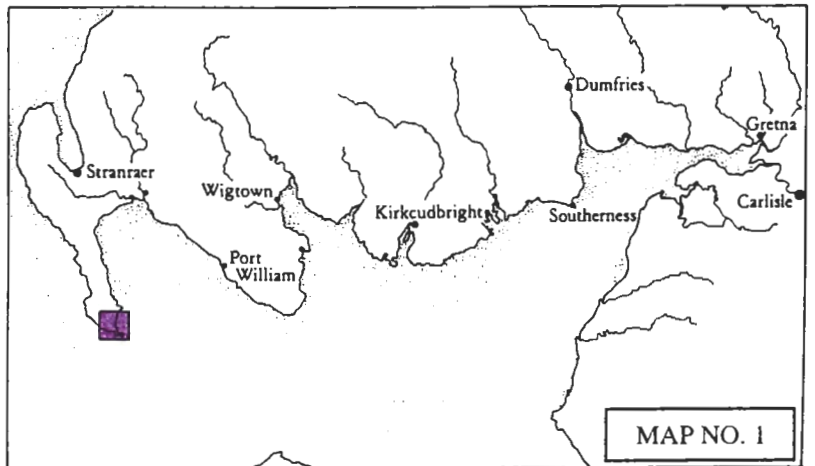
**KEY**

| Erosion class              | Derwent Code    | Colour |
|----------------------------|-----------------|--------|
| Definitely accreting       | Prussian Blue   |        |
| Accreting/stable           | Light Blue      |        |
| Stable                     | Grass Green     |        |
| Stable/eroding             | Deep Chrome     |        |
| Definitely eroding         | Deep Vermilion  |        |
| Both accreting and eroding | Imperial Purple |        |
| No access                  | Blank           |        |
| Land below 10m             | Straw Yellow    |        |

**MAP CLASS: EROSION**

Assessment date: 19.9.96

Scale 1:25 000



**MAP NO. 1**

## MAP 1: BUILT HERITAGE AND ARCHAEOLOGY

---

### Sites on the Coast Edge & Foreshore

**NX13SW 17**  
NX 1452 3086  
MULL OF GALLOWAY  
Earthwork  
Scheduled Ancient Monument  
1st Mill. BC/AD  
Fair  
Monitor

**NX 1445 3089**  
EAST TARBET BAY  
Cottage & Quay  
Statutory Listed Building  
19th century  
Good  
Nil

**NX13SW 11**  
NX 1439 3159  
CHAPEL WELLS, MULL FARM  
Well  
1st & 2nd Mill. AD  
Uncertain; not located  
Nil

**NX13SW 10**  
NX 1437 3159  
ST MEDAN'S CHAPEL  
Cave & Chapel  
Scheduled Ancient Monument  
1st & 2nd Mill. AD  
Uncertain; not located  
Nil

**NX13SW 8**  
NX 1417 3229  
THE DUNNAN, PORTANKILL  
Promontory Fort  
Scheduled Ancient Monument  
1st Mill. BC/AD  
Good  
Nil

---

### Sites in the Hinterland

**NX 1532 3069**  
MULL OF GALLOWAY  
Drystone Fieldbank  
18/19/20th century  
Good  
Nil

**NX13SW 16**  
NX 1422 3104  
MULL OF GALLOWAY  
Earthwork  
Uncertain  
Good  
Nil

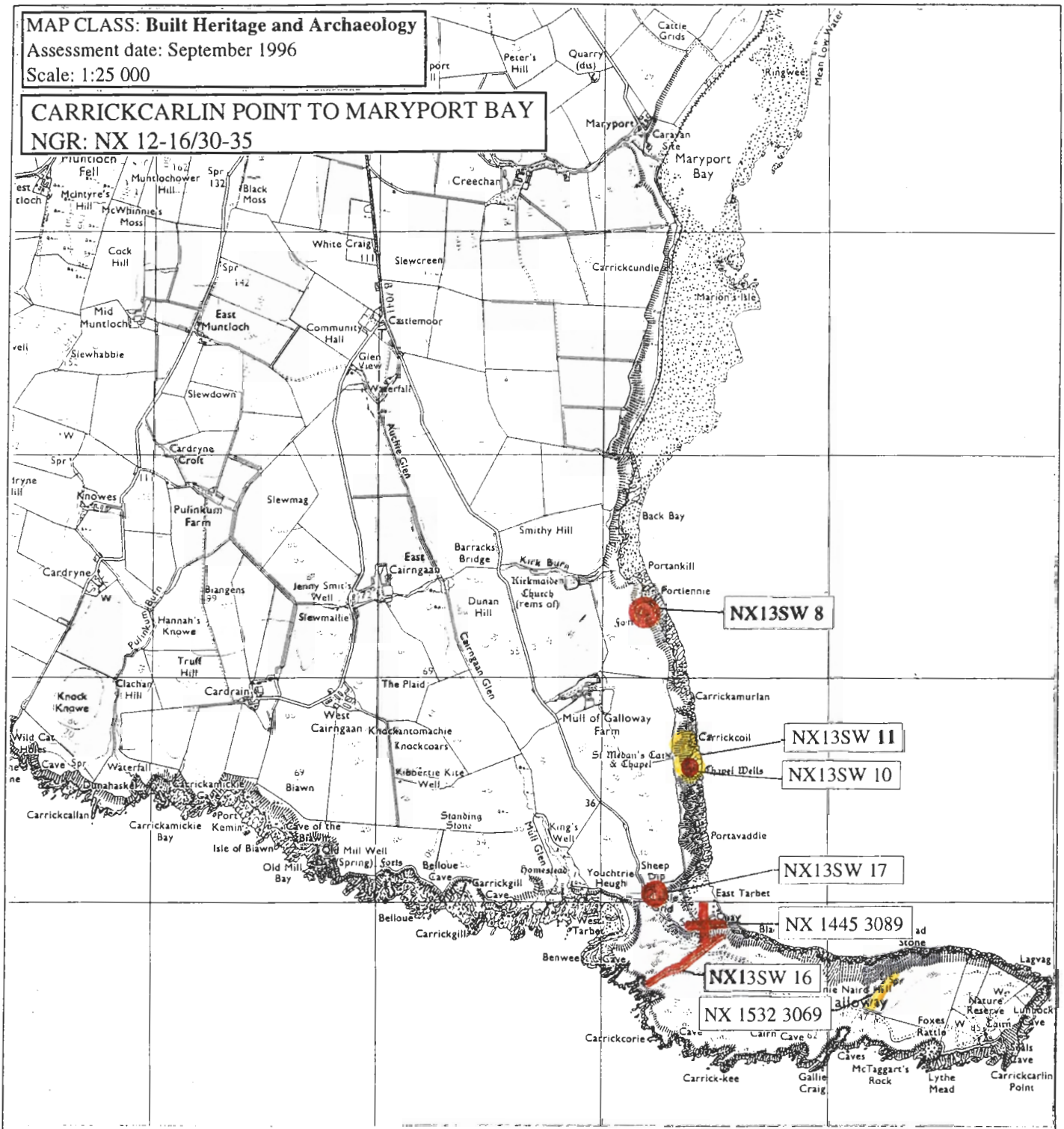
MAP CLASS: Built Heritage and Archaeology

Assessment date: September 1996

Scale: 1:25 000

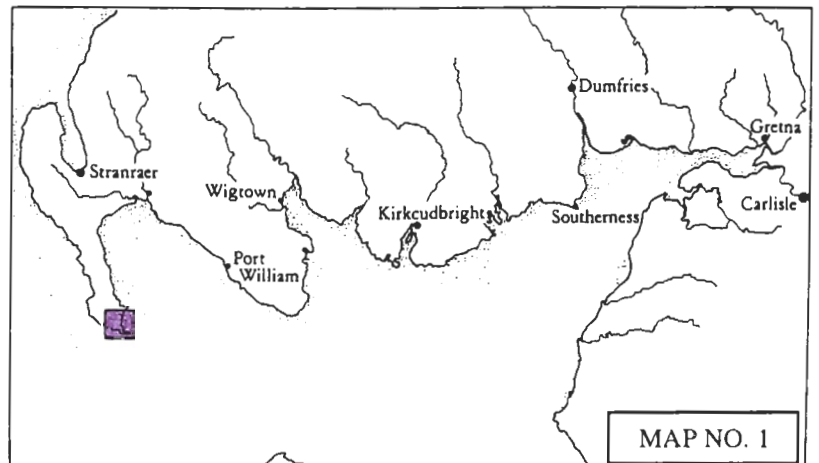
CARRICKCARLIN POINT TO MARYPORT BAY

NGR: NX 12-16/30-35



KEY

| Site location                | Symbol                     | Colour | Significance  |
|------------------------------|----------------------------|--------|---|
| NGR ref. - eg.<br>NX 143 368 | Roundel - Solid, (or area) | Red    | Protected Ancient Monument                                      |
|                              | Cross                      | Red    | Listed Historic Building  |
| NMRS ref. - eg.<br>NX13 SW17 | Roundel - Open, (or area)  | Red    | Monument formally proposed by Historic Scotland for designation |
|                              | Roundel - Solid, (or area) | Yellow | Other known Ancient Monument                                    |
|                              | Dashed outline             | Yellow | Gardens/Designed landscape                                      |
| NX13 SW17                    | Roundel - Solid, (or area) | Yellow | Undesignated wreck  |
|                              | Area                       | Green  | Insufficient information; more work needed                      |
|                              | Area                       | Blue   | Probably archaeologically sterile                               |



MAP NO. 1

