

MAP 34: MULLOCK BAY TO PORT MARY

Hinterland Geology and Coastal Geomorphology: This region of coastline shares the same geomorphologic characteristics as is depicted on Map 33. The hinterland geology consist of mainly till over outcropping rock. The cliff -edge is precipitous with limited access. Morainic drift outcrops at Netherlaw Point. Glacial drift flanks White Port Bay. This bay and Abby Foot Bay both contain raised beach deposits possibly from the Main Holocene Marine Transgression. The rock platform is exposed down to the LWMS mark.

Erosion Class: Given the exposed position of this particular section of coastline it is considered to be definitely eroding. At Abbey Burn Foot sand and boulders are banking up against the current HWMS. Finer sand and shingle is present at the head of Port Mary and was seen to be stable.

Built Heritage & Archaeology: The archaeology of this section of the coast is dominated by the small cluster of monuments at Port Mary, comprising a natural landing place, on the coastal edge, and a promontory fort and listed building in the immediate hinterland. Coastal erosion does not affect any of the sites. Of much greater significance to the condition of the promontory fort of Castleyards is the occurrence of a pit containing dead sheep and calves immediately within the interior of the rampart. A survey and monitoring programme is strongly recommended.

Map 34: Hinterland Geology and Coastal Geomorphology

1. PORT MUDDLE to NETHERLAW POINT

NX 705 436

3km

Cliff (> 10m)

Glacial sands and gravels, raised beach

Port muddle is a small bay indented along a major fault line. The Hinterland geology is glacial sands and gravels overlying a high cliff-edge. Marine sands and gravels outcrop above Mullock Bay and overlie thinly bedded sandstones and mud stones. The cliff-edge gradient is steep. The foreshore consists of greywackee platforms exposed down to the MHWL with boulders and sand at Mullock Bay.

2. NETHERLAW POINT to WHITE PORT

(near Port Mary Bay)

NX 730 434

4.5km

Cliff (> 10m)

Till over visible rock

Till covers visible limestone rock platform. Marine sands and gravels form raised beaches at Abbey Burn Foot and Port Mary both of which are on major fault lines. In between these two bays glacial sands and gravels occur. The foreshore consists of limestone platforms with large boulders intermixed with shingle and sand.

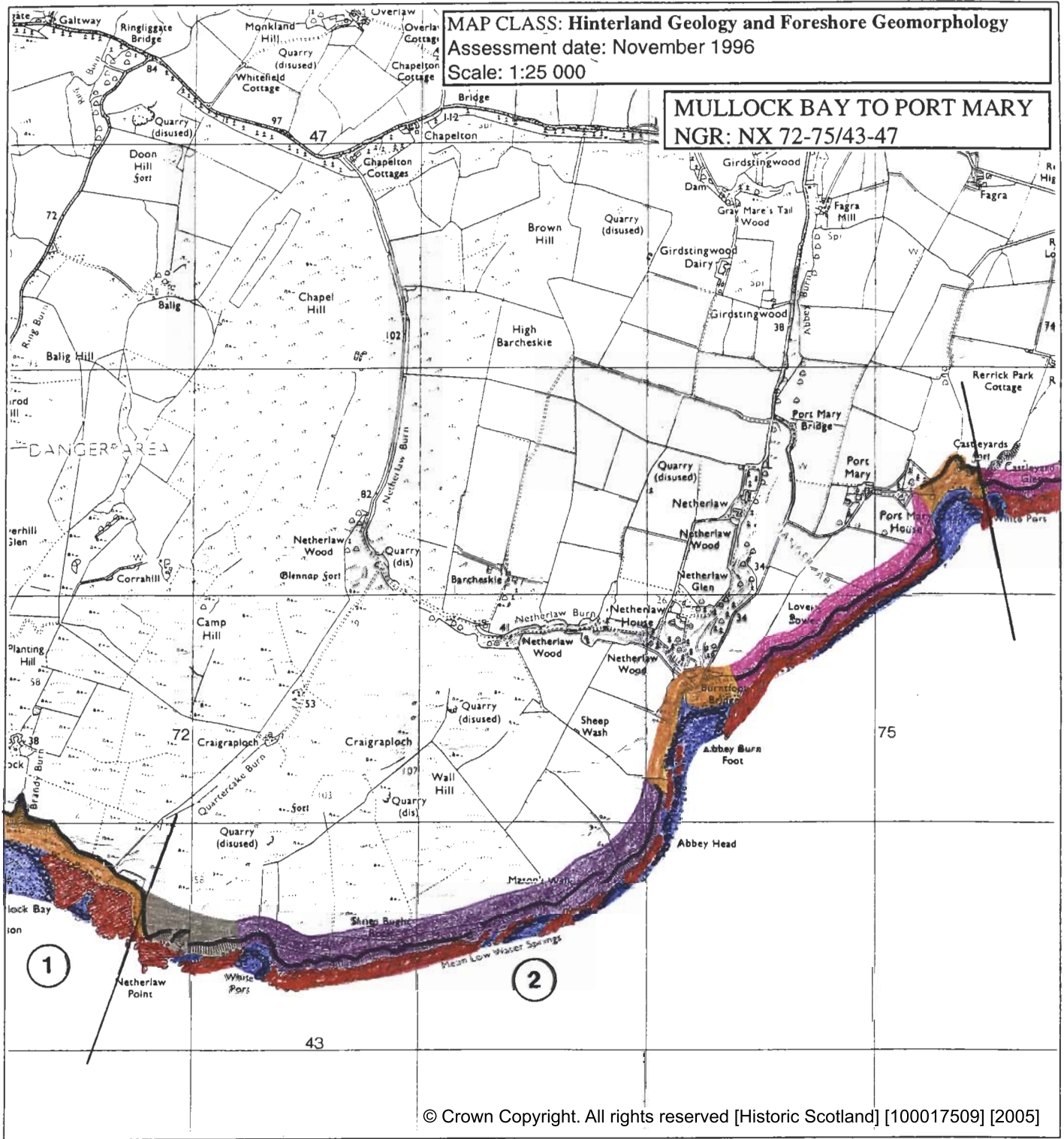
MAP CLASS: Hinterland Geology and Foreshore Geomorphology

Assessment date: November 1996

Scale: 1:25 000

MULLOCK BAY TO PORT MARY

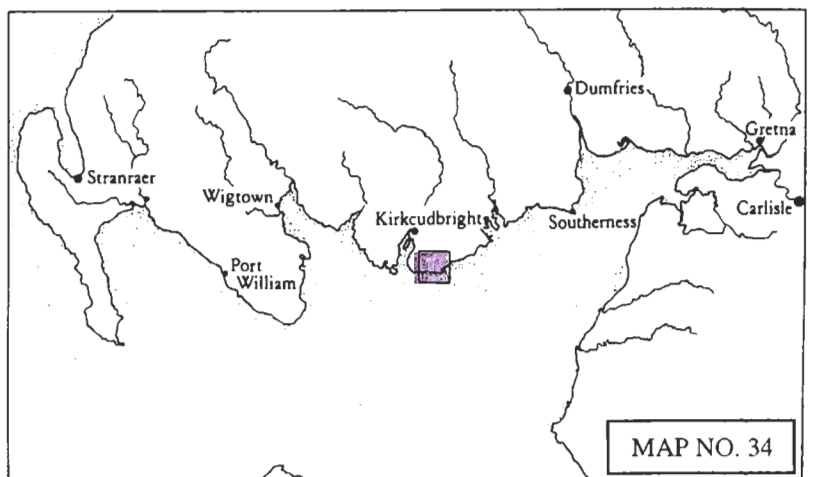
NGR: NX 72-75/43-47



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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. 34

MAP 34: EROSION

1. MULLOCH BAY east to ABBEY HEAD

NX 433 725

2.9km

Definitely eroding

Situated partly on Durness Limestone this part of the coast is exposed with a southerly aspect. The cliffs display notching and scouring and are eroding slowly.

2. ABBEY HEAD to PORT MARY'S HOUSE

NX 745 446

2.5km

Both accreting and eroding

This unit includes Abbey Burn Foot (NX 743 444) which is a shingle dominated beach that gives way to rock platform. The shingle is banking up at the MHWM and appears stable at the present. The exposed cliffs are eroding slowly.

3. PORT MARY'S HOUSE to WHITE PORT

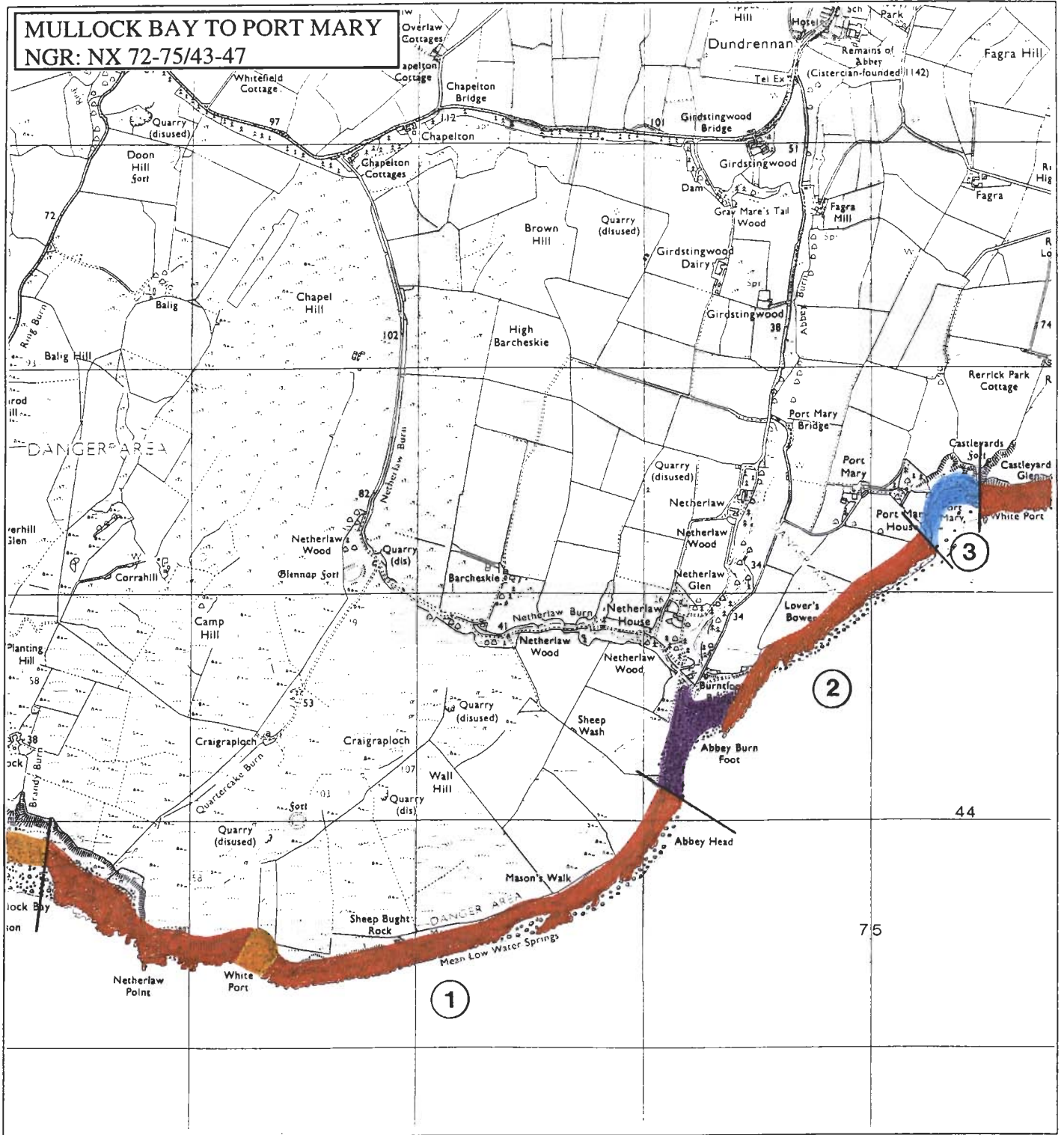
NX 754 454

0.3km

Accreting or stable

This small bay consists of shingle which is banking up at the MHWM. There appears to be no erosion and at the present the beach head is stable.

MULLOCK BAY TO PORT MARY
NGR: NX 72-75/43-47



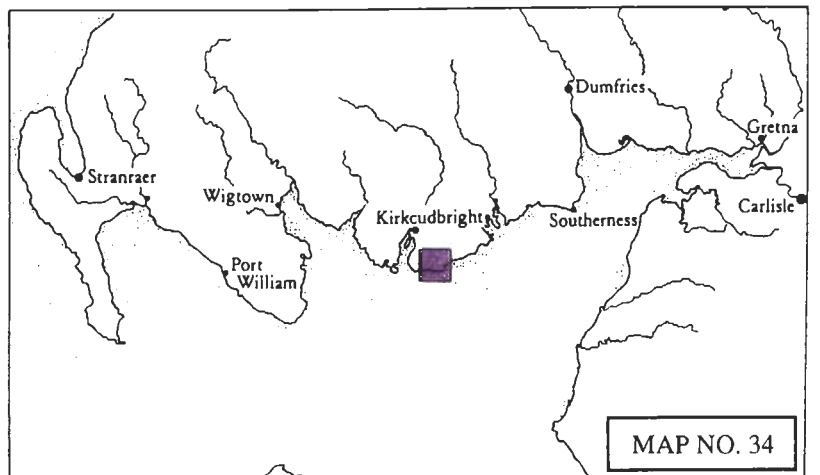
KEY

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: 15.10.96

Scale 1:25 000



MAP NO. 34

34: BUILT HERITAGE AND ARCHAEOLOGY

Sites on the Coast Edge & Foreshore

NX74SW 4
NX 742 443
ABBAY BURN FOOT
Natural Harbour
Uncertain
Good
Nil

NX74NE 24
NX 753 453
PORT MARY
Landing Place
Uncertain
Uncertain; not located
Nil

Sites in the Hinterland

NX 7512 4542
PORT MARY HOUSE
House
Statutory Listed Building
Late 18th century
Good
Nil

NX75NE 5
NX 7548 4552
CASTLEYARDS
Promontory Fort
1st Mill BC/AD
Good
Nil

MAP CLASS: Built Heritage and Archaeology

Assessment date: October 1996

Scale: 1:25 000

MULLOCK BAY TO PORT MARY

NGR: NX 72-75/43-47



KEY

Site location	Symbol	Colour	Significance
NGR ref. - eg. NX 143 368	Roundel - Solid, (or area)	Red	Protected Ancient Monument
	Cross	Red	Listed Historic Building
NMRS ref. - eg. 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

