

MAP 47: KIRCONNEL MERSE TO DUMFRIES

Hinterland Geology and Coastal Geomorphology: Marine deposits occur along the course of the River Dee which flows through flat land below 5m O.D. This is protected by flood defence works.. Fluvioglacial outwash deposits occur near Kelton and immediately south of Dumfries. Salt-marsh is a common feature along the tidal stretch of this river.

Erosion Class: Kirkonnel Merse is incised by drainage channels and prone to erosion. Higher up the river conditions are stable owing to flood defence works.

Built Heritage & Archaeology: Two quays, situated on opposite banks of the river Nith, are contained in this section. Both belong to the nineteenth century and were originally built in connection to the maritime trade of Dumfries (Graham & Truckell, 1977, 128-134). Laghall quay exhibits signs of tidal damage and monitoring is recommended.

Map 47: Hinterland Geology and Coastal Geomorphology

1. KIRKCONNELL MERSE to GREENMERSE
NX 984 690

2.7km

Low edge (< 5m)

Marine sands and gravels

This unit includes part of the lower tidal stretch of the River Nith. The hinterland is low lying with a cover of marine sands and gravels. The foreshore consists of saltmarsh and alluvial estuarine mud.

2. GREENMERSE to DUMFRIES SEWAGE WORKS

NX 975 730

2.2km

Low edge (< 5m)

Marine sands and gravels

West bank of the River Nith. Marine derived sands and gravels overlying Carse clays. The banks of the river consists of alluvial mud and silt.

3. DUMFRIES SEWAGE WORKS to north of KINGHOLM

NX 977 750

3.4km

Low edge (< 5m)

Glacial sands and gravels

Urban stretch of the River Nith. Glacially derived sands and gravels occur on each side of the river. Alluvial mud and silts banks are present alongside the central river channel.

4. North of KINGHOLM to south of KELTONBANK

NX 974 730

3.4km

Low edge (< 5m)

Marine sands and gravels

Lower stretch of the River Nith with a hinterland of marine sands and gravels overlying Carse clays. The riverbanks contain fine alluvial mud and silts. Merse (salt-marsh) is established to the west of Kennethbank.

5. South of KELTONBANK to north of KENNETHBANK

NX 995 680

Low edge (< 5m)

Marine sand and gravel

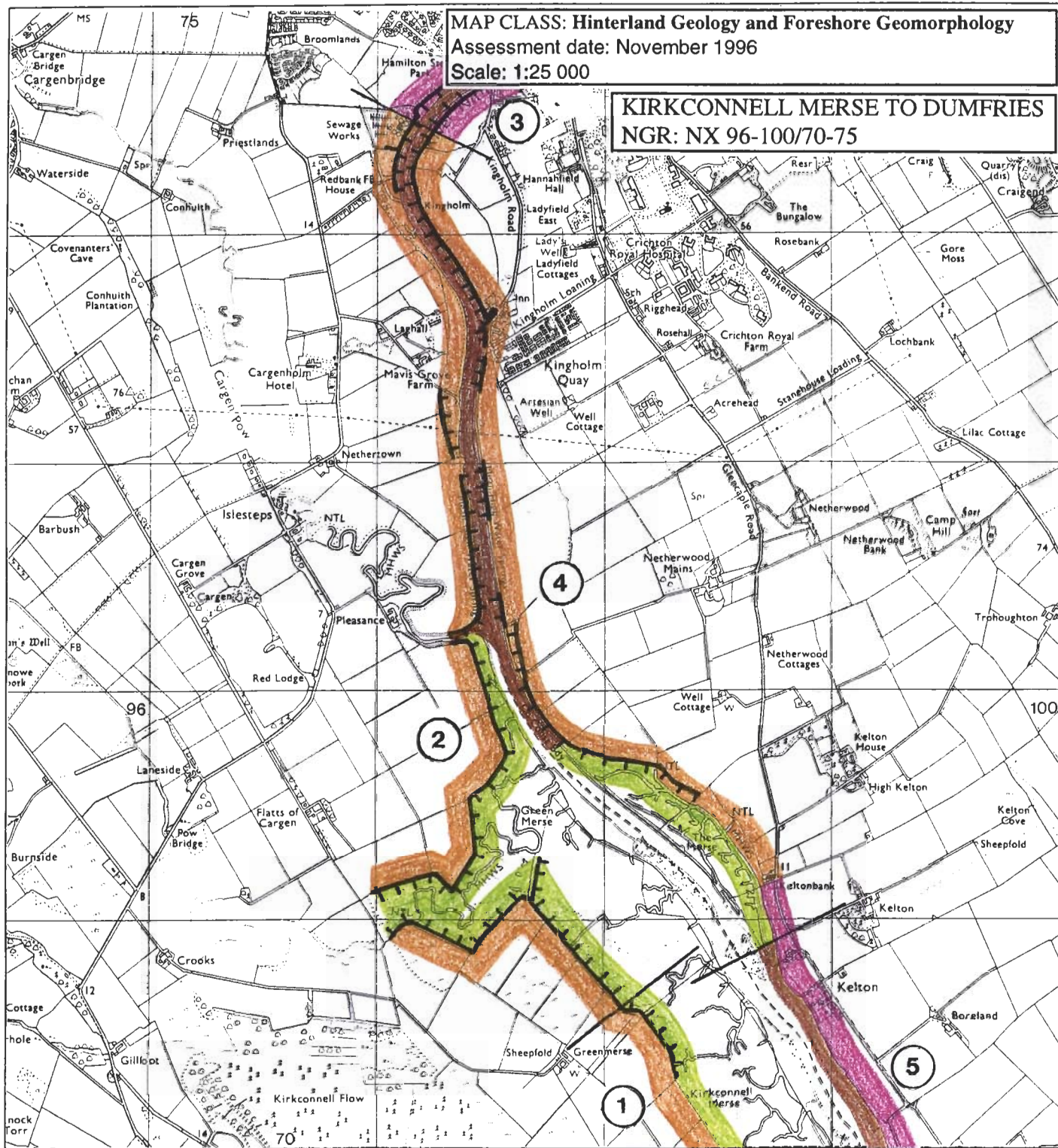
The lower tidal reach of the River Nith. The hinterland geology consists of marine sands and gravels. The river edge is estuarine mud and silt.

MAP CLASS: Hinterland Geology and Foreshore Geomorphology

Assessment date: November 1996

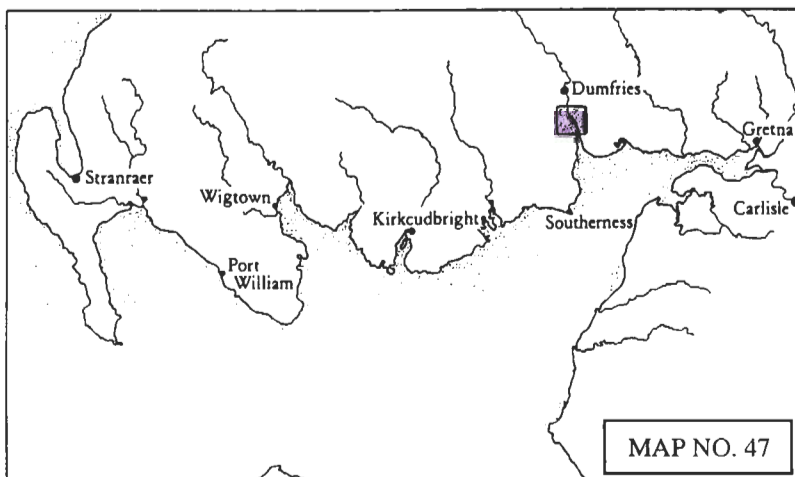
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KIRKCONNELL MERSE TO DUMFRIES
NGR: NX 96-100/70-75



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. 47

MAP 47: EROSION

1. East of GIBBON HILL FARM to GREEN MERSE

NY 984 710

2km

Accreting and eroding

Incised channels occur along the edge of marshland. These have accreting mud banks. Slope failure is also occurring. In general the marsh is trapping sediment with loss of sediment in other parts.

2. GREEN MERSE to the COLL WEIR, DUMFRIES

NY 972 740

5km

Stable

The west bank of the River Nith protected by flood banks in parts. Reed beds on the river edge provide further stability to the river edge.

3. The COLL WEIR to west of WELL COTTAGE

NY 975 730

5km

Stable

The east bank of the River Nith protected by flood banks. Reed beds on the river edge are providing additional stability.

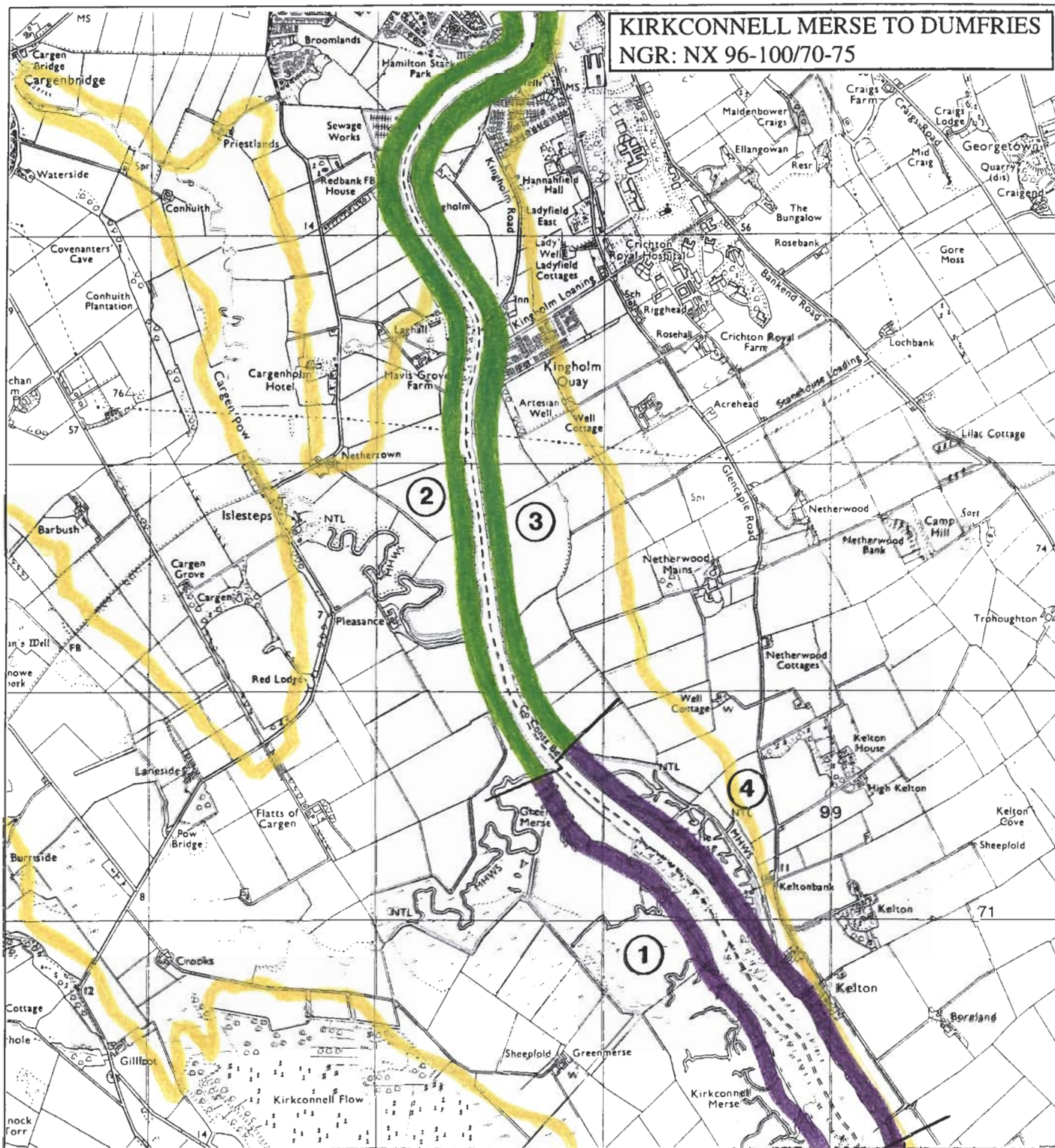
4. West of WELL COTTAGE to south of BORELAND

NY 986 710

2.0km

Both accreting and eroding

This unit includes a tract of marshland that is incised with narrow river channels. Sediment is being trapped by reedbeds in parts.

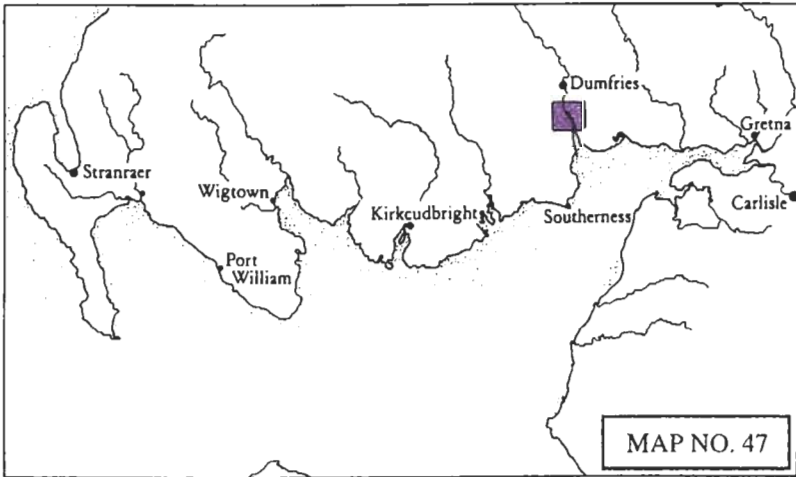


KIRKCONNELL MERSE TO DUMFRIES
NGR: NX 96-100/70-75

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: 09.10.96
 Scale 1:25 000



MAP NO. 47

MAP 47: BUILT HERITAGE AND ARCHAEOLOGY

Sites on the Coast Edge & Foreshore

NX 9737 7330

LAGHALL

Quay

19th century

Fair

Monitor

NX 9749 7364

KINGHOLM QUAY

Quay & Quayside Buildings

Statutory Listed Building

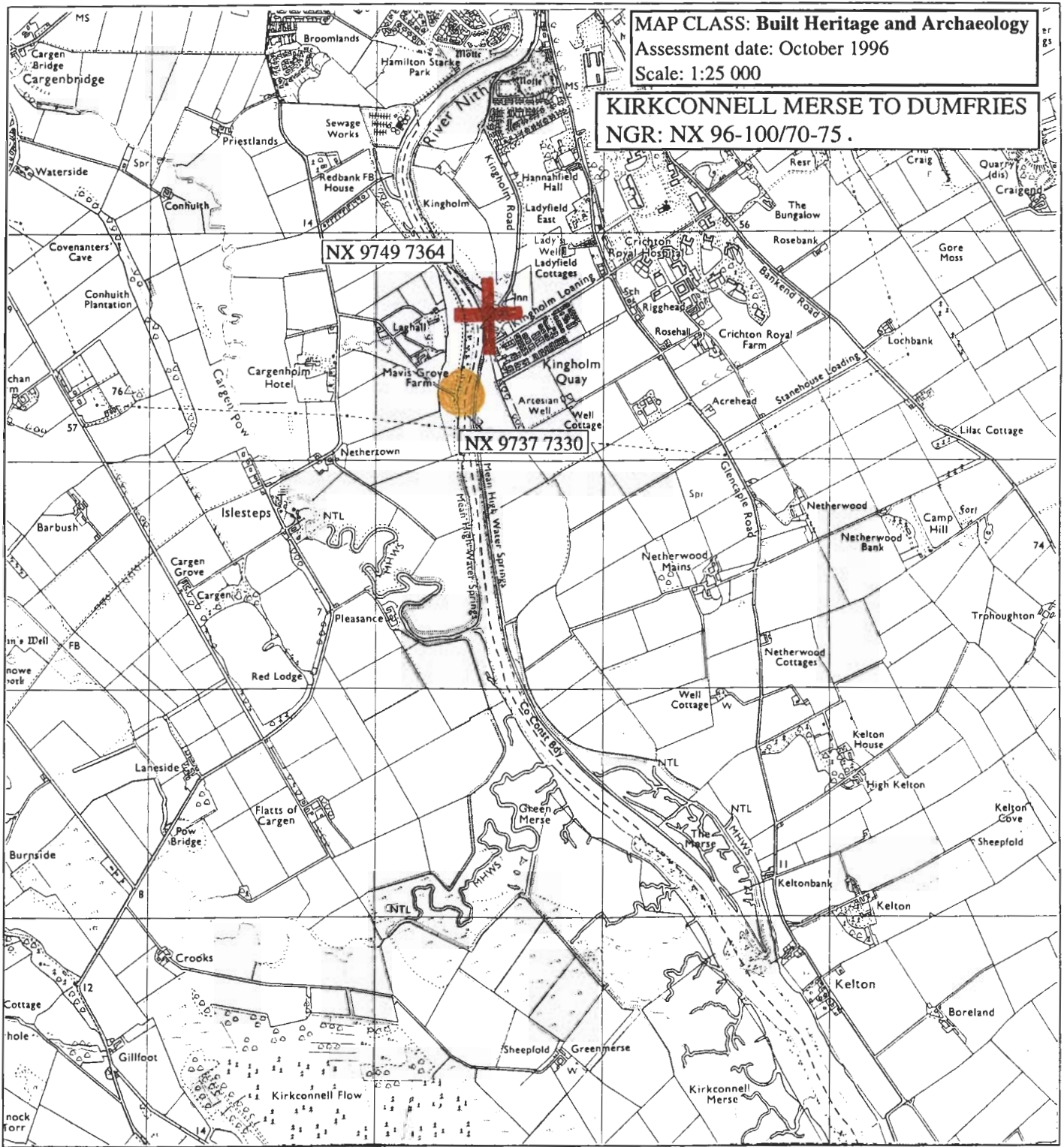
19th century

Good

Nil

Sites in the Hinterland

None



MAP CLASS: Built Heritage and Archaeology
 Assessment date: October 1996
 Scale: 1:25 000

KIRKCONNELL MERSE TO DUMFRIES
 NGR: NX 96-100/70-75.

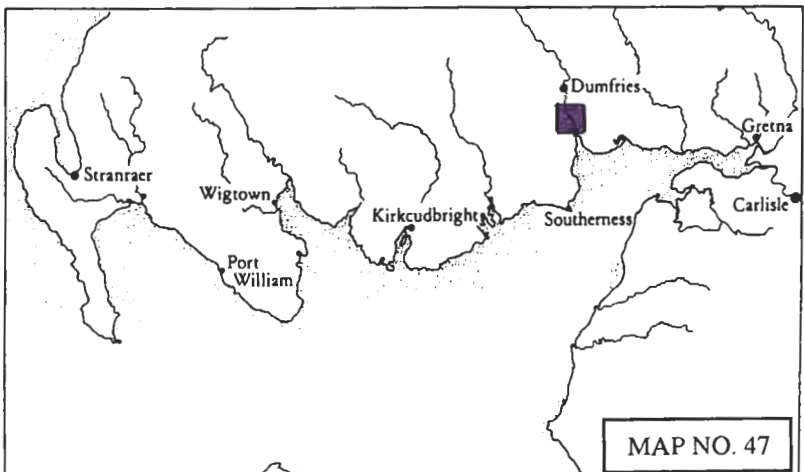
NX 9749 7364



NX 9737 7330

KEY

Site location	Symbol	Colour	Significance
NGR ref. - eg.	Roundel - Solid, (or area)	Red	Protected Ancient Monument
	Cross	Red	Listed Historic Building
NX 143 368	Roundel - Open, (or area)	Red	Monument formally proposed by Historic Scotland for designation
	Roundel - Solid, (or area)	Yellow	Other known Ancient Monument
NMRS ref. - eg.	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



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