

MAP 8 HEADWELL TO ROFFERT ROCK

Built heritage and archaeology - The discovery of a mesolithic settlement at Morton, which between 8000-6000 years ago was a small peninsula jutting out into the shallow waters at the mouth of the Tay but now lies some two kilometres inland (NO465260) is indicative of the potential of the mouth of the Tay Estuary (Wickham Jencs 1994, 67-68). Although much altered since the end of the last ice age, today's coastline, where sand and mud dominate the wide intertidal zone, provides a favourable burial environment for archaeological remains, and the foreshore is covered with wooden stakes and piles. These can be broadly categorised into large diameter (30cm.) circular piles arranged in linear fashion, and thinner, pointed stakes, also apparently laid in line (centre of area NO480285). These features are thought to be glider traps or, in some cases, possibly fish traps, but more work would be needed to confirm this identification. Other foreshore features of interest are the collapsed remains of an old breakwater or quay to the east of the existing Tayport Harbour (NO461288-461291; Site description 4), the collapsing hulk of a carvel planked boat nearby to this breakwater (NO46152902; Site description 4), and the Listed Building, and timber frame lighthouse which is marked on the O.S. 1:25,000 as 'the Pile' (NO46302930 Site description 4). The existing harbour at Tayport is of significance and, like many of the small harbours in Fife, is in poor condition (NO42NW58; Site description 4) and should be surveyed and monitored periodically. Wartime defences feature widely along this coastal sector. Behind the foreshore, a line of tank traps can be seen (NO42NE73) although in places the blocks remain covered by sand, and two pillboxes protect the coast edge near Tayport meteorological station (NO47272775; NO47152778). There is documentary evidence that a castle stood at Ferry Port on Craig (NO42NE1) since the 16th Century although 19th Century accounts and the O.S. 6 inch map (1854) give conflicting locations for the position of this castle, as variously, 'said to be nearly opposite the gas-works, is now below high water mark' or well within the 19th Century town boundaries (RCAHMS 1933). However, no traces were found of Tayport Castle and the position given in the NMRS is in a private garden which stands some way back from the coast edge (NO45672907).

Hinterland geology and coastal geomorphology; Erosion class-The north coastline of the outer Tay estuary has a foreshore composed of sand which narrows as the coastline progresses westwards. The hinterland consists of a small area of dunes and dune platform. The coast edge of the outer estuary is undercut and sand cliffs form on the dunes (Erosion Units 1,2). *Toppled trees occur where the forest reaches the coast edge and some sections are partially stabilised with defences and vegetation.* The dune and links surface extends far inland near Tayport Bay, a wide mud and silt estuarine flat which is experiencing accretion encouraged by marsh and reed beds at the coast edge. The intertidal area has sand bars and tidal banks of shingle. West of the bay muds dominate the foreshore, however, in the vicinity of the caravan park there is erosion of the loosely consolidated sand deposits at the coast edge. West of the caravan park, the coast edge is stabilised by manmade piers and defences associated with Tayport Harbour which is generally stable with mud accretion inside the main basin. However, the rear harbour wall is in bad repair as drainage is concentrated at the back of the wall causing scour erosion which has dislodged the stone blocks of the wall (Erosion Unit 8,9).

**MAP 8 HEADWELL TO ROFFERT
ROCK**

EROSION UNITS

1
NO49352828
0.9 km
Eroding or stable
The coast edge is undercut and erosion has progressed inland beyond the antitank blocks. To the west dolerite boulders help to stabilise the edge.

2
NO48582819
0.5 km
Definitely eroding
Erosion of the coast edge and the upper foreshore has exposed antitank blocks on the foreshore 30-40 metres from their original position at the back of the beach. The coast edge has retreated landward to the forest, toppled trees line the top of the foreshore. The erosion has been attributed to bad storms and previous shipping activities in the Tay.

3
NO47702788
1.3 km
Both accreting and eroding
Sand is accumulating on the upper foreshore burying the antitank blocks at the coast edge. Old deflation hollows caused by wind erosion occur in the high dunes, however they are now stable. The active dunes at the coast edge show signs of advancing marram grasses. To the west localised undercutting and trampling erosion has exposed part of the line of antitank blocks.

4
NO46992790
0.6 km
Stable
Mud flats stabilised with reeds and marsh occur on the upper foreshore. To overcome track erosion at the coast edge antitank blocks are positioned perpendicular to the foreshore.

5
NO46692835
0.6 km
Definitely eroding

The edge of the caravan site is composed of loosely consolidated sandy glacial deposits which are easily undercut by wave action. The erosion is most noticeable at the stream outlet. To combat erosion dolerite blocks and rubble are placed along the edge.

6
NO46452855
1.1 km
Stable
The coast edge is manmade consisting of pier walls and in front of the houses, seawalls, gabion baskets and boulders protect the edge.

7
NO45952918
0.5 km
Accreting or stable
The pier walls at the entrance to the harbour are stable under typical wave conditions. Mud is accreting in the harbour due to increased wash of fines into the Tay from agricultural practices.

8
NO45892902
0.2 km
Definitely eroding
The rear harbour stonewall is undergoing serious erosion. Stone blocks have been dislodged causing parts of the wall to collapse. Drainage from the tarmac pathways of the housing close to the harbour have increased the volume, speed and pressure of the water at the back of the wall. The concentration of water behind the wall has caused scour erosion.

9
NO45732921
0.3 km
Eroding or stable
The west harbour wall has localised scour erosion associated with runoff from the landward

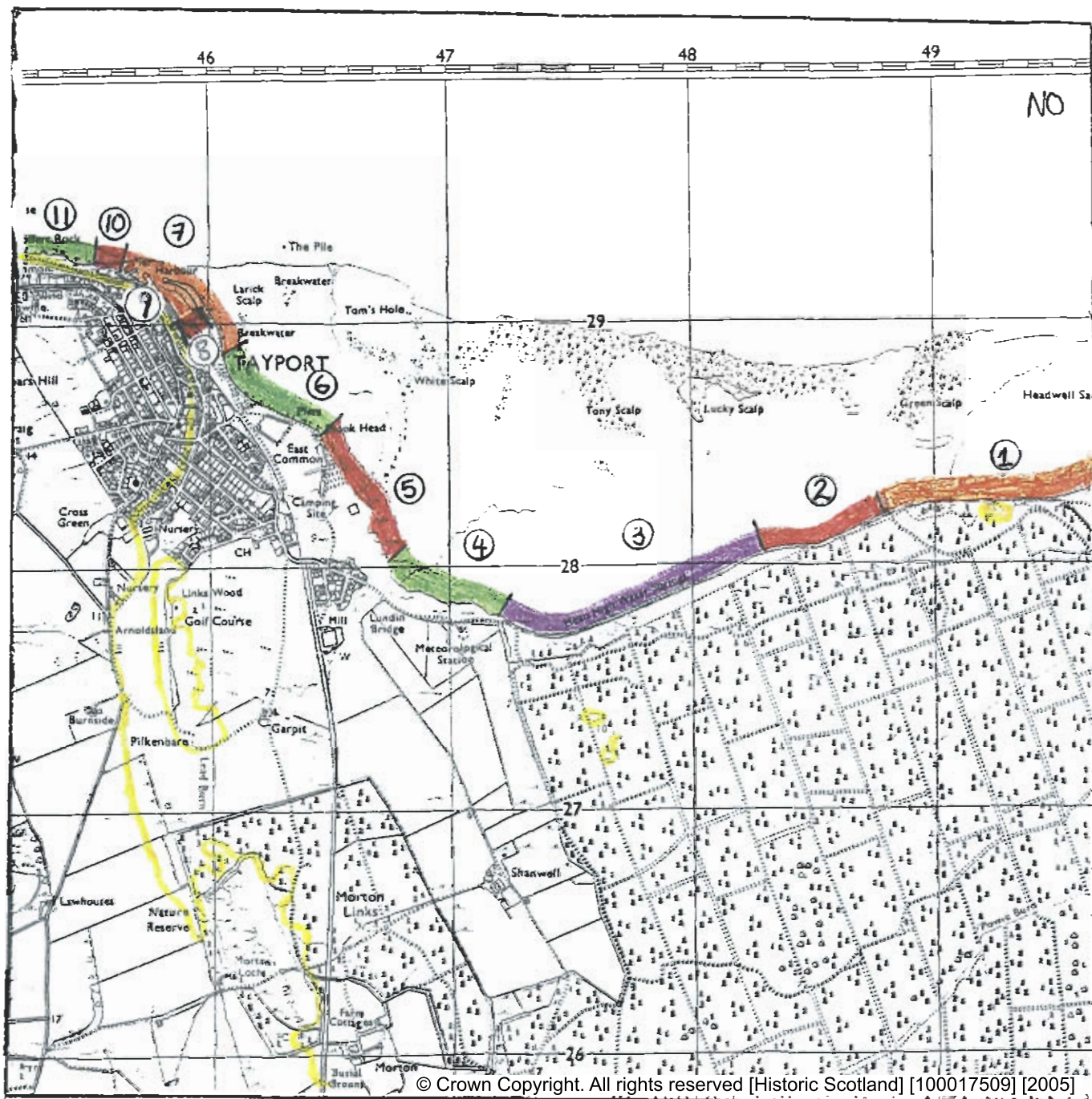
side.

10
0.4 km
NO45642925
Definitely eroding
The low irregular coast edge is undercut. In the east there is a collapsed wall at the coast edge. Adjacent to this wall tipped wastes and dolerite boulders have been put in place to protect the edge.

11
NO45332931
0.5 km
Stable
Resistant igneous rock stabilises the coast edge and the foreshore.

MAP CLASS: EROSION
 (Assessment date: 5. 14 October 1996)
 NO 42/52. Scale 1:25,000

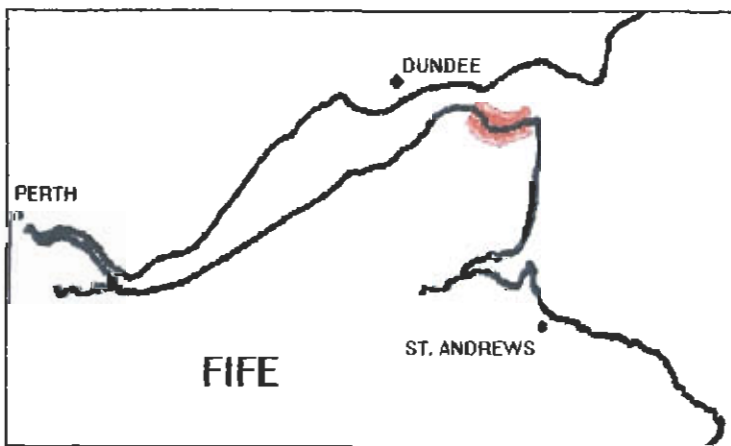
HEADWELL TO ROFFERT ROCK



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KEY

Erosion class	Staedtler colour	Colour
Definitely Accreting	ultramarine blue	
Accreting or stable	light blue	
Stable	light green	
Eroding or stable	orange	
Definitely Eroding	scarlet	
Both accreting and eroding	purple	
No access	black	
Land below 10m	canary yellow	



**MAP 8- HEADWELL TO ROFFERT
ROCK**

GEOLOGY UNITS

- 1**
NO49622828
0.2 km
Mainly alluvial/marine muds
Low edge (< 5 metres)
Blown sand
Tay estuarine muds and silts have fringing sand and shingle beaches on the upper foreshore. Low dunes are situated along the edge.
- 2**
NO49192829
0.6 km
Mainly alluvial/marine muds
Human disturbance
Blown sand
Large dolerite blocks and rubble are positioned along the coast edge. The coast edge consists of high dunes. The intertidal zone is associated with shingle bars and islands.
- 3**
NO48582819
0.5 km
Mainly alluvial/marine muds
Low edge (<5 metres)
Blown sand
There is a low undercut forest edge adjacent to a narrow upper foreshore of silty sands. The hinterland consists of blown sand deposits, old dune ridges can be identified within the forested area.
- 4**
NO48052795
0.6 km
Mainly alluvial/marine muds
Low edge (<5metres)
Blown sand
Muds dominate the foreshore, with fringing silty sands on the upper foreshore. Shingle bars occur in the intertidal zone. Dunes with marram grasses are situated along the coast edge.
- 5**
NO47382785
1 km

Marsh
Low edge (<5 metres)
Blown sand
The foreshore consists of flat lying wet muds. On the upper foreshore the muds are stabilised to form flats with marsh and reed beds. The hinterland consists of a wide area of low lying links with blown sands.

6
NO46882791
0.3 km
Marsh
Low edge (< 5 metres)
Alluvium with raised beach and marine deposits
Thick alluvium muds and marsh compose the foreshore. Tidal indentation of the low lying hinterland has created an area of alluvial deposits. Raised beach deposits occur beyond.

7
NO46692835
0.6 km
Mainly alluvial/marine muds
Human disturbance
Alluvium with blown sand
The low coast edge of the caravan site is composed of blown sands. Human disturbance, involving the tipping of concrete and rubble help to protect the edge.

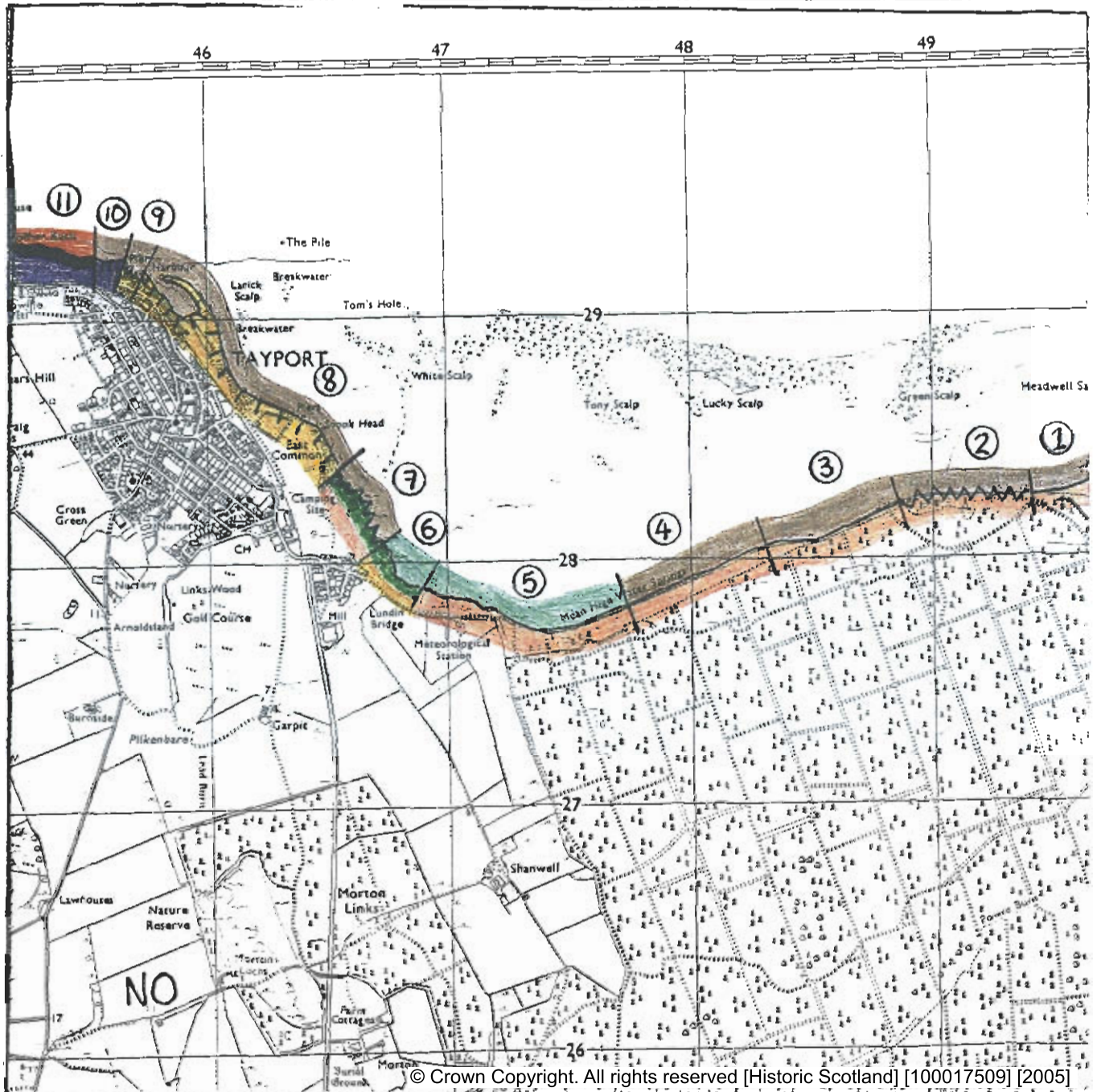
8
NO46122882
1.4 km
Mainly alluvial/marine muds
Manmade barrier
Raised beach and marine deposits
A concrete promenade forms the frontage of the common. The housing is protected by gabion baskets and seawalls. A fringing shingle and rubble beach occurs on the upper foreshore. The stone piers rise to 6 metres at the harbour entrance.

9
NO45652931
0.2 km
Alluvial /marine muds

Human disturbance
Raised beach and marine deposits
Tipped concrete slabs and bricks are placed at the coast edge. The foreshore is composed of alluvial muds with a fringe of coarser deposits.

10
NO45562932
0.1 km
Alluvial /marine muds
Manmade barrier
Drift, boulder clay over visible rock
A stone wall is situated at the coast edge. The foreshore is composed of muds with coarse angular igneous cobbles and boulders on the upper foreshore. The hinterland geology consists of Lower Devonian basalts overlain with boulder clay.

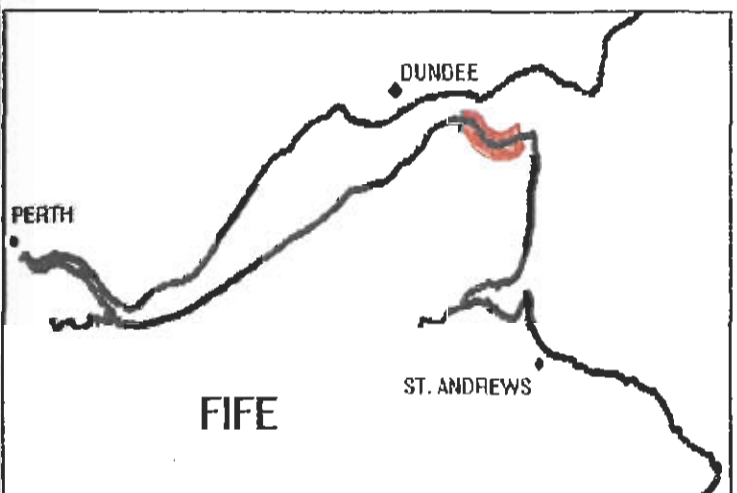
11
NO45362933
0.5 km
Mainly rock platform
Cliff (>5 metres)
Drift, boulder clay over visible rock
The resistant rock promontories and the irregular rock platform on the foreshore consist of Lower Devonian basalts. There are intervening shingle beaches on the upper foreshore.



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Hinterland Geology	Standard colour	
Drift, boulder clay	light grey	
Drift, boulder clay over visible rock	Caran D'ach'ie violet	
Raised beach and marine deposits	golden brown	
Blown sand	peach	
Glacial sand and gravel	magenta	
Alluvium	grass green	
Coast edge		
Low edge (< 5m)	thin black line	
Cliff (> 5m)	solid black line	
Man made barrier	black line with spurs	
Shingle beaches	small circles	
Human disturbances	black carats	
Coastal Geomorphology		
Mainly rock platform	vermillion	
Mainly sand	indigo	
Mainly alluvial/marine mud	sienna brown	
Marsh	tree green	

KEY



**MAP 8 - HEADWELL TO
ROFFERT ROCK**

**BUILT HERITAGE AND
ARCHAEOLOGY UNITS**

*Sites behind the coast edge
(TAYP.)*

NO 45992873
8 GREENSIDE PLACE
HOUSE
LISTED BUILDING
18th Century
Not seen
Nil

NO45702916
INN COTTAGE & ICE
HOUSE, 9&11 INN ST
HOUSE
LISTED BUILDING
19th Century
Not seen
Nil

NO45642921
17&21 INN ST
HOUSE
18th Century
Not seen
Nil

NO45552917
23 ALBERT ST
HOUSE
LISTED BUILDING
19th Century
Not seen
Nil

NO42NE35
TAYPORT, TAY STREET,
STATION
RAILWAY STATION
Uncertain
Not seen
Nil

NO42NE27
TAYPORT, DALGLEISH
STREET, BELL ROCK
TAVERN AND HOUSE
PUBLIC HOUSE; HOUSE
Uncertain
Not seen
Nil

NO42NE28
TAYPORT, ALBERT
STREET, 7-21 (1-16) ISLA
PLACE

HOUSES
LISTED BUILDINGS
Uncertain
Not seen
Nil

NO42NE30
TAYPORT, ALBERT
STREET, ARGYLE HOUSE
HOUSE
Uncertain
Not seen
Nil

NO42NE39
TAYPORT, GAS LANE,
GAS WORKS
GASWORKS
Uncertain
Not seen
Nil

NO42NE55
TAYPORT, DALGLEISH
STREET
SCULPTURED STONE
Uncertain
Not seen
Nil

*Sites on the coast edge and
foreshore*

NO42NE73
LUNDIN BRIDGE ANTI-
TANK BLOCKS
(Intermittent)
20th Century
Fair
Nil

NO49292854
Navigation marker for gas
pipeline
20th Century
Fair
Nil

NO49152823
Navigation marker for gas
pipeline
20th Century
Fair
Nil

NO480285; NO470285
Area of wooden posts: grid
lines of large dia. posts set in
concrete (glider traps). Thin
pointed stakes in line (fish-
traps poss.)

Uncertain
Poor
Survey

NO42NE54
LUCKY SCALP
FOLLY
19th Century
Not seen (destroyed in 1979)
Nil

NO47272775
Hexagonal concrete pillbox
20th Century
Fair
Nil

NO47152778
Hexagonal concrete pillbox
20th Century
Fair
Nil

NO47302798
Metal box frame on shore
19th - 20th Century
Fair
Nil

NO47172777
Corroding metal frame
19th-20th Century
Poor
Nil

NO47012780
Corroding metal frame
19th-20th Century
Poor
Nil

NO46312858
Lines of wooden piles
adjacent to coast edge
Uncertain
Poor
Nil

NO46302930
THE PILE LIGHTHOUSE
LIGHTHOUSE
LISTED BUILDING
19th Century
Poor
Survey and monitor
**See site description 4*

NO461288-461291
Collapsing stone breakwater
Uncertain
Poor
Survey
**See site description 4*

NO46152902
Wreck of small boat
20th Century
Poor
Survey
**See site description 4*

NO46332858
Lines of wooden piles on
foreshore
Uncertain
Poor
Survey

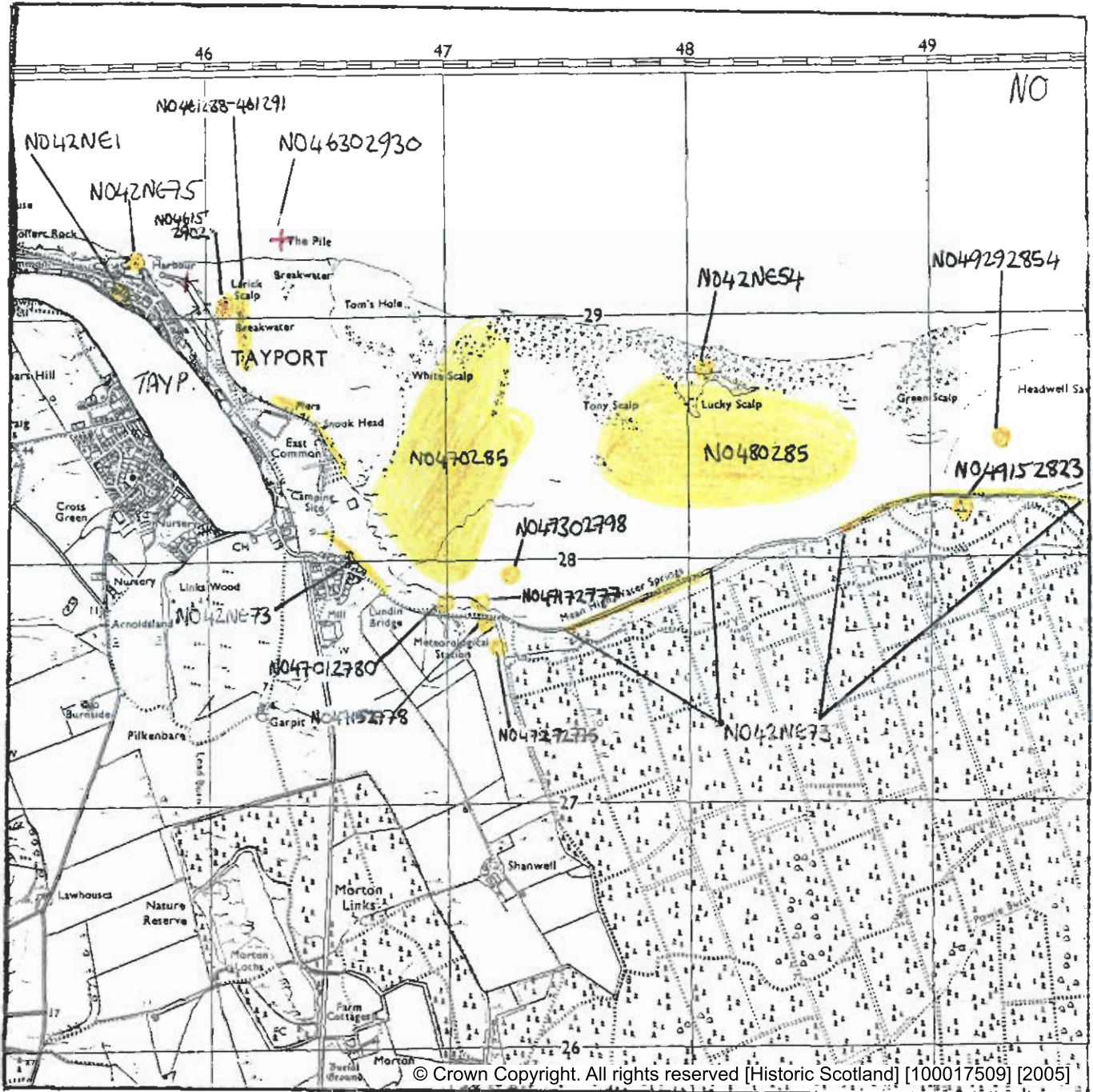
NO42NE58
TAYPORT, HARBOUR
HARBOUR
LISTED BUILDING
Poor
Survey and monitor
**See site description 4*

NO42NE75
TAYPORT, OLD HARBOUR
HARBOUR AND CRANE
19th Century
Poor
Survey/monitor
**See site description 4*

NO42NE1
TAYPORT CASTLE
CASTLE
16th Century
Not seen
Nil

MAP CLASS: Built Heritage and Archaeology
 (Assessment date: 5. 14 October 1996)
 NO 42/52. Scale 1:25,000

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KEY

Site location	Symbol	Staedtler colour	Significance
	solid roundel	carmine	Protected Ancient Monument
NGR e.g.	cross	carmine	Listed Historic Building
NO12345678	open roundel	carmine	Monument formally proposed by Historic Scotland for designation
	solid roundel	yellow ochre	Other known monument
NMRS e.g.	dashed outline	yellow ochre	Designed landscape
NO28NW35	open roundel	yellow ochre	Undesignated wreck
	area	green	Insufficient information, more work needed (no access, or not walked)
	area	blue	Probably archaeologically sterile

