WEXFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Kilmore Quay**
Other names used for site	Forlorn Point; Crossfarnoge
IGH THEME	**IGH5 Precambrian**
TOWNLAND(S)	**Crossfarnoge, Nemestown**
NEAREST TOWN/VILLAGE	**Kilmore Quay**
SIX INCH MAP NUMBER	**51, 52**
ITM CO-ORDINATES	**696190E 603130N (Crossfarnoge)**
1:50,000 O.S. SHEET NUMBER	**77 GSI BEDROCK 1:100,000 SHEET NO. 23**

Outline Site Description
Coastal exposures east and west of the harbour at a prominent headland on the south Wexford coast.

Geological System/Age and Primary Rock Type
Precambrian age pale-grey gneiss and schist bedrock, part of the Kilmore Quay Group (Rosslare Complex), cross-cut in places by dark-coloured diorite dykes. Pleistocene raised beach and head deposits occur in cliffs.

Main Geological or Geomorphological Interest
This is the best locality for exposures of the Kilmore Quay Group (the location other is south of St. Helen's near Rosslare Harbour). Bedrock is principally comprised of thin bands of gneiss and dark-grey schist. The rocks were originally sandy and muddy sedimentary rocks, prior to being heavily deformed and metamorphosed during successive episodes of deformation affected these rocks prior to the injection of the dykes. The Rosslare Complex rocks were severely faulted and folded around 480 million years ago, resulting in the Kilmore-Whilkeen Shear Zone that can be traced along the southern margin of the Kilmore Quay Group. The Saltees Granite, seen in contact with the metamorphic rocks at very low tide east of the harbour, was emplaced during this period of deformation. The Rosslare Complex represents the exposed basement of the microcontinent of Avalonia. Avalonia collided with the continent of Laurentia (NW Ireland) between c. 450 and 380 million years ago, with the closure of the Iapetus Ocean during one of the great tectonic episodes to affect Ireland - the Caledonian Orogeny. A precise age for the Rosslare Complex remains a topic of discussion. Radiometric dating of gneiss minerals indicates the rocks over 620 million years ago. The cliffs to the east of the harbour expose a section of the Courtmacsherry Formation raised beach (CFB) that has been documented at numerous sites along the south coast of Ireland. The cliffs expose an upward sequence from bedrock platform, through coarse shingle, head, Irish Sea till, outwash sediments, and inland till. The CFB has been dated at Wood Village, Co. Wexford to about 53,000 years ago.

Site Importance – County Geological Site; recommended for Geological NHA
This important County Geological Site is the type locality for the Kilmore Quay Group, and is important to the understanding of the geological origin of southeast Ireland (Avalonia), and therefore should be recognised as a geological NHA. A significant area of the site is located in the Saltee Islands SAC (000707).

Management/promotion issues
The home of a Coastguard and Lifeboat Station and fishing quay since the 1800s, Kilmore Quay was redeveloped in the 1990s. A popular visitor destination, the erection of a public information sign alongside the coastal path could be a valuable asset in promoting the geological heritage of this and adjacent geo-heritage sites (Ballyteigue Burrow, St. Patricks Bridge, Saltee Island, Carnsore Granite) and seascapes. A Slí Charman coastal path signboard at the harbour includes some information on the geology of south Wexford. The Kilmore Quay Memorial Garden hosts several inscribed limestone and granite plaques, plinths and sculptures.

Diorite dyke (dark) in gneiss on Forlorn Point. Kilmore Quay Marina in background to east.

Rust coloured head (sand, soil) overlying raised beach deposits resting on bedrock platform.

Carnsore Granite sign at Kilmore Quay Memorial Garden to those lost at Sea.

Gneiss outcrop on beach at Nemestown, east of the slipway at Olinda looking west.


Richfield
Park
Moated Site and Castle
Killag
Church
Ballyhary
Knocknoran
Reservoir
Gallagh
Ballyseskin
Boleys Cross Rds.
Moated Site
Lannagh
Kilmore
Pollrane
Ballask
Soughane
Sarshill
Newtown
Graveyard
Ballycleary
Inish And Ballyteige Slob
Grange
Rickardstown
Castle
Ballyhealy
Ballyhealycastle
Neytown
Ringbaun
Kilturk
Clongaddy
Cross Rds.
Libgate
Chapel
Millroad
Ballyorangans
Ballyteige
Castle
R739
Beak
Nemestown
Kilmore Quay
Cé na Cille Móire
St Patrick's Rock
Kilmore Quay
Rock
Water Witch Rock
Crossfarnoge or Forlorn Point
Rinn Chrois Fhearnóg
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Kilmore Quay
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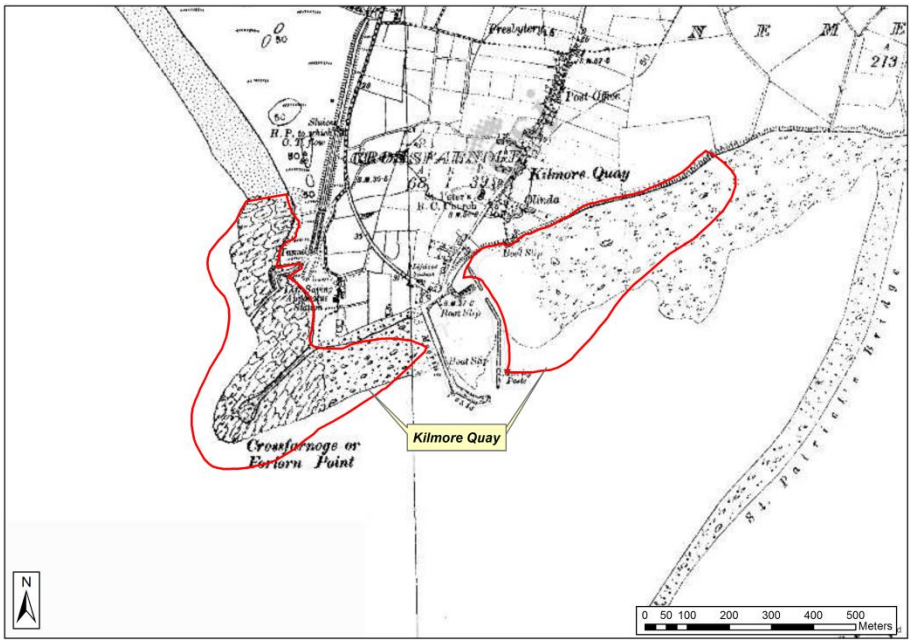
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