

## CORK - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Rock Farm Quarries</b>		
Other names used for site	Cork Golf Club, Little Island Quarries		
<b>IGH THEME</b>	<b>IGH3 Carboniferous to Pliocene Palaeontology, IGH8 Lower Carboniferous, IGH15 Economic Geology</b>		
<b>TOWNLAND(S)</b>	<b>Wallingstown, Ballytrasna</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Glanmire</b>		
<b>SIX INCH MAP NUMBER</b>	<b>75</b>		
<b>ITM CO-ORDINATES</b>	<b>575700E 571850N (last remaining marble quarry)</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>81</b>	<b>GSi BEDROCK 1:100,000 SHEET NO.</b>	<b>25</b>
<b>GIS CODE</b>	<b>CK078</b>		

### Outline Site Description

This site comprises a number of extensive quarries cut into a relatively low-lying island along the northern side of Lough Mahon and the River Lee Estuary, which have been landscaped as cliff and other aesthetically impressive features into the grounds of Cork Golf Club.

### Geological System/Age and Primary Rock Type

The bedrock comprises a relatively complex, fault-bound sequence of Lower Carboniferous (Mississippian) 359-323 Ma fossil-rich, limestones of the Little Island and Clashavodig Formations, as well as Waulsortian Limestones and marbles of the Cork Red Marble Formation, all deposited in the South Munster Basin.

### Main Geological or Geomorphological Interest

The Rock Farm Quarries have not been operational for some time, but historically Rock Farm Quarry West and Rock Farm Quarry East produced stone for aggregates, chippings, lime dust, and drainage stone, all in the early eighteenth century. As well as this, they were a source of much of the Cork Red Marble used as decorative stone all over the world. The quarries were also a source of many fossil specimens figured in palaeontological monographs. The sections in these quarries provide the best information about the upper part of the Carboniferous Limestone succession in the Cork Syncline.

The lowest exposures in Rock Farm Quarry West are mudbank limestones of the Little Island Formation, with a shelly fauna, including goniatites. Foraminifera faunas from this unit are of Visean age. These are stratigraphically some 250 m above the Cork Red Marble Formation. The upper part of the formation at the southern end of Rock Farm Quarry West is also of Visean age and is notably crinoidal, with spar-filled cavities rare.

The overlying Clashavodig Formation is exposed in Rock Farm Quarry East, and comprises skeletal packstones but other levels of grainstones, including oolites, occur. The lower part, at the north of the prominent rock wall, consists of skeletal packstones. The rock wall itself is oolitic in parts, and burrowed. Much of this rock is karstified, with enlarged fissures and extensive cavities exposed.

Both quarries have been landscaped into the golf course, which took over the grounds hosting the quarries in 1897. To allow play, many craters and hollows had to be filled with waste stone and topsoil, producing a fast draining, links-like turf, still an attractive feature to this day. A number of course features and hole names reflect the quarrying history, including three lime kilns, the quays which allowed boats to transport the limestone and marble extracted from the quarries, many rocky crags and rock walls, the site of the old crusher, the tar plant, and the site of a magazine.

### Site Importance – County Geological Site; recommended for Geological NHA

This County Geological Site is an important representative site exhibiting fresh exposure of several limestone units, as well as the best remaining exposure of Cork Red Marble. Historically, this site was an economic mineral deposit of considerable importance to Ireland.

### Management/promotion issues

A round of golf would allow exploration of the quarrying history of the locality, as the golf course's features inherently illustrate the various features of the site, but the quarries are not particularly suitable for general promotion; such promotion would involve active partnership with Cork Golf Club.



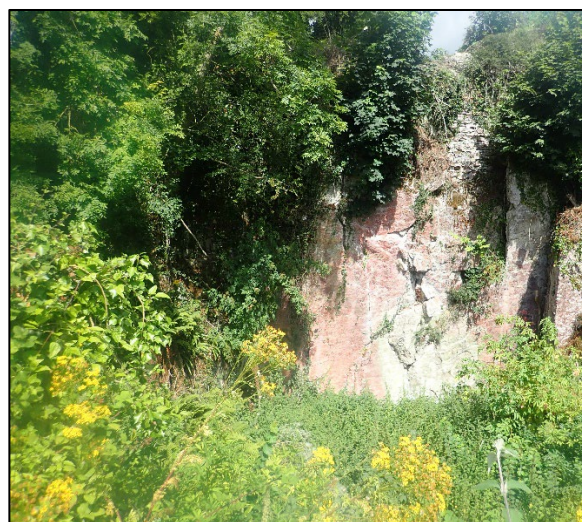
Massive crinoidal limestone of the Little Island Formation exposed at Rock Farm Quarry West.



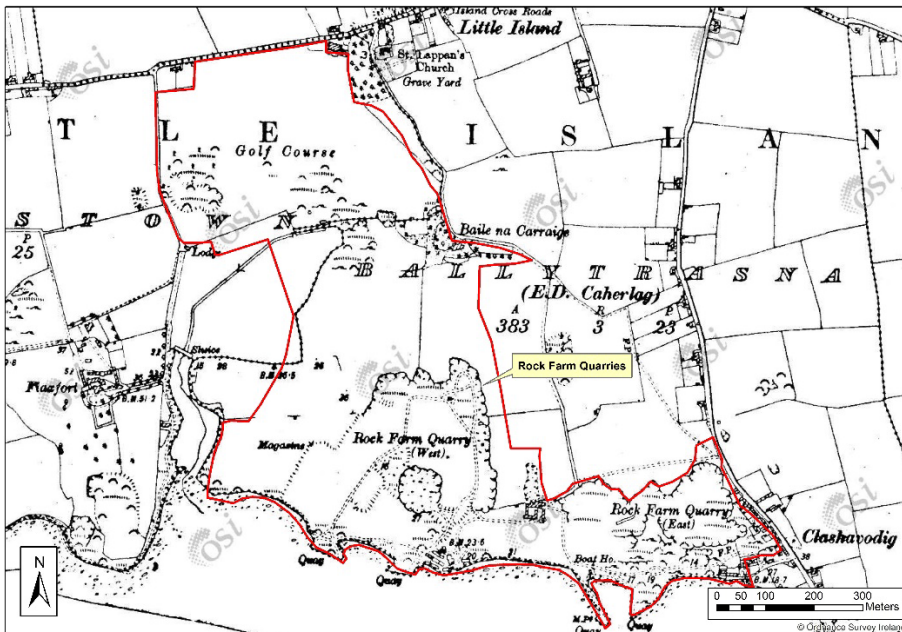
The Clashavodig Formation, with the Little Island Formation at the rock wall in the distance.



Clay-filled karstic cavity in Rock Farm Quarry East.



The Marble Quarry in the centre of the course.



The screenshot shows the Cork Golf Club website with a navigation menu including Home, Club, Course, Legends, Visitors, News, Membership, Tee Booking, Contact Us, and Members. Two main content areas are visible: one on the left with a green header and text about quays, and one on the right with a black and white photograph of a quayside and text about Spion Kop.

**The Quays** on the right of the 5th Hole was built to allow boats transport the limestone extracted from the quarries. Old paths leading to the quays are still visible on the course if you look carefully.

**Spion Kop** at the 6th hole is called after a rocky hill in South Africa, the site of a battle during the Second Boer War on the 24th January 1890. It was the caddies lookout point when caddies were a regular feature at Cork Golf Club.

Detail on some of the course features from Cork Golf Club's website.



Detail on Cart at one of the golf course signboards.