

SOUTH DUBLIN - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Dodder Terraces
Other names used for site	
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Kiltipper, Ballymace, Friarstown Upper, Bohernabreena, Killininny, Tallaght, Tymon South, Knocklyon, Templeogue, Oldbawn
NEAREST TOWN/VILLAGE	Tallaght
SIX INCH MAP NUMBER	21, 22, 24, 25
ITM CO-ORDINATES	709960E 726430N (centre of Dodder channel at Oldbawn)
1:50,000 O.S. SHEET NUMBER	50
GSi BEDROCK 1:100,000 SHEET NO.	16

Outline Site Description

The Dodder Terraces comprise a series of flat-topped, elevated terraces much higher than the current Dodder River, but which form what was the river floodplain during the last deglaciation at the end of the last ice Age.

Geological System/Age and Primary Rock Type

The Dodder channel is formed in an area of glacial till of varying depths, with portions of bedrock outcrop or subcrop along its stretch. The till was deposited at the maximum of the last Ice Age. The terraces on either side of the channel were formed during deglaciation at the end of the last Ice Age, by meltwater deposition along the edge of the deglacial Dodder River.

The bedrock in the locality is varied, with Ordovician metasediments underlying most of the high ground south of Bohernabreena, and bedded 'Calp' limestone in the northern, lowland portion.

Main Geological or Geomorphological Interest

The sand and gravel terraces of the Dodder River record the deglacial retreat of the ice sheet through south Dublin at the end of the last glaciation. Well-defined suites of glaciofluvial and delta terraces occur along the valley between Ballinacroeny Lower and Templeogue. They are linear forms and are generally subparallel to the meanders of the river, though some of the highest examples at Kiltipper are isolated fragments.

All of these deposits are genetically related to the deglaciation of a prominent valley and its subsequent dissection by extraglacial meltwaters. The terraces are dominated by sands and gravels derived from Lower Carboniferous limestone. Their well drained nature means they generally form productive grassland.

Site Importance – County Geological Site

This is a location with good potential as a teaching site on glacial meltwater deposition, as the feature is accessible and easily viewed from both the R114 road at Bohernabreena and the N81 at Templeogue-Tallaght. The terraces now form the 'green' parkland beside the river in these latter localities.

Management/promotion issues

The roadside location of the feature means it is easily accessible, and the parks and walkways between Tallaght and Templeogue along the river mean the terraces form an active part of the recreational lifestyle in this area. Parking is available and a signboard in the park near Oldbawn Bridge, outlining the formation of the terraces and the deglacial Dodder channel, as well as the bedrock geology of the locality, may help promote the features.



The former floodplain level of the Dodder during deglaciation is clearly seen here at Tallaght.



Also at Tallaght, the Dodder channel, with gravel islets forming in the modern day river.



Part of the terraces in the public parkland at Oldbawn, adjacent to Oldbawn Bridge.



Part of the flat-topped terrace at Bohernabreena, beside the N81 road.



