

SOUTH DUBLIN - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Greenhills Esker		
Other names used for site	The Green Hills Esker		
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	Kilnamanagh, Tymon North		
NEAREST TOWN/VILLAGE	Templeogue		
SIX INCH MAP NUMBER	22		
ITM CO-ORDINATES	710514E 729108N (centre of feature)		
1:50,000 O.S. SHEET NUMBER	50	GSi BEDROCK 1:100,000 SHEET NO.	16

Outline Site Description

The Greenhills Esker includes a large accumulation of sands and gravels deposited both under the ice sheet and at its margin as the ice withdrew northwestwards across south Dublin at the end of the last Ice Age.

Geological System/Age and Primary Rock Type

The Greenhills Esker is formed within an area of Lower Carboniferous limestone, but the esker itself is Quaternary in age, having been deposited either under or at the edge of the northwestward-retreating ice sheet during deglaciation after the last Ice Age.

Main Geological or Geomorphological Interest

Much of the esker itself has been removed by historical quarrying of its constituent sands and gravels, so only fragments of the feature remain intact. Where present, the esker ridge is a striking feature, standing proud of the flat landscape of till (boulder clay) upon which it was deposited. Intact portions adjacent to Tymon Lane and adjacent to the M50 are especially impressive. Here the esker is comprised of a raised, elevated ridge of sands and gravels.

The feature is also important in a historical and cultural sense as Greenhills itself is named after the sand hills that formed the esker. These have since been quarried away but many of them can be seen on the historical six inch sheets of the locality. The siting of Tymon Castle, now in ruins and nowadays the site of Tymon Park's Ranger Station, was purposely on top of one of the esker's highest hills, depicted beautifully in an eighteenth century painting by Gabriel Beranger.

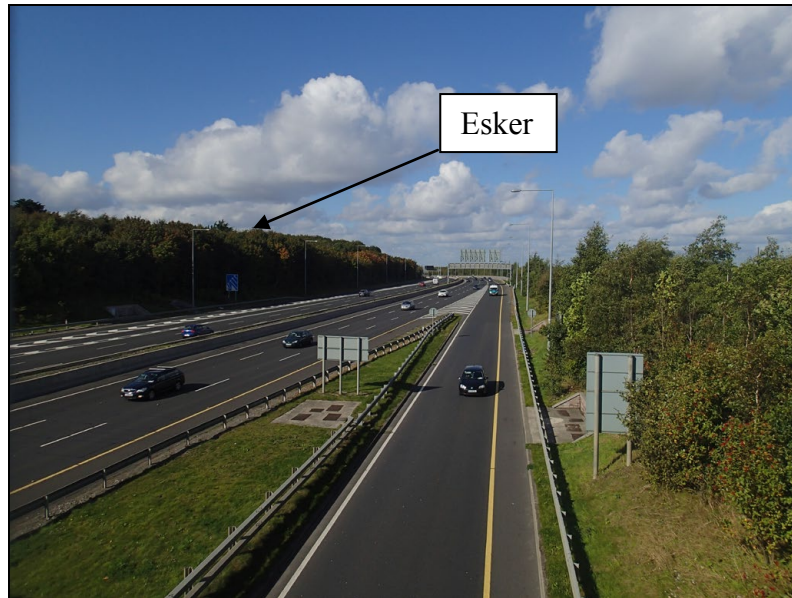
The esker feature is important in that it records faithfully the ice movement across this area of Dublin, which is along its orientation, *i.e.* northwest to southeast. Associated sands and gravels along the Greenhills Road, northeast of the esker are probably part of an associated ice marginal fan. The sands and gravels within the feature are comprised chiefly of limestone clasts.

Site Importance – County Geological Site

What remains of the feature is still a striking example of a high, dry sand and gravel ridge that stands proud of the surrounding landscape. This esker and the associated sands and gravels along the Greenhills Road seem to be a good example of a deglacial, meltwater-deposited complex, with portions deposited under the ice, and portions at the ice margin.

Management/promotion issues

This system comprises a well-defined landform sequence and should be listed as a County Geological Site. A signboard within Tymon Park, where the feature can be well seen and where there are already several signboards, might help promote the feature.



The Greenhills Esker covered in broadleaved woodland, alongside the M50 Motorway at Tymon North.



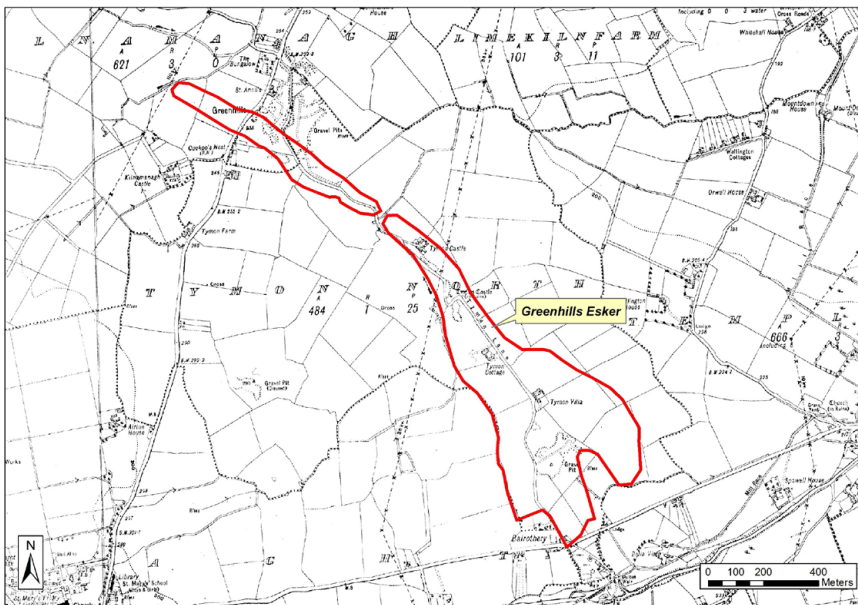
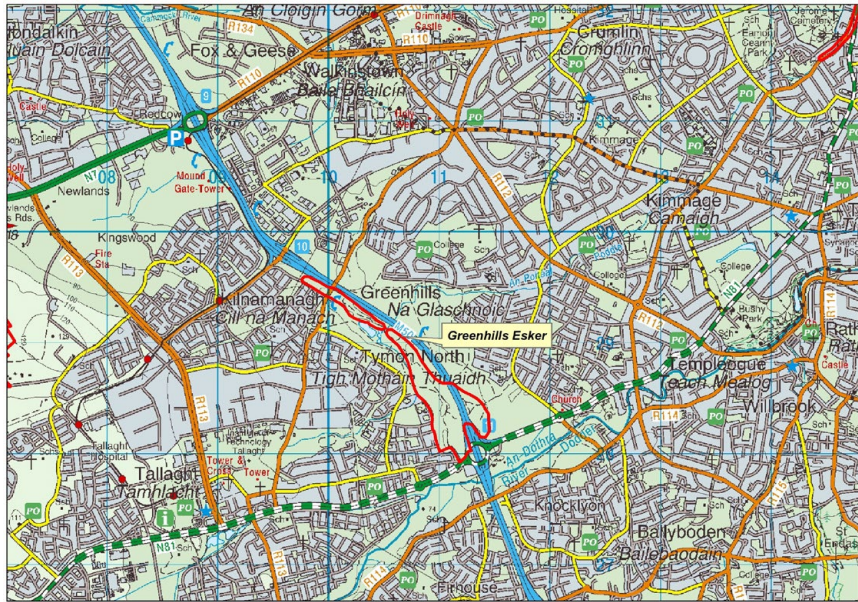
Some of the landscaped portion of the extant Greenhills Esker ridge, in Tymon Park just north of the Ranger Station.



A wooded portion of the esker near the National Basketball Arena.



Walks through and alongside the esker in the northeastern portion of Tymon Park.





Timmond Castle, which sat on a portion of the esker, depicted in the painting of the castle by Gabriel Beranger in the eighteenth century.