TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE

Bansha and Castle Mary Moraine and Outwash

Other names used for site

Bansha Moraine, Castle Mary Moraine, Castle Mary

outwash plain

IGH THEME IGH7 Quaternary

TOWNLAND(S) Numerous NEAREST TOWN/VILLAGE Cahir

SIX INCH MAP NUMBER 67, 68, 74, 75
ITM CO-ORDINATES 601640E 628940N

1:50,000 O.S. SHEET NUMBER 66, 74 GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

A broad expanse of sand and gravel occupying a triangular-shape area between Bansha, Golden and Caher.

Geological System/Age and Primary Rock Type

The site is underlain by Lower Carboniferous (Mississippian) limestone and calcareous shale bedrock. The moraines and outwash features are Quaternary in age, and formed during deglaciation at the end of the last Ice Age (*c.* 14,000 years ago).

Main Geological or Geomorphological Interest

The Bansha and Castle Mary moraine and outwash extends northwest to southeast between Bansha and Caher for a distance of 11 km, Sandstone-rich sands and gravels are prominent in the Bansha to Caher moraine. A tributary outwash system extending 10km from Golden joins the Bansha and Caher moraine just north of Caher. This limestone-rich sand and gravel moraine follows the River Suir.

The sand and gravel expanse is comprised of glacio-fluvial and glacio-lacustrine sands and gravels that form a landscape varying from gently undulating plains to hummocky terrain and ridges. Undisturbed layers of sediment exposed in the quarried faces of sand and gravel pits are well sorted and bedded, characteristic features of deposits laid down in braided rivers that issued from the front of an ice margin. A large glacial lake, Lake Aherlow, was impounded in the Glen of Aherlow at the close of the last Ice Age.

Site Importance – County Geological Site

The expansive moraine and outwash plain landforms at this site are key to the development of an understanding deglaciation episodes associated with the end of the last Ice Age, and to the wider understanding of the glacial geomorphology and the reconstruction of the glacial history of Late Midlandian ice masses in Ireland.

Management/promotion issues

The Glebe to Golden section of the Tipperary Heritage Way (National Waymarked Trail) follows a route along the moraine landscape, skirting the sand and gravel quarries at Ballydrehid (Silver Sands and Suirville (New Bridge). Exposed sections of the glaciofluvial deposits in disused sand and gravel pits could be preserved to provide a 'window' into the subsurface deposits of this landscape, for future research and community heritage interest.



Thick sand and gravel deposits exposed in pit at Ballydrehid, near railway line and River Suir.



Gravel and sand quarry (Silver Sands) on N24 Tipperary-Cahir road at Ballydrehid.



View northwards from River Suir bridge (New Bridge) at Suirville. Mound visible at sand and gravel on west bank (left).



Gentle outwash plain at Cloghleigh, south of Golden.



Fine sand layers and coarse sand layers in pit face at Ballydrehid, near railway line.



