TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Touknockane M7 Road Cut

Other names used for site

IGH THEME IGH8 Lower Carboniferous TOWNLAND(S) Touknockane, Cooleen NEAREST TOWN/VILLAGE Birdhill (Limerick)

SIX INCH MAP NUMBER 31

ITM CO-ORDINATES 570650E 666123N (centre of section)
1:50,000 O.S. SHEET NUMBER 58 GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

A short road cutting on the M7 Motorway approximately 2 km southwest of Junction 27 for Birdhill.

Geological System/Age and Primary Rock Type

The cutting is made in Carboniferous limestone. The rocks are classed as the Ballysteen Formation and are dark coloured limestones with thin shale partings between thick beds of limestone.

Main Geological or Geomorphological Interest

The cutting at Touknockane is a new landmark on the M7 Motorway partly because the rock is stepped. This is a result of the engineers excavating the cutting to make use of the natural characteristics of the limestone rock. Quite thick beds occur here around half a metre or more in thickness, some with thin shale partings between beds and the steps are made at one or more beds. The natural dip of the limestone beds is relatively flat, but generally to the south west, so the markedly stepped look to the cutting is directly related to the geological character.

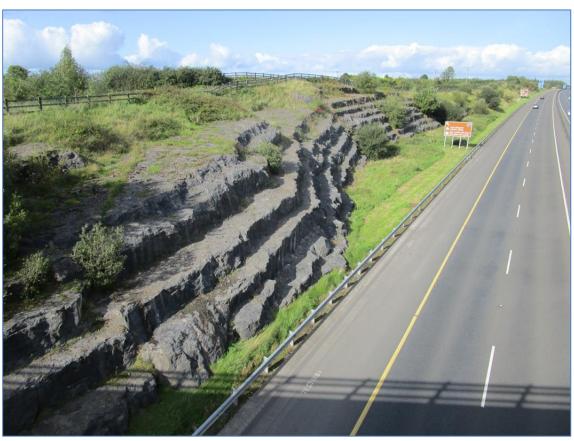
Aside from road cuttings and quarries, natural exposures of the limestone bedrock is relatively scarce so this cutting provides a good representative section to see the gross morphology of the rocks and the fairly uniform character of the Ballysteen Formation which is a widespread formation across the southern Midlands of Ireland.

Site Importance - County Geological Site

The opportunity to appreciate rock character while passing through a new landmark cutting and being a representative exposure of the Ballysteen Formation in the county, make this site a worthy County Geological Site.

Management/promotion issues

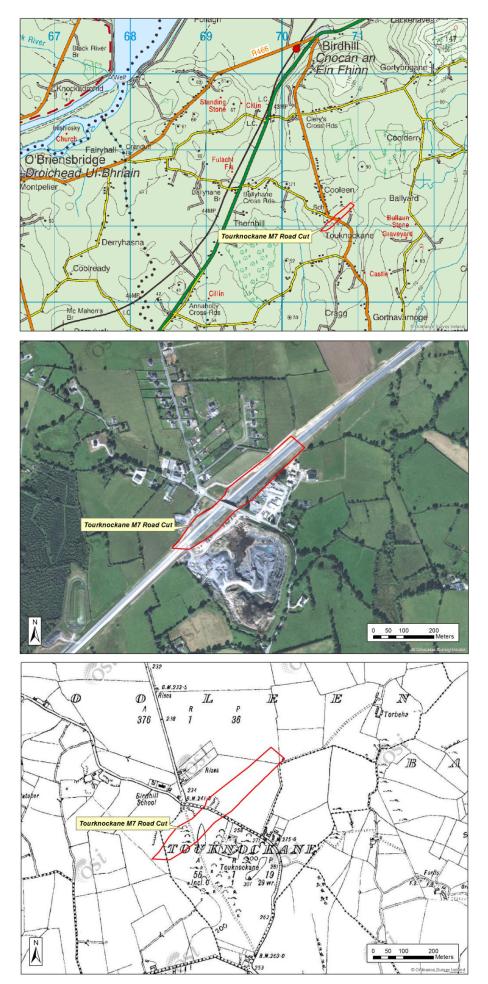
Being on a motorway it is not legal or possible to stop and look closely at the rocks but they are a distinctive new landmark created by the M7 construction and can easily be appreciated on driving past. The overhead bridge does allow safe viewing from a different perspective. Some simple, non-distractive signage to name the site and provide minimal geological information could be provided, but would best be done as part of a strategic approach to all motorway and major road cuttings by the National Transport Authority in conjunction with geological heritage specialists.



The Tourknockane Road Cutting, northern side.



The Tourknockane Road Cutting, southern side.



Gallagher et al. 2019. Geological Survey Ireland.