## FINGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ardgillan House Boulder
Other names used for site	
IGH THEME:	IGH 4 (Cambrian – Silurian)
TOWNLAND(S)	Ardgillan Demesne, Kilmainham
NEAREST TOWN	Skerries
SIX INCH MAP NUMBER	5
NATIONAL GRID REFERENCE	321984 261143 = O 21984 61143
1:50,000 O.S. SHEET NUMBER	43 <b>1/2 inch Sheet No.</b> 13

#### **Outline Site Description**

Single large boulder placed beside path from public car park to Ardgillan House.

#### **Geological System/Age and Primary Rock Type**

Ordovician pillow lavas, weathered to show concentric patterns within pillows.

### Main Geological or Geomorphological Interest

This single large boulder is composed of Ordovician pillow lavas. It formed when volcanic eruptions occurred underwater about 470 million years ago, forming globular 'pillow' shapes as a result of interaction with seawater. The water quenched the outside of the lava forming a crust but hot molten lava under pressure continued to flow out, creating these classic structures. Subsequent weathering has picked out concentric rings of cooling structures and trapped gas bubbles within the lava. This boulder also has an interesting recent history. It was first found on the shore near Ardgillan, and was thought to be an archaeological artefact showing prehistoric stone carvings, like those of Newgrange. Following storage in OPW premises in Trim, it was only later saved from disposal and moved to Ardgillan by the Senior Parks Superintendant of Fingal County Council.

#### Site Importance

The boulder merits listing as a CGS because it tells several fascinating stories in a publicly and accessible, eye catching spot, where many visitors can see it. It reveals not only its geological origin as volcanic lava erupted underwater, as evidence of the amalgamation of the two 'halves' of Ireland millions of years ago, but also a more recent history of movement at the hands of people.

### Management/promotion issues

This site is owned by Fingal County Council and should be promoted and presented in the best possible way. This should be addressed as a priority arising from this report and the further assistance of one author (M. Parkes) sought in the interpretation of the boulder for the public.



Above: Two images of Ardgillan House Boulder. The concentric rings represent cooling structures from a time when this oddly shaped boulder was once hot molten lava, erupting underwater.

# Ardgillan House Boulder





