

MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Letter
Other names used for site	
IGH THEME	IGH10 Devonian
TOWNLAND(S)	Letter
NEAREST TOWN/VILLAGE	Westport
SIX INCH MAP NUMBER	77
ITM CO-ORDINATES	506620E 790215N (T-junction at Letter)
1:50,000 O.S. SHEET NO. 31	GSI BEDROCK 1:100,000 SHEET NO. 11
GIS Code MO075	

Outline Site Description

Roadside bedrock exposures, bare outcrops in exposed heathland, and a small extraction pit.

Geological System/Age and Primary Rock Type

An Ordovician-Devonian unconformable contact. Devonian conglomerates, breccias, and coarse sandstones and Ordovician mudstones, sandstone and volcanics.

Main Geological or Geomorphological Interest

This site is of interest owing to the occurrence of an unconformable Devonian-Ordovician contact. Two small outcrops of Ordovician rocks (Letter Formation) are surrounded by younger Devonian rocks (Graffa More Formation), a feature called an inlier. The Letter Formation outcrops expose sandstones, mudstones and volcanic rocks. Marine microfossils (*Chitinozoa*) identified in the Letter formation mudstones provide a mid- to late-Ordovician age for the rocks.

The Devonian Graffa More Formation (Islandeady Group) comprises up to 800m of red and green conglomerates, breccias, and coarse grained sandstones. These sedimentary rocks indicate deposition in an alluvial fan environment. Palaeocurrent data suggest these sediments originated from a southerly source.

Site Importance – County Geological Site, may be recommended for Geological NHA

The site is significant as it hosts Ordovician and Devonian bedrock, but does not host Silurian age rocks. The absence of Silurian bedrock indicates that a significant break in the geological record (an unconformity) of greater than 20 million years occurs between the older Ordovician and the younger Devonian rock formations at the site. The unconformable contact is not observable at the site.

Management/promotion issues

Apart from some roadside exposures, access to the outcrops is through private land. The features are important in the context of the geological history of this part of Co. Mayo. Any removal of the roadside outcrops should be prohibited.



Roadside outcrop of conglomerates of the Graffa More Formation (Devonian), looking north.



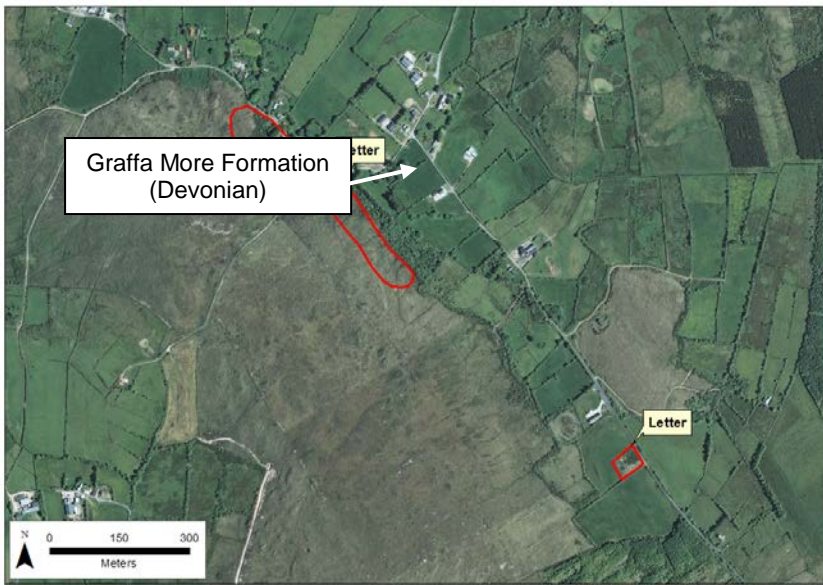
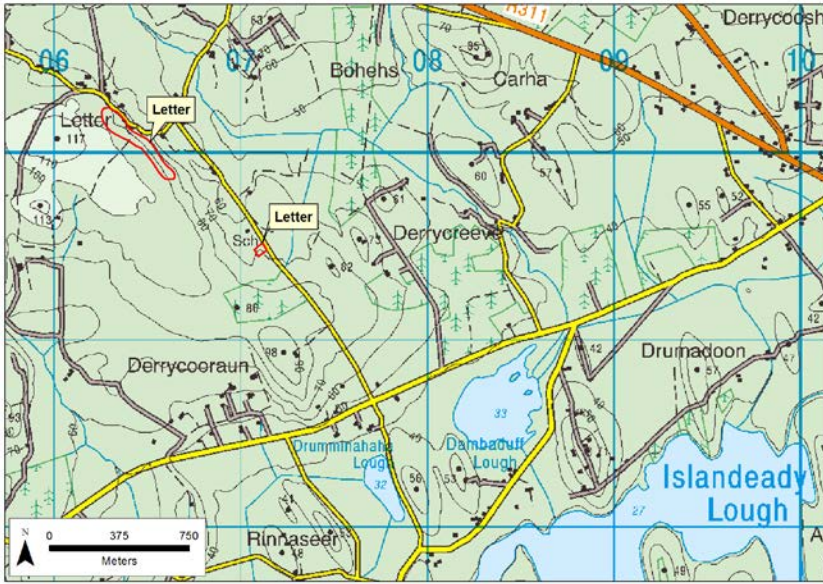
Grazing land at Letter viewed from old schoolhouse looking NW.



Letter Formation (Ordovician) sediments in quarried extraction pit in field south of new school, looking east towards road.



Graffa More Formation (Devonian) conglomerates looking north.



Letter Formation
(Ordovician)

