MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Knock Airport Road**
Other names used for site	Ireland West (Knock) Airport N17 road cutting
IGH THEME	**IGH2 Precambrian to Devonian Palaeontology**
TOWNLAND(S)	**Lurga Upper**
NEAREST TOWN/VILLAGE	**Charlestown**
SIX INCH MAP NUMBER	**73a**
ITM CO-ORDINATES	**546910E 796110N**
1:50,000 O.S. SHEET NO. 32	**GSI BEDROCK 1:100,000 SHEET NO. 11**
GIS Code MO071	

Outline Site Description
Roadside bedrock exposures alongside the N17 and approach road to Ireland West (Knock) International Airport.

Geological System/Age and Primary Rock Type
Basalts (andesites) and graptolitic cherty shales of the Lower to Middle Ordovician Horan Formation (Lower Palaeozoic Charlestown Inlier).

Main Geological or Geomorphological Interest
Graptolite fossils have been identified in the past in cherty shales that are interbedded with the volcanic horizons. The site is important as a geological window into the Ordovician volcanic sequence of the Charlestown Inlier. The Ordovician and Silurian rocks of the Charlestown Inlier have been correlated with rocks of the Lough Nafooey and Tourmakeady Groups to the southwest, and with the Tyrone Volcanic Group to the northeast. The volcanic rocks record the Caledonian collision between the ancient Laurentian continent and an oceanic arc during the Early to Middle Ordovician (*c.* 488-460 million years ago).

Site Importance – County Geological Site
This County Geological Site is an excellent road cut of unweathered exposures of cherty shales and basalts (andesites). The fossils previously noted in the shales were not identifiable in the field. These graptolites had been used to date the succession and there is good potential for seeking new collections.

Management/promotion issues
The site is not at any significant or immediate risk. Unconsolidated material blanketing the upper sections of the embankment may become loose. The bedrock exposures are easily accessible alongside the N17 hard-shoulder, though care should be taken as this is a 100km/h zone. Access to the andesite exposures alongside the airport approach road is easy, and loose samples of andesites may be collected in safety here.

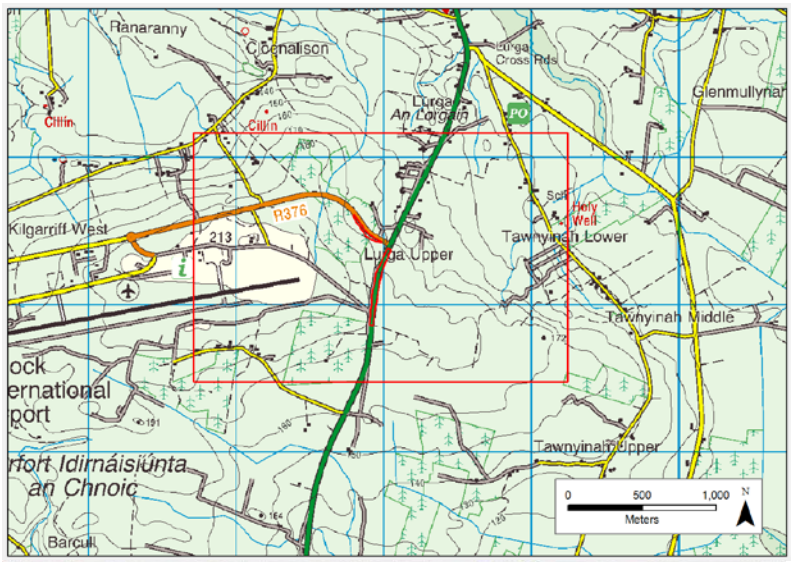
Looking south at N17 road cutting beside Ireland West (Knock) Airport (runway light-towers on right, west).

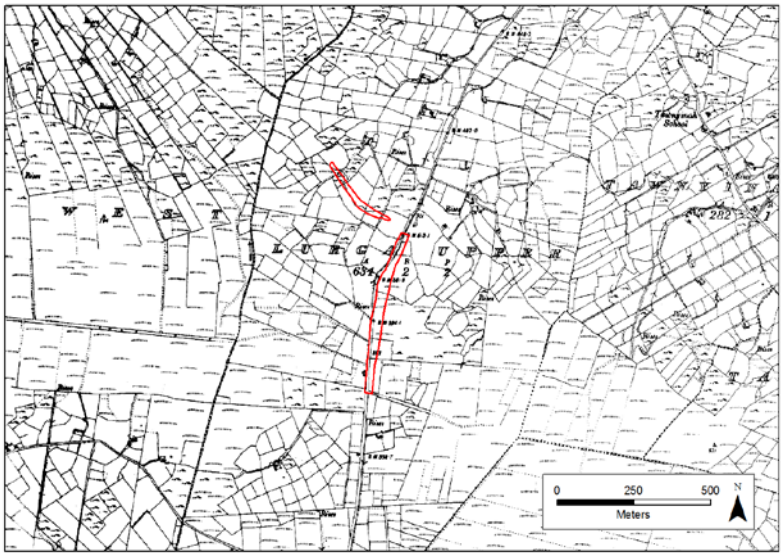
N17 road cutting viewed from roadway (old airport approach road) above main road - looking south.

Fresh exposures of siltstone on east side of N17 road - looking south.

Andesite exposures on right (south) side of airport approach road near N17 junction.

Sample of the green coloured andesite (volcanic) from exposures alongside airport approach road.





Hennessy et al. 2014 (revised 2019). Geological Survey Ireland.