MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	**Finny Road Section**
Other names used for site	Finny School
IGH THEME	**IGH2 Precambrian to Devonian Palaeontology, IGH4 Cambrian to Silurian**
TOWNLAND(S)	**Finny**
NEAREST TOWN	**Clonbur**
SIX INCH MAP NUMBER	**120**
ITM CO-ORDINATES	**501170E 758820N (centre of feature)**
1:50,000 O.S. SHEET NO. 38	**GSI BEDROCK 1:100,000 SHEET NO. 11**
GIS Code MO057	

Outline Site Description
The site is situated along a 1km long stretch of the R300 road on the Kilbride peninsula, between Finny Church and Finny school (now disused). The site comprises hilly farmland (sheep grazing) on the north side of road, and low-lying fields on the lake side of the road. This is a key site within the much larger 'Finny and Kilbride' Site.

Geological System/Age and Primary Rock Type
The geology of the site is best observed at well-exposed, hillside outcrops of sedimentary and volcanic rocks. Non-fossiliferous purple sandstones of the Lough Mask Formation (and basal Ardaun Lava Member pillow lavas) are succeeded by fossil-rich grey sandstones of the Kilbride Formation (and Tonalee Member mudstones). These planar, southeast dipping (~60º) Silurian rocks are dated to 436-428 million years (Llandovery series: Telychian stage). The Silurian rocks unconformably overlie Ordovician volcanic rocks of the Bencorragh Formation (Lough Nafooey Group) at the western part of the site (< 200m from church).

Main Geological or Geomorphological Interest
This site is an excellent location for observing the palaeontology of the Silurian (Llandovery) rocks of South Mayo. This sequence along the Finny Road Section represents a classic sedimentary marine transgression (land to shallow marine to deep marine) of marine sandstones (Kilbride Formation) over purple terrestrial fluvial sediments (Lough Mask Formation) and lavas. Marine fauna include *Eocoelia* shell beds and *Skolithos* worm burrows (trace fossils) in the 'Annelid Grits' of the Kilbride Formation. The outcrops near and just above road level at the school are characterized by very shallow water *Skolithos* beds, interbedded with shell beds of the brachiopod *Eocoelia*. Fossils in the younger (overlying) layers of the Kilbride Formation include faunal assemblages (corals, brachiopods, trilobites, cephalopods, crinoids, and trace fossils) that record deeper water environments upwards in the succession. Red mudstones of the Tonalee Formation may be observed near Finny School in streambeds on the lakeside of the road.

Site Importance – County Geological Site; recommended for Geological NHA
This is a superb site for observing, mapping and studying classic Silurian geology and palaeontology in relatively easy-to-access sections. It forms a key site of national importance within the larger 'Finny and Kilbride' area and should be designated as part of the larger site.

Management/promotion issues
The development of one off housing or farm buildings, or road widening in the area has the potential to seriously impact on classic geological outcrops, and on access to fields. The geology along the Finny Road section provides a superb location for studying Silurian fossiliferous marine sedimentary rocks and for geology education in general. Groups coming from Ireland, the UK and USA have long visited the area. The landowners throughout the Kilbride peninsula have always been generous and open in allowing groups to access to the important sites distributed throughout the peninsula. The site has yielded very many fossils that are now held in museum collections, such as at NUI Galway.

Roadside exposures of SE (steeply) dipping grey sandstone exposures of the Kilbride Formation, looking NE.

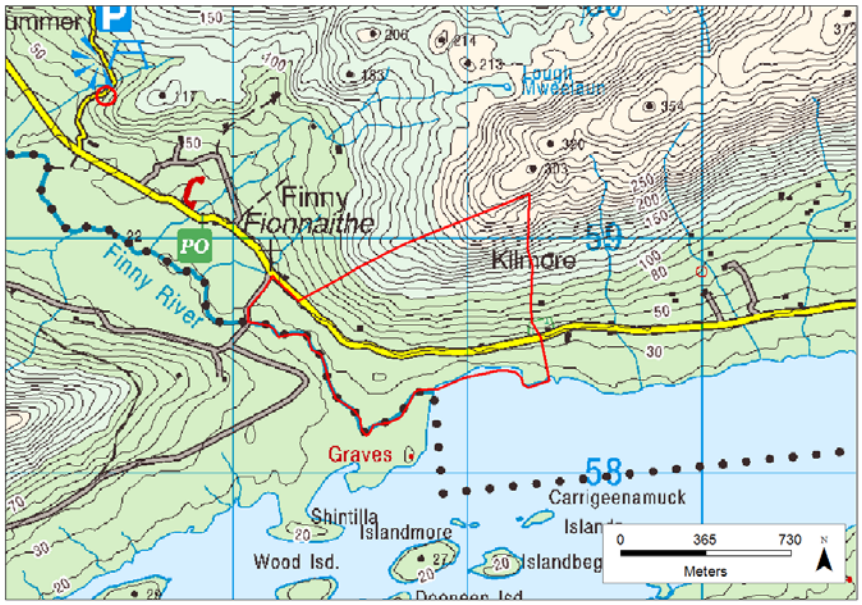
Kilbride Formation exposure with Knock Kilbride hillside rising in background.

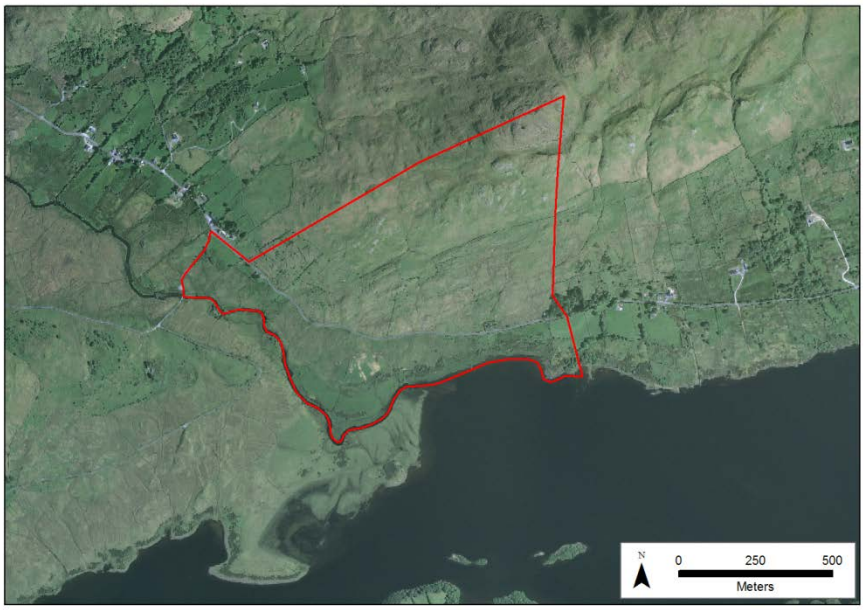
Massive purple sandstones of the Lough Mask Formation in roadside quarry.

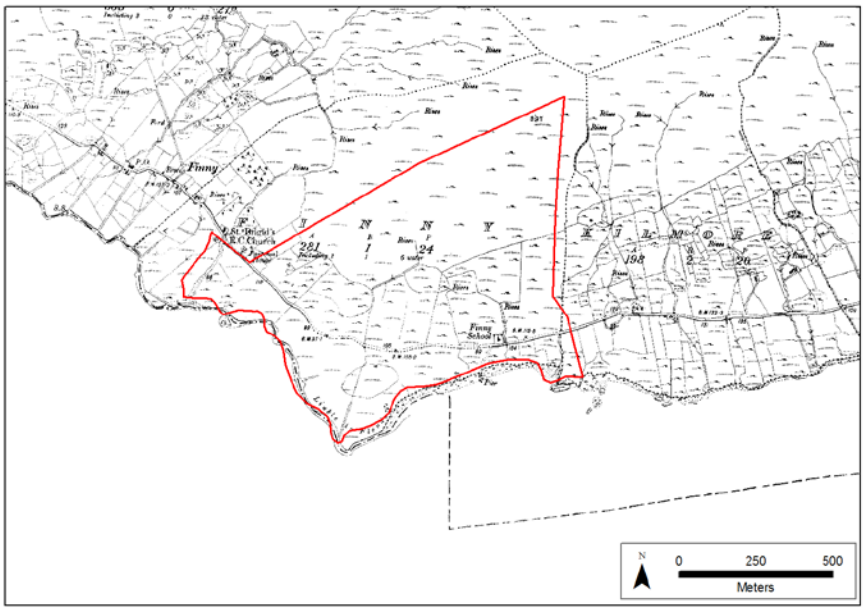
Close up of a bed with abundant *Skolithos* worm burrow marks (trace fossils).

South dipping 'Annelid Grits' exposures of the Kilbride Formation south of the road looking over Lough Mask towards Ben Levy (middle distance) and Cappanagapple (left).

Brachiopod (*Eocoelia)* fossils in the Annelid Grits of the Kilbride Formation near Finny School.







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